A MORAL COMPASS

THE ROLE OF EXPLICIT MORAL KNOWLEDGE WHEN DUTCH POLICE OFFICERS CONSIDER USING THEIR FIREARM

A Master Thesis in accordance with the requirements for the degree of Master of Science in Policing.

Student : Pascal Martens

Student ID : MAR15112474 / 170528

Supervisor : Wendy Dorrestijn

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"Doubt is not a pleasant condition, but certainty is an absurd one."[1]

[1]Voltaire (1919)

PREFACE

Doubt has been a trigger in my work life to look for other perspectives and a way to develop myself as a professional. That is why I quit my job as an IT consultant in 2003 after receiving a bachelor's degree at a part-time study in outdoor management and started working as a use-of-force instructor at the Police region Utrecht, in the Netherlands. This was a time where I was mainly focused on my own development as a firearms- and martial arts instructor. The required skills of a use-of force instructor, or so I thought, were mainly the ability to shoot like a marksman and physically subdue a suspect with confidence and flawless performance. After a while this changed into the conviction that not I, as an instructor, needed to perform at that high level, but that all my energy was needed to let my students excel in their performance as a police officer. This perspective was mainly focussed on skills and tactics, and not so much on other important but vague concepts, such as mindset, motivation, reflective capabilities or communication. This shifted after time as well. During my time as an educator of use-of-force instructors these vague concepts had become my main focus.

At a certain time I was asked as an expert witness in a case that involved possibly excessive use of force by police officers. During this period I became aware that my individual, albeit professional, opinion was founded on my personal experiences and insights. I started to wonder what the fundamental body of knowledge was that we as a police organisation valued related to police use of force. Since I could not find it at the time, I started looking into doing scientific research myself. The first requirement was having the mental skills and tools to do so. Therefore I started with the course for a degree in Master of Science in Policing in 2014. During this time I became aware of a job vacancy for the manager of the Knowledge & Information Hub of the Knowledge & Research sector of the Dutch Police Academy. After an interview round I received the job in April 2017.

As the manager of knowledge for the Dutch Police I have become very aware of the quality and different shapes that knowledge has taken. I felt a need to look into the scope and depth of police knowledge in order to facilitate the best form, focus and depth for the police organisation. This led me to seeing explicit moral knowledge as a somewhat neglected but crucial part of policing. The thesis before you is an attempt to look into the role explicit moral knowledge has in the Dutch Police organisation.

This study and concluding thesis would not have been possible without the support of my teammates in Ossendrecht, my team in Apeldoorn, my managers, my classmates, my wife and my kids. Thank you all for your unrelenting support, guidance and time.

Kind regards,

Pascal Martens
Critical Friend in Policing

ENGLISH SUMMARY

People sometimes get seriously injured or die as a result of police use of force in the Netherlands. It is not clear what the role of the quality of the decision making by police officers is, but these incidents do eat away at the trust in the police. This thesis examines the expectations citizens and the police themselves have of the use of a firearm by the police, how police officers are trained to make decisions when they consider using their firearm and how this translates to actual police incidents. The extent to which professional knowledge is relevant and accessible also seems to determine the quality of police work.

The following main question has been investigated in order to go into this in more detail:
What is the role of explicit moral knowledge[2] when Dutch police officers consider using a firearm?

The three sub-questions in this research relate to the formal expectations laid down in explicit moral knowledge when police officers consider using their firearm. In addition, the sub-questions also look at the focus of police training when it comes to the application of explicit moral knowledge in the considerations of using a firearm. And a third perspective has been explored related to the role of explicit moral knowledge in operational circumstances where police officers have actually considered using their firearm.

Three different methods have been used to answer the three sub-questions, and through triangulation these methods have generated an overall picture of the role that explicit moral knowledge plays in the consideration of Dutch police officers to use a firearm. The first method is a document analysis on 6 selected documents. The second method is a series of interviews with 7 use-of-force instructors related to the focus of their training and the third method is a meta-analysis of 15 case studies concerning operational situations where police officers have considered using their firearm.

It seems that explicit moral knowledge describes the purpose, boundaries and circumstances of firearms use and also the capabilities and accountability of police officers in proactive and rational performances of police duties, but that it does not relate to reactive and instinctive self-defence situations. In these situations, police officers do not act as rational professionals, but rather as a human in distress. In those cases, explicit moral knowledge relevant to professional police work may not be applicable and therefore appears to play a limited or no role. Moreover, it seems that although police officers perceive a context in all circumstances, the quality of that perception is crucial for the proper application of explicit moral knowledge. If the perception of a specific context is incorrect, the application of explicit moral knowledge may become irrelevant. The role of explicit moral knowledge in such cases may no longer be functional, because its application is based on a misconception.

[2] In this case explicit moral knowledge is viewed as law, regulations and professional knowledge.

DUTCH SUMMARY

Ook in Nederland komt het voor dat personen ernstig gewond raken of overlijden door politiegeweld. Welke rol de kwaliteit van de besluitvorming van politieagenten hierin speelt is niet duidelijk, maar dat het knaagt aan het vertrouwen in de politie wel. Deze thesis onderzoekt de verwachtingen die burgers en de politie zelf hebben van geweld door de politie, hoe agenten worden getraind om besluiten te nemen als ze vuurwapens overwegen toe te passen en hoe zich dit daadwerkelijk manifesteert in het politiewerk op straat. De mate waarin professionele kennis relevant en beschikbaar is lijkt bovendien ook bepalend te zijn voor de kwaliteit van het politiewerk.

Om hier dieper op in te gaan is de volgende hoofdvraag onderzocht:
Welke rol speelt expliciete morele kennis[3] als Nederlandse politieagenten overwegen hun vuurwapen te gebruiken?

De drie deelvragen die daarbij gehanteerd zijn hebben betrekking op de verwachtingen die zijn vastgelegd in expliciete morele kennis als politieagenten overwegen hun vuurwapen te gebruiken. Daarnaast is in de deelvragen bekeken welke focus IBT docenten aanbrengen als het gaat om de toepassing van expliciete morele kennis bij de overwegingen om het vuurwapen te gebruiken. En ten slotte is er teruggekeken naar de rol die expliciete morele kennis gespeeld heeft in operationele omstandigheden waar politieagenten daadwerkelijk hebben overwogen hun vuurwapen te gebruiken.

Er zijn drie verschillende methoden gebruikt om de drie deelvragen te beantwoorden, en deze schetsen middels triangulatie een overkoepelend beeld van de rol die expliciete morele kennis speelt bij de overweging van Nederlandse politieagenten om het vuurwapen in te zetten. De eerste methode is een document analyse op 6 geselecteerde documenten. De tweede methode is een serie aan interviews onder 7 IBT docenten over de focus van hun training en de derde methode is een meta analyse over 15 casestudies m.b.t. de terugblik op een situatie waar politieagenten overwogen hebben hun vuurwapen te gebruiken.

Het lijkt erop dat expliciete morele kennis het doel, de grenzen en de omstandigheden van vuurwapengebruik en tevens de capaciteiten en verantwoordingsplicht van agenten in proactieve en bewuste uitvoering van politietaken beschrijft, maar dat het geen betrekking heeft op reactieve en instinctieve noodweersituaties. In die situaties treden politieagenten niet zozeer op als rationele professionals, maar betreft het eerder een mens in nood. In die gevallen is expliciete morele kennis die relevant is voor professioneel politiewerk mogelijk niet van toepassing en lijkt deze kennis dus een beperkte of geen rol te spelen. Bovendien lijkt het erop dat hoewel politiemensen onder alle omstandigheden een context waarnemen, de kwaliteit van die perceptie cruciaal is voor een goede toepassing van expliciete morele kennis. Als de perceptie van een specifiek geval niet juist is, kan de toepassing van expliciete morele kennis irrelevant worden. De rol van expliciete morele kennis is in die gevallen mogelijk niet langer functioneel, omdat de toepassing ervan gebaseerd is op een misvatting.

[3] Hierbij wordt expliciete morele kennis beperkt tot wetgeving, regelgeving en professionele waarden

TABLE OF CONTENTS

PREFACE 2

ENGLISH SUMMARY 3

DUTCH SUMMARY 4

PART 1 | THESIS 7

1. INTRODUCTION 8

1.1. The police and its mandate to use force 8

1.2. Applying professional knowledge 9

1.3. Problem statement 9

1.4. Object of the research 9

1.5. Research model 10

1.6. Research questions 10

1.7. Relevance and purpose 10

1.8. Thesis outline 11

2. RESEARCH DESIGN 12

2.1. Research methods 12

2.2. Constructing the theoretical framework 15

2.3. Validity (internal and external) and reliability 16

2.4. Limitations and strengths of this study 16

2.5. Ethics of this study 17

2.6. The researcher 17

3. THEORETICAL FRAMEWORK 18

3.1. Determinants for inappropriate use of force by police officers 18

3.2. Improving decision making as a solution for inappropriate use of force by police officers 20

3.3. A closer look at professional knowledge for the police 22

4. FINDINGS 25

4.1. Law, regulations and professional values 25

4.2. Police training and its focus 27

4.3. Reflections on actual police use of force 33

5. DISCUSSION 41

5.1. Research sub-questions answered 41

5.2. Triangulation of findings 43

5.3. Expert review 45

6. CONCLUSION 47
6.1. Main research question answered 47
6.2. Closing remarks and recommendations 47
7. REFERENCES 49
PART 2 | ANNEX BOOK 54
8. APPENDICES 55
8.1. Appendix A1. Definitions of Key Aspects 55
8.2. Appendix A2. Professional Biography of Expert Reviewers 56
8.3. Appendix B1. Referencing of Analysed Documents 57
8.4. Appendix B2. Coding for the Document Analysis 58
8.5. Appendix C1. Interview Aspects, Topics and Questions 65
8.6. Appendix C2. Declaration of Anonymity and Confidentiality 67
8.7. Appendix C3. Coding for the Interviews 68
8.8. Appendix D1. Matrix of Case Selection Criteria and 131 Case Studies 75
8.9. Appendix D2. Coding for the Meta-Analysis of Multiple Cases 78
8.10. Appendix E1. List of Figures and Tables 84

PART 1 | THESIS

1. INTRODUCTION

The police regularly make decisions about use of force. Most of these decisions work out satisfactory, but some of these decisions work out rather tragically. Timmer (2005) shows that in the Netherlands, between 1996 and 2000, at least 2451 cases of use of force by the police have led to severe trauma or even the death of a suspect. In police use of force the perception of the public may be that a large amount of deplorable decision making is preventable. It certainly generates distrust of the police (Weitzer, 2002). This thesis therefore explores the expectations society and police organisations themselves have of police officers when they consider using force and how police officers are trained to optimise their decision making process in order to improve at least the most impactful decisions that the police make, such as the use of their firearm.

The causes for excessive force by the police may lie in a diverse set of variables which might strengthen or weaken each other, such as institutional and cultural factors, societal factors and individual factors (Friedrich, 1980). Besides possible malicious intentions by some police officers more reasons for excessive use of force by the police in western societies appear to be applicable (Terrill, Paoline III & Manning, 2003; Garner, Maxwell and Heraux, 2002).

It is important to find the cause or causes of excessive use of force by the police, as it erodes the legitimacy of the police by creating deep mistrust in communities (Weitzer, 2002). Police legitimacy depends on a few simple concepts, say Myhill and Quinton (2011). They and Tyler (2004) point out that trust and shared values are crucial for police legitimacy and that police fairness is fundamental to this perspective.

Inappropriate use of force by the police and a drive to change this is not just a societal issue, impacting only people outside of the police organisation. The involved police organisation and involved police officers may also feel the need for improvement, as it affects them as well. In the Netherlands the police organisation is required to assess every use of force applied by police officers. The internal affairs department of the Dutch Government gets involved in the cases where the result of the applied force was substantial and has led to severe trauma or death (Rijksrecherche, 2018; Timmer, 2015). This scrutiny and transparency is important for the police if they wish to remain legitimate, because it is fundamental to *Good Governance* (Johnston, 2006). Amnesty International (2016) requires of any police agency that they show consideration for the legality, necessity, proportionality and accountability of all use of force. But, the legitimate mandate to use force is a delicate power and as such calls for a good comprehension of its constituents. This will be explained in the following section.

1.1. The police and its mandate to use force

In line with the social contract, our western governments have the monopoly on non-punishable use of force, which they delegate to police officers (Sherman, 1980). The social contract requires of the police that they minimise the amount of violence in a society and that police use of force is limited to an unavoidable minimum (Bittner, 1980). This means that the police may use force and remain legitimate if they restrict using force. “policemen must acquire the attitude of physicians who take pride in employing all available means to avoid surgery, and who, when surgery is unavoidable take pride in making the smallest possible incision” (Bittner, 1980, pp. 106). In the Netherlands the police must always follow the guiding principles of proportionality and moderation (Politiewet, 2012). This means that the police are restricted to use force light-hearted. It is therefore not a surprise that the police are held accountable for their actions, especially when using force (Waddington & Wright, 2011). These researchers point out that police use of force becomes unethical, when the applied force is disproportionate to the crime or when the frequency of the application of the use of force does not match the occurrence at hand. “In general, if the community gives its consent, it may welcome the exercise of legitimate authority by the police as long as the police are seen to be contributing their services towards democratic ends in an ethically acceptable manner” (Bruggeman & Den Boer, 2010, pp. 144). One could conclude from the above that inappropriate use of force is by its nature also unethical and immoral.

1.2. Applying professional knowledge

Holgersson and Gottschalk (2008) mention that the quality of police work is determined by the availability of sufficient and appropriate knowledge. This does not necessarily mean protocols. It should also apply to knowledge based on reflection and introspection of police officers as that stimulates moral resilience, say Smit, Slagmolen and Brepoels (2015). As if having a protocol solves all problems concerning the difficulties police officers encounter before, during and after a fierce incident.

1.3. Problem statement

The Dutch Chief of the police, Akerboom (2017), points out that policing is not solely based on guidelines, regulations and rules, but also on moral values, such as integrity, trustworthiness, courage and connectedness. This supports the notion that the whole spectrum of moral knowledge should be applied by police officers when they consider using force. Legal powers are in a sense also moral knowledge (Hazard, 1995). At this moment we cannot be certain that moral knowledge is used optimally, but we do know that inappropriate use of force is still taking place. An indication of sub-optimal provision, and possibly also use, of a specific type of moral knowledge in the police organisation can be seen in the Knowledge and Information Hub (KIH)[4] of the Police Academy of the Netherlands as only one legal expert is active to provide advice on legal matters, such as criminal law and criminal proceedings, for potentially 65 thousand employees of the Dutch police. The notion that knowledge on legal matters needs to be improved is supported by the report *Parate Kennis Bevoegdheden Politie*[5]*,* delivered by the Inspectorate of Safety and Justice (Inspectie Veiligheid en Justitie, 2015). They indicate that there is clearly room for improvement concerning the capability of Dutch police officers to have a clear picture of their official powers. They recommend a training system to achieve a higher level of understanding related to these legal powers. Since police officers also require the ability to express their own behaviour in language, due to the fact that they have to be able to justify their use of force as it needs to be applicable for scrutiny, the moral knowledge should be explicit in nature. This means that the moral foundation of police use of force must be expressible in language. And this shows that explicit knowledge of ethical behaviour in use of force is essential. If explicit moral knowledge is not properly taken into consideration police officers may find themselves subject to biases, mistakes, emotions or cold rationalism which can lead to unethical use of force. Erroneous decision making is most critical and should certainly be prevented when the use of a firearm is considered by the police, as this can lead to irrevocable consequences.

1.4. Object of the research

The research has looked into the function of explicit moral knowledge in the decision making process of police officers when they consider using their firearm. Explicit moral knowledge in this study is limited to law, regulations and professional values. The preferred object of the research was the inner workings of the mind when considerations take place. Since this was far too difficult to actually measure, a set of three varying perspectives have been utilised to accommodate this problem. The combination of these three perspectives has provided a sufficient indication of the function that explicit moral knowledge has played when Dutch police officers considered using their firearm. The three perspectives that were used as the objects of the study were:

1. The *formal expectations* of just behaviour society, and the police organisation itself, have of Dutch police officers when they use their firearm, laid down in law, regulations and professional values.
2. The focus of educators in *police training* related to the application of just behaviour when Dutch police officers consider using a firearm.
3. The role of explicit moral knowledge in the *reflection* of performances of police officers when they have considered using a firearm in an actual situation.

These three perspectives are a sufficient substitute for actually measuring the mind of police officers when they consider using their firearm because it says something about the fundamental source of moral knowledge that

[4] In Dutch this translates to the *Kennis en Informatieknooppunt (KIK)*
[5] In English this translates to the report Available Knowledge Police Powers

police officers are required to be aware of. Furthermore this moral knowledge, decision making and the use of a firearm is periodically taught and trained by specialist instructors who aim to prepare the police officers for violent events in the execution of their duty. And finally the manner in which police officers reflect on their deliberations and actions related to using, or not using, their firearm may give insight in the actual considerations they might have had during those fierce incidents.

1.5. Research model

Figure 1. The research model

1.6. Research questions

In order to assess how explicit moral knowledge is used in the decision making process of police officers in the Netherlands the following main research question (MQ) has been used: **"What is the role of explicit moral knowledge when Dutch police officers consider using a firearm?".**

The related sub-questions (SQ) are presented below and are directly related to the three perspectives on the object of the study:

SQ1. – "What is expected by law, regulations and professional values of Dutch police officers when they consider using a firearm?".

SQ2. – "In what way is explicit moral knowledge the focus of police educators when Dutch police officers are trained in decision making concerning the use of a firearm, in order to improve just behaviour?".

SQ3. – "In what way is explicit moral knowledge a part of the reflection when Dutch police officers have considered using a firearm in an actual situation?".

The sub-questions aim to look at the role of explicit moral knowledge from the three perspectives. SQ-1 provides insight in the first perspective by looking at the *formal expectation*, which provides some insight in how legislation and internal regulations have described the rules that police officers are supposed to follow concerning the use of a firearm. SQ-2 provides insight in the second perspective by looking at the focus of *police training*, which generates understanding of the quality and purpose of training moral knowledge within decision making and use of a firearm. And finally SQ-3 provides insight in the third perspective by looking at the role explicit moral knowledge plays in the *reflection* of the performance of police officers when they have considered using a firearm in an actual situation. When these three perspectives are put together and some sort of congruence can be established, it is fair to say that that is the most robust role explicit moral knowledge plays in the considerations of Dutch police officers when they think about using their firearm. The definitions of key aspects can be found in appendix A1.

1.7. Relevance and purpose

This master thesis aims to provide insights that might improve legislation, training and police performance. It intends to help

thesis is perceived as a success if the output of this paper leads to a useful policy for the National Police of the Netherlands (NPN).

1.8. Thesis outline

This thesis has started with a summary of the content, in both English and Dutch since it will also be deposited in the library of the Dutch Police Academy. The first chapter contains the introduction, problem statement, object of the study, conceptual framework, research questions and relevance of the thesis. The research design is presented in chapter two. It explains in detail how the diversity of methods used in this thesis have been performed and how they relate to the research questions. This chapter furthermore explains how the theoretical framework has been constructed, how validity and reliability have been achieved, what the limitations and strengths of this study are and how the ethics related to this study have been addressed. A description of the researcher has been provided as he is also an instrument in the research. In chapter three a theoretical framework is presented which provides the theoretical basis of the research. In chapter four the findings have been presented. Chapter five discusses these finding by answering the sub-questions of the research, performing triangulation and presenting the remarks from the expert review. Chapter six is concerned with the conclusion and some closing remarks. Finally in chapter seven and eight the used literature and the appendices are presented which concludes the thesis. The thesis body and the annex book, with all the appendices, are two parts of the complete work.

2. RESEARCH DESIGN

This thesis made use of descriptive research and is qualitative in nature. It aims to describe the role of explicit moral knowledge when Dutch police officers consider using their firearm.

2.1. Research methods

Three research methods have been used in this thesis. The research started with an *interpretative method* that took shape through a document analysis. The document analysis consisted of formal legislation, police law, an inspection report and internal documents concerning appropriate use of firearms by the Dutch police in varying contexts. The second research method that has been utilised in this thesis was the *survey method*. This method was achieved by conducting seven semi-structured interviews with use-of-force instructors. The semi-structured interview involved a standardised interview plan for comparability between the separate interviews, but also left room to explore opinions and probe into the perspectives expressed by the interview candidates. The third and final research method for this thesis was the *case-study method* which was performed through a meta-analysis of qualitative case-studies that referred to 15 individual cases. By performing a meta-analysis of multiple cases in this thesis a broad understanding of a complex phenomenon has been achieved. An additional technique has also been performed, namely the *triangulation* of the outcome of the former three research methods, which has led to a balanced perspective on the answer of the main research question. And finally an *expert review* was done to discuss the outcome of the research and explore the implications for policy and the possible recommendations that follow from this research. The aforementioned research methods, triangulation and expert review have been linked to the research (sub)questions, which can be seen in table 1.

Research steps	Related research (sub)question
1 – Method 1: Document analysis; of police regulations and law	SQ1
2 – Method 2: Interviews; with 7 police trainers in use-of-force	SQ2
3 – Method 3: Meta-analysis; of 15 case studies of actual incidences	SQ3
4 – Triangulation; of expectations, training and incidences	SQ1 | SQ2 | SQ3 | MQ
5 – Expert review; by the Firearms Advisory Commission	SQ1 | SQ2 | SQ3 | MQ

Table 1. Research steps related to research (sub)questions

General approach

All three applied methods have been performed by means of coding the acquired content. Firstly by open coding, which was followed by axial coding. The outcome has been shared with another researcher, who tested a sample of the coded material. After a discussion about the differences some recoding took place, which has led to a final set of themes and sub-themes. The themes and subthemes are presented in chapter 4 and are discussed in chapter 5 of this thesis. The actual codes can be found in the appendices.

Document Analysis

The document analysis was based on the formal expectations of just behaviour society and the police organisation itself have of police officers when they use their firearm. In order to establish a varied set of relevant documents applicable for analysing, a set of selection criteria have been devised to select and warrant this variation. The variation of documents is important because it shows different perspectives formulated by a diverse group of people from varying backgrounds and institutes, which embody the view of society and the police organisation. Different perspectives lead to a balanced representation of the relevant law, regulations and professional values. The selected documents have been chosen on the basis of the following criteria in table 2:

Document selection criteria
The documents had to be relevant for the use of firearms by Dutch police officers
The documents had to be applicable to all armed police officers of the NPN
The documents had to express law, regulations or professional values, validated by a higher authority such as a judge or a police leader
The documents needed to be available for investigation and open for public scrutiny, so that its contents could be made public
The documents had to be varied in date, context, function and author, but still be relevant to the research question (SQ1)

Table 2. Document selection criteria

Table 3 indicates the exact documents that were analysed. Formal referencing of the analysed documents can be found in Appendix B1.

Documents analysed	Type of document	Id-code
European Convention on Human Rights (ECHR)	Law	d1
Politiewet 2012	Law	d2
Ambtsinstructie Politie	Law	d3
Parate Kennis Bevoegdheden Politie	Inspection report	d4
Handelingskader; Extreem geweld	Internal document	d5
Beroepscode Politie	Internal document	d6

Table 3. Selected documents id-codes

The relevance of the selected articles, paragraphs and sections was based on the relation they had with the following question; “Does the text in the document say anything about the expectations that could possibly be related to the use of a firearm by police officers?”.

Interviews

The interviews were based on key elements relevant for the focus of educators in police training related to the application of explicit moral knowledge when Dutch police officers consider using a firearm. This has led to a set of six aspects with a related topic list to support a set of nine questions. These aspects, topics and used questions can be found in Appendix C1. They portray the sensitising concepts that existed with the researcher. Within the interview a focus was set on roleplaying games and scenario based training as these mimic the actual setting of decision making the most. The involved elements are *just behaviour, police training* and *consideration to use a firearm.* The first element is related to moral, mental and physical aspects. The second element is related to educational and operational aspects and the last element is related to judgemental aspects. The use-of-force educators and instructors, which were the candidates for these interviews, have been handpicked by the researcher as they are seniors in their field and are seen as the experts by their peers. In order to have a balanced perspective every type of instructor has at least been represented by two candidates and these candidates have been operational throughout various locations in the Netherlands, see figure 2. This geographical spread created a varied viewpoint as some local differences may be applicable at every training location. Furthermore, the interview candidates have been promised anonymity (see Appendix C2 for a declaration of confidentiality) in order to achieve the most sincere answers possible. Therefore the interview candidates have been represented by an id-code. Table 4 shows the used id-codes of the interviews.

Types of interview candidates	Id-Code
Educator of instructor-training	i1
Educator of instructor-training	i2
Instructor Police Academy of initial training	i3
Instructor Police Academy of initial training	i4
Instructor NPN of in-service training	i5
Instructor NPN of in-service training	i6
Instructor NPN of in-service training	i7

Table 4. Interview candidates id-codes

A | Almere

B | Alphen a/d Rijn

C | Drachten

D | Ossendrecht

E | Sevenum

F | The Hague

G | Zwolle

Figure 2. Map of The Netherlands[6], marked with police training locations of interview candidates

The interview candidates consisted of six males and one female, differing in age between 25 and 55 years. This division and variation is incidental. Every interview took about 45 to 60 minutes. The recordings have been worked out by the researcher into transcripts and these were confirmed by the seven interview candidates.

Meta-Analysis of Multiple Case Studies

The third perspective on the object of the study is concerned with the role of explicit moral knowledge in the reflection of performances of Dutch police officers when they have considered using a firearm in an actual situation. In order to examine this a set of cases have been attained. Students of the bachelor's degree in policing, provided by the Dutch Police Academy had an assignment where they were required to describe a situation using the model from Binder and Scharf (1980) on the division of process steps in the consideration of using deadly force. The students selected their cases based on their personal knowledge of a certain incident or by searching through an operational database. The resulting 131 cases described by these students were collected and stored by the lecturer. This lecturer made all of these case studies available for this thesis, but requested that the classified case studies would be excluded. The resulting 15 cases cover areas spread throughout the Netherlands and occurred during the years 2005 to 2018. Although only one case took place in 2005, the rest actually took place between 2014 and 2018. The selection process of the resulting 15 individual cases was performed by adhering to certain selection criteria as specified in table 5.

[6] *Retrieved from; https://www.felloo.nl/wp-content/uploads/2016/11/rnl_kaart_rechtbanken_egaal.png*

Case selection criteria
The case study must relate to Dutch police officers.
The case study must not be classified.
The case study must not be related to riot police.
The case study must describe a situation where the police considered using force.
The case study must relate to the use of a firearm.
The researcher must not be part of the incident, described in the case study.
The case study must include an interview with an involved police officer.

Table 5. Case selection criteria

All 131 initial case studies have been cross queued with the case selection criteria, see Appendix D1. This resulted in 31 applicable case studies. In order to match the workload with the assignment of writing a master's thesis this has been brought down by selecting every second case study of the final batch. All of the remaining 15 case studies consisted of a document analysis combined with interviews by the bachelor students. The interviews were mandatory as these give the best perspective on the consideration to use a firearm by the involved police officer.

The 15 remaining case studies were analysed by selecting text fragments that were related to the following questions that are mainly connected to the decision making model of Binder and Scharf (1980), see chapter 2.2:
"Anticipation - How did the police officer prepare for the incident?"
"Anticipation - What did the police officer expect of the situation?"
"Entry and information exchange - Did the police officer need to adjust his perspective during the incident?"
"Final decision - What were aspects of the consideration when the firearm came into play?"
"Reflection - Did the police officer have doubts about using his firearm? And why?"
"Reflection - How did the police officer reflect on the incident and his own role and behaviour?"

The individual cases have also been labelled with an id-code. And in order to comply with privacy legislation the names of the students have been erased. Case study content can be retraced through the number of the case and the letter 'c' before it, see table 6.

Case id-codes					
No. 01	c07	No. 06	c55	No. 11	c82
No. 02	c19	No. 07	c63	No. 12	c93
No. 03	c22	No. 08	c66	No. 13	c101
No. 04	c29	No. 09	c69	No. 14	c104
No. 05	c46	No. 10	c80	No. 15	c110

Table 6. Case id-codes

Triangulation
The three research methods used in this thesis made a form of triangulation possible. The themes and sub-themes that were acquired after coding the content, and the content itself, have been compared with each other. Substantive examples of convergence are presented in the discussion in chapter 5.2.

Expert Review
After the triangulation the findings have been reviewed by three lecturers of the Dutch Police Academy to discuss the implications for policy on training and education within the NPN. See appendix A2 for their professional biography. Their perspectives and considerations have been presented in chapter 5.3 and 6.2 as their view has led to some recommendations resulting from this research.

2.2. Constructing the theoretical framework
The scientific literature examined for this thesis has been found in scientific articles, books and relevant web-documents as a means to better understand the concepts and characteristics concerning decision making, ethics, knowledge and policing. The results were mostly acquired through Google Scholar, the library of Canterbury

Christchurch University and the library of the Police Academy of the Netherlands. The collection of literature has been performed through search topics or combinations of these search topics based on the following concepts, themes and subjects:

Search topics			
Accountability	Ethics	Law	Protocols
Ambiguity	Excessive force	Legitimacy	Reasonable force
Complex decision	Explicit morals	Moral heuristics	Stress effects
Context	Firearm	Moral principles	Tacit morals
Decision making	Hard choice	Norms	Time constraint
Decision speed	Intuition	Police brutality	Use of force
Difficult choice	Knowledge	Policing	Values

Table 7. Search topics for relevant scientific literature

2.3. Validity (internal and external) and reliability

This thesis aims to be as valid and reliable as possible by means of method-triangulation and variation in source material. This aim is furthermore supported by describing the research design as thoroughly as possible.

The quality of the data retrieved through the interviews and multiple case-studies largely depend on the reliability of the people involved. In some instances people may involuntary create bias in their explanation of an experience due to rationalisations after the fact. This can be caused by *hindsight bias*, *loss aversion* and *confirmation bias* (Kahneman, 2012). People also appear to be affected by *bounded rationality* and *bounded ethicality*, which points out that they have a limited capacity to rationally investigate their reasons for specific behaviour (Arthur, 1994) and "in the domain of ethics, individuals exhibit bounded ethicality, making unethical decisions that are outside of their own awareness and are inconsistent with their consciously held ethical values" (Zhang, Fletcher, Gino & Bazerman, 2015, p. 5). This created pressure on reliability and required of the researcher to thoroughly investigate and triangulate the data.

Reliability of the coding process has been performed by means of intercoder agreement. Discussions have taken place after a sample of coded material from the document analysis, interviews and meta-analysis of the multiple cases was shared with another researcher. This researcher is a teacher in the bachelor education in policing of the Dutch Police Academy.

2.4. Limitations and strengths of this study

Some limitations are conceivable for the thesis due to its qualitative nature. The limited amount of interviews, the quality of the used case studies, the subjective selection of interview candidates and the effects of bounded ethicality and bounded rationality make it relevant to state the conclusion in terms of mostly and probably. The findings may therefore not come off as exact scientific fact. Triangulation within the research method and variation of source material nevertheless generate a certain level of objectivity. Also, some important aspects of the problem have intentionally not been explored to exhaustion, as this would make the thesis unfeasible. The restricted focus on explicit moral knowledge as the core of appropriate use of a firearm is a simplification of reality. In the introduction and the theoretical framework several other important notions have been highlighted, but not explored further. So, only a few factors have been investigated in-depth and a conclusion has been provided, but the interaction with and between all these excluded factors is actually required to provide a comprehensive explanation with regards to the improvement of ethical use of a firearm by the Dutch police. And the preferred object has not been researched, but rather three related aspects influencing the preferred research object.

Although the research for this thesis contains several limitations, it also has some strengths. The discussions in the interview sessions, for instance, have led to a certain awareness of the issue with the use-of-force instructors. This may have had immediate impact on the lessons these instructors carry out. Another important strength is the output of the research, which will be made available in the media library of the Dutch Police Academy and

adds to the scientific body of knowledge available for the entire Dutch police organisation. Since it has shed some light on an important aspect of the problem, namely the role of explicit moral knowledge, it may very well influence the facilitation of knowledge in content and form related to law, legislation and professional values.

2.5. Ethics of this study

A paragraph on ethics is applicable due to the sensitive nature of the thesis. Every interview candidate has the right and obligation to verify their own transcript from the interviews, which they have all done. The transcripts have been anonymised and the interview candidates have received a signed declaration of secrecy by the interviewer to enhance trust. Every interview candidate participated on a voluntary basis. All included case studies have also been anonymised by the researcher, so that involved individuals in the separate cases cannot be retraced. This includes the authors of the case studies as well as the subjects within the case studies.

2.6. The researcher

It is of some importance to understand who the researcher of this thesis is because the researcher is a main part of the organisation, interpretation, evaluation and presentation of the content. As Maxwell (1992) says; "…objective 'sense data' that are independent of the researcher's perspective, purpose and theoretical framework do not exist" (p. 292). This means that a certain amount of subjectivity is unavoidable. To understand the subjective perspective better a description of the researcher is provided. This however does not mean that the research did not follow rigorous methodological rules, but rather that language, selection of content and probing in certain aspects may also have involved (unconscious) personal preferences.

The researcher of this thesis is a 45 year old Caucasian male, working for the Dutch police organisation as a civilian. Besides being a student of the Master of Science in Policing he is currently also the head of the Knowledge and Information Hub (KIH) of the Dutch Police Academy. He has been active for 14 years as a use-of-force instructor and educator of use-of-force instructors within the Dutch police organisation. As such he has developed a thorough perspective on training, lesson development, teacher competences and use of force content, including ethics and reflection. The researcher has been involved as an expert witness in a prominent court case which involved suspicion of excessive force applied by Dutch police officers following the death of a forcefully arrested suspect. The researcher also has a solid martial arts background in judo and jiu-jitsu.

The aspects mentioned here have directly influenced the choice and exploration of the research topic and have made it possible to interpret and code the documents and cases that were researched. It also had a substantial influence on the interviews, since these required a large amount of joint exploration with the interviewees.

3. THEORETICAL FRAMEWORK

In accordance with the introduction a more detailed description of the scientific literature concerning the causes of unethical use of force, decision making under stressful circumstances and moral knowledge will be presented here. The main focus is in this research is on the role that explicit moral knowledge plays when Dutch police officers consider using a firearm. The three angles to this focus are the expectations of the police and the public, the quality and focus of training, and the reflection of police officers on actual incidents where they have considered using their firearm. This chapter primarily aims to achieve an understanding of the complexity and variables involved when police officers consider using their firearm, often in fierce circumstances, and what it might take to prevent unethical behaviour.

3.1. Determinants for inappropriate use of force by police officers

In order to assess when use of force is deemed unethical we must first take a closer look at the distinction between reasonable and inappropriate force. It is obvious that the assessment of use of force differs wildly depending on the role or involvement people have in a specific incident. Terrill (2001) suggests that the amount of force should be based on the behaviour of the suspect. He says that a critical element of measuring the appropriate amount of force by the police is the extent of opposition encountered by the person being apprehended. This means that a person resorting to passive resistance should be treated with less force by the police than a person resorting to assaultive resistance, when being apprehended (Paoline III & Terrill, 2011). So, force is unreasonable if it doesn't match the type of resistance encountered by the person being detained. But how does this aligning of force work? It seems to be a subjective scale, which may differ per police officer, situation and suspect. Alpert and Smith (1994) point out that the public has an ambiguous perspective on the appropriateness of force applied by the police. They argue that people expect police officers to be aggressive in the enforcement of the law against criminals (*objective perspective*). But they also expect police officers to show restraint when they are involved themselves (*subjective perspective*). The researchers conclude that use of force is being perceived as reasonable when it is deemed necessary. They acknowledge that this is a simplification of the issue. And that the assessment of a given situation should incorporate at least a totality of situational circumstances. The determinants that elicit inappropriate force applied by the police can be divided in three parts according to Friedrich (1980); the police organisation, the situation at hand and the acting police officer.

Organisational determinants

The traditional culture in the police organisation is an influential indicator for inappropriate use of force by police officers say Terrill, Paoline III and Manning (2003). Their research shows that police officers who are more aligned with the values of the traditional police culture are more excessive in their use of force than those who are indifferent to that police culture. The traditional view of police culture, mentioned in their research, indicates that police officers generally think unfavourably of supervisors and the public. They dislike procedural guidelines. They wholeheartedly accept the role of crime-fighter, but reject all other policing roles. They appreciate more aggressive tactics during patrol and value selectivity in the execution of their duties as law enforcement officers. The police officers who are most aligned with the police culture also think the least positive about citizens even to the point where they are willing to violate citizens' rights (Terrill, Paoline III & Manning, 2003; Worden, 1996). "Interestingly, approximately 43% of the responding officers explained that following the rules is not always compatible with getting the job done" (Paoline III & Terrill, 2011, p. 180). The police organisation is also influenced by political pressures as Jacobs and O'Brien (1998) show in their research (see also; White, 2001). They point out that police killings of African Americans in the US is moderated by the presence of black mayors in their cities. These researchers also make clear that these mayors have political motive and resources to reduce these police killings of African Americans. And they conclude that coercion by the (local and national) government is often applied to preserve the existing order in ethnically divided jurisdictions, indicating the impact of political pressures.

Research by Friedrich (1980), on the other hand, indicates that the cultural (and political) aspect is rather exaggerated and that at least two other prominent factors for the occurrence of inappropriate use of force by

the police should be addressed. These factors are the behaviour of the suspect and the presence of other people, such as citizens and colleagues. So situational determinants can also be a strong trigger or deterrent for inappropriate use of force by the police.

Situational determinants

Garner, Maxwell and Heraux (2002) indicate in their comparative study that the presence of a known crime location, antagonistic bystanders or hostile demeanour of an offender in a policing situation increases the occurrence of use of force by the police. They also point out that more force is being applied if there are more suspects, if bystanders are present, if the incident occurs in the weekend, if the police use their lights or sirens while approaching an incident, or if the police respond to a priority call. And the severity of the used force increased when the offenders were male (as opposed to female), had a reputation for carrying weapons, or if the present bystanders were not associated with the offender. All in all, the most robust findings in their research seems to be the relative importance of the offender's demeanour, measure of resistance and race. Although the latter is the least significant, according to Garner, Maxwell and Heraux (2002).

Terrill and Mastrofski (2002) have also found that regardless of their behaviour some suspects are indeed treated more forcefully by the police than others, such as non-white, male, younger and poor suspects. But also that less-educated and inexperienced police officers resorted to the application of more force. Showing that perhaps individual determinants of police officers are yet another influential trigger or deterrent for inappropriate use of force. This makes sense when you consider that the application of force is always applied by an individual police officer who can choose to ignore policies, procedures and tactics that do not correspond with his personal moral compass by invoking discretionary powers (Rowe, 2007).

Individual determinants

Since individuals are present in an organisation, form a professional culture, are present in a given policing context and have the ability to think, reflect, decide and act, It may be the most prominent group of determinants in this search for influential determinants in the use of inappropriate force.

Samuel Walker (as cited in Alpert and Smith, 1994, p. 501) points out that a police officer, just like any other person, reacts emotionally to people with an offensive attitude and may not be so rational or ethically correct as the professional standard might require. The loss of face and emotional pressure experienced by police officers in certain incidents can have a negative impact on the way they use force and show restraint. The police should act as judiciously as possible in these circumstances and have the long-term effects in mind related to professional prestige (Friedrich, 1980), but this is not always the case. Garner, Maxwell and Heraux (2002) found that younger police officers use more force than older police officers. They found that male police officers use more force than female police officers. And that police officers who had experienced work-related injuries prior to an incident may use force more excessively. Worden (1996) makes a clear distinction in his research between the 'Tough Cop' and the 'Problem Solver' whereas he says that the first is the most likely to use force in an inappropriate way and that the second is likely to not even use force at all, let alone inappropriately. He points out that attitudes and characteristics of police officers have a complex and systemic relationship with the application of coercive methods and that social forces, such as the organisational context, have a significant impact on this relationship. Nevertheless an inventory of these characteristics may still be useful. The 'Tough Cops' are described as professionals who focus on serious crime and crime control. They believe that citizens are hostile towards the police, and that work should be based on experience and common sense. They also believe that 'curbstone justice'[7] can be appropriate and effective. These police officers wholeheartedly identify with the traditional police culture. The 'Problems Solvers', on the other hand, are described as sceptical of traditional policing methods and have a hard time reconciling coercive methods with their moral code. They believe that the actions of people (offenders) are not simply based on self-interest, but are influenced by an intricate set of

[7] Curbstone justice means justice delivered in the streets and is informal or quasi-legal (curbstone justice, n. d.)

physical, economic and social conditions. These police officers wish to offer assistance in solving problems that the public are undergoing.

Although a variety of causes for inappropriate use of force may be spread amongst organisational determinants, situational determinants and individual determinants, the solution to reduce it may be found foremost with the individual police officer, his perception of a situation and his decision making process (Worden, 1996). This may require a form of resilience to situational and organisational factors. This research will investigate this path in further detail, as it is the individual police officer who, in the end, decides to use or withhold force.

3.2. Improving decision making as a solution for inappropriate use of force by police officers

Police officers regularly make rapid high-stake decisions in their work. Some of which can be really hard choices. These can be either based on a rational or an emotional style of policing. Brown and Daus (2015) have researched the effects of emotional and rational based decision making. In their view more rational based police officers avoid coercive action and police officers with a more emotional basis resort to force more readily. This does not mean that emotion is a negative aspect of policing, it is actually a rather valuable trait as it stimulates fast decision making in a high risk situation. With proper training targeted at effective emotional regulation this can become more useful as it may decrease stress and improve the quality of the decision making process (Brown & Daus, 2015). Historically however, as Aveni (2008) remarks, police training has had a strong focus on speed, and not on assessing and mitigating risks. This is problematic as it excludes earlier stages of decision making in police training. He argues that situational awareness and critical decision making avoids fatal use of force and diminishes possible judicial ramifications. And that it is not the fast drawing of a weapon or the ability to shoot like a marksmen that saves lives.

Decision making in separate stages

It might be sensible to divide the decision making process in stages, as White (2002) suggests, if earlier stages of decision making are important. Or as Binder and Scharf (1980) say:

> *"A police "decision" to use, or not to use, deadly force in a given context might be better described as a contingent sequence of decisions and resulting behaviours each increasing or decreasing the probability of an eventual use of deadly force" (p. 116).*

These different stages may require diverse types of decision making. Binder and Scharf (1980) suggest a division into four phases; (1) Anticipation, (2) Entry, (3) Information exchange, (4) Final decision. Every phase is under influence of former phases. They describe these phases as follows:

Anticipation: This is the moment information reaches the officer to act on a certain call. This can be issued through a dispatch, a colleague or a bystander, for instance. The content of this information is determinative, as is the manner in which the information is brought across. Both immediately influence the emotional tone of the officer at this stage.

Entry: This is the moment the officer enters the scene and is able to acquire information concerning the situation at first hand. He must assess the situation on account of danger and verify or refute the information received in an earlier stage. This includes choosing to use cover or positioning in a tactical way. The anticipation phase strongly influences this assessment.

Information exchange: This is the moment a form of communication is set up between the officer and the suspect. This can be extremely short, perhaps just a yell or shouting one word, or very long as it can be the case in a hostage situation.

Final decision: This is the moment the officer decides to act, sometimes rational and deliberate, and sometimes emotional and impulsive. "Most shootings occur suddenly, in moments of fear without calculation", says Rubenstein (as cited by Binder & Scharf, p. 118, 1980).

Binder and Scharf (1980) point out by separating the decision making stages, that the emotional pressures, which may distort the final decision making process, can actually be mitigated in an earlier stage. During that earlier stage rational thinking is still possible and an optimal tactic may be chosen, which positively influences the final decision. But there is a natural urgency to police work. And this urgency has a high potential to lead to violence, as Fyfe (1989) similarly concludes. He emphasises the importance of diagnosing potential critical problems before being confronted with them, by applying tactical knowledge and concealment. He says that if it comes down to a choice between critical decision making under the worst possible conditions and advance diagnosis, planning and training, the latter is certainly preferable. In short we can say that deliberate decision making trumps rapid decision making.

Naturalistic Decision Making (NDM)

Although this might be true, there is also a point to be made for rapid decision making. The most natural way police officers come to a decision is through intuition (Hine, Porter, Westera, Alpert & Allen, 2018). These researchers point out that sometimes policies and procedures may be counterproductive as they force police officers in systematic analysis, although the mental capacity to actually do this is limited. Simon (1990) shows that humans do not possess an unlimited capacity for decision making. The complexity of the task environment combined with the limited computational ability of the decision maker results in a sort of optimal outcome, he says. Since rapid intuitive decision making requires less mental strain (Kahneman, 2012) a police officer might perform at his peak when applying heuristics (Hine et al., 2018) and relying on previous personal experience or known experiences of colleagues (Trenholm, 2018). Experience based decisions are at the core of Naturalistic Decision Making (NDM). Klein (2008) provides some insight in how NDM works and why recognition-primed decision making is so appealing. The researcher explains that due to former experiences, the decision maker can match a new situation and immediately come up with a suitable response (if he has enough experiences in his repertoire). At its core the method generates a first good option and does not waste time on searching for the best option, the researcher points out.

Biases and illusions in decision making

Combining naturalistic decision making with critical thinking might actually be the most successful strategy. Kahneman (2012) describes a process in the brain where two distinct thinking methods or systems interact with each other on account of decision making. System 1 is a rapid intuitive and emotional decision maker and system 2 is a lazy rational one. System 1 is effortless, but system 2 requires a lot of energy and conscious effort. And although system 1 is effortless and fast, it is also bound to make mistakes in complex situations as it mainly works with heuristics, in contrast with system 2 which is more rational and may understand cause and effect, statistics and logic better. The optimal decision making process actually requires both systems. In reality, though, system 2 is often not involved, which can lead to all sorts of problems.

Kahneman (2012) has excessively tested the ability of people to make rapid intuitive decisions but his experiments have shown that five main problems occur when system 2 is insufficiently involved in the decision making process, since rapid intuitive decisions tend to be biased. He shows that a skewed perspective can be caused under influence of intrinsic and extrinsic presumptions, based on *priming*, *confirmation bias* and *the anchoring effect*. A skewed perspective can also be caused by the preference of people to choose easy over complex. This leads to problems on account of unconsciously substituting a complex problem with an easy one, or thinking only about best-case scenarios, instead of planning a strategy which also incorporates a worst case scenario. In this problem area it also becomes clear that people are inherently bad staticians. People readily violate the logic of probability by preferring plausibility over probability, for instance. Another main problem, which leads to a skewed perspective, is based on the fact that people unwittingly tend to create a coherent story and prefer order over chaos. Even when this is not warranted. This leads to *hindsight bias*, which distorts a memory in favour of a coherent narrative supporting a present conception. One more problem leading to a skewed perspective is the strain people show towards *not losing* in contrast with winning or gaining. The aversion of loss is disproportionate to the pleasure of gain. This causes people to remain committed to a concept, project

or idea, even though logic dictates it should be abandoned. People fear regret and therefor remain positive and involved despite the fact that it is no longer warranted, which may lead to even greater regret in the future. And finally a main problem is caused by a conflict which occurs when people remember and experience a situation. The value of a memory is mostly based on the final sentiment of an experience. Duration is less important than the height of the pleasure or pain. A mainly negative experience, with a rather pleasant ending will be remembered as positive. And vice versa. This shows that a lot of weight is given to the end of an experience which may lead to an unjust perception of an experienced situation. These five problem areas have a strong influence on decision making since the police may find themselves in a complex and high-risk situation which requires effortless rapid decision making, but also qualitative sound decision making, free of fallacies, biases and illusions.

In order to counter this problem, police officers should postpone the 'final decision' phase as it adds a certain amount of flexibility to the range of options a police officer has and increases the space for 'system 2' thinking (Blair et al., 2011). These researchers suggest that this can be achieved by making proper tactical choices on account of distance and cover as they strongly support the importance of early decision making regarding encounters with armed suspects. So the 'entry' phase should be optimised if the final decision is to be as ethical as possible.

Value based decision making

Professional ethics, moral values and private beliefs may conflict with each other, or support each other. But they might make decision making even more complicated. In accordance with Chang (2014, 2017), Herbert (1998) points out that police officers may be confronted with conflicting orders and even with legislation that is counter-productive. In these cases the officer must make a personal decision, which may differ from that of colleagues and may even be illegal. He stresses that officers apply internalised values and rules, which evolve during scenarios and experience. Thus creating room for discretionary powers and will-based reasoning. These internalised values and rules should be called upon in high-risk scenarios. Making this valid and ethical personal decision in a professional setting comes down to analysing the alternatives which are available. Chang (2014) points out in her research that people tend to compare values in the same way as they do with metrics, but that does not work and makes for hard choices. With metrics you can state that one alternative is larger, heavier or louder than the other. Or that they are equal to each other. This does not work the same with values. Values, such as justice, kindness or beauty cannot be quantified by numbers. Therefore an adjusted model must be taken into account when comparing values. She shows that values can be on 'a par' or in the same neighbourhood of each other, but still be quite different. In a hard choice one alternative is not better than the other, but rather, different and evenly balanced. To solve this dilemma a person should become an active creator instead of passive discoverer of reason (Chang, 2014, 2017). A requisite for this approach to decision making should be a sufficient sense of ethics.

The importance of professional knowledge in decision making

So, a police officer who finds himself in a complex and threatening situation could be helped with a rich sense of ethics (in order to do the right thing), operational tactics (to postpone the final frame decision) and a realistic perception of the situation (so that analytical decision making can be optimal). In order to achieve these feats a certain amount of domain-specific knowledge must be internalised (Simon, 1990). Trenholm (2018) remarks that several police officers in his research underline the importance of professional knowledge and experience to make the best decisions possible. These experiences may also come from interactive simulations in a training environment. The police officers in Trenholms research remark that knowledge is necessary if they wish to work within the parameters of the legal context and professional policy. Furthermore, the research stresses the importance of professional knowledge for sound decision making.

3.3. A closer look at professional knowledge for the police

Certain kinds of requirements need to be met in order to provide police officers with the necessary professional knowledge for sound decision making. These requirements constitute the Knowledge Management (KM) of the

police organisation. Research done in the Singapore Police Force (SPF) by Luen and Al-Hawamdeh (2001) on KM points this out by stating the following:

> *"Police work is dynamic and complex. Police officers come into contact with an astounding amount of information in the course of their work. To discharge their duties effectively, police officers need to be able to access, assimilate and use knowledge effectively. The crux is to surface such knowledge and bring it to bear on problems in a timely and effective manner" (p. 318).*

Seba and Rowley (2010) argue that public organisations, such as the police, show an inability to comprehend and apply KM, lack awareness and a clear strategy for KM, and have barriers in structure and culture complicating its effective use. Moreover, to make things more complicated, knowledge is an ambiguous term as it can be seen as a container concept if not properly defined (Schakel, 2013). Some see knowledge as tacit and explicit (Polanyi, 2012; Grant, 2007; Luen & Al-Hawamdeh, 2001; Seba & Rowley, 2010). And some see knowledge simultaneously as an object and as a process (Seba & Rowley, 2010). In the Dutch police organisation knowledge is seen as both a competence and as a building block, which require a provision and a management system for effective use (Dijkstra & Jurriens, 2015). The ancient philosopher Aristotle even had some trouble formulating a single definition of knowledge (Devereaux, 1986). He ended up with a trifold solution which divided knowledge into three types, the three virtues, and named them *Episteme*, *Techne* and *Phronesis* (Aristotle as cited in Flyvbjerg, 2001). Episteme meant theoretical knowledge of reality, which is declarative in nature. Techne meant practical knowledge, which describes how a person should do things. This is mainly procedural in nature. And phronesis meant wisdom, or knowledge of the good, which is essentially about morals and ethics (Aristotle, 1999). So, how should the police organise all these perspectives on knowledge?

Tong (2009) and Innes (2010) show that police work itself can be seen from a variation of perspectives when they describe the art, craft and science of policing. They point out that a mixture of perspectives on policing and its related knowledge is consistent with the complex task of policing. Sometimes the police need intuition, these are the tacit qualities of knowledge, and sometimes they need a more scientific approach, which relates to the explicit qualities of knowledge, they say. When these two qualities of knowledge are combined with the three types of knowledge, as proposed by Aristotle (1999), a category model for knowledge emerges for the varying kinds of knowledge, see figure 3.

	Declarative Knowledge	**Procedural Knowledge**	**Moral Knowledge**
Explicit Knowledge	*Position 1*	*Position 3*	*Position 5*
Tacit Knowledge	*Position 2*	*Position 4*	*Position 6*

Figure 3. The category model for knowledge (Martens, 2018)

Based on all of these perspectives it becomes clear that to make morally justified decisions, which are required for ethical use of force, the police at least requires moral knowledge in their decision making process. In summary of this argument Fitzpatrick (2006) says it quite fittingly:

> *"The demands and expectations of the police today are unprecedented in their scope and complexity. On a daily basis officers as well as command staff are required to make decisions of enormous social consequence. (….) Inherent in these decisions are ethical processes requiring an acute sense of complex moral rules and the extraordinary courage to follow them" (p. 23-24).*

These moral rules can be seen as law, ethics or moral values says Hazard (1995). He points out that the most explicit and broadly shared manifestation is law and that morals are the most tacit and somewhat private expression of norms. He explains that moral is derived from the Latin word *mores*, which implies that it is based on subjective culture and often difficult to communicate to others. The chief editor of the *Dutch magazine for the Police*[8]*,* Van Hoorn (2018), remarks that the boundaries of law and those of morals are not the same.

[8] In Dutch this translates to *het Tijdschrift voor de Politie*

Although there might be a clear distinction between law and morals, they both seem to be a requisite for police officers to make sound decisions.

4. FINDINGS

All results relevant for this master thesis and addressed in the methodology section are presented in the following subchapters and are discussed in chapter 5.

4.1. Law, regulations and professional values

Although the analysed documents often do not specifically speak about the use of firearms, but more generally about police conduct, it can still be applied to firearm situations as police activities may take place in that context. The formal expectations, which have been laid down in law, regulations and professional values, appear to have been grouped around several themes. The analysed documents seem to indicate the purpose of the use of a firearm by Dutch police officers. The purpose shows a selection of reasons and underlying goals which authorise the use of force with a firearm. The requirements for a proper execution of duties related to the use of a firearm by Dutch police officers also seem to flow from the document analysis. These requirements indicate a capability to appropriately use a firearm in the public domain. The analysed documents furthermore seem to indicate under which circumstances the Dutch police officers are allowed to use a firearm. These circumstances describe the situation and operational goals that validate the use of a firearm. It is also possible to derive a series of boundaries from the document analysis that seem to describe the limitations of the application of force with a firearm by Dutch police officers. These boundaries point out when legitimate force turns into abuse and excessive force. And finally the document analysis seems to point out how Dutch police officers are held accountable when using their firearm. The accountability is focussed on the manner in which the police are transparent about the application of force with a firearm. A complete overview of the document analysis is displayed per theme in appendix B2. The following paragraphs however show the common thread of the document analysis.

The purpose of a firearm

Law seems fundamental to the purpose of using a firearm by police officers. The permission to use firearms by the police seems to flow from formal and professional regulations. *The European Convention on Human Rights* (d1) points out that the police may use force in order to make a lawful arrest. The police are tasked, under subordination of the competent authority and in accordance with the applicable legal rules, to ensure the effective enforcement of the legal order, says the *Politiewet 2012* (d2). A more graphical and ethical perspective is added by the *Handelingskader Extreem Geweld* (d5), which states that in certain situations, such as terrorist attacks, the police must do something. Doing something comes down to balancing one's own safety and the safety of others. The police prioritises tasks that lead to distraction and disruption of extremely violent criminals or terrorists. This is emphasised in the *Beroepscode Politie* (d6) as this document indicates that the police will act forcefully in times of need.

Requirements for a proper execution of duties

The capability to responsibly handle firearms are, according to the *Politiewet 2012* (d2), based on two grounds; the use of a firearm should be reasonable and it should be moderate. The *Ambtsinstructie Politie* (d3) states that police officers must also be trained in the use of a firearm and that the firearm has to be rightfully assigned to them in order to make use of them. The police officer who uses a firearm ought to have sufficient professional knowledge, social skills and good physical and mental stamina in order to use a firearm reasonably and moderately according to the *Parate Kennis Bevoegdheden Politie* (d4). The same document also specifies the importance of knowledge on law specifically as the police officer does not always have time for contemplation or have the ability to confer with a colleague. Lack of this knowledge may lead to doubt, which can in turn lead to unwarranted restraint or unnecessary escalation, according to the document. In a context where the use of force by criminals or terrorists is overwhelming the police officers ought to act according to their best professional ability, says the *Handelingskader Extreem Geweld* (d5). Furthermore, this document sums up which tactical actions a police officer can perform if the context requires the use of a firearm. In closing, the *Beroepscode Politie* (d6) illustrates that police officers should strive to be true to the core values of the police; ethical, reliable, valiant and connecting. This is supported by the professional pledge police officers make, which states that a police officer should be a good civil servant, be attentive, be honourable and be reliable. And that he or she will not do anything to disgrace the police.

The circumstances under which a firearms may be used

In certain situations a firearm is the most appropriate use of force by the police. The *European Convention on Human Rights* (d1) indicates that the police may only act forcefully if a penalty is provided by law. This is illustrated by specifying that this may be the case when a person must be defended from unlawful force, or in order to effect a lawful arrest, or preventing the escape of a person who has been lawfully detained, or when a riot, or insurrection, needs to be subdued. The *Politiewet 2012* (d2) also stresses the connection with law. The document specifies the following:

> *"The police officer, appointed to carry out the police task, is lawfully authorised to use force...in the legitimate performance of his duties, if the intended purpose justifies this, also in view of the dangers associated with its use, and that this goal cannot be achieved in any other way. The use of force is preceded by a warning if possible." (par. 2.2, article 7.1)*

The exact circumstances in which the police may use their firearm is described in *Ambtsinstructie Politie* (d3). In this document the most prominent article states that a firearm may be used in three circumstances. When the police attempts to arrest a person who is suspected of having a firearm ready to be used and who might also use this weapon, is the first. If the police attempts to arrest a person who resists the arrest and who is suspected of having committed a crime which is penalised with a sentence of more than four years imprisonment, and which has constituted a serious violation of physical integrity or privacy, or could be a threat to society if allowed to escape, is the second valid situation for police officers to use their firearm. And a third situation involves containing a riot or fierce disorder and being under supervision of a police leader and being under orders of a legitimate authority. The same document additionally sums up a list of circumstances that require attention if the police actually intends to use a firearm, such as shooting at vehicles. The complete list can be found in appendix B2, figure B2.5. In the *Beroepscode Politie* (d6) a final remark has been given which shows that context is central to the application of appropriate force as it implies that it is a strength of the police when a police officer dares to act in contrast to protocols, procedures and professional guidelines in order to do the right thing. A fundamental value that the document puts forward and that supports this is; act friendly if possible and firm if needed with attention to the situation, involved people and professional knowledge.

The boundaries police officers ought to take into consideration when using a firearm

At its core the *European Convention on Human Rights* (d1) states that the rights of humans need to be respected, especially the right to life. Torture, execution, inhuman or degrading treatment and discrimination are specifically mentioned in the document as important concepts that need to be prohibited. The *Ambtsinstructie Politie* (d3) points out that the police may not use their firearm if a suspect has a known identity and delay of his arrest does not contain a risk to society. Furthermore, they must holster their weapon immediately if its use is not warranted (anymore). Undermining legitimacy is an effect when police officers carry out unlawful activities, says the *Parate Kennis Bevoegdheden Politie* (d4). The document emphasizes the importance of adhering to law, and not to professional intuition, as law leaves very little room for interpretation. On the other hand, the *Beroepscode Politie* (d6) clearly stresses the independent execution of duties and leaves room for discretionary powers. Nevertheless the document also states that the police must respect all citizens, should not be corruptible and must not act out of self-interest.

How police officers are held accountable when using a firearm

The manner in which the police must be transparent about their use of force, especially deadly force such as the use of a firearm, is mentioned in the *Ambtsinstructie Politie* (d3). The document points out that the police officer who uses force must immediately report the circumstances and facts surrounding its use to their superior. The superior will make a record of the reported force and may send it to the public prosecutor if the police commander deems it necessary, or when the use of force has led to severe trauma or death, or when a firearm has been used. This aspect is also supported by the *Beroepscode Politie* (d6) as it highlights the importance of the duty to explain and substantiate deviations from protocols, procedures and professional guidelines.

4.2. Police training and its focus

The interviews gave insight in the way explicit moral knowledge influenced the focus of police training sessions related to scenarios in which the use of firearms have been trained. It appears that indeed *Just Behaviour* and *Decision Making* are a part of *Police Training*. These three elements have been specified in appendix A1 and have been discussed in subchapter 2.1. That subchapter furthermore introduced the six main themes that followed from them. These were; educational aspects, operational aspects, judgemental aspects, moral aspects, mental aspects and physical aspects. The interviewees speak of students, but that ranges from police pupils in a primary setting to experienced police officers in an in-service training.

The outcome of the interviews show that although the educators in use of force are aware of the importance of explicit (and tacit) moral knowledge for their students, the conditions to optimise these training sessions are less than optimal. Furthermore there seems to be some difference between the perspectives of the individual interview candidates, but also between the types of educator. The educators that work for the Police Academy are less active in the application of skills and knowledge, but are rather occupied with the acquisition of basic skills and knowledge, which makes sense as they are responsible for primary training.

> *"I still believe that you have to take the initial situation of the student into account, so you can only come to training decision-making once you have sufficiently covered everything in those role-playing games. Because otherwise you have to let someone make a decision, which you can see as a skill, but he doesn't yet have all the tools to make that decision, which will only lead to problems". [i1]*

The educators of the in-service police training are on the other hand mainly concerned with the application of skills and knowledge and not so much with the attainment of basic skills and knowledge. In the following paragraphs the outcome of the interviews will be presented, grouped by the main themes. See appendix C3 for an overview of the interview results clustered in main- and subthemes.

Educational and operational aspects in police training

It appears that all use-of-force instructors resort to roleplaying games and scenario based training related to firearms. It is remarkable however that this varies between a quarter and two-third of the available training time, depending on the instructor. Overall the use-of-force instructors point out that the amount of time spent on roleplaying games and scenarios depends on the situation.

> *"A lot of role playing games and scenario based training is focussed on the use of a firearm. This is mainly with the in-service training. At the academy this is a bit less, due to the fact that students do not have a firearm in the first trimester." [i2]*
>
> *"It depends on the context we provide in the scenarios. In 2018 we were training extreme use of force, so logically this means a high rate of firearm usage, but we are currently alternating these sessions with a more mundane context that requires less force and so a lot less use of firearms is seen when that is the case". [i5]*

When police training commences and the use-of-force instructors resort to roleplaying games and scenario based training in order to train decision making several operational and educational aspects become relevant. Firstly the value of operational context in the training is seen as high. The operational context is not stable but unique for every setting, so training should mimic this and supply students with sufficient handles to operate successfully in that dynamic environment.

> *"A police officer on the street who has to make a decision must largely recognise the situation. Although that is never entirely possible. Because every situation on the street is different and unique. In the training we cannot really create a blueprint for the actual setting, in which we say; if you are confronted with this you must act like that. Because the next time the suspect might be*

three meters to the right and perhaps, suddenly, a woman with a baby buggy also appears. It immediately changes everything. That is however the power of roleplaying games". [i1]

Although it is not always possible to arrange a realistic setting, the instructors do acknowledge the fact that it is important.

"Often we [the instructors] will supply the students with a dispatch. But I don't believe the dispatch is realistic enough, though. Let me try to explain. We do put them outside of a gym or a training facility, because we do have realistic buildings here. And then we tell them; you have just received a notification to go to ... and then 3 seconds later I will say; Okay, guys, let's go inside! So, yeah, I think we are missing a part of the real operational setting here". [i3]

The use-of-force instructors also mention operational experience as an important factor in decision making, which supports the notion that training should mimic the operational environment as best as possible.

"You may be able to train intensely, but if you lack the experience, then it's just... That operational experience just has more impact on behaviour". [i7]

Besides operational aspects, comments were given on educational aspects. The use-of-force instructors mentioned the importance of a proper learning environment. And how it is often difficult to arrange a realistic setting and give attention to all the relevant learning goals. Both time constraints and insufficient teacher competencies may lead to a sub-optimal learning environment to reflect on explicit moral knowledge. Some use-of-force instructors even acknowledge explicit moral knowledge as a neglected topic.

"I do think that more lessons should be about moral knowledge. Because we increasingly realise that we can easily teach a specific procedure, it's not rocket science. But this is difficult. This is where the student is going to struggle with on the streets. I think that it is becoming more important than ever, but I am not sure if all instructors are competent enough to handle that type of subject". [i3]

The use-of-force instructors, however, make use of an array of methods to specifically reflect on explicit moral knowledge when they are able to address the topic. They speak of discussions that they lead in the class, questions that they ask during scenario's and in some cases provoke behaviour in order to elicit ethical dilemmas so that explicit moral knowledge becomes a topic.

"In a school-shooting scenario I sometimes create a context with several suspects. The students only operate as one couple, do they then choose to leave the first suspect where they have confronted him? Or are they going to cuff him or will one of them stay behind? But what happens when your handcuffs are used up, and three more suspects are still in the building. Is it really immoral to give a headshot? Sometimes the students have a discussion with each other, also with the whole class. We do not always supply the answer to the question ourselves, but we do want to stimulate the discussion so that they think about it". [i7]

The manner in which learning purposes concerning explicit moral knowledge are formulated seems to differ per instructor. When it concerns law it is seen as less complicated, but when it comes to ethical dilemmas it is viewed as complex. Most however state that explicit moral knowledge can only be properly addressed when it arises during a training. It is seen as a side-effect of a teaching method, instead of an explicit teaching goal.

"Learning proper moral decision making is crucial and fundamental in educating police officers. This entails norms and values and introspection, but also legislation. Especially the latter is difficult to teach, since the courts and judges may argue over the right approach in a specific situation and

therefore this is extremely difficult for trainers to handle with all the proper nuances. I actually tend to stay away from that specific discussion". [i4]

Judgemental aspects in police training

The use-of-force instructors remark that while focussing on how judgement related to explicit moral knowledge takes place during the roleplaying games and scenario based training, certain aspects come to light that may be viewed as important constituents. These are; perception, decision making itself, verification, consequences and doubt. To a lesser degree some instructors also mention grey areas, heuristics, professional intuition, professional considerations, expectations and process-steps. Especially perception seems to be an important factor in decision making as it may lead to a skewed view of values and norms that a student may have.

"And I also ask how did you come to that decision? How does a person think, you know? How does someone interpret the scenario? What is he experiencing? Because I can try to arrange something in a scenario, but what a student actually experiences may be very different, he may have performed very well, not according to my scenario, but according to the scenario in his own mind". [i7]

"And that they won't immediately translate it into the most extreme use of force, but that they recognise that the context has become less violent and that therefore milder force might be appropriate". [i6]

Most instructors teach their students to verify their perception either when they arrive on the scene or during the scenario as context may change.

"Everything a student has pictured in his mind, in advance, should be checked on the spot and may have to be adjusted". [i4]

Doubt over the legality of actions and the possible consequences of making mistakes appears to have some impact on the decision making process, the use-of-force instructors say.

"The consequences are considerable when the use of a firearm is involved. So the students really want to perform well and take the time to figure out what the appropriate action should be. And when 2 students come up with a different view, they become very uncertain. They really want to come up with the most appropriate action that everyone supports. I guess that is due to the consequences". [i3]

"Students are perhaps not only concerned with the consequences of an investigation, but possibly also with the consequences of PTSD or something similar. That could lead to a couple of seconds of delay on the streets, hoping that the situation will improve even though they should have taken action. The situation requires constant balancing on a scale, I find that difficult as an instructor. Somehow you don't want to slow them down, but you want to make it clear to them that it is quite impactful to use your firearm". [i6]

Some instructors help students with these dilemmas and use the roleplaying games as a method to train decision making by showing what the proper decision should be in a given circumstance.

"And in the end it is all about what the student encounters, what his perception is, what kind of options he has and which one he will choose. And that is exactly what we start to teach in the roleplaying games. We help the student by indicating that he or she should have decided this or opted for that. Which would have led to the most safe and smart course of action". [i1]

Moral, mental and physical aspects in police training

The main components of moral aspects in the roleplaying games and scenario based training, related to decision making to use a firearm and explicit moral knowledge, seem to be; Law as basis for action and Moral considerations. All use-of-force instructors recognise the importance of law as it is an integral part of most training sessions. The problem for students and some instructors seem to arise when an activity is legal, but may not be moral. Students request clarity on topics, which might not always be possible for an instructor to provide, since some viewpoints are based on personal deliberations of students.

> *"I have noticed that students prefer to stay away from these kinds of questions. If student A defends his actions by saying; yeah, but legally it's all right and student B says; mmmhmmmh ... I'm not so sure it's the right thing to do. Then that is difficult to hear for student A. To have a contrasting opinion, while there are legal grounds for an intervention, seems very disruptive". [i3]*

Sometimes the legal perspective can become rather immoral, as a student might search for grounds to use force or by not really engaging with a suspect, but scanning the situation rather superficially and then finding enough grounds to go ahead and make an arrest.

> *"I find it inadequate because the student is totally unable to see what the context truly is, because it differs from the one before and the student does not appear to notice this. The only thing he does is to look for an appropriate legal ground so that all his forceful actions are legalised and then he resorts to actual force. [...] However, this is not acceptable for me. They are not at all agile and cannot be bothered to utter an extra sentence or two. [...] Stop for a moment and engage a suspect with a conversation". [i2]*

Using law as a basis and adding moral considerations, and perhaps other elements, to a training is something some instructors also do. This means that law is effectively the first requirement in a series of requirements that a student needs to check in order to come to a decision to act.

> *"Well. I tend to view the performance of a student on several grounds. The first is legal, so what does the law say in this case. May a suspect with a baseball bat be physically subdued? Well, the law doesn't say it's not allowed, so okay. A bit like that. A second ground is the set of tactical elements that I have brought in as a teacher. For example, did they use the car as cover? Those kind of things. So, actually, the content of the lesson. [...] And the third, the why question, there is actually no measuring unit for it. I let students exchange perspectives on that". [i3]*

Moral considerations seem to be linked with the emotions of students. In violent confrontations with suspects, police officers sometimes also become fuelled with their personal feelings, which may interfere with professional conduct.

> *"If someone has just tried to severely harm you and you shoot him, but you could possibly have postponed it. Then it might not be entirely justified, but morally there is something like; You just tried to hurt me and why should I not be allowed to hurt you? So there is a very thin line. And we see that reflected in students when we really push them in a violent scenario". [i5]*

Nevertheless a general reflection of moral considerations does take place in some roleplaying games and scenario based training with a more positive angle, but that is still complex.

> *"We act with as little force as possible. That is actually the only principle I hold on to. And is the behaviour that a student shows in line with this principle? How could the use of force have been less? Could it have been less at all? The police, of course, have wonderful values, although these are container concepts, criteria must also be included. What do these consist of? The organisation*

may say valiant ... but what is that really? and when is behaviour no longer valiant? And can I also be valiant when I retreat from a violent confrontation?". [i2]

It appears that mental aspects are important to effectively act in accordance with moral considerations, and thus act in line with explicit moral knowledge. The most noteworthy mental aspect, according to the use-of-force instructors, seems to be the capability to handle pressure. To a lesser degree they speak of vulnerability, independent thinking, motivation, deviation, emotion and others. See appendix C3 for a complete list. The effect of pressure on performance seems two-fold. It looks like there is pressure from the consequences of unjust performance, which shows in a more basic emotion; fear.

"Then I would ask; can you give examples of others who may not have acted completely in accordance with the law and are subsequently removed from the police organisation? So a kind of argument has been put forward that is not true at all. A kind of fear myth". [i2]

And the other effect of pressure appears to be an inadequacy to perform optimally. The stress of a complex and violent encounter may lead to less room for tactical choices or limitations in perception.

"I am mainly concerned with the room to manoeuvre in the students mind and if he is able to make a choice". [i2]

"Although we can't easily arrange 85 bystanders for a training, we do realise that so much people on the street does something with the students, it has an impact on perception and therefore on his actions. And ultimately that also has something to do with decision-making. [...] the student is going to exclude information. Decision-making under pressure usually goes wrong because new information can no longer be processed". [i1]

And although creating a stressful training context appears to be difficult, it is a subject or method in roleplaying games and scenario based training for most instructors.

"I am not so much focussed on the skills of students anymore, they are usually sufficient. But what we are more interested in is that they start thinking logically and remain calm. Those are the two main aspects, I think, to be able to operate in stressful situations". [i6]

Physical aspects, while training roleplaying games and scenarios, are mainly based on skills of the students, safety and the tactics involved in using a firearm. The role of moral knowledge in those settings seems to be ambiguous as some instructors point out that due to limited time for training and often the inadequacy of instructors themselves make for skill-based lessons. They view that skills are a basic fundamental requirement to function as a police officer.

"Use of force instructors almost search for measurable aspects in a training. Can I explain what I am seeing? Is it tangible? Someone seems in good shape, he is moving well, he uses a cover or something. We are looking at those things. And then there is also accountability. We bring forward the relevant legislation and decide if the student has acted accordingly. But that whole other aspect, no ... that's not being addressed at all. And then you get all kinds of things like; I don't really have time for that, how competent do I feel about that subject, to actually deal with things like that?". [i2]

"No, we are mainly focussing on basic skills and primary knowledge, and we try to retrieve and apply that in the training. But we have forgotten something crucial, namely the moral compass and things like that. We sometimes explain it, though, and there are other teachers who can also coach a difficult discussion. But we don't train it. We merely mention it. And that's all the police officer gets from us". [i2]

Some use-of-force instructors acknowledge this and are aware of other aspects that transcend skills as they attempt to focus on the prevention of PTSD, an underlying belief system or just becoming a good police officer.

> *"As a beginning instructor we all felt it was super important that the students had a correct grip on their firearm and that remains true, because when the trigger is pulled, the shot must of course be accurate, but actually it has become less crucial for us now. There are other aspects that have become much more relevant and they do not receive enough attention. [...] We must pay attention to our students in the field. It is not without reason that so many police officers are at home with problems such as PTSD". [i1]*

> *"I can continue to overload them with skills, decisions, choices, principles and procedures. [...] When a student doesn't want to do something because it doesn't feel morally right. If I can figure that out, I can train that person very nicely in those dilemmas. [...] You can see that the most impactful aspect, that affects everything, relates to who you want to be, your beliefs". [i5]*

> *"You can throw in anything. Procedural knowledge and legal knowledge, but that doesn't lead to a good police officer". [i3]*

Combining the types of training may lead to an optimal situation where instructors attempt to balance the varying learning goals they have set out for their training, so both skills and accountability for instance.

> *"The student must be able to justify every shot he wants to give. It is not so much a shooting lesson, but a lesson about decision-making. At first we trained firearms skills and a lot of shooting followed, now we shoot much less because it is about making decisions in an operational setting. Does the student have a buddy with him or not, does the suspect have a firearm or not? And after a while we expand that into a larger scenario". [i6]*

To some degree the use-of-force instructors also reflect on the manner in which tactics, related to the use of firearms, is being trained. The same issues with skill-based training appear to be relevant in tactics-based training. Tactics also seem less complicated than moral dilemmas, some instructors say.

> *"You can notice that other instructors, and that fits within our culture, tend to rapidly jump to evaluating tactical behaviour. Like when an open door hasn't been seen. Or why a student went to the left instead of to the right? However, there is less reflection on feelings or the issue of how someone perceived a situation, what goal he may have had in mind, when he played out the scenario". [i5]*

> *"So the moral reflection remains, I think, underexposed due to a lack of knowledge. It is also not comprehensible at all. Legal knowledge is comprehensible. Shooting or not shooting legally, tactics and technique are all more comprehensible. This is about how a student feels about something and how safe the environment is so that a student can talk freely about it. I think there is a lot of room for improvement on that aspect". [i4]*

In some instances tactics seem to conflict with moral values, which leads to a difficult conversation.

> *"A suspect was shot in a scenario, he was wounded and crawled away. The student heard more shooting taking place in another room. So he shot the suspect who was already wounded in the head and left. I then asked why he did that. His answer was that all the time required to cuff the suspect would be less time to go to another suspect who is shooting at bystanders". [i6]*

In other instances tactics seem to support moral values, especially when a student is competent.

"Sometimes a student decides not to use a firearm. That decision is made in a situation where a suspect, who puts his firearm down on the ground and kneels beside it, suddenly attempts to grab his weapon. Although one of the two students may use his firearm, he won't. They say; I can still solve it by wrestling the suspect without having to shoot". [i6]

Working in a safe manner is viewed by several use-of-force instructors as one of the most fundamental aspect of police work.

"Yes. Of course you have to help someone who is bleeding to death, but to place handcuffs on him and then carry on, is difficult for them. Although that would, nevertheless, be the ideal approach. [...] They must also think about their safety. That is actually the most important thing". [i7]

But some instructors also understand that this can go wrong, if taken too far.

"I was amazed and startled that students had acted so forcefully. The assumption they had that fighting was often unavoidable and that the student himself may not be harmed at all and that the other party should be hurt as much as possible, was... I have an opinion about that ... and so I confronted the class; what do you as a class think, I asked. I try to have moral conversations like that". [i2]

Asking about safety in a training also looks like an important encouragement for students to start with reflecting on their performance in a specific scenario.

"By asking them the questions that make them think. So that they will reflect on that situation. Asking the right question is very powerful. Because I make them think, when I ask; Did you act safely?". [i1]

"In any case, it's about how a student feels and if he has felt unsafe in the scenario? That is certainly an important factor for us. Because someone who has felt unsafe should at least get some room to reflect". [i4]

Assessing risks appears to be fundamental to decision making say some instructors.

"The student then arrives at the scene. For example, he may be taking parties apart and he may be scanning the environment and seeing bystanders joining the ruckus. Then he must immediately adjust his Risk Analysis. Say, the risks related to; can I - can I as a person, can I use resources and am I skilled for this, and if the answer is no, well then he asks for assistance. It may also be that the student immediately requested backup up front because he knows the neighbourhood and already suspects what might happen there. It may also be that he approaches the scene and sees 20 people instead of two people and therefore asks for assistance. So that is the choice that they have to make in the moment and they must decide whether to go through as planned or perhaps pull back". [i4]

4.3. Reflections on actual police use of force

The meta-analysis of the 15 cases has provided a set of three main themes that cover a series of 13 sub-themes. The three main themes are the goals, the perceptions and the activities of the police during a potentially violent confrontation. The goals represent the initial goal with which a police unit starts in a situation, but also the new goals that arise when a situation or perspective changes. The perspectives that police officers have of a situation are formed during the briefing, initial dispatch or awareness of a suspicious situation, and that perspective appears to be under pressure during the course of the action. A varied collection of beliefs, assumptions and awarenesses can be deduced from the cases as repeated revisions of the original perspective are obtained when new information is added, and the dynamic context of the situation develops. The activities that police officers resort to can be traced back to training, preparation and plan-making. But also says something about the

conscious actions that are taken to handle the situation the police officers are in and how they take control of that situation. The following paragraphs explain these main themes in relation to the decision making model of Binder and Scharf (1980). That model, as discussed in subchapter 3.2, divides police decision making into several steps. Some of these steps have been clustered during the coding phase of this research and a reflection has also been added since the cases also included an interview after the incident, which has led to the following relevant aspects; *Anticipation, Entry and Information exchange, Final decision* and *Reflections.* The complete overview however of the outcome of the meta-analysis can be found in appendix D2.

The goals of the police during a potentially violent confrontation
During the *Anticipation* it seems that police officers in the selected cases often get sent to maintain public order or to mediate in a dispute. This however mostly changed in the *Entry and Information exchange* into physical arrest, warding off threats or self-defence. The shift in goals appear to have come about through an escalation of the situation the police officers found themselves in.

> *"The police officer put his hand on the shoulder of the guy who was urinating in public to prevent him from running away. The other guy, who was with him, took this the wrong way as he started pushing the other police officer and began yelling at him. At that moment, the situation threatened to escalate". [c29]*

> *"The aim was, prior to the escalation, to "mediate" and "maintain public order". As soon as the situation escalated, the officers had to focus on three new goals, namely "arrest of a fleeing suspect", "arrest of a dangerous suspect" and "self-defence". Ultimately, the final goal in this case was to get this dangerous suspect under control. […] This goal was never set beforehand, because none of the police officers had expected this amount of escalation". [c66]*

Besides escalation, the police officers also reacted to a development of the incident, which has led to other goals such as providing medical assistance to a wounded suspect.

> *"The police officers who were wrestling with the suspect were completely covered in blood. A little later other officers came to the scene on their bicycle. The police officers fixated the lower part of the suspect's body with one of the bicycles. Another officer tried to apply a tourniquet on the man with the help of a baton and the rope of a bobbin. In the end they succeeded. The man only calmed down after the third sedation. Only then could he be offered the medical assistance he needed". [c63]*

In the *Final decision* the police officers remained focussed on the set goals. After new information unfolded or when the context changed they fell back to *Entry and Information exchange*. It is remarkable however that in none of the cases an explanation was provided in the *Reflection*. The most detailed description of the rationale behind the shifts in goals has been provided in the way the police officers have perceived the situation.

The perception of the police during a potentially violent confrontation
Police officers appear to have varying perceptions of the situation they are in. In most cases this perception shifts due to the dynamic context and accumulation of new information. It seems that the perception of police officers in a potentially violent confrontation is formed and renewed during the *Anticipation, Entry and Information exchange* and *Final decision.* Some initial assumptions and prior-information have been provided to police officers by the dispatch. This shaped the *Anticipation* of the police officers. In some instances the police officers requested more details, but these were not always processed due to the fast arrival time of the police unit on the scene.

> *"The two police officers requested a background check on both addresses, but due to the swift arrival time (within 6 minutes) this information was not shared with the two police officers". [c07]*

"Police officers immediately started driving and arrived on the scene rather quickly. As a result, background information about the home and the people involved was not yet issued by the dispatch". [c110]

In some cases the police decided to investigate a situation and gather more information on the scene.

"The aim is to gather more information on-site about the conflict, possibly to mediate (de-escalate) and to maintain public order. As of yet, there is no indication of a criminal offense and therefore no goal to arrest anybody". [c22]

Assumptions based on earlier contact with known suspects or places may have also shaped the initial perception of police officers.

"Café X was known as an establishment where usually something was going on. There were often fights. It was 'a difficult place with difficult people'. A lot of drunks and drug use". [c19]

And in some cases these assumptions may have been misleading as the actual situation could turn out to be quite different from the initial perspective.

"There appeared to have been a stabbing in street x. The perpetrator of the stabbing is said to be attacking several people. The dispatcher nonetheless immediately dismisses it as a possible false report because only one person called it in. This instantly led to the assumption that the situation might not be too bad, the police officers explained. It nevertheless soon became clear that the situation was quite threatening". [c104]

During the *Entry and information exchange* the police officers became aware of a lot of triggers that in most cases led to the realisation or tipping point where they had to decide to act forcefully, retreat or conclude the arrest. The most common triggers were; unresponsive person, ineffective pepperspray and agitated person. See appendix D2 for a complete list of triggers and tipping points.

"The two people reeked of alcohol. The police officers could make reasonable contact with the woman but not with the man. The police officers tried to make contact, but the man did not want to shake their hand. The man was visibly angry, he was scolding and did not respond to reason. Because of the angry and fierce look in the man's eyes, one of the police officers had become extra alert. The police officers tried to explain that they had received a report of a neighbour dispute and that they wanted to hear their side of the story. Suddenly the man forcefully swung his fist, missing the male officer, and hit the fence. The police officers tried to calm the man down, but to no avail". [c07]

"The police officer ended up in a fight with the suspect and got in a threatening situation. She tried to ward off the punches, and used pepperspray against the suspect in self-defence. The suspect did not respond to the pepperspray. They fell to the ground, where the suspect landed on top of the police officer and slammed his fists against her head". [c69]

The tipping points that were mentioned the most often were; safety first, control over suspect and shot in leg is effective.

"The other police officer had no direct sight of the suspect through the fences but heard the sound of the chainsaw's engine. She called out to her partner 'get out of there'. According to the other police officer, the man held the chainsaw at chest height, turned the sawblade in their direction and walked towards them. At that moment they thought: 'This is for real, we must think of our own safety first'.". [c07]

"The suspect repeats his stabbing movements with the knife and walks towards the police officers. They both take a step aside. The suspect walks between the two officers, with his arm in front of his eyes, probably because he is suffering from the pepperspray. At that moment one police officer manages to bring the suspect to the ground and fixate his movement. After this, he is cuffed and transported". [c82]

"The police officers stated that contact with the suspect was not possible. It seemed as if he was completely out of it. The suspect could only be apprehended after two warning shots and a shot in both of his legs". [c104]

These tipping points led to the *Final decision*, which in some cases had become part of a feedback loop. The final decision to use, or not use, a firearm in these cases had been made several times in one incident, due to its dynamics. It appears that a certain awareness or belief formed in their mind, which led to the decision to use, or not use, a firearm. Becoming aware of an unresponsive suspect, a suspect with a deadly weapon and ineffective pepperspray seems to be the major contributor of that awareness.

"The suspect was approached and, after calling out to him, kept advancing towards the police officers with a knife in his hand. She noticed that the suspect had a very absent look in his eyes. So the police officers decided to go back in their vehicle". [c63]

"After one of the two police officers approached the suspect, he immediately pulled a knife and started to making stabbing motions in the direction of the police". [c55]

"The police officers in the squad car attempted to cut the suspect off. The officer on the passenger side used pepperspray against the suspect at about a distance of four or five meters. Given the large distance and weather conditions, this attempt to subdue the suspect failed. The suspect swung forcefully with his knife but he did not appear to attempt to stab the police officers. The suspect walked around the squad car and continued on his way. The officers that were on foot still followed him. The officers from the second unit got back in their vehicle and drove up further ahead of him. They tried to cut him off again, and attempted to continue using pepperspray. But to no avail". [c82]

Although the examples mentioned above are more common in the researched cases, it also appears that the police officers are very aware of the positive effect of some of their interventions. Which seem to indicate that they are also consciously able to reduce the amount of force.

"All the involved police officers indicated that they deliberately put their finger on the trigger to be able to give of a shot in the chest. However, when the suspect stepped back, they all took their finger off the trigger and pointed the firearm to the suspect's legs". [c55]

The beliefs that the police officers acquired during the incident seem to provide them with a sense of urgency. The most prominent belief is the idea that eventually there is a lack of alternatives. The police officers felt compelled to act based on these beliefs.

"The suspect continued to approach the police officer. The suspect was summoned to stop walking and to drop what he had in his hands. He did not comply. The distance between the police officer and the suspect decreased rapidly which made the police officer think: 'It is you or me'. The officer reacted on this with self-defence". [c110]

"One of the police officers also wrote in his police report that, at the time, he thought pepperspray would not be sufficient. He did not know what else he could do and so he grabbed his firearm". [c29]

During the *Reflection* on the incident by the involved police officers they most often mentioned that they felt as if they were in a life threatening situation, which forced them to resort to some kind of force.

> *"It was also not possible to communicate with the suspect due to his mental state. He did not respond to the police officers addressing him and his shouts were not understood by them either. The point of no return had actually been applicable during the entire incident, but became inevitable when the suspect pulled the knife. The suspect was a danger to himself and to the community". [c82]*

The perception of police officers appear to have guided the activities that they employed during the incidents.

The activities employed by the police during a potentially violent confrontation
In most parts of the development of the incidents described in the cases a set of activities have been carried out. So, during the *Anticipation* the police officers often focussed on plan-making and preparation.

> *"While driving to the incident, the police officers made a compact plan with regard to the Risk Analysis. They asked themselves; 'What is the goal?, what are the risks involved?, what tasks can I do?, on what legal grounds? and what will I do? If an arrest is going to be made, then we should take the knife into account, which the suspect may carry on him'. The police officers estimated at*
>
> *that time that it may be necessary to use pepperspray in order to control the situation. When they arrive at the scene, the police officers plan to speak with the person who called and her mother first". [c110]*
>
> *"After the first police officers are on the scene and pass on information, two other officers also notice that it is becoming more serious and so they haste to get there. In the squad car the approaching police officers talk about the steps they should take when they arrive. There was no mention of use of force". [c104]*

Although in some instances the specific activity of plan-making was rather absent due to the rapid development of the incident.

> *"A Risk Analysis and plan was not made in advance and no specific tasks were set. The incident was close to the police station and the police officers were on site in about 4 minutes after the dispatch. Therefore no consultation between police officers had taken place". [c19]*
>
> *"The police officers were confronted with the situation, while on the street. There had not been a moment where they could have sought consultation and think of a plan. Another factor is that both officers had been focussed on the incident too much to zoom out". [c29]*

And in other cases the lack of plan-making was caused by the assumption that the police officers would arrive in a well-known situation.

> *"Since these police officers had received such reports quite often in their careers at night-time, they had not made a plan or a briefing, but wanted to act based on what they would encounter on the spot. They had therefore not made a Risk Analysis, had not divided tasks and had not planned anything at all. While arriving at the location of this incident, no new information was received from the dispatch and therefore no further information was shared with the other police units". [c63]*

The police officers sometimes prepared themselves by requesting backup-up and actively listening to the radio while approaching the incident

"When the specified vehicle was located, the two police officers requested another police unit to assist with the deployment of the BTGV[7]". [c80]

"Through his radio channel, the police officer informed the approaching colleagues that if they saw any kind of weapons, they should treat them as if they were real weapons, especially if the suspects were older boys and not young kids. Furthermore, during the approach, the police officer continuously focused on listening to the dispatch to hear if new information was added". [c93]

In the *Entry and Information exchange* remarkably none of the cases mentioned activities, only perceptions and shifted goals. But during the *Final decision* the police officers often mentioned taking control and in a few cases mentioned acting according to training. The most common form of taking control looks like the act of disabling a suspect.

"The suspect suddenly made a move towards the officer. He lunged for him, this was essentially different from the shuffling they saw earlier, so that the suspect suddenly appeared to be attacking. The police officer immediately fired a (1) shot into the suspect's leg. The distance was only around 4 meters at that time. The suspect still did not show his hands. But the suspect did go to the ground after the shot. The shot was briefed to the dispatch and the officer mentioned that the suspect was hit, medical assistance was also requested for this. Immediately after the shot was fired by the police, the suspect was secured and handcuffed". [c101]

"A police officer shot the suspect in his leg. They saw that the suspect became a bit unstable, but continued cutting in his arm with the knife. Another police officers shot the suspect in his right lower leg. The police officers deliberately waited to see to what the impact of the shots were and if it was necessary to shoot again. One police officer described that he saw the bullet go straight in and come out diagonally. The suspect eventually buckled due to the shots. He nevertheless tried to get up again, but continued to fall as his legs couldn't support him. Then the police officers saw the man put the tip of the knife to his chest and started pushing the knife into his chest with two hands. A police officer started shooting, this time three shots in a row. A bullet hit his buttock, one hit his leg and one shot missed. Several police officers prepared to shoot again, but this was stopped by one officer. Three of them approached the suspect and kicked the knife away from him. The seriously injured and confused suspect could then be apprehended and cared for". [c63]

In a few cases the police felt compelled to act because there was an imminent threat to a colleague or others.

"Both police officers indicated that they felt that the suspect was out to stab a colleague. The police officer with the pepperspray sees an opportunity to spray the suspect at a distance of about 5 meters. The suspect however does not respond to this. Another officer must holster his weapon as colleagues are walking and / or driving through his line of fire. Yet another police officer, who arrived on a motorcycle, is also forced to put away his firearm because of the lines of fire. Eventually a police unit arrives on site with a squad car and sees the suspect walking with the knife. At a speed of approximately 15 kilometres per hour, they hit the suspect from behind. The suspect falls to the ground and drops the knife". [c104]

The police officers mentioned in a few cases that they recognised the situation they were in from a training session and acted accordingly. In one instance the training shaped the police officers' view on knives.

"Both police officers saw that the suspect was still proceeding towards them. Both of them drew their service weapon almost simultaneously and aimed it at the suspect. One of the police officers remarked that he had not deliberately thought about grabbing his firearm but that he had done this automatically due to the use of force training". [c07]

"The dangers of suspects who threaten others with knives are nowadays taught by the use of force instructors. In the mind-set of police officers these dangers are now better understood and taken into account when they have to assess an incident. The use of force continuum is therefore approached differently than it used to be. A suspect can cause life-threatening injuries if he can bridge the distance with a knife in his hands before a police officer can pull out his firearm". [c101]

The police officers focussed in the *Reflection* of the activities mainly on how they were taking control and how they felt that they performed conscious actions. In some instances they also reflected on the value of training. Reflections on how the police officers took control was mostly about confidence and deliberate action even though this may have been altered in the course of the incident.

"The police officer had a plan in her mind. She would force the suspect to lay down the knives, turn him around and make him walk backwards in her direction, with his hands on his head, so that he could be handcuffed afterwards. Even when the suspect came out of his hiding, the police officer still did not experience any stress because she felt that she had everything under control. When the suspect knelt and seemed to put the knives on the floor, she still had this feeling". [c46]

But also the sense of reaching a point of no return appears to have led to a sense of inevitable actions and attempts to take control over the situation as some police officers mention in the cases.

"For both police officers, the point of no return was reached at the moment they saw the vehicle of the suspect. At that instant, both police officers realised that a BTGV procedure would be initiated in which they would be involved. One of the police officers indicated that they had experienced adrenaline, but only mildly. Both officers indicated that this had little or no influence on their performance". [c80]

"The point of no return was reached by the police officers at the moment that the suspect started to resist. They acted out of stress, which meant that pepperspray was not properly used, radio communication was 'forgotten' and physical force was applied, but not as it was taught by the use of force instructors. The police officers also described their actions as being driven by survival instinct". [c66]

The reflections on conscious actions led to a strong sense of deliberate choices that were often made in the researched cases.

"There were no doubts because the police officers felt calm and they assumed the arrest would unfold in a controlled manner. While considering to use their firearm the police officers thoroughly deliberated the situation. Even though the police officer indicated that she experienced a combination of adrenaline, stress and anxiety at that time". [c46]

"At the moment the police officer was lying on the ground, and the suspect was sitting on top of her and hitting her head several times, she thought about using her firearm. The police officer nevertheless chose not to use her firearm since the firearm would then be within reach of the suspect, which would increase the risk to her safety". [c69]

In a few cases the police officers also reflected on eliminating other options and considering the consequences of their actions or inactions.

"The police officer had to make the decision to shoot in a very short period of time. The use of pepperspray was not sensible given the distance between him and the suspect. The baton would also be inappropriate as it is unusable to control that type of situation. The firearm may be the last resort, but in this case, the correct means to regain control of the situation". [c110]

"When the suspect was located, the two police officers decided to go ahead and apprehend him because delay could result in more casualties. No other police officers were present at this time". [c101]

And in some cases the police officers reflected on the value of training use of force techniques, such as the use of firearms.

"Both police officers found that they were well prepared for such a situation due to the use of force training and that those training sessions are really beneficial. […] the only workable way for police officers who need emergency solutions in fractions of seconds is to train emergency situations as is done in use of force training. This is therefore in line with the experiences of police officers who previously did not always see the usefulness of these training sessions, but have started to think differently because of this specific incident". [c07]

5. DISCUSSION

The findings have led to some insights which make it possible to answer the research sub-questions. After these are answered the triangulation takes place in order to search for consistent and inconsistent results between the methods and perspectives. And to conclude this chapter the remarks from the expert review have been presented to assess the overall perspective that the research appears to have reached.

5.1. Research sub-questions answered

In the following paragraphs all three sub-questions will be addressed related to their corresponding research method.

What is expected by law, regulations and professional values of Dutch police officers when they consider using a firearm? (SQ1)

The researched law, regulations and professional values can be arranged into a certain classification. It appears that explicit moral knowledge describes the purpose of the use of a firearm by the police, the boundaries that police officers need to have in mind when they consider using their firearm, the circumstances under which a firearm may be used, the required capabilities of police officers when they use their firearm and how they are held accountable after using a firearm.

The purpose of using a firearm is executing the law as it is written, but also what it stands for. The letter of the law and the spirit of the law may be different as not all incidents are completely covered by law. It is for that reason that regulations and professional values are crucial to understanding and interpreting law in a specific context.

The boundaries of using a firearm by the police means respecting all basic human rights, which can come into conflict with the purpose of using a firearm. This may even be viewed as a paradox. It is therefore important to notice that Dutch police officers have discretionary powers and must immediately adjust the amount of force or withhold force if the purpose is met. It also implies that police officers are required to use the least amount of force as possible.

The circumstances that make it reasonable to use a firearm for Dutch police officers are based on the lawfulness and the notion of *doing the right thing*. The latter seems vague but is actually required for the police to assess a specific context and in some situations abandon protocols, procedures and professional guidelines because it is the most humane thing to do.

The capabilities of Dutch police officers come down to using force moderately and reasonably. In order to do this they must be trained in the means to use force, but also have their professional skills in order, such as possessing adequate professional knowledge, social skills and physical and mental stamina. They are also expected to adhere to the core values of the Dutch police in order to be capable to use their firearm, although interpreting these abstract core values in an operational context may be difficult.

Accountability is crucial for the police organisation to remain legitimate. It is for that reason that the Dutch police officers must report the use of a firearm immediately to their superior and must always be able to explain and substantiate deviations from regulations.

In what way is explicit moral knowledge the focus of police educators when Dutch police officers are trained in decision making concerning the use of a firearm, in order to improve just behaviour? (SQ2)

The use-of-force instructors explained that they believe that operational experience is crucial for appropriately handling difficult situations. Therefore they tend to mimic that experience in the training they provide by creating a realistic operational setting. This also provides a realistic blueprint for the actual circumstances and boundaries related to the use of a firearm. Nevertheless they seem to agree that it is often difficult to plan for moral dilemmas as those tend to be side-effects of the more skill-based training in these realistic operational settings. Besides, they say, the discussions about the application of moral knowledge seems to either limit itself to law, or is dismissed altogether as it is viewed as both too complicated and too time-consuming. Some reflect on this by stating that perhaps instructors currently lack the competencies to address this topic adequately, which makes

it a neglected topic. And thereby withholding students the opportunity to acquire the capabilities to handle explicit moral knowledge in context. Although when it does receive the proper attention the instructors guide the students through discussions, or ask questions about a certain performance and in some cases do succeed in provoking certain behaviour that leads to a moral dilemma.

The decision making skills and the perception of students are relevant as well, say the use-of-force instructors. These are part of the range of capabilities required for properly applying explicit moral knowledge. An instructor should be aware of the perception a student has of a context because the behaviour the student shows is based on that perception and may be founded on great values, but not for the misinterpreted situation. The instructor has to reflect on that perception, not on what he intended with his training, otherwise the student may get taught incorrect solutions to a dilemma. Some instructors also remark that the students are taught to verify their perceptions as context might change over time. In some instances students show doubt when they have to decide to act, due to the legality of their actions and concerns about the consequences. The instructors mention that the student seems to hope the situation will improve while in fact the delay, followed from doubt, may lead to escalation. The solution that the instructors put forward is that most of them train decision making as a skill in the roleplaying games.

Law seems to be an integral part of the roleplaying games and scenario based training. Sometimes this comes into conflict with moral considerations as some students recognise that even though some interventions may be legal in in a certain context, they may still not be moral. This conflict can create doubt, but the instructors say that they lead to a discussion in the training amongst students, which is valuable. Doubt may also be misinterpreted by the instructors, which is another reason for an open discussion about student decision making. One use-of-force instructor also mentions that in some cases the students act immoral by scanning the context rather superficial and limit themselves by only searching for grounds to use force, which the instructor finds unacceptable. Some use-of-force instructors also explain that they assess a performance by combining standards. Law is the foundation of that performance, but also tactics and moral considerations are discussed. Although the latter seems difficult to grade. In some instances personal feelings of students may interfere with professional conduct when they are pushed in very violent scenarios. But one use-of-force instructor remarks that if they all adhered to just on basic principle most moral considerations would be less complicated. His general rule of thumb is; *use as little force as possible*.

The capability to handle pressure is trained in the roleplaying games and scenario based training, but it appears that some students fear the consequences of unjust performance and that the stressful environment that the instructors provide also leads to an inadequacy to perform optimally. This makes some instructors tend to focus more on the capability to think logically and remain calm under these severe conditions than the application of skills, as these are usually sufficient. This does not mean that skills and tactics are not trained, moreover some instructors tend to stick to skills and tactics as these are the basic fundamental requirement to function as a police officer, they say. Besides these skills and tactics are measurable and morals are not which make it easier to manage for an instructor. On the other hand, there are also use-of-force instructors who attempt to focus on the prevention of PTSD, address an underlying belief system or transcend all of these aspects and focus on making good police officers as a whole. In some cases this leads to combinations of learning goals, such as skills combined with accountability for instance.

It is remarkable that in some cases the tactics in a scenario support moral values, especially when a student is competent, and in others they seem to conflict with moral values. This appears to be related to balancing interventions and choosing a lesser evil. The balance of interventions also seems related to safety aspects. Safety is regarded by the instructors as one of the most fundamental aspects of police work. In some cases asking about safety can lead to a student reflecting on his performance. And openly assessing the risks in a scenario is found to be essential to decision making.

In what way is explicit moral knowledge a part of the reflection when Dutch police officers have considered using a firearm in an actual situation? (SQ3)

The multiple cases appear to keep to a certain classification of their own. They clearly describe the goals of the police officers, the perceptions they had and how both the goals and perceptions shifted during the incident. And which various activities the police officers employed during the incidents. In all cases it was possible to indicate what took place during the *Anticipation,* the *Entry and Information exchange,* the *Final decision* and how the police officers *Reflected* on the incident as a whole.

The initial goals or purpose appear to be legitimate tasks, such as mediation and maintaining public order. These shifted to physical arrest, warding off threats, self-defence and supplying medical assistance to a wounded suspect as the incident evolved. All of these newly acquired goals are also legitimate.

The perceptions of police officers, required for proper assessment of the circumstances and boundaries, were initially formed through assumptions and prior-information seemingly based on information supplied by the dispatch and expectations built on earlier contact with known suspects or experiences of known places. These perceptions were in some cases misleading and required verification on scene. When the police officers arrived at the incident they were confronted with various triggers in behaviour of suspects, situation of colleagues and the general context. These triggers led to a tipping point that initiated further actions. An important tipping point appeared to have been the sense that the police officers were in serious jeopardy and that safety needed to be their first concern. In other instances they felt that they could moderate their interventions as the suspect was under control or that a shot had disabled the suspect. During the final decision to use, or not use, a firearm, the police officers in some cases became aware of the threatening situation as some suspects were completely unresponsive, had a deadly weapon or seemed impervious to pepperspray. Some police officers also became aware of the impact of their interventions and moderated accordingly if possible, indicating a sense of boundaries and circumstances. The police officers in most cases felt they lacked alternatives and were therefore forced to use their firearm, more or less out of self-defence. They reflected on this mostly by remarking that they experienced a life-threatening situation.

In some cases police officers acted before arriving at the incident by making plans and thinking about the goal, the involved risks and the legitimate grounds for an intervention. Thereby indicating a capability to apply law, regulations and professional values. Although this was often neglected in other cases, mostly due to the rapid arrival time, the swift development of an incident or the assumption that the situation would not be very threatening. Those that had the time to prepare themselves often requested back-up and actively listened to the service radio. At the time the police officers perceived the actual situation they often reacted to the triggers and tipping points by taking control of the situation and trying to disable the suspect either physically or by means of a firearm. Some mentioned the positive effects of training on their actions. The value of training was for some police officers also an item in the reflection. Most reflected on how they took control over the situation and how they often made conscious choices, even under stress. In those cases they felt confident as their actions were deliberate. Although that also shifted to anxiety in some cases during the incident. In a few cases the police officers also reflected on the point of no return which had forced them to act, sometimes in a controlled manner and sometimes in a panicked and instinctive way. In a few cases police officers were able to think about the consequences of their actions and eliminate other options before drawing their firearm, which reflects a sense of moderation and attention to the circumstances in which they acted.

5.2. Triangulation of findings

A certain amount of consistency can be found throughout this research, even though the three methods in this research are based on different perspectives. Consistency between two or three methods will be discussed in the following paragraphs as well as the possible inconsistency between perspectives.

Consistent results between methods

The importance of perception appears to be a very consistent factor in this research. In the document analysis the relevant law, regulations and professional values that were assessed clearly require an accurate perception

of a specific context in order to assess the legality of the use of a firearm, but also to consider the circumstances and boundaries. This is substantiated in the interviews with the use-of-force instructors as they explain that a proper sense of the situation is fundamental to reflection. That is why an instructor is required to explore the unique perception a student has had during a roleplaying game or scenario. Furthermore, the instructors also aim to mimic the operational environment in the best way possible in order for students to recognise the accurate context and perform the appropriate actions while on the streets. This is additionally supported in the multiple-case analysis as the police officers in the various cases constantly seem to adjust their perceptions due to the dynamic development of an incident as they often appear to be aware of triggers that specify a situation. The quality of the perception, in a training environment and in the operational context, however is often not optimal as misinterpretation also seems to occur.

The document analysis indicates that a certain amount of transparency is required for police officers to justify their use of a firearm as this is part of the accountability. This transparency is also required in a training setting since it requires reflection. And reflection requires at least openness (Filmalter & Heyns, 2015). But also in the multiple-case analysis the involved police officers mostly openly discussed their deliberations and showed a capacity for reflection. This appeared to be not only after the incident but also during the incident as they were capable on most occasions to increase their force or to moderate it.

Within all three methods the importance of law was brought up. The purpose of using a firearm for police officers is based on the lawful execution of duties, say the documents in the document analysis. Law also seems to play an integral part in the roleplaying games and scenarios. Moreover, most use-of-force instructors prefer to limit moral deliberations to the assessment of legality. And some police officers reflected on their Risk Analysis and plan making in the multiple-case analysis by mentioning that they looked into the legal grounds of their proposed interventions. Nevertheless, a more pragmatic and fluid form of law seems to have been the basis of the interventions in several cases and were mentioned by some use-of-force instructors. This appeared to be a heuristic; use the least force possible. This is in complete congruence with the concept of using force moderately and reasonably, as mentioned in the document analysis.

An even more fluid and somewhat fuzzy concept has also been consistently mentioned in the three methods. That concept is; doing the right thing. The document analysis shows that police officers pledge to abide by the core values of the police which state that doing the right thing may even mean abandoning protocols, procedures and professional guidelines. The use-of-force instructors mention the conflict that sometimes seems to occur in a training session between legality and moral considerations. The instructors recommend the students to choose the lesser evil. This again is also seen in a few cases as some police officers have had time to think of the consequences of their interventions and were able to consciously eliminate other options before using their firearm. Doing the right thing apparently requires a weighing of values in the spur of the moment as the dynamic context evolves. But what that eventually entails has not been made clear and can maybe never be made clear on forehand as it appears to be both meaningful and at the same time futile (Nap, 2012).

Inconsistent results between methods

The research findings do not clearly show inconsistencies when the three methods are combined. It is rather that an absence in one method may be found which does not corroborate a specific finding that is noteworthy in others. The single most remarkable is the absence of guidelines in the document analysis when police officers have become reactive and instinctive in a self-defence situation. It seems that the police are confronted with law, regulations and professional values that only guide them in a deliberate proactive execution of duties. In that perspective the purpose, boundaries, circumstances, capabilities and accountability are all relevant and applicable. The roleplaying games, scenario based training and multiple cases on the other hand mention the attention they give to uncertainty in a fuzzy and threatening operational context. And although the police officers do not receive a clear cut answer in the training or know exactly what to do in the operational field, they do seem to deal with it. It seems that deliberate and proactive interventions may follow explicit moral rules, but intuitive and reactive actions, especially under high stress, are left to the discretion of the police officer. Which begs the question; is a police officer in that situation viewed as a professional applying professional skills and knowledge

or must he be viewed as a person that may be fighting for his life and applying all his personal and professional skills and knowledge to survive in that context? This research does not provide an answer to this question, but perhaps the professional police officer should also be regarded as an intuitive being and incorporating intuition and feelings in professional standards might be something to be aware of.

Other noteworthy findings that are not supported by all three methods are difficult to discern as both the interviews and multiple-case analysis cover a wide and differing range of perspectives that use varying semantics to describe the perspectives. This makes for different nuances and sometimes dissimilar details, but the common thread appears to be the same.

5.3. Expert review

The three experts have reviewed the results of this thesis thus far. Dr. Nap reflects on the findings by saying that the actions of police officers need to be valued in respect to "good coexistence" within society. How the police contribute to good coexistence in society is the real benchmark, he says. It is difficult to say that a certain tactic or action is good police work, the question itself is part of moral knowledge. Something is good within a certain context, but who can determine whether it is moral? Who is involved in the discussion about the merits of an action is important. It is a kind of co-creation Dr. Nap says. Good police work is contextual, it is emergent and comes from good virtues. But it also stems from the people involved who asses the action. And it even depends on the behaviour of the perpetrator, for instance when a technique to subdue a suspect ends up in a struggle for life.

Sometimes good police work comes from protocols, but those are supposed to make police officers think and are not meant as a prescription that merely require a blind execution of tasks. An assessment of a context in the moment is required, says Dr. Nap. Moral knowledge cannot be described and recorded in protocols, it can only be discussed, remarks Prof. Dr. Adang. He says that good police work seems to come down to the individual, even though this is only partly justified. He ponders the questions; How well is someone trained? And does he have the appropriate equipment and weapons at his disposal? Passing on the responsibility to police officers alone, who have used excessive force, is unethical when they have to justify themselves in court. This may lead to concealment of the truth, says Dr. Nap. Which may decrease the probability of good police work and may lead to more ambiguity and moral complexity.

Unavoidable and moral dilemmas are a bit ambiguous by their very nature, says Prof. Dr. Adang. Police officers have to follow the rules, but what happens if they conflict with personal morals? Dr. Nap remarks that it is important to have a sort of moral orientation that may guide police officers in ambiguous situations. A moral orientation is relevant when it comes to good police work. For example; the relationship with a suspect is important, because you still have to work with the suspect. Therefore use as little force as possible.

Dr. Nap states that moral knowledge is also about attitude. Use-of-force training is part of the character building process and therefore plays a crucial part in the co-creation of good police work. This is supported by Prof. Dr. Adang who says that realistic scenarios in training are crucial, but not the rare and extreme situations. Use-of-force instructors should focus on the most common situations and invoke dilemmas within these realistic scenarios, he says. This includes alternating shoot and no-shoot developments in the same scenarios. The current formal training and certification (RTGP[9]) is not sufficient for a moral compass, he remarks. A moral compass requires more. Having conversations in focus groups is also valuable for instance. However, what is said does not always correspond to what one would actually do in an operational context.

A moral compass and proper training are important requirements for good police work, but the operational context asks more of the police officers. Dr. Nap mentions the biography of a situation. A situation is not static, but evolves over time, which requires a proper understanding of that situation when a police officer joins,

[9] RTGP: Regeling Toetsing Geweldsbeheersing Politie, which is a regulation for the assessment of police use of force.

contributes or departs in a situation. Actions that combine evidence based and context based aspects seem to be the most successful approach, he says.

Police officers require a realistic perception in order to properly asses a situation and apply evidence based and context based aspects. Dr. Nap wonders if a police officer is able to enhance and verify his perception with the perception of others. A good perception seems to be a part of moral action: Is a police officer locked inside his own head, or does he understand that he has to involve others to complement his perception? This also means that the ability to perceive a situation as realistic as possible calls for an optimal ability to do so. Therefore life-style choices and other elements that impact the capability of a police officer are part of a moral playing field, since they can influence the quality of perception. The moral playing field can be expanded though, even spectators may become participants in this stage, says Dr. Nap.

Dr. Smit states that it is very complicated to assess the quality of a choice, but also the quality of a perception. She says that critical reflection of your own perception is important, because the assessment of the context has to be tested. You cannot know beforehand that you are misperceiving a situation. Prof. Dr. Adang wonders how a person perceives reality. He points out that in certain situations a police officer may entice his own self-defence situation based on his own single perspective.

But what can be expected of a police officer? Explicit moral knowledge is important in the case of a pro-active rational attitude towards a context, when a police officer is cognitively in control. He may be following the logic of the rational man, says Dr. Smit. Morality, however, is of a different order. The professional may not be a purely or predominantly rational person. If humans in general are not always rational, then why would the professional be mostly rational? asks Dr. Smit. She says that the cognitive person is no longer available in freeze-fight-flight mode. So the professional is also not often cognitive because he regularly enters freeze-fight-flight mode. The limbic system takes over on those occasions. It is remarkable that the professional police officer is nevertheless valued by a cognitive standard, which feels unfair, she comments. It is logical that moral knowledge can no longer be applied when it has been inhibited. So, evaluating performance and training also has to deal with non-rational aspects of ethics. Dr. Smit states that in a stressful self-defence situation the professional police officer does not cease to exist and a primal human emerges, but rather that non-rational behaviour is also a part of the profession. The rational process cannot be seen as the only moral layer, there is so much more. Humans have many more layers and these are not always cognitive and not necessarily intrinsic, but are based on feelings, she concludes.

Dr. Smit explains furthermore that when the professional police officer is reduced to a peeled onion, where only the deepest core remains intact, the professional standards eventually evaporate and that only the child within him or his role as child of his parents, father of his children or husband of his wife remains. Most people are first and foremost a family person, so even above survival instincts there is a deeper sense that there are still loved ones depending on them. Prof. Dr. Adang also remarks that a personal moral compass seems stronger than a professional compass. This view suggests that personal values eventually trump professional values.

6. CONCLUSION

In the former chapter the three sub-questions were answered, triangulation of the findings was performed and the experts have reviewed the outcome of the research, which makes it possible to answer the main research question and formulate some further remarks and considerations related to legislation, training and police performance.

6.1. Main research question answered

The main research question that has been central to this research was: *"What is the role of explicit moral knowledge when Dutch police officers consider using their firearm?"*. It seems that explicit moral knowledge describes the purpose, boundaries, circumstances, capabilities and accountability in proactive and deliberate executions of policing tasks, but that this excludes reactive and instinctive self-defence situations. In those situations the Dutch police officers may not act as rational professionals but more as human beings in distress. In that case current explicit moral knowledge relevant for professional policing may not be applicable and has thus a limited or no role to play. And on top of this it seems that in all circumstances the Dutch police officers perceive a context and that the quality of that perception is crucial for the proper application of explicit moral knowledge. If the perception of a specific instance is not accurate, however, then the application of that explicit moral knowledge may become too difficult. So the role of explicit moral knowledge in those cases ceases to be functional as the application of it is based on a misperception.

6.2. Closing remarks and recommendations

The importance of perception for the application of explicit moral knowledge obliges use-of-force instructors to focus more on perception as a topic in their training and develop a substantial amount of scenarios which involve learning goals related to assumptions, awareness, confirmation, verification and beliefs. Although there are legal escapes for police officers who have found themselves in a misperceived situation and have used a firearm according to the misperception, for instance by claiming presumed (putative) self-defence.

In addition to the integration of perception into the learning goals, the use-of-force instructors must also strive to develop to a level where all explicit moral knowledge and considerations are not shunned during role-playing games and scenario based training, so as not to allow it to remain a neglected topic.

The impact of the findings in this research on how the Dutch police assess the required legal knowledge[10] for police officers and the periodically assessed firearms competencies[11] have not been part of this research. But it does seem that the current manner of assessing the capabilities for using a firearm are rather meagre and do not include moral considerations or perception. More and specific research is required to make any statements on this issue, though.

It also seems that tactics and skills are extensions of explicit moral knowledge, which may suggest that these are somehow manifestations of indirect moral knowledge. If such a thing exists it could mean that moral components in tactics and skills also shape just behaviour of police officers in a violent setting. Which also supports the notion proposed by Blair et al (2011), Binder & Scharf (1980) and Fyfe (1989) that proper tactics and skills may lead to less force by police officers as it improves the space for decision making. The assumption that skills and tactics may be seen as manifestations of indirect moral knowledge also requires further research.

More research might also be done on how moral knowledge should be presented to police officers. Perhaps it can be divided in strict guidelines, principles and intuition. This may result into a certain taxonomy that enables moral knowledge to be suitable for violent and reactive circumstances, but also for more deliberate and planned actions. Furthermore, research into tacit moral knowledge and private morals, and their role in decision making when police officers consider using a firearm, may be relevant as well.

[10] RTGP: Toets Ambtsinstructie,
[11] RTGP: Toets Vuurwapengebruik

Suggestions by the expert reviewers

In order to increase the chance of good police work the amount of students in classes should be reduced when use of force is being trained as this makes for more qualitative interaction between students and instructors, says Dr. Nap. Furthermore, he says, the use-of-force instructors themselves could be trained better, which may lead to more qualitative training on account of moral behaviour. And moral development should be treated as a learning goal, which contributes to moral awareness of police officers. Prof. Dr. Adang recommends further research on the effect of the communication of the dispatch when it comes to perception and expectations. And Dr. Smit concludes that follow-up research is warranted on the way a police officer steers to verification and reflection when he, as a professional, ends up in a reactive and threatening situation.

7. REFERENCES

Akerboom, E. (2017). 5 Jaar één politie: met morele waarden trotseren wij tegenwind. *24/7 Personeelsblad van de politie*(48), 15.

Alpert, G. P., & Smiths, W. C. (1994). How reasonable is the reasonable man: Police and excessive force. *Journal of Criminal Law & Criminology, 85*, 481-501.

Amnesty International. (2016, August). *Use of force guidelines for implementation of the UN basic principles on the use of force and firearms by law enforcement officials.* Retrieved from https://www.amnesty.nl/content/uploads/2017/01/ainl_guidelines_use_of_force_short_version_0.pdf?x79902

Aristotle. (1999). *Nicomechean Ethics.* (W. D. Ross, Trans.) Kitchner: Batoche Books.

Arthur, W. B. (1994). Inductive reasoning and bounded rationality. *The American economic review, 84*(2), 406-411.

Aveni, T. (2008). Obsolescence: The police firearms training dilemma. *Answering the Call*(Fall issue), 1-7.

Binder, A., & Scharf, P. (1980). The violent police-citizen encounter. *The annals of the American academy of political and social science, 452*(1), 111-121.

Bittner, E. (1980). *The functions of the police in modern society.* Cambridge, Massachusets: Oelgeschlager, Gunn & Hain, Publishers, Inc.

Blair, J. P., Pollock, J., Montague, D., Nichols, T., Curnutt, J., & Burns, D. (2011). Reasonableness and reaction time. *Police quarterly, 14*(4), 323-343.

Brown, S. G., & Daus, C. S. (2015). The influence of police officers' decision-making style and anger control on responses to work scenarios. *Journa; of Applied Research in Memory and Cognition, 4*(3), 294-302.

Bruggeman, W., & Den Boer, M. (2010). Ethics and Policing in the Emerging EU Internal Security Architecture. In M. Den Boer, & E. Kolthoff, *Ethics and Security* (pp. 141-164). The Hague: Eleven International Publishing.

Chang, R. (2014, May). *Hard choices.* Retrieved from https://www.ted.com/talks/ruth_chang_how_to_make_hard_choices/transcript

Chang, R. (2017). Hard choices. *Journal of the American Philosophical Association, 3*(1), 1-21. Retrieved from https://www.cambridge.org/core/services/aop-cambridge-core/content/view/A4BEB486621AAEFEC50145087501D584/S2053447717000070a.pdf/hard_choices.pdf

curbstone justice. (n.d.). Retrieved from www.oxfordreference.com: http://www.oxfordreference.com/view/10.1093/acref/9780199829941.001.0001/acref-9780199829941-e-12391

Devereaux, D. T. (1986). Particular and universal in Aristotle's conception of practical knowledge. *The review of Metaphysics*, 483-504.

Dijkstra, M., & Jurriens, P. (2015, March 20). Een visie op kennis. *Unpublished internal document*. Apeldoorn: The Police Academy of The Netherlands.

Filmalter, C. J., & Heyns, T. (2015). Requirements for reflection in the critical care environment. *Curationis, 38*(1), 1-4.

Fitzpatrick, D. P. (2006). Moving beyond the noble cause paradigm: Providing a unified theory of ethics for 21st century American policing. *Forum on Public Policy: A Journal of the Oxford Round Table*, 1-25.

Flyvbjerg, B. (2001). *Making social science matter: Why social inquiry fails and how it can succeed again.* (S. Sampson, Trans.) Cambridge University Press.

Friedrich, R. J. (1980). Police use of force: Individuals, situations, and organizations. *The Annals of the American Academy of Political and Social Science, 452*(1), 82-97.

Fyfe, J. (1989). Split-second Syndrome and Other Determinants of Police Violence. In R. G. Dunham, & G. P. Alpert, *Critical Issues in Policing: Contemporary Readings* (pp. 465-479). Illinois, USA: Waveland Press Inc.

Garner, J. H., Maxwell, C. D., & Heraux, C. G. (2002). Characteristics associated with the prevalence and severity of force used by the police. *Justice quarterly, 19*(4), 405-746.

Grant, K. A. (2007). Tacit knowledge revisited - we can still learn from Polanyi. *The Electronic Journal of Knowledge Management, 5*(2), 173-180.

Hazard Jr, G. C. (1995). Law, morals and ethics. *SOUTHERN ILLINOIS UNIVERSITY LAW JOURNAL, 19*, 447-458.

Herbert, S. (1998). Police subculture reconsidered. *Criminology, 36*(2), 343-370.

Hine, K. A., Porter, L. E., Westera, N. J., Alpert, G. O., & Allen, A. (2018). Exploring Police Use of Force Decision-Making Processes and Impairments Using a Naturalistic Decision-Making Approach. *Criminal Justice and Behavior*, 1-20.

Holgersson, S., & Gottschalk, P. (2008). Police officers' professional knowledge. *Police Practice and Research: An International Journal, 9*(5), 365-377.

Innes, M. (2010). The art, craft and science of policing. In P. Cane, & H. M. Kitzer, *The Oxford Handbook of Empirical Legal Research* (pp. 11-36). New York: Oxford University Press.

Inspectie Veiligheid en Justitie. (2015). *Parate kennis bevoegdheden politie.* The Hague: Ministerie van Justitie en Veiligheid. Retrieved from https://www.inspectie-jenv.nl/Publicaties/rapporten/2015/03/25/parate-kennis-bevoegdheden-politie

Jacobs, D., & O'Brien, R. M. (1998). The determinants of deadly force: A structural analysis of police violence. *American journal of sociology, 103*(4), 837-862.

Johnston, M. (2006). *Good governance: Rule of law, transparency, and accountability.* New York: United Nations Public Administration Network.

Kahneman, D. (2012). *Thinking, Fast and Slow.* London, England: Penguin Books.

Klein, G. (2008). Naturalistic Decision Making. *Human factors, 50*(3), 456-460.

Luen, T. W., & Al-Hawamdeh, S. (2001). Knowledge management in the public sector: principles and practices in police work. *Journal of information Science, 27*(5), 311-318.

Martens, P. (2018). *Defining Knowledge; The impact of an ambiguous definition of knowledge on collaboration.* Research Report, Apeldoorn. Retrieved from https://www.politieacademie.nl/kennisenonderzoek/kennis/mediatheek/PDF/94763.PDF

Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard educational review, 62*(3), 279-301.

Myhill, A., & Quinton, P. (2011). *It's a fair cop? Police legitimacy, public cooperation, and crime reduction; An interpretative evidence commentary.* United Kingdom: National Policing Improvement Agency. Retrieved from https://www.researchgate.net/profile/Paul_Quinton/publication/265889188_It's_a_Fair_Cop_Police_Legitimacy_Public_Cooperation_and_Crime_Reduction_An_Interpretative_Evidence_Commentary/links/55b40a6908aed621de0112f5.pdf

Nap, J. A. (2012). *Vragen naar goed politiewerk: belang-stellend ontwikkelen van de alledaagse praktijk. een proeve van normatieve professionalisering.* Den Haag: Boom/Lemma.

Oxford Dictionaries. (A. n.d.). *English Oxford living Dictionaries*. Retrieved September 23, 2018, from https://en.oxforddictionaries.com/definition/role

Oxford Dictionaries. (B. n.d.). *English Oxford living Dictionaries*. Retrieved September 23, 2018, from https://en.oxforddictionaries.com/definition/consider

Oxford Dictionaries. (C. n.d.). *English Oxford living Dictionaries*. Retrieved September 23, 2018, from https://en.oxforddictionaries.com/definition/expect

Oxford Dictionaries. (D. n.d.). *English Oxford living Dictionaries*. Retrieved September 28, 2018, from https://en.oxforddictionaries.com/definition/focus

Oxford Dictionaries. (E. n.d.). *English Oxford living Dictionaries*. Retrieved September 23, 2018, from https://en.oxforddictionaries.com/definition/train

Oxford Dictionaries. (F. n.d.). *English Oxford living Dictionaries*. Retrieved September 23, 2018, from https://en.oxforddictionaries.com/definition/decision-making

Oxford Dictionaries. (G. n.d.). *English Oxford living Dictionaries*. Retrieved September 28, 2018, from https://en.oxforddictionaries.com/definition/reflect

Oxford Dictionaries. (H. n.d.). *English Oxford living Dictionaries*. Retrieved September 28, 2018, from https://en.oxforddictionaries.com/definition/actual

Paoline III, E. A., & Terrill, W. (2011). Listen to me! Police officers' views of appropriate use of force. *Journal of Crime and Justice, 34*(3), 178-189.

Polanyi, M. (2012). *Personal Knowledge: Towards a Post-Critical Philosophy.* Chicago: University of Chicago Press (Original work published 1958).

Politie. (n.d.). *Organisatie*. Retrieved September 23, 2018, from https://www.politie.nl/over-de-politie/organisatie---organisatie.html

Politiewet 2012. (2018, September 19). *Art. 7 Par. 7* . Retrieved November 30, 2018, from https://wetten.overheid.nl/BWBR0031788/2018-09-19

Rijksrecherche. (2018, March 18). *Ernstige geweldsaanwending door politiefunctionarissen*. Retrieved from www.rijksrecherche.nl: https://www.rijksrecherche.nl/ernstige-geweldstoepassing-politiefunctionarissen

(n.d.).*rnl_kaart_rechtbanken_egaal.png.* Felloo. Retrieved from https://www.felloo.nl/wp-content/uploads/2016/11/rnl_kaart_rechtbanken_egaal.png

Rowe, M. (2007). Rendering visible the invisible: police discretion, professionalism and decision-making. *Policing & Society, 17*(3), 279-294.

Schakel, J. K. (2013). *Organizing distributed knowledge for collaborative action: Structure, functioning, and emergence of organizational transactive memory systems.* Amsterdam: University Press.

Seba, I., & Rowley, J. (2010). Knowledge management in UK police forces. *Journal of Knowledge Management, 14*(4), 611-626.

Sherman, L. W. (1980). Perspectives on police and violence. *The Annals of the American Academy of Political and Social Science, 452*(1), 1-12.

Simon, H. A. (1990). Invariants of human behavior. *Annual review of psychology, 41*(1), 1-20.

Smit, A. S. (2015). Weerbaarheid in vakmanschap. *het Tijdschrift voor de Politie, 77*(10), 28-34.

Smit, A. S., Slagmolen, N., & Brepoels, M. (2015). *Weerbaarheid onderzocht (2010-2015): Over menselijke processen in het politiewerk.* Den Haag: Boom criminologie.

Terrill, W. (2001). *Police coercion; Application of the force continuum.* New York: LFB Scholarly Publishing LLC.

Terrill, W., & Mastrofski, S. D. (2002). Situational and officer-based determinants of police coercion. *Justice Quarterly, 19*(2), 215-248.

Terrill, W., Paoline, E. A., & Manning, P. K. (2003). Police culture and coercion. *Criminology, 41*(4), 1003-1033.

Timmer, J. S. (2005). *Politiegeweld.* Alphen aan de Rijn: Kluwer.

Timmer, J. S. (2015). Politiegeweld onder vuur. *Tijdschrift voor de politie, 77*(8), 6-10.

Tong, S. (2009). Introduction: A Brief History of Crime Investigation. In S. Tong, R. P. Bryant, & M. A. Horvath, *Understanding Criminal Investigation* (pp. 1-12). West Sussex, UK: Wiley-Blackwell.

Trenholm, S. B. (2018). *Identifying the necessary components of a police decision-making model (Phd Thesis).* St. John's Newfoundland and Labrador: Memorial Universtity of Newfoundland. Retrieved from https://core.ac.uk/download/pdf/158273163.pdf

Tyler, T. R. (2004). Enhancing police legitimacy. *The annals of the American academy of political and social science, 593*(1), 84-99.

Van Hoorn, J. (2018). Big data. *het Tijdschrift voor de Politie, 80*(7), 3.

Voltaire. (1919). *Voltaire in His Letters Being A Selection from His Correspondence.* (S. G. Talentyre, Trans.) New York and London: G.P. Putnam's Sons.

Waddington, P. A., & Wright, M. (2011). Police use of force, firearms and riot-control. In T. Newburn, *Handbook of Policing* (pp. 465-496). Abingdon: Taylor & Francis.

Weitzer, A. (2002). Incidents of police misconduct and public opinion. *Journal of criminal justice, 30*(5), 397-408.

Wettenbank. (1994). *Overheid.nl.* Retrieved November 04, 2018, from Ambtsinstructie voor de politie, de Koninklijke marechaussee en andere opsporingsambtenaren: https://wetten.overheid.nl/BWBR0006589/2018-07-01

White, M. D. (2001). Controlling police decisions to use deadly force: Reexamining the importance of administrative policy. *Crime & Delinquency, 47*(1), 131-151.

White, M. D. (2002). identifying situational predictors of police shootings using multivariate analysis. *Policing: an international journal of police stategies & management, 25*(4), 726-751.

Worden, R. E. (1996). The causes of police brutality: Theory and evidence on police use of force. In E. R. Maguire, & D. E. Duffee, *Criminal Justice Theory: Explaining the nature and behavior of criminal justice* (2nd ed., pp. 149-204). New York & London: Routledge.

Zhang, T., Fletcher, P. O., Gino, F., & Bazerman, M. H. (2015). Reducing Bounded Ethicality: How to Help Individuals Notice and Avoid Unethical Behavior. *Special Issue on Bad Behavior; Organizational Dynamics, 44*(4), 310-317.

PART 2 | ANNEX BOOK

8. APPENDICES

8.1. Appendix A1. Definitions of Key Aspects

- Explicit moral knowledge: As explained in chapter 3.3, explicit moral knowledge (MQ, SQ1-3) relates to all explicit forms of knowing related to law, ethics and morals. This means that legislation and regulations are meant, but also values and norms. But in this case it can only be explicit, even though knowing also means skills, attitude and experience on a subconscious level. Explicit moral knowledge in this research is also limited to professional knowledge as it focusses on the professional application of a firearm in the line of duty. Private and religious morals for instance may have an influence on professional conduct, but that has not been a part of this research. Explicit moral knowledge is limited in this research to law, regulations and professional values.
- Dutch police officers: The Dutch police officers (MQ, SQ1-3) are the qualified officers within the National Police of the Netherlands (NPN) with the authority to use legitimate force. The NPN consists of 10 operational local units, the national unit, the Police Academy, the police services unit and the central staff of the police organisation (Politie, n.d.).
- Using a firearm: Using a firearm as a police officer (MQ, SQ1-3) in the Netherlands means the aiming and actual use of a firearm, including firing a warning shot (Wettenbank, 1994). This does not mean that deciding to use a firearm also means that the police officer intends to kill the suspect or cause great bodily harm, although it is a likely outcome. It may signify the last resort to disable a dangerous suspect.
- Decision making: In this thesis decision making (SQ2) is meant as the process of constructing a decision (Oxford Dictionary, F. n.d.). The knowledge about the process of reaching a decision might provide insight for improvements on the decision making process (Hine, Porter, Westera, Alpert & Allen, 2018).
- Just behaviour: Dutch police officers require moral responsibility for their professional conduct in order to function successfully under challenging circumstances (Smit, Slagmolen & Brepoels, 2015). Functioning successfully and moral responsible behaviour are therefore directly linked. Smit (2015) adds that physical, mental and moral aspects are important factors of just behaviour (SQ2) as they are fundamental to successful functioning in challenging circumstances.

- …the role of…: In this thesis the role of explicit moral knowledge is being assessed (MQ). The meaning of 'role' is the function of a thing in a specific circumstance (Oxford Dictionary, A. n.d.). The *thing* in this context means explicit moral knowledge and the *specific circumstance* is the consideration of using a firearm by Dutch police officers in the line of duty.
- …consider…: When a police officer considers using a firearm (MQ, SQ1, SQ3) he is contemplating before reaching a decision to actually act upon (Oxford Dictionary, B. n.d.)
- …expected…: What is expected of a policeman (SQ1) means what is required to fulfil a duty, which is appropriate in a situation (Oxford Dictionary, C. n.d.). In this case what is required and appropriate to do during the contemplation of using a firearm.
- …focus…: In what way is explicit moral knowledge the focus of police educators when Dutch police officers are trained (SQ2) comes down to that which is the centre of interest or activity (Oxford Dictionary, D. n.d.). In this case the centre of the training.
- …trained…: Being trained (SQ2) means the development of a skill or specific behaviour of a police officer by means of practice and education (Oxford Dictionary, E. n.d.).
- …reflect…: When police officers reflect (SQ3), it means that they think deeply and carefully about a thing (Oxford Dictionary, G. n.d.). In this case the *thing* is their own activities and their reflection or analysis of fundamental parts that make up their behaviour.
- …actual…: An actual situation (SQ3) is a situation that has taken place in reality, as it has existed as a fact (Oxford Dictionary, H. n.d.).

8.2. Appendix A2. Professional Biography of Expert Reviewers

Otto Adang[12]

Prof. Dr. Otto M.J. Adang (1956) is a behavioural scientist. He has been lecturer in Public Order & Use-of-force Management at the Police Academy since 2004. Prof. Dr. Adang is interested in aggression, reconciliation and collective behaviour in relation to the maintenance of public order. Since 1998, he has been leading the research programme he has set up on Use-of-force management in conflict situations, aimed at the interaction between police and civilians. Since 1 April 2016, he has also been Professor of Security and Collective Behaviour at the Faculty of Behaviour and Social Sciences at the University of Groningen.

Jan Nap[12]

Jan Nap obtained his PhD in 2012 on "Questions about good police work: important for the development of everyday practice". In the past, Jan Nap (1957, Rotterdam) held various managerial positions at the Leiden municipal police and was later a programme maker at the School for Police Leadership and a strategic developer at Research, Knowledge & Development.

Annika Smit[12]

Lecturer Resilience, Annika Smit (1975), obtained her PhD in Biological Psychology at the Radboud University Nijmegen in 2004. Graduated in Physiological Psychology, she focused her research on 'cognitive energetics': vigilance, attention and information processing. Somewhat weary of the rather strict framework of experimental research, she left the scientific world where she came from. She began a journey that led to the police via medical applications (Cambridge, UK) and intelligent systems (D-CIS lab in Delft). In 2009 she started at the Police Academy with the first draft of a strategic research agenda. Together with a number of others, she encountered concerns about the vitality and health of the police. Further exploration of these concerns resulted in a search for the human aspects within the police profession. Smit was responsible for the research portfolio within the Programme for Strengthening Professional Resilience (PVPW), which ended on 31 December 2015. Since 1 January 2016, Annika Smit has been lecturer in Resilience at the Police Academy.

[12] *Professional biographies retrieved from: https://www.politieacademie.nl/kennisenonderzoek/Onderzoek/onderzoekers/Paginas/default.aspx*

8.3. Appendix B1. Referencing of Analysed Documents

European Convention on Human Rights (ECHR) - d1

Council of Europe. (2018, December 27). *European Convention on Human Rights*. Retrieved from https://www.echr.coe.int/Documents/Convention_ENG.pdf

Politiewet 2012 - d2

Ministry of Justice & Safety. (2018, December 27). *Politiewet 2012.* Retrieved from https://wetten.overheid.nl/BWBR0031788/2018-09-19

Ambtsinstructie Politie - d3

Ministry of Justice & Safety. (2018, December 27). *Ambtsinstructie voor de politie, de Koninklijke marechaussee en andere opsporingsambtenaren.* Retrieved from https://wetten.overheid.nl/BWBR0006589/2018-07-01

Parate Kennis Bevoegdheden Politie - d4

Inspection Justice & Safety. (2014). *Parate Kennis Bevoegdheden Politie.* The Hague: Ministry of Justice & Safety. Retrieved from https://www.inspectie-jenv.nl/Publicaties/rapporten/2015/03/25/parate-kennis-bevoegdheden-politie

Handelingskader; Extreem geweld - d5

National Police of The Netherlands. (2015). *Handelingskader Terroristische Incidenten.* [Internal Document]: CTER LE.

Beroepscode Politie - d6

National Police of The Netherlands. (2017). *Beroepscode Politie*. Nieuwegein [Internal Document]: Korpsmedia.

8.4. Appendix B2. Coding for the Document Analysis

Document Analysis

Capability	*Freq.*
Total	*70*
Requirements for proper use of a firearm	70

Circumstances	*Freq.*
Total	*46*
Use under strict conditions	46

Boundaries	*Freq.*
Total	*27*
Limits to the use of a firearm	27

Purpose	*Freq.*
Total	*17*
Instrument to execute the law	17

Accountability	*Freq.*
Total	*7*
Transparancy on police use of firearms	7

Capability	*70*
Circumstances	*46*
Boundaries	*27*
Purpose	*17*
Accountability	*7*
	167

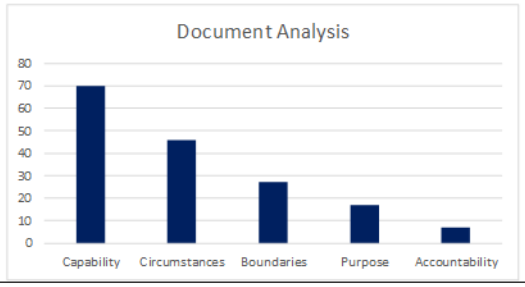
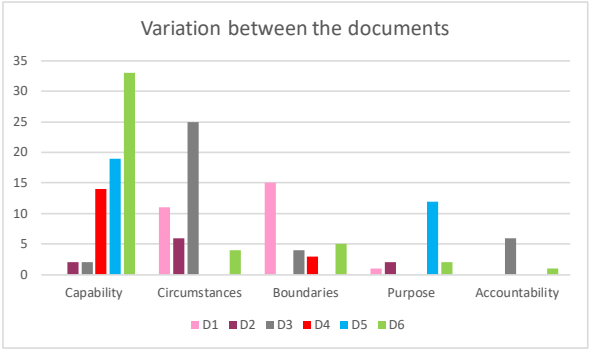


Figure B2.1. General overview of themes from the document analysis



	D1	D2	D3	D4	D5	D6
Capability	0	2	2	14	19	33
Circumstances	11	6	25	0	0	4
Boundaries	15	0	4	3	0	5
Purpose	1	2	0	0	12	2
Accountability	0	0	6	0	0	1

Figure B2.2. Overview of the variation within the document analysis

European Convention on Human Rights (ECHR) - d1

Requirements for proper use of a firearm	*Freq.*
Total	***0***
…	0

Use under strict condictions	*Freq.*
Total	***11***
Penalty provided by law	1
Absolute necessary force	1
Defence from unlawful violence	1
Lawful arrest	1
Preventing escape of detainee	1
Subdoing a riot or insurrection	1
Unlawful behaviour of people	1
National security under threat	1
Public safety is in jeopardy	1
National economy is in jeopardy	1
Prevention of disorder and crime	1

Limits to the use of a firearm	*Freq.*
Total	***15***
Right to life must be respected	1
Deprivation of life	1
No torture	1
No inhuman treatment	1
No degrading punishment	1
Liberty and security of person must be respected	1
Only guilty according to law	1
A fixed penalty must be respected	1
Right to freedom must be respected	1
Right to private family life must be respected	1
No discrimination of rights and freedom	1
No death penalty or execution	2
No discrimination within law	1
No discrimination by public authority	1

Instrument to execute the law	*Freq.*
Total	***1***
Execution of law	1

Transparancy on police use of firearms	*Freq.*
Total	***0***
…	0

Requirements for proper use of a firearm	***0***
Use under strict condictions	***11***
Limits to the use of a firearm	***15***
Instrument to execute the law	***1***
Transparancy on police use of firearms	***0***
	27

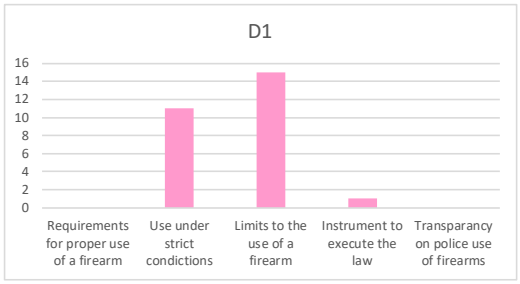


Figure B2.3. Specific overview of themes and sub-themes from the document analysis, d1

Politiewet 2012 - d2

Requirements for proper use of a firearm	*Freq.*
Total	***2***
Application of powers need to be reasonable	1
Application of powers need to be moderate	1

Use under strict condictions	*Freq.*
Total	***6***
Use force or containment according to law	1
Use force only as last resort and justified	1
Proportionate and moderate use of force	1
If possible supply warning before using force	1
Police perform according to guidelines	1
Use of force is allowed to prevent escape of detainee	1

Limits to the use of a firearm	*Freq.*
Total	***0***
…	0

Instrument to execute the law	*Freq.*
Total	***2***
Effective enforcement of law	1
Providing assistence to those in need	1

Transparancy on police use of firearms	*Freq.*
Total	***0***
…	0

Requirements for proper use of a firearm	*2*
Use under strict condictions	*6*
Limits to the use of a firearm	*0*
Instrument to execute the law	*2*
Transparancy on police use of firearms	*0*
	10

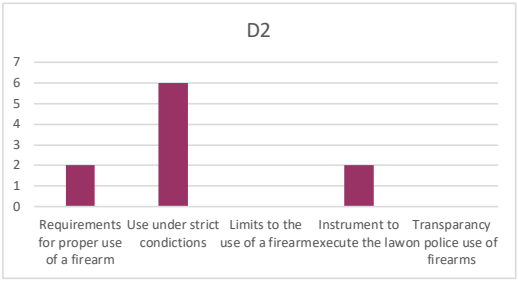


Figure B2.4. Specific overview of themes and sub-themes from the document analysis, d2

Ambtsinstructie Politie - d3

Requirements for proper use of a firearm	*Freq.*
Total	***2***
Rightfully assigned means of force	1
Practiced in the means of force	1

Use under strict condictions	*Freq.*
Total	***25***
Only use firearm when...	
Arresting person with gun and intent to use	1
Arresting person who …	
is trying to escape and	1
is suspected of crime of 4 years or more and	1
is related to severe physical trauma or	1
privacy or	1
is a threat to society	1
Containing a riot or fierce disorder and	1
under supervison of police leader and	1
under orders of legitimate authority	1
Use firearm on vehicle only if person is inside	1
Only use automatic firearm in acute (self)defence	1
Sniper rifles may only be used	
in case of severe crime and	1
in case of immediate peril of others	1
under command of SWAT leader	1
Unholstering a firearm is only alowed	
when the use of a firearm is permitted	1
when a situation may occur where it is permitted	1
Before firing, a warning must be provided	1
possibly with a warningshot	1
this may only be omitted if it is not safe to do so	1
A warningshot must be safe for people and objects	1
The police will remove people	
when they pose an immediate threat due	1
to drinking or other	1
to the public order, safety or health or	1
to themselves when in public space or	1
in an object in the public space, not being a home	1

Limits to the use of a firearm	*Freq.*
Total	***4***
No use of firearm if person is identified	1
No use of firearm if delay does not contain risc to society	1
The firearm is immediateley holstered	
When the use is no longer permitted	1
When a situation may no longer occur where it is permitted	1

Instrument to execute the law	*Freq.*
Total	***0***
…	0

Transparancy on police use of firearms	*Freq.*
Total	***6***
facts of used force reported immediately to superior	1
Circumstances of used force reported immediately to superior	1
The superior will record the reported use of force	1
The reported use of force will be reported to the public prosecutor	
When the police commander deems it necessary	1
When the use of force has led to severe trauma or death	1
When a firearm has been used and shot	1

Requirements for proper use of a firearm	***2***
Use under strict condictions	***25***
Limits to the use of a firearm	***4***
Instrument to execute the law	***0***
Transparancy on police use of firearms	***6***
	37

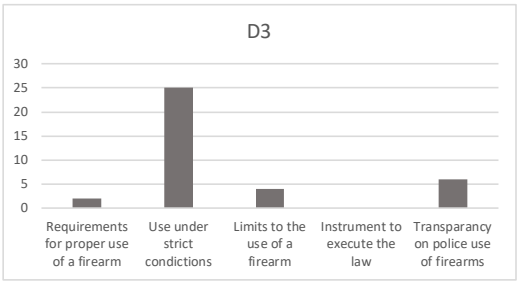


Figure B2.5. Specific overview of themes and sub-themes from the document analysis, d3

Parate Kennis Bevoegdheden Politie - d4

Requirements for proper use of a firearm	*Freq.*
Total	***14***
Lack of sufficient knowledge lead to unlawful action	1
Good physical ands mental stamina crucial for performance	1
Knowledge of executive powers crucial for performance	1
Social skills are crucial for performance	1
Insufficient knowhow leads to doubt in using force	1
Only authorised lawful activities	1
Need to know when and what to do	1
Necessary knowledge of law at their disposal	1
Not allways time for deep thinking	1
Not allways able to confer with colleague	1
Doubt can lead to unnecessary restraint	1
Doubt can lead to escalation	1
Police are aware of their lack of knowledge	1
Lack of knowledge is no problem due to professional intuition	1

Use under strict condictions	*Freq.*
Total	***0***
…	0

Limits to the use of a firearm	*Freq.*
Total	***3***
Unlawful activities	1
Undermining legitimacy is effect of unlawful police actions	1
Profesional intuition not enough, law is specific, small margins	1

Instrument to execute the law	*Freq.*
Total	***0***
…	0

Transparancy on police use of firearms	*Freq.*
Total	***0***
…	0

Requirements for proper use of a firearm	*14*
Use under strict condictions	*0*
Limits to the use of a firearm	*3*
Instrument to execute the law	*0*
Transparancy on police use of firearms	*0*
	17

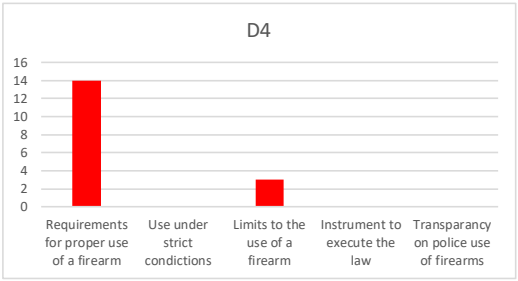


Figure B2.6. Specific overview of themes and sub-themes from the document analysis, d4

Handelingskader; Extreem geweld - d5

Requirements for proper use of a firearm	*Freq.*
Total	***19***
Police is asked to go to terrorist incident	1
Police is confronted with terrorist incident	1
Capabilities of police officer may lead to alternative tasks	1
Demand clear agreements on tasks.	1
Make a plan (goal, riscs, lawfulness, ability, how to)	1
On arrival do not drive on or near the crimescene	1
Take sight of object in safe position	1
Exit vehicle, take cover behind hard material	1
Assist the SWAT team to your best proffessional ability	1
If SWAT is not on site, Act to stop threat	1
Create a distraction, by all means	1
Disrupt by containing the actions of terrorists	1
Stop the threat by intervention, like AMOK	1
Dispatch can assign police to stake-outs	1
Observe location of (fleeing) purpetrator	1
Gather information	1
Residents and bystanders at safe distance	1
Stay out of sight	1
Do not chase, apprehend, intervene, unless selfdefense	1

Use under strict condictions	*Freq.*
Total	***0***
...	0

Limits to the use of a firearm	*Freq.*
Total	***0***
...	0

Instrument to execute the law	*Freq.*
Total	***12***
Police are expected to act in terrorist incidents	1
No action leads to loss of life of others	1
Action may lead to loss of own life	1
The police will act	1
Doing nothing is not an option	1
Balancing between own safety and safety of others	1
Action is rational and context specific to situation	1
Distraction and disruption is part of policing	1
Safety of self and others	1
Saving potential victims, by stopping threat	1
Preventing follow-up attacks	1
Criminal investigation	1

Transparancy on police use of firearms	*Freq.*
Total	***0***
...	0

Requirements for proper use of a firearm	***19***
Use under strict condictions	***0***
Limits to the use of a firearm	***0***
Instrument to execute the law	***12***
Transparancy on police use of firearms	***0***
	31

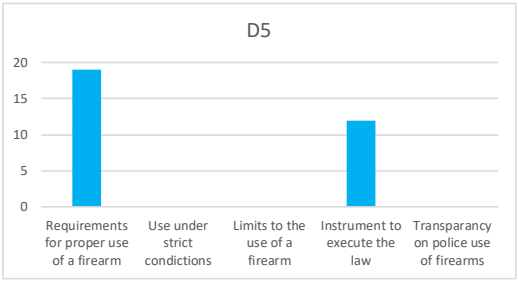


Figure B2.7. Specific overview of themes and sub-themes from the document analysis, d5

Beroepscode Politie - d6

Requirements for proper use of a firearm	*Freq.*
Total	***33***
Being a good civil servant	1
Being attentive	1
Being honorable and reliable	1
Will not do anything to disgrace the police	1
True to core values of the Police	1
Courage to act decisively	1
Connect without prejudice	1
Promote mutual understanding	1
Every citizen can count on police	1
The strong arm with the outstretched hand	1
Socially responsible	1
Morally impeccable conduct	1
Capacity to operate in grey areas	1
Professional judgement and responsibility	1
Knowledge related to the core values	1
Expertise related to the core values	1
Awareness of virtues related to the core values	1
The police steps forward, if needed with force	1
The police steps forward, even at their own peril	1
Consistent and just behaviour	1
High -quality results from virtuous manner	1
Act brave in complex and dangerous situations	1
Difficulties will not be avoided	1
Take good care of others	1
Make decisions regardless of others	1
Protocols and established methods are the start	1
Deviation are based on professional space	1
The police will not stop thinking for themselves	1
Individual knowledge and skills are adequate	1
Attribute to positive image of the police	1
Attitude, appearance and behaviour is sound	1
Powers to use force will be used lawfully	1
Service resources will be handled with care	1

Use under strict condictions	*Freq.*
Total	***4***
Context is central	1
Attention to situation	1
Attention to involved people	1
Attention to professional knowledge	1

Limits to the use of a firearm	*Freq.*
Total	***5***
The police is for all must be respected	1
Independant execution of duties	1
Act not out of self interest	1
Respectful to all must be maintained	1
No corruption	1

Instrument to execute the law	*Freq.*
Total	***2***
The police provide assistence if needed	1
The police acts forcefully in need	1

Transparancy on police use of firearms	*Freq.*
Total	***1***
Actions will be explained and substantiated	1

Requirements for proper use of a firearm	***33***
Use under strict condictions	***4***
Limits to the use of a firearm	***5***
Instrument to execute the law	***2***
Transparancy on police use of firearms	***1***
	45

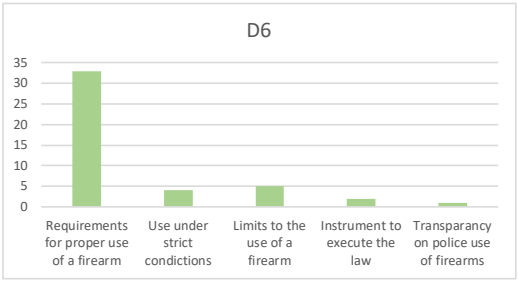


Figure B2.8. Specific overview of themes and sub-themes from the document analysis, d6

8.5. Appendix C1. Interview Aspects, Topics and Questions

The interviews were performed with the following six aspects and related topics in mind and can be viewed as the sensitising concepts for the interviews:

1. Educational aspects
    - Lesson development and didactics
    - Reflection with students
    - Learning Environment
    - Frequency of related lessons
    - Use of firearm in related lessons
    - Teacher competencies

2. Operational aspects
    - Context on the street
    - Experience of student
    - Procedural knowledge

3. Judgemental aspects
    - Decision making
    - Process-steps of decision making
    - Crucial aspects of decision making
    - Expectations in a context
    - Perception of a context
    - Verification of an assumption
    - Declarative knowledge

4. Moral aspects
    - Lawful and just behaviour in an incident
    - Grey area in a context
    - Moral considerations during an activity
    - Doubt over course of action
    - Norming of behaviour
    - Sound behaviour
    - Moral principles
    - Moral knowledge

5. Mental aspects
    - Emotion
    - Vulnerability
    - Pressures during an incident
    - Deviating from a plan
    - Motivation
    - Control over a situation

6. Physical aspects
    - Performing an action
    - Available skills during an incident
    - Focus on tactics
    - Safety of police officer

The interview questions are listed below and are all related to lessons which consist of roleplaying games or scenario training:

Intensity of training the professional use of firearms

01. How often do you train the use of a firearm in these specific lessons? (i)

Training decision making in firearm scenarios

02. How often do you train decision making in these specific lessons? (ii)
03. What are crucial aspects of decision making, according to you, and what do you find remarkable? (v)

Training the applications of moral knowledge in firearm scenarios

04. How often is moral knowledge an element in these specific lessons? (iii)
05. In what way is moral knowledge an aspect of your lessons? (viii)
06. How often is explicit moral knowledge present in your teaching goals? (iv)
07. How do you achieve teaching goals related to moral knowledge, and what do you find remarkable? (ix)

Training the capability for reflection in firearm scenarios

08. How do you reflect with students on their performance and choices related to the use of firearms, and what do you find remarkable? (vi)
09. How do you get students to express their moral considerations with you or the class, and what do you find remarkable? (vii)

8.6. Appendix C2. Declaration of Anonymity and Confidentiality

I, the undersigned,....Pascal Martens....., formally declare to the interview candidate, ……, that:

I will treat confidentially any information disclosed orally in relation to the interview of training in firearms, decision making and explicit moral knowledge. This interview was held in accordance with the requirements of the Master Thesis for the degree of Master of Science in Policing. (More specifically; *The Moral Compass: The role of explicit moral knowledge when Dutch police officers consider using their firearm.*)

I will not use or disclose confidential information or documents concerning the identity of the interview candidate for any purpose other than fulfilling my obligations to the requirements of the Master of Science in Policing from the Canterbury Christchurch University and Police Academy of the Netherlands. This means that the first assessor of the Master Thesis, Wendy Dorrestijn, will also be made aware of the identity of the interview candidate and the selection process.

I will submit the research as a Master Thesis to the media library of the Police Academy of the Netherlands, but will exclude confidential information or documents concerning the identity of the interview candidate.

If a third party wishes to know the identity of the interview candidates I will firstly ask permission of the interview candidate before disclosing any information.

Date:……October 10, 2018……..Place:…… Maarssen, NL ……

Signature…… ……

8.7. Appendix C3. Coding for the Interviews

Q1 -		
How often do you train the use of a firearm in the lessons, which consist of roleplaying games or scenario training?		
Around 20%	i3	Remark: The academy shows more variation in intensity than the
20-30%	i1, i7	in-service training
Up to 50%	i6	
Around 60%	i2	
Between 0-67%	i4	
Depends on context	i5, i4, i3,	

Figure C3.1. Question 1 from the interviews

Q2 -		
How often do you train decision-making in the lessons, which consist of roleplaying games or scenario training?		
This has been neglected	i1, i2	Remark: Academy spends more time on basic skills than in-service training
More than 50%	i3	
Quite a lot	i5, i7	
Depends on context	i4, i6	

Figure C3.2. Question 2 from the interviews

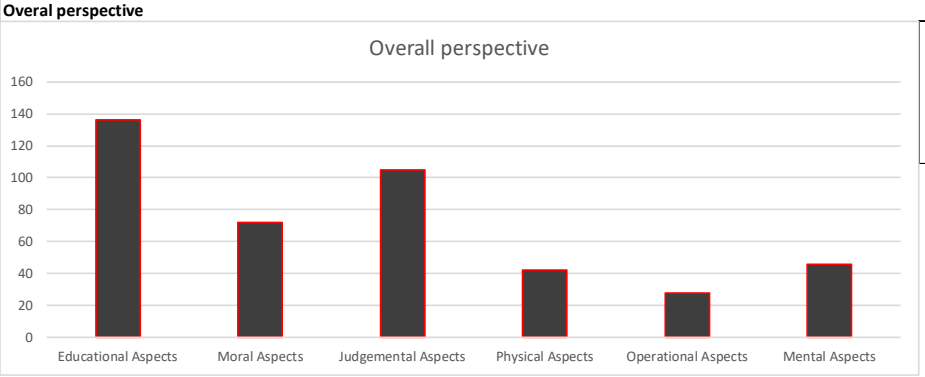
Q3 -		
How often is moral knowledge an element in the lessons, which consist of roleplaying games or scenario training?		
This has been neglected	i2, i4	Remark: Legislation is a recurring theme, but personal introspection is rare
This is rarely dealt with	i1, i5, i6, i7	
Around 25%	i3	

Figure C3.3. Question 3 from the interviews

Q4 -		
How often is explicit moral knowledge present in your teaching goals?		
Never	i2	Remark: A situation may occur in the training, though,
Law yes, not values no	i4	that appears to be a moral dilemma. This will then be addressed accordingly.
Side-effect of teaching method	i1, i3, i5, i6, i7	addressed accordingly.
At least 10%	i7	

Figure C3.4. Question 4 from the interviews

Overal perspective



136	*Educational Aspects*
72	*Moral Aspects*
105	*Judgemental Aspects*
42	*Physical Aspects*
28	*Operational Aspects*
46	*Mental Aspects*
429	

Educational Aspects	*Freq.*
Total	***136***
Learning purpose	40
Method	29
Didactics	13
Limited time	13
Neglected topic	13
Teacher competencies	12
Learning environment	11
Agogics	4
Training experience	1

Moral Aspects	*Freq.*
Total	***72***
Law as basis for action	32
Moral considerations	21
Professional conduct	8
Proportionate and moderate us	3
Values	2
Norming	2
Moral knowledge	2
Intentions	1
Private morals	1

Judgemental Aspects	*Freq.*
Total	***105***
Perception	31
Decision-making	16
Verification	9
Consequences	9
Doubt	8
Grey area	6
Heuristics	6
Professional intuition	5
Professional considerations	5
Expectation	4
Process-steps	3
Instinct	1
Student background	1
Recognition	1

Physical Aspects	*Freq.*
Total	***42***
Skills	15
Safety	15
Tactics	9
Primal instinct	3

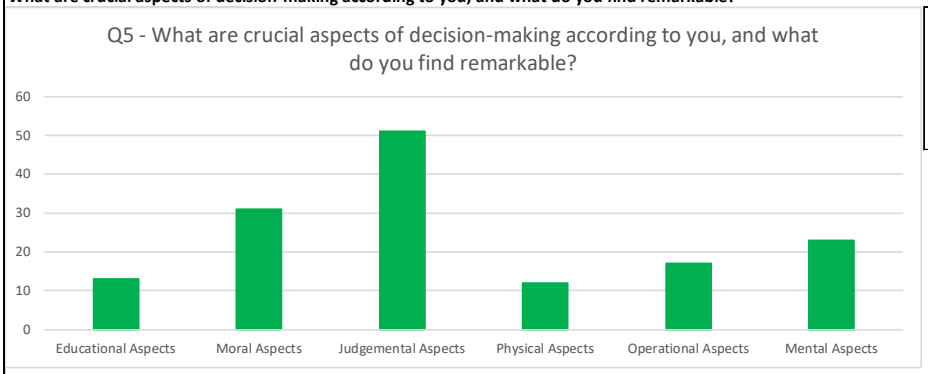
Operational Aspects	*Freq.*
Total	***28***
Operational experience	12
Operational context	11
Procedural knowledge	4
Background colleague	1

Mental Aspects	*Freq.*
Total	***46***
Pressures	15
Vulnerability	5
Independent thinking	4
Motivation	4
Deviation	3
Emotion	3
Mental agility	2
Recollection	2
Step back	2
Convictions	2
Mindset	2
Recognition	1
Rationalisation	1

Figure C3.5. General overview of themes and sub-themes from the interviews

Q5 -

What are crucial aspects of decision-making according to you, and what do you find remarkable?



13	*Educational Aspects*
31	*Moral Aspects*
51	*Judgemental Aspects*
12	*Physical Aspects*
17	*Operational Aspects*
23	*Mental Aspects*
147	

Educational Aspects	*Freq.*
Total	***13***
Learning environment	6
Didactics	2
Learning purpose	2
Limited time	2
Training experience	1

Moral Aspects	*Freq.*
Total	***31***
Moral considerations	8
Law as basis for action	7
Professional conduct	6
Proportionate and moderate us	3
Values	2
Norming	2
Moral knowledge	2
Intention	1

Judgemental Aspects	*Freq.*
Total	***51***
Perception	14
Decision-making	11
Consequences	6
Professional considerations	5
Professional intuition	4
Expectation	3
Verification	3
Heuristics	2
Process-steps	2
Recognition	1

Physical Aspects	*Freq.*
Total	***12***
Skills	4
Tactics	3
Safety	3
Primal instinct	2

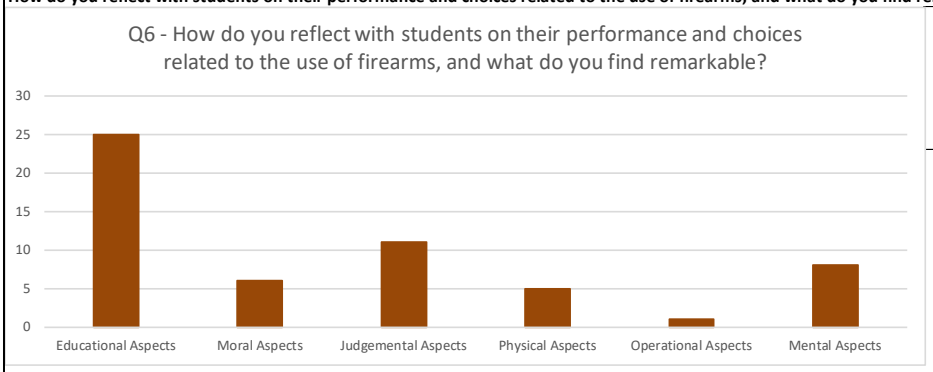
Operational Aspects	*Freq.*
Total	***17***
Operational context	10
Operational experience	4
Procedural knowledge	2
Background colleague	1

Mental Aspects	*Freq.*
Total	***23***
Pressures	12
Control	4
Independent thinking	2
Mindset	2
Motivation	1
Rationalisation	1
Emotion	1

Figure C3.6. Specific overview of themes and sub-themes from the interviews; Question 5

Q6 -

How do you reflect with students on their performance and choices related to the use of firearms, and what do you find remarkable?



25	*Educational Aspects*
6	*Moral Aspects*
11	*Judgemental Aspects*
5	*Physical Aspects*
1	*Operational Aspects*
8	*Mental Aspects*
56	

Educational Aspects	*Freq.*
Total	***25***
Method	11
Learning purpose	7
Teacher competencies	4
Learning environment	2
Agogics	1

Moral Aspects	*Freq.*
Total	***6***
Law as basis for action	5
Moral considerations	1

Judgemental Aspects	*Freq.*
Total	***11***
Perception	7
Instinct	1
Heuristics	1
Student background	1
Verification	1

Physical Aspects	*Freq.*
Total	***5***
Safety	3
Tactics	2

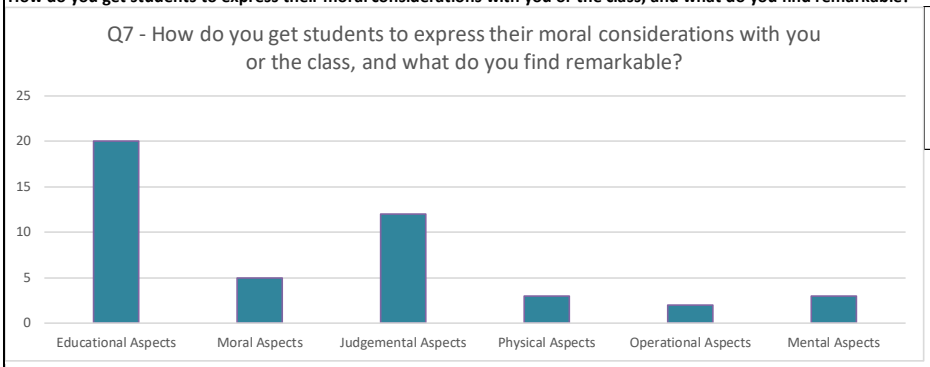
Operational Aspects	*Freq.*
Total	***1***
Operational experience	1

Mental Aspects	*Freq.*
Total	***8***
Pressures	2
Motivation	2
Convictions	2
Emotion	2

Figure C3.7. Specific overview of themes and sub-themes from the interviews; Question 6

Q7 -

How do you get students to express their moral considerations with you or the class, and what do you find remarkable?



20	*Educational Aspects*
5	*Moral Aspects*
12	*Judgemental Aspects*
3	*Physical Aspects*
2	*Operational Aspects*
3	*Mental Aspects*
45	

Educational Aspects	*Freq.*
Total	***20***
Method	6
Limited time	3
Learning purpose	3
Teacher competencies	3
Neglected topic	2
Agogics	2
Didactics	1

Moral Aspects	*Freq.*
Total	***5***
Law as basis for action	3
Moral considerations	2

Judgemental Aspects	*Freq.*
Total	***12***
Perception	3
Doubt	3
Verification	2
Consequences	2
Grey area	1
Decision-making	1

Physical Aspects	*Freq.*
Total	***3***
Safety	3

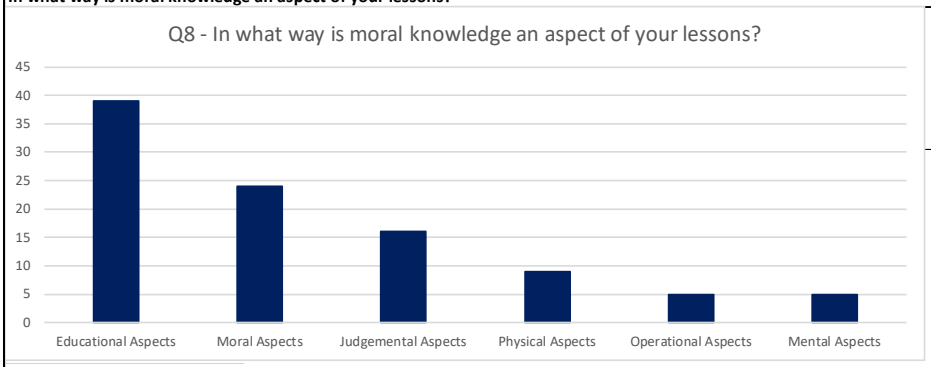
Operational Aspects	*Freq.*
Total	***2***
Operational experience	2

Mental Aspects	*Freq.*
Total	***3***
Deviation	1
Mental agility	1
Step back	1

Figure C3.8. Specific overview of themes and sub-themes from the interviews; Question 7

Q8 -

In what way is moral knowledge an aspect of your lessons?



39	*Educational Aspects*
24	*Moral Aspects*
16	*Judgemental Aspects*
9	*Physical Aspects*
5	*Operational Aspects*
5	*Mental Aspects*
98	

Educational Aspects	*Freq.*
Total	***39***
Learning purpose	13
Method	8
Neglected topic	7
Limited time	4
Teacher competencies	2
Learning environment	2
Didactics	2
Agogics	1

Physical Aspects	*Freq.*
Total	***9***
Safety	3
Skills	3
Tactics	3

Operational Aspects	*Freq.*
Total	***5***
Operational experience	4
Operational context	1

Moral Aspects	*Freq.*
Total	***24***
Law as basis for action	14
Moral considerations	7
Professional conduct	2
Intentions	1

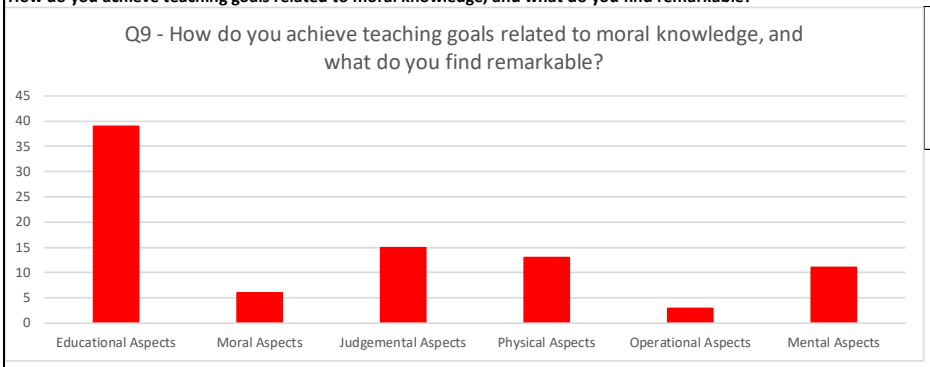
Mental Aspects	*Freq.*
Total	***5***
Recollection	2
Recognition	1
Step back	1
Vulnerability	1

Judgemental Aspects	*Freq.*
Total	***16***
Perception	5
Heuristics	3
Doubt	3
Grey area	2
Expectation	1
Consequences	1
Professional intuition	1

Figure C3.9. Specific overview of themes and sub-themes from the interviews; Question 8

Q9 -

How do you achieve teaching goals related to moral knowledge, and what do you find remarkable?



39	*Educational Aspects*
6	*Moral Aspects*
15	*Judgemental Aspects*
13	*Physical Aspects*
3	*Operational Aspects*
11	*Mental Aspects*
87	

Educational Aspects	*Freq.*
Total	***39***
Learning purpose	15
Didactics	8
Limited time	4
Neglected topic	4
Method	4
Teacher competencies	3
Learning environment	1

Moral Aspects	*Freq.*
Total	***6***
Law as basis for action	3
Moral considerations	3
Private morals	1

Judgemental Aspects	*Freq.*
Total	***15***
Decision-making	4
Verification	3
Grey area	3
Doubt	2
Perception	2
Process-steps	1

Physical Aspects	*Freq.*
Total	***13***
Skills	8
Safety	3
Tactics	1
Primal instinct	1

Operational Aspects	*Freq.*
Total	***3***
Procedural knowledge	2
Operational experience	1

Mental Aspects	*Freq.*
Total	***11***
Vulnerability	4
Deviation	2
Independent thinking	2
Mental agility	1
Motivation	1
Pressures	1

Figure C3.10. Specific overview of themes and sub-themes from the interviews; Question 9

8.8. Appendix D1. Matrix of Case Selection Criteria and 131 Case Studies

The 131 supplied cases have been ordered based on the first name of the student and were numbered accordingly. After cross queuing with the selection criteria in table 5 the applicable 15 case studies emerge. These resulting 15 are highlighted in the green rows.

no.	Classified	Riot Police	Police Force	Type of Force	Author Involved	Interview	Applicable
1	no	no	no	-	no	-	no
2	no	no	no	-	no	-	no
3	no	no	yes	Physical	no	-	yes
4	no	no	yes	Physical	yes	-	possibly
5	no	no	yes	Baton	no	-	yes
6	no	no	yes	Firearm	no	yes	no
7	no	no	yes	Firearm	no	yes	yes
8	no	no	yes	Physical	yes	-	possibly
9	no	no	yes	Physical	yes	-	no
10	no	no	yes	Firearm	no	yes	no
11	no	no	yes	Vehicle	yes	-	no
12	no	no	yes	Physical	yes	-	no
13	no	no	no	Physical	yes	-	no
14	no	no	yes	Pepperspray	no	-	no
15	no	no	yes	Baton	no	-	possibly
16	no	yes	yes	Baton	no	-	possibly
17	no	no	yes	Physical	no	-	no
18	no	no	yes	Physical	no	-	no
19	no	no	yes	Firearm	no	yes	yes
20	no	no	yes	Pepperspray	no	-	yes
21	no	no	yes	Firearm	no	yes	no
22	no	no	yes	Firearm	no	yes	yes
23	no	no	yes	Physical	no	-	yes
24	no	no	yes	Physical	yes	-	no
25	no	no	yes	Firearm	yes	-	possibly
26	no	no	yes	Firearm	yes	-	possibly
27	no	no	yes	Firearm	no	yes	no
28	no	no	yes	Physical	no	-	yes
29	no	no	yes	Firearm	no	yes	yes
30	no	no	yes	Physical	no	-	no
31	no	no	yes	Firearm	no	yes	no
32	no	no	yes	Dog	no	-	yes
33	no	no	no	-	no	-	no
34	no	no	no	Dog	yes	-	no
35	no	no	yes	Firearm	yes	-	possibly
36	no	no	no	Vehicle	yes	-	no
37	no	no	yes	Pepperspray	yes	-	possibly
38	no	no	no	-	no	-	no
39	no	no	yes	Firearm	yes	-	possibly
40	no	no	yes	Firearm	yes	-	yes

41	no	no	yes	Dog	yes	-	no
42	no	no	yes	Pepperspray	no	-	no
43	no	no	yes	Firearm	yes	-	possibly
44	no	no	yes	Firearm	yes	-	possibly
45	no	no	yes	Pepperspray	no	-	yes
46	no	no	yes	Firearm	no	yes	yes
47	no	no	yes	Physical	no	-	yes
48	no	no	yes	Physical	no	-	no
49	no	no	yes	Physical	no	-	no
50	no	no	yes	Firearm	yes	-	possibly
51	no	yes	yes	Baton	yes	-	no
52	no	no	yes	Physical	yes	-	no
53	no	no	yes	Firearm	no	yes	no
54	no	no	yes	Dog	no	-	no
55	no	no	yes	Firearm	no	yes	yes
56	no	no	yes	Physical	yes	-	no
57	no	no	yes	Firearm	no	yes	no
58	no	no	yes	Pepperspray	no	-	yes
59	no	no	yes	Tazer	yes	-	no
60	no	no	yes	Firearm	yes	-	possibly
61	no	yes	yes	Physical	no	-	no
62	no	no	yes	Physical	no	-	yes
63	no	no	yes	Firearm	no	yes	yes
64	no	no	yes	Firearm	yes	-	possibly
65	no	no	yes	Firearm	no	yes	no
66	no	no	yes	Firearm	no	yes	yes
67	no	no	yes	Physical	yes	-	no
68	no	no	yes	Firearm	no	yes	no
69	no	no	yes	Firearm	no	yes	yes
70	no	no	yes	Physical	yes	-	no
71	no	no	yes	Firearm	yes	-	possibly
72	no	no	yes	Physical	yes	-	no
73	no	no	yes	Firearm	yes	-	possibly
74	no	no	yes	Physical	no	-	yes
75	no	no	yes	Dog	yes	-	no
76	no	no	no	-	yes	-	no
77	no	no	yes	Physical	yes	-	no
78	no	no	yes	Firearm	no	yes	no
79	no	no	yes	Physical	no	-	no
80	no	no	yes	Firearm	no	yes	yes
81	no	no	yes	Firearm	no	yes	no
82	no	no	yes	Firearm	no	yes	yes
83	no	no	yes	Firearm	no	no	yes
84	no	no	yes	Physical	yes	-	no
85	no	no	yes	Pepperspray	yes	-	no
86	no	no	yes	Dog	no	-	no

87	no	no	yes	Physical	yes	-	possibly
88	no	no	yes	Dog	yes	-	no
89	no	no	yes	Physical	no	-	possibly
90	no	no	yes	Dog	no	-	no
91	no	yes	yes	Firearm	no	-	yes
92	no	no	yes	Firearm	no	yes	no
93	no	no	yes	Firearm	no	yes	yes
94	no	no	yes	Vehicle	no	-	no
95	no	yes	yes	Physical	no	-	no
96	no	no	yes	Firearm	no	yes	no
97	no	no	yes	Dog	yes	-	no
98	no	no	yes	Tazer	no	-	no
99	no	no	yes	Pepperspray	no	-	no
100	no	no	yes	Physical	no	-	no
101	no	no	yes	Firearm	no	yes	yes
102	no	no	yes	Firearm	no	yes	no
103	no	no	yes	Dog	yes	-	no
104	no	no	yes	Firearm	no	yes	yes
105	no	no	yes	Physical	no	-	no
106	no	no	yes	Pepperspray	no	-	yes
107	no	no	yes	Firearm	no	yes	no
108	no	no	yes	Physical	yes	-	no
109	no	no	yes	Dog	no	-	yes
110	no	no	yes	Firearm	no	yes	yes
111	no	no	yes	Firearm	no	no	yes
112	no	no	yes	Physical	yes	-	no
113	no	no	yes	Firearm	no	no	no
114	no	no	yes	Firearm	yes	-	no
115	no	no	no	-	no	-	no
116	no	no	yes	Firearm	no	no	yes
117	no	no	yes	Physical	no	-	no
118	no	no	yes	Baton	no	-	no
119	no	no	no	-	no	-	no
120	no	no	yes	Firearm	no	yes	no
121	no	no	yes	Firearm	yes	-	no
122	no	no	yes	Pepperspray	yes	-	possibly
123	no	no	yes	Pepperspray	yes	-	possibly
124	no	no	yes	Physical	yes	-	no
125	no	no	yes	Pepperspray	no	-	no
126	no	no	yes	Physical	no	-	no
127	no	no	yes	Physical	no	-	no
128	no	no	yes	Firearm	yes	-	possibly
129	no	no	yes	Firearm	yes	-	possibly
130	yes	no	yes	Firearm	yes	-	no
131	no	no	yes	Pepperspray	no	-	yes

8.9. Appendix D2. Coding for the Meta-Analysis of Multiple Cases

Overall view

Goal	Freq.
Total	***28***
Initial goal	15
Goal shift	13

Goal	Q1 (Anticipation)	Q2 (Anticipation)	Q3 (Entry & Information)	Q5 (Final Decision)	Q4 (Reflection)	Q6 (Reflection)
Total	***3***	***12***	***13***	***0***	***0***	***0***
Initial goal	3	12	0	0	0	0
Goal shift	0	0	13	0	0	0

Perception	Freq.
Total	***87***
Awareness	25
Belief	16
Prior Information	15
Tipping point	14
Triggers	14
Assumptions	3

Perception	Q1 (Anticipation)	Q2 (Anticipation)	Q3 (Entry & Information)	Q5 (Final Decision)	Q4 (Reflection)	Q6 (Reflection)
Total	***1***	***17***	***34***	***23***	***7***	***5***
Awareness	0	0	6	14	2	3
Belief	0	0	0	9	5	2
Prior Information	1	14	0	0	0	0
Tipping point	0	0	14	0	0	0
Triggers	0	0	14	0	0	0
Assumptions	0	3	0	0	0	0

Activity	Freq.
Total	***72***
Taking control	25
Plan-making	17
Training	12
Conscious actions	12
Preparation	6

Activity	Q1 (Anticipation)	Q2 (Anticipation)	Q3 (Entry & Information)	Q5 (Final Decision)	Q4 (Reflection)	Q6 (Reflection)
Total	***21***	***2***	***0***	***15***	***15***	***19***
Taking control	0	0	0	13	1	11
Plan-making	15	2	0	0	0	0
Training	0	0	0	2	3	7
Conscious actions	0	0	0	0	11	1
Preparation	6	0	0	0	0	0

Figure D2.1. General overview of themes and sub-themes from the meta-analysis of multiple cases

	Anticipation	Entry & Information	Final Decision	Reflection
Goal	**15**	**13**	0	0
Perception	**18**	**34**	**23**	**12**
Activity	**23**	0	**15**	**34**

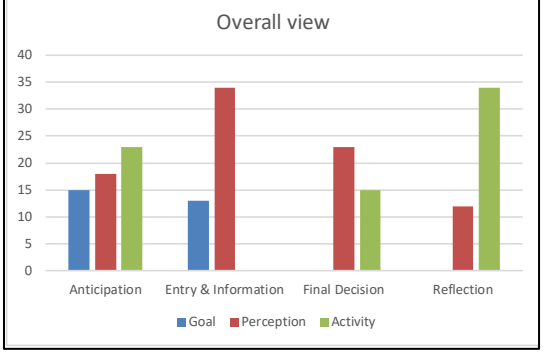
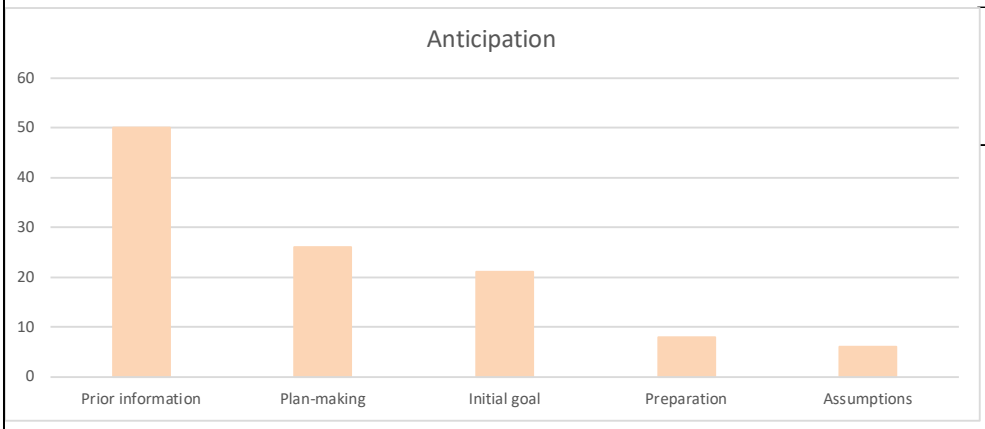


Figure D2.2. General overview of themes from the meta-analysis of multiple cases related to the decision making model of Binder & Scharf (1980)

Anticipation

Q1 - How did the police officer(s) prepare for the incident?

Q2 - What did the police officer expect of the situation?



50	*Prior information*
26	*Plan-making*
21	*Initial goal*
8	*Preparation*
6	*Assumptions*
111	

Plan-making	*Freq.*
Total	***26***
Planning action on arrival	6
No preparation	5
Tactical consultation	5
Scenario thinking	4
Division of tasks	3
Private planning	2
Ambiguous initial goals	1

Assumptions	*Freq.*
Total	***6***
Assuming alcohol and drugs	2
Prank call	1
Suicide by cop	1
Panicky colleagues on scene	1
Dispatch appears shaken	1

Preparation	*Freq.*
Total	***8***
Requesting back-up	2
Active listening on radio	2
Decisive instruction	1
Asking for suspect description	1
Adjusting strategy while driving	1
Interviewing witness and victim	1

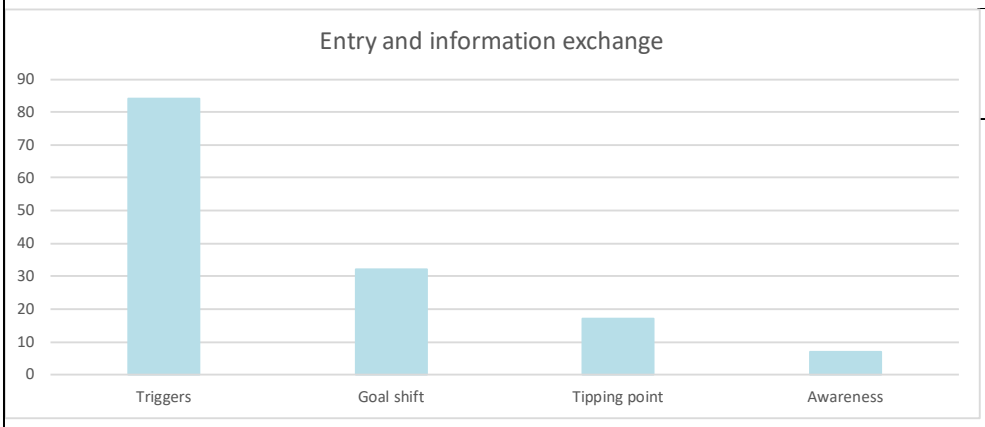
Initial goal	*Freq.*
Total	***21***
Initial goal maintaining public order	4
Initial goal mediation	4
Initial goal physical arrest	2
Initial goal domestic dispute	2
Initial goal arresting armed suspect	1
Initial goal locating and assessing suspect	2
Initial goal locating and arresting suspect	2
Initial goal securing victim	2
Initial goal fining for urinating	1
Initial goal observing public	1

Prior information	*Freq.*
Total	***50***
Dispatch mentions knife	5
Violent suspect	5
Information gathering on sight	4
Limited aggression	3
Request background information	3
Known mental patient	3
Information deficit	3
Suspect has priors in violence	2
Woman abused by man	2
Description of suspect	2
Suspect stabs person	2
Notorious establishment	1
No visibility inside establishment	1
Aggressive public	1
Busy shopping area	1
Victim had been tied up	1
Home invasion	1
Shots fired by suspect	1
Car with suspect alerted by ANPR	1
Possibility of armed persons	1
Suspects two polish young men	1
Possibility of toy guns involved	1
Suspects two young boys	1
Limited access roads	1
Recreational area with small roads	1
Victim is approachable and stable	1
Trauma helicopter is underway	1

Figure D2.3. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Anticipation

Entry and information exchange

Q3 - Did the police officer need to adjust his perspective during the incident?



84	*Triggers*
32	*Goal shift*
17	*Tipping point*
7	*Awareness*
140	

Awareness	*Freq.*
Total	***7***
Acquired new information	2
Unclear about potential threat	2
Alert state and observant	1
Potential hostage situation	1
Ambiguous sense of situation	1

Tipping point	*Freq.*
Total	***17***
Safety first	4
Control over suspect	4
Shot in leg is effective	3
Massive fight	1
Second colleague in distress	1
Weapon is discarded	1
Colleague in mortal danger	1
Conform tactical guidelines	1
Cooperative suspects	1

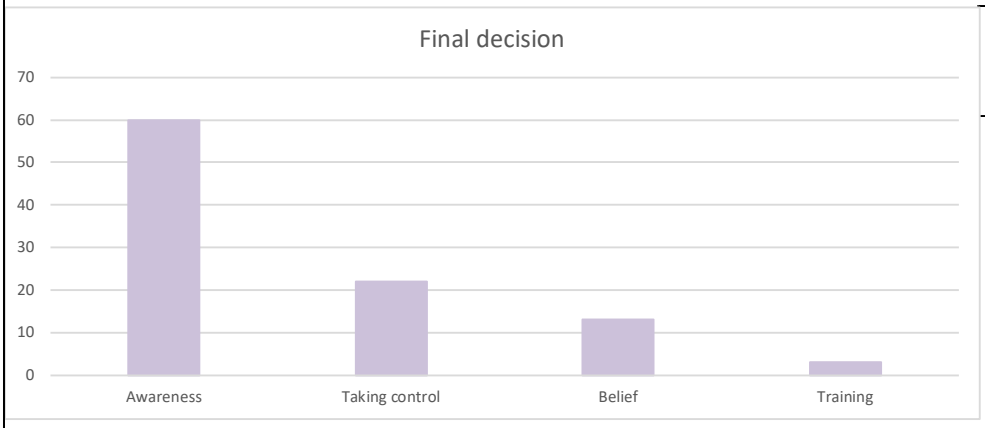
Goal shift	*Freq.*
Total	***32***
New goal physical arrest	8
New goal warding off threat	5
New goal maintaining public order	3
New goal containing threat	3
New goal self defence of all police	3
New goal mediation	2
Deviating from plan	1
New goal medical assistance	2
New goal neutralising threat	2
New goal defending colleague	1
New goal pursuit of suspects	1
New goal apprehending fleeing suspect	1

Triggers	*Freq.*
Total	***84***
Unresponsive person	9
Ineffective pepperspray	7
Agitated person	7
Multiple goals simultaneously	6
Assault with a weapon	5
Suspect resisting arrest	4
Colleague in distress	3
Detecting a weapon	3
Encountering violence	3
Ineffective shot in leg	3
Aggressive bystanders	2
Self mutilation suspect	2
Violent bystanders	2
Report of weapon	2
Mental patient involved	2
Ineffective warning shots	2
Alcohol is involved	2
Unfocussed suspect	2
Man fitting description	2
Violent suspect	2
Suspect out of sight	2
Illegal immigrant	1
Man acts suspicious	1
Man flees after being addressed	1
Colleague in alert posture	1
Suspect in local establishment	1
Suspicious behaviour of person	1
Suspects with pistol-like objects	1
Confusing communications with colleagues	1
Short distance to suspect	1
Suspect potentially with knife	1
Colleague without proper cover	1
Suspect yells threats in phone	1

Figure D2.4. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Entry and Information exchange

Final decision

Q5 - What were aspects of the consideration when the firearm came into play?



60	*Awareness*
22	*Taking control*
13	*Belief*
3	*Training*
98	

Taking control	*Freq.*
Total	***22***
Suspect disabled	5
Imminent threat to others	4
Colleague in mortal danger	2
Self defence	2
No back-up available	2
Rapid action consultation	2
Addressing the suspect	2
Increasing distance	1
Considering using police dog	1
Bystander disabled	1

Belief	*Freq.*
Total	***13***
Lack of alternatives	5
Short distance to suspect	2
Suspect with absent eyes	1
Suspect in psychosis	1
Suspect with ruthless eyes	1
Agitated person	1
Cooperative suspect	1
Bystander is agitated	1

Training	*Freq.*
Total	***3***
Recognition	2
Mindset regarding knives	1

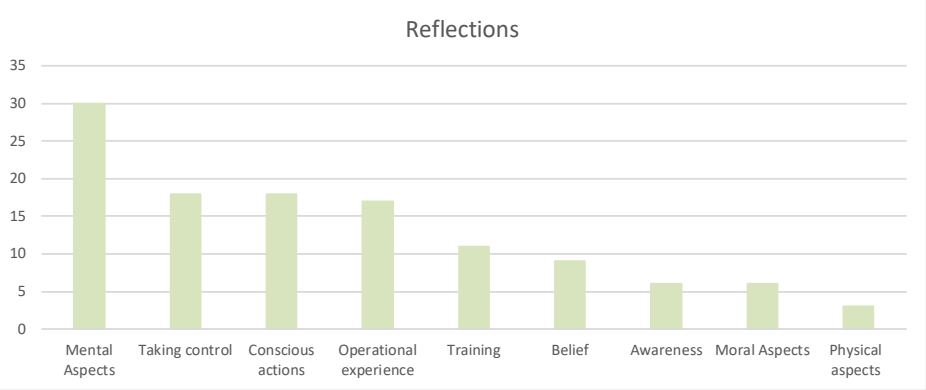
Awareness	*Freq.*
Total	***60***
Unresponsive suspect	9
Suspect with deadly weapon	9
Ineffective pepperspray	8
Continuous threat assessment	5
Checking line of fire	4
Resisting suspect	4
Violent suspect	4
Ineffective shot in leg	3
Ineffective warning shots	3
Pepperspray is effective	2
Suspect in public domain	2
Suicide by cop	1
Terminal self mutilation	1
Fleeing suspect	1
Ineffective physical apprehension	1
Suspect vehicle recently damaged	1
Suspect in local establishment	1
Suspects with pistol-like objects	1

Figure D2.5. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Final decision

Reflections

Q4 - Did the police officer have doubts about using his firearm? And why?

Q6 - How did the police officer reflect on the incident and his own role and behaviour?



30	*Mental Aspects*
18	*Taking control*
18	*Conscious actions*
17	*Operational experience*
11	*Training*
9	*Belief*
6	*Awareness*
6	*Moral Aspects*
3	*Physical aspects*
118	

Belief	*Freq.*
Total	***9***
Life threatening situation	5
Forced to shoot	2
Forced to use force	1
Decision-making took too long	1

Taking control	*Freq.*
Total	***18***
Confidence and deliberate action	6
Point of no return	6
Shooting to stop self mutilation	1
Least amount of force	1
Rapid escalation	1
Self defence	1
Acting according to perception	1
Deliberate tactical choices	1

Mental Aspects	*Freq.*
Total	***30***
Confident	6
Stressful but not fearful	3
Strong sense of team performance	3
Clear plan in mind	3
Strong sense of individual performance	2
No stress until escalation	2
Stressful and fearful	2
Natural tension but no stress	2
In panic but rational	1
Expectations	1
Mentally fit	1
Actions primarily intuitive	1
Tunnel vision	1
Plan not clear	1
Switching from lethal force to medical assistance	1

Conscious actions	*Freq.*
Total	***18***
Deliberate choice	7
Eliminating other options	4
Considering consequences	4
Intuitive decision-making	2
Checking environment	1

Training	*Freq.*
Total	***11***
Value of trained skills	3
Lack of communication	2
Poor application of force	2
Automatic drawing of firearm	1
Self regulated actions	1
Insufficiently prepared	1
Deviation from protocol	1

Moral Aspects	*Freq.*
Total	***6***
Proportionate and moderate use of force	3
Professional considerations	2
Moral justification	1

Awareness	*Freq.*
Total	***6***
Safety first	2
Monitoring progress	2
Retreat was possible	1
Lack of alternatives	1

Physical aspects	*Freq.*
Total	***3***
Professional communication	2
Physically fit	1

Operational experience	*Freq.*
Total	***17***
More alert now	3
Value of information	3
Improved communications	3
Situational awareness	2
No alternative scenario in mind	2
Use means of force earlier in scenario	2
Tactical considerations	2

Figure D2.6. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Reflections

Reflections (related to Moral Knowledge Classification	
Purpose + Accountability	
Moral Aspects	6
Circumstances + Boundaries	
Belief	9
Awareness	6
Capability	
Mental Aspects	30
Taking Control	18
Conscious Actions	18
Operational Experience	17
Training	11
Physical Aspects	3

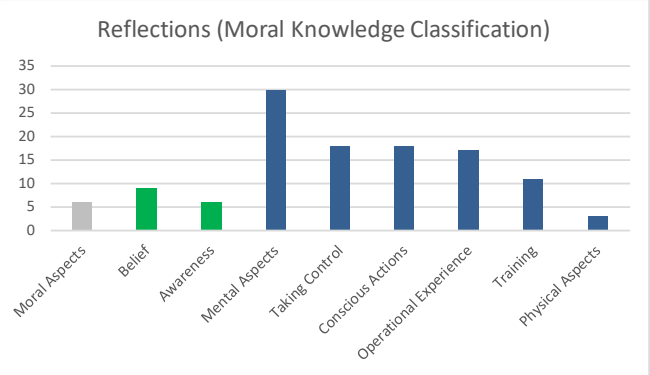


Figure D2.7. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Reflections combined with the moral knowledge classification

8.10. Appendix E1. List of Figures and Tables

Figure 1. The research model 10

Figure 2. Map of The Netherlands, marked with police training locations of interview candidates 14

Figure 3. The category model for knowledge (Martens, 2018) 23

Figure B2.1. General overview of themes from the document analysis 58

Figure B2.2. Overview of the variation within the document analysis 58

Figure B2.3. Specific overview of themes and sub-themes from the document analysis, d1 59

Figure B2.4. Specific overview of themes and sub-themes from the document analysis, d2 60

Figure B2.5. Specific overview of themes and sub-themes from the document analysis, d3 61

Figure B2.6. Specific overview of themes and sub-themes from the document analysis, d4 62

Figure B2.7. Specific overview of themes and sub-themes from the document analysis, d5 63

Figure B2.8. Specific overview of themes and sub-themes from the document analysis, d6 64

Figure C3.1. Question 1 from the interviews 68

Figure C3.2. Question 2 from the interviews 68

Figure C3.3. Question 3 from the interviews 68

Figure C3.4. Question 4 from the interviews 68

Figure C3.5. General overview of themes and sub-themes from the interviews 69

Figure C3.6. Specific overview of themes and sub-themes from the interviews; Question 5 70

Figure C3.7. Specific overview of themes and sub-themes from the interviews; Question 6 71

Figure C3.8. Specific overview of themes and sub-themes from the interviews; Question 7 72

Figure C3.9. Specific overview of themes and sub-themes from the interviews; Question 8 73

Figure C3.10. Specific overview of themes and sub-themes from the interviews; Question 9 74

Figure D2.1. General overview of themes and sub-themes from the meta-analysis of multiple cases 78

Figure D2.2. General overview of themes from the meta-analysis of multiple cases related to the decision making model of Binder & Scharf (1980) 78

Figure D2.3. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Anticipation 79

Figure D2.4. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Entry and Information exchange 80

Figure D2.5. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Final decision 81

Figure D2.6. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Reflections 82

Figure D2.7. Specific overview of themes and sub-themes from the meta-analysis of multiple cases; Reflections combined with the moral knowledge classification 83

Table 1. Research steps related to research (sub)questions 12

Table 2. Document selection criteria 13

Table 3. Selected documents id-codes 13

Table 4. Interview candidates id-codes 13

Table 5. Case selection criteria 15

Table 6. Case id-codes 15

Table 7. Search topics for relevant scientific literature 16