Learning about Crisis Response

- Analyzing the usefulness of an e-learning course to teach the lay public about crisis response

Master's Thesis in Societal Safety

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Preface

With the end of this thesis, comes also the end of my time as a student of societal safety at the University of Stavanger. The past two years have been challenging and required an immense amount of work, often pushing me to my limits.

Thanks to the abundance of excellent professors affiliated with this degree, and even more so, thanks to my friends that helped me along the way, I was always able to overcome my limits and could do so with a smile.

Now to this thesis. When I set out to write this paper at the beginning of the year, I could not have imagined how unfortunate many things would turn out to be. Luckily, my supervisor, Ove Njå, always did his best to help me out of difficult situations and point me towards a new way of approaching yet another fallback. Ove, I want to thank you not only for making it possible for me to work with 123CrisisTraining in the first place, but also for being patient with me and helping me through the challenges with good advice.

To Tor Bjarne Olsson, thank you for allowing me to work with 123CrisisTraining and being so flexible in changing the approach of this research when the first and second plan did not work as expected.

And finally, again thank you to my friends who have offered their help where they could and making sure that I had a great semester despite all the challenges that came with this thesis.

Summary

"Emergencies can strike anytime, anywhere and affect anyone. In emergencies, 90% of lives are saved by people like you. You can be a hero by learning and providing first aid when the time comes and ensuring first aid training is accessible to all." (International Committee of the Red Cross, 2014)

Crisis may hit anywhere, at any time, and anyone could be involved in it. Imagine being in a crisis – a car accident, a fire, a terror attack. What would you do? As the quote of the International Committee of the Red Cross suggests, in most cases, it is an average person that saves lives. It usually takes time before emergency services arrive at the scene of crisis, and it is therefore crucial that the persons at the scene, no matter if directly affected by the crisis or not, help each other and do their best to reduce damage and prevent more harm from occurring. First aid is crucial, but there are many more ways in which someone can help. This research tries to analyze whether the e-learning course 123CrisisTraining is an appropriate resource to teach the lay public how they can respond to, and manage a crisis, and improve their ability and willingness to help.

Originally, it was planned to conduct this research by giving the course to pupils in different municipalities in Norway. Pupils would have gotten a questionnaire both before and some time after conducting the e-learning course, to see whether they learned something from the course, and if that helped improve their willingness and ability to respond to crisis. By comparing the results from both municipalities with each other, it was planned to analyze whether geographic differences would have an effect on the results, as one municipality might have been more invested in teaching their pupils about crisis than another. However, due to an overwhelmingly negative response to my inquiries, with zero schools agreeing to be part of the research, the approach was changed.

In the end, after having problems with finding enough willing students from the University of Stavanger to participate as well, the research was conducted by using the data from 35 questionnaires, 4 interviews, and a literature study to be able to answer the research questions. Facing numerous problems with finding willing respondents, the scope of the research was also extended to include the identification of possible ways the lay public can contribute to crisis management.

Looking at regulations and laws in Norway, it became evident, that the Norwegian government and emergency services expect the population to be actively involved in the prevention of a

crisis, and the preparation and management of it should it occur. In many cases, the population is also more than willing to participate in any way the can as to help people and prevent the situation from becoming worse. This can be seen in various descriptions of small or big crises, such as car accidents, forest fires, or terrorist attacks, to name a few. The public can get involved by giving first aid, evacuating an area, starting search and rescue efforts, informing emergency services about the situation, or by doing one of many other things described in the literature. Data from the questionnaires also suggest that many of the respondents have a rough idea of how they would approach crises, or in fact any accident or crisis related situation in which a person may need help.

Certain assumptions about 123CrisisTraining could be made when comparing its set up with the literature that discusses what is required to make an e-learning course good. 123CrisisTraining offers several of the features defining a good e-learning course, namely the ability to move freely around the course and choose which parts one wants to learn more about, and the combination of visual material, text, exercises, and group work that allows for conversations and discussions.

Interviewees often had somewhat different opinions about the contents of the e-learning course. However, three of the four interviewees all expressed the desire to have a more thorough explanation of what one can do during the acute phase of a crisis, while it is less interesting for the lay public to learn about parts of the post-crisis material, as it is aimed at organizations. It is difficult to come to a definite conclusion about whether 123CrisisTraining is an appropriate e-learning course to teach the lay public about crisis management. It can simply not be answered in this research due to the limited empirical evidence, including the fact that three out of four interviewees had extensive crisis management knowledge even before going through 123CrisisTraining. However, this could not be prevented due to the vast problems with finding other volunteers for this research.

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1.0 Introduction

> *"Emergencies can strike anytime, anywhere and affect anyone. In emergencies, 90% of lives are saved by people like you. You can be a hero by learning and providing first aid when the time comes and ensuring first aid training is accessible to all."* (International Committee of the Red Cross, 2014)

Imagine being on your way to work, school, or a friend's house, when the car in front of you is suddenly hit by another car from the oncoming traffic. What would you do? Maybe even more important is the question: What can you do? Depending on who you ask, the answers to these questions may vary, but it is likely that most, if not all people would include calling the emergency services in their answer. Some people may leave it at that, while others will do more. One additional response may be to give first aid, as the above quote by the International Committee of the Red Cross (ICRC) suggests. By doing so, many lives can be saved, proving the importance of the public's involvement in emergency response.

However, giving first aid is far from the only thing that a passerby or directly affected person can contribute with during an emergency or a crisis. According to the definition of first aid presented by the International Federation of Red Cross and Red Crescent Societies (IFRC), *"First aid is the immediate assistance provided to a sick or injured person until professional help arrives"* (International Federation of Red Cross and Red Crescent Societies, 2016, p. 15). First aid focuses on helping injured and sick people, but response to crisis entails more than that. It has been proven time and time again that the public has many ways to contribute to successful crisis management, both before emergency services have arrived at the scene and once they are there. Depending on the type of crisis, this may mean they will have to evacuate an area, help others that have been harmed, fight a fire, or hide from a culprit.

Potentially the most prominent example of public contribution to crisis management in Norway has been witnessed during the 22nd of July attacks on the government district in Oslo and on the island Utøya. In their report, the commission of Norway's Public Investigations (NOU) specifically mentions that the involvement of passersby, residents and the camping tourists near Utøya were crucial in keeping the number of lives lost that day from rising even higher (Gjørv, 2012, pp. 457-458). There, camping tourists and residents didn't necessarily help most victims by giving first aid, but by taking their boats and helping fleeing children out of the water while putting themselves in danger (Gjørv, 2012, p. 30).

The public's response during the 22nd of July attacks in Norway is just one of many examples, and similar ones can be found all around the world. They don't necessarily have to be mayor crises like this one or Hurricane Katrina in the USA (Rodríguez, Trainor, & Quarantelli, 2006) either, but can be smaller emergencies like car accidents, or an accident at home. However, despite there being many positive examples of the public's involvement in crisis response and management, there are still ways in which the response of the public can be improved.

In a study from Germany, Burghofer, Köhler, Stolpe, and Lackner (2008) followed the operations of an emergency helicopter to analyze if first aid measures had been initiated by the public first responders, and if it had been done correctly. A significant number of these operations were car accidents, where first responders were identified to not only help with first aid but warn upcoming traffic and help people out of dangerous areas. However, despite arriving at many scenes where first aid had been given, Burghofer et al. (2008) classified 40.1% of required and possible measures as partly wrong or incomplete, or completely wrong or lacking (p. 132). These numbers might have been even higher if the first responders that are doctors, nurses, or similar, but were not on the job, would have been taken out of the analysis.

The main difference between nurses, doctors, and other emergency service personnel and the lay public is clear. It is their education and training that allows them to help more effectively should they find themselves in the midst of a crisis. In addition, by practicing their profession on a daily basis, they will become more confident and seasoned, making it easier to identify solutions in most situations. First responders rarely have these advantages, and education about crisis management tends to be limited to first aid courses, which are a requirement to complete before obtaining a driver's license in countries such as Norway or Germany. Any further education and training depend on the individual's own interest on the subject matter. Certain companies also require from their employees to complete safety courses, but these courses are generally limited to accidents that can happen in the company's environment. Skills learned there are thus very specific to situations that are more unlikely to happen in other environments. In addition, when accidents happen in a company related environment, employees often have crisis management plans to fall back on, that tell them what to do, and who is supposed to fulfill a task in most cases.

In those other situations that happen outside of the work environment, these guidelines and response resources to help manage an emergency or a crisis suddenly disappear. The lay public's training is limited to first aid courses and training taken on one's own initiative, and the results are often less than optimal and leave room for improvement (Burghofer et al., 2008).

It seems therefore appropriate to find a way to educate the lay public in a more general approach to crisis management and give them the necessary tools to identify a situation appropriately and decide on effective ways to react to the crisis. It should not be the goal to educate the lay public in a way that they will all be experts in crisis management of any kind of possible situation, but to find a way to teach them basics that can be of advantage in any kind of situation. This may be a terrorist attack as on the 22nd June in Norway, a natural disaster such as Hurricane Katrina in the USA in 2005, a car accident, a fire, or any kind of other situation in which the lives of people are in danger and other damage can occur.

There are many ways to educate the public, the most obvious being through school. There are however certain drawbacks to this method, including limited reach of those no longer at school, and the difficulties of implementing a whole new curriculum into the school system. Furthermore, it would be beyond the scope of this thesis to make a thorough analysis of the school system to find a way to implement this. Instead, a more appropriate approach is the analysis of educational systems that are already in existence, such as the use of e-learning courses to educate certain groups about crisis management. 123CrisisTraining is one such course, that has originally been developed to educate and prepare companies better to the management of crisis, no matter what the crisis may look like. This course is not specific to any type of company or institution and is thus a good basis to build this research on.

Having studied Societal Safety for the past one and a half years, one thing became quite clear. Many of the topics being taught in this degree are not only relevant to those wanting to pursue a career working with crisis management, but they convey knowledge each and every person can benefit from. To repeat the initial quote by the ICRC, *"Emergencies can strike anytime, anywhere and affect anyone"* (International Committee of the Red Cross, 2014), and as such I believe that it is essential to educate as many people as possible on the matter of societal safety and crisis management specifically. I have therefore made this the focus of my research for this master thesis.

1.1 Research problem and questions

With this motivation, the following research problem has been formulated:

"Is it appropriate to use an e-learning course to teach the lay public how to respond to, and manage a crisis, and improve their ability and willingness to help?"

This problem entails two parts. First, it is a question about the need to spend resources and people's time to teach them about crisis response and management. On one hand, there are many different tasks a lay person can do to respond to a crisis. But on the other hand, it is a question whether it is truly necessary to teach the lay public specifically about it, or if they have the capability to improvise and make the best out of their knowledge even without the help of specific training. It is a question about the actual impact of the training. Second, it is a question about whether it is appropriate to use an e-learning course to do so. The concept of using an e-learning course seems appropriate on first sight, but the question needs to be answered whether an e-learning course is actually a good way for people to learn about crisis management, and if it will bring positive results.

In order to answer this research problem, the following research questions have been formulated:

- *What role can, and should, the lay public take in the response to crisis?*

This research question serves to find out what is important for the lay public to know about crisis response, and with that, what the e-learning course should include and teach those carrying it out. It will look at whether it is important for the public to learn more than they already know, and what it actually is that they feel they can do, and what the government or emergency services might want them to do.

- *In which way should the e-learning course be set up in order to teach the lay public how to respond to crisis?*

This research question takes a closer look at the e-learning course, which topics it should entail, and how those should be presented. With the focus on 123CrisisTraining, this question delves into the evaluation of the course, and explores how the course set up should look like in order to offer best learning outcomes and prepare the public for crisis response.

- *What results may be expected from completing the e-learning course?*

As a continuation of the second research question, answering this question will explore what the actual results may be from going through the e-learning course. Where the second sub-question looks at the contents of the course, this one will focus on the actual and potential results the course can give, and how the best results may be achieved. It will also be necessary to explore whether there may be a difference in results for people with diverse backgrounds.

1.2 Research limitations

There are many ways to answer the research questions, and it can be relevant to look at several different topics in order to find the best answer. As it stands, however, a master thesis is limited by its time frame and the resources available. Because of this, it is important to formulate research limitations that will make the research possible and clear and help to define the scope of the research.

Starting, it is important to define the kind of situations that will be of interest. The research's aim is to see if lay people can achieve an improved ability to react to crisis given they do not have pre-defined plans and roles to fall back on. As such, crises happening in a work environment, where employees can benefit from Risk and Vulnerability Analysis (RVA) or crisis management plans will not be included in this study. In these situations, employees are more likely to have previous knowledge through training, which will be of certain advantage. However, the results of this study may be transferrable to these kinds of situations and may improve response there, too.

Similar to RVAs and crisis management plans, emergency services such as the police bring a certain order into a crisis and often define possible actions for lay people. To analyze how lay people fare without guidance, the time from when a crisis occurs up to the time of emergency services' arrival will be the main focus here. However, lay people can be a better resource to emergency services when they have more skills to contribute with. Therefore, the time after emergency services' arrival will also be considered, if so in a lesser degree.

The e-learning course used in this research is commercialized, and, thus, demands also certain limitations. Data collection through the distribution of this online course has to be limited to a specific number of people. In combination with aforementioned time constrains, research subjects are limited to a maximum number of 200 people. In addition, the people to participate in this study will be taken exclusively from students studying at the University of Stavanger. This will be explained in further detail in the *Method* chapter.

Lastly, due to time constrains, it is not possible to analyze the actual improvement in ability by observing people's actions in real crises or realistic exercises. Appropriate exercises need to be well thought out and require time to plan, as well as other resources such as money, observers and other volunteers. In case of analyzing real crises, it may take many years before people going through the e-learning course actually find themselves in the midst of a crisis. The research will therefore look at the participants' own evaluations of the outcome of the e-learning course.

Any further explanations and specifications of these limitations will be discussed in the following Theory and Research Method chapters.

1.3 Previous research

This research looks at the usefulness of the 123CrisisTraining e-learning course in terms of teaching the lay public about crisis. As 123CrisisTraining is aimed at organizations rather than individuals, this research is somewhat different to others. At the University of Stavanger, Ove (2013) wrote a mater thesis that also looked at the use of technical tools to facilitate learning, but focused on the organizations the tools were meant for rather than the lay public. E-learning is a subject area that has been covered in many pieces of literature, if mainly so in a more pedagogical approach, including a book by Hills (2003), which explains how a good e-learning course should be set up. This book will be used later in this study. The research by Sommer, Braut, and Njå (2013) is however an example of research done on learning in terms of crisis management, although not e-learning.

Regarding the involvement of the lay public in crisis, a lot of known research has been conducted by various authors, including Helsloot and Ruitenberg (2004), Darley, Latane, and McGuire (1968b), Kruke (2015) or Clarke (2002), just to name a few. Their research builds in many ways the foundation of this thesis, as many theories suggest that the involvement of the lay public is crucial during crisis.

1.4 Clarification of concepts

In order to avoid misunderstandings this chapter will offer an overview and clarification of certain concepts used in the remainder of the thesis.

To fully understand the focus of the research question, it is important to define what is meant by *lay people*. This can best be described by explaining what is meant when referring to *emergency services* and *voluntary organizations first*, as these are the groups excluded in the term *lay people*.

In this paper, when talking about *emergency services*, I will refer to all public response organizations that have been trained specifically to be able to manage crises, and have as their mandate to do so (Engen et al., 2016, p. 297). These organizations include the police, fire departments, and ambulance, as well as armed forces and other military driven actors relevant in crises.

Voluntary organizations are similar to emergency services by having been trained specifically to help in crises. The difference lies in their likely "charitable status, [that they] operate without profit, be staffed by unpaid volunteers, or have a governing body which does not receive payment" (Bowen & Ellis, 2009). Relevant organizations include the Red Cross, Doctors without Borders, Norske Redningshunder (Norwegian Rescue-Dogs), or the German THW, just to name a few.

When referring to *lay people* or the *lay public*, it will, thus, signify those people that are not part of emergency services or voluntary organizations. In other words, this group consists of people that do not work with emergency and crisis response. Additionally, it will also exclude those that have done so in the past. People who went through first aid training as part of obtaining a driver's license, or those who underwent basic safety training as part of their work will also be counted as lay people. This is because many people have first aid training as their only crisis related training, and for many, obtaining this skill through the driver's license lies many years in the past and most information has been forgotten. In case of work related safety training, the reason for its inclusion is its specific and narrow field of appliance in many cases.

The term *first responder* denotes all those people present at the scene of crisis from when it occurs up until emergency services or voluntary organizations arrive. First responders are those that can help one way or another. It can be people that were initially affected, or those that were nearby when the crisis occurred. This group can include both lay people, people working for emergency services, or those part of voluntary organizations. The difference is that those people are not present at the scene as part of their job, and can therefore not benefit from work related resources (i.e. doctors or nurses not on the job cannot make use of an ambulance and its equipment)

Finally, the types of situations of interest in this study may vary between emergencies, accidents, crises, disasters, or catastrophes. However, for the purpose of the research, there will be no mayor distinction between these concepts, and they may be used interchangeably. A more thorough explanation for why this has been decided will be given in the theory chapter.

2.0 The *123CrisisTraining* e-Learning Course

123CrisisTraining takes a central part in this research. It is an e-learning course developed by *Norsk Krisetrening* in collaboration with *Innovasjon Norge* and has as its goal to strengthen the skills of employees and help create a stronger safety culture in businesses (Norsk Krisetrening, 2018). Despite its focus on businesses, it is still a valid and relevant e-learning course to see its impact on the lay public. This is due to its general, and non-situation-specific contents. It aims to prepare those carrying it out to be able to respond to any type of crisis in any kind of situation. To analyze its potential impact on a person's skills, it is first important to take a closer look at the contents of the course to understand which topics about crisis response and management are taken up there, and how they are presented. This chapter will be used to present the contents of 123CrisisTraining and its setup, in order to be able to analyze the course in later chapters.

2.1 The setup of 123CrisisTraining

After logging into 123CrisisTraining, one receives access to the two parts the course is made up of. Choosing "123Krisetrening e-læring" opens the main course in a new window, which takes the form of an interactive slideshow of sorts. However, before going into more detail there, it is desirable to look at the second part "123Krisetrning Øvelser". This part is made up of two group exercises, of which one should be completed before the actual e-learning course and one after. Further, it includes one individual exercise to be completed after the course, and an introduction to these exercises. The introduction gives a brief overview over the exercises and explains in which order they should be completed. Additionally, it gives a brief explanation of why it is desirable to do these exercises. As written there, the aim of these exercises, and the e-learning course as a whole, is to help creating a safety culture at work through repeatable trainings and maintenance of skills relating crisis response (123CrisisTraining).

2.1.1 Exercises

The first group exercise is set to take an hour, and it is suggested that it is done in groups of 3-10 participants. The aim of this first exercise is to identify crises that can occur at the work place in question. This is done by either working in groups to discuss potential situations, or by using already existing risk assessments done by the business. In either case, these potential crises should then be considered by each individual, and each one should number their top three most important situations. After this is done, the exercise continues by having everyone discuss their rankings, to see and understand the different perceptions and discuss similar or different opinions. The discussion's purpose is to create a basic understanding and get people to start thinking about situations where it might be important to act and do something to prevent or mitigate the impact of a crisis. In the case of this study, this group exercise does not seem very appropriate. However, the goal of this exercise, namely to identify possible crisis situations that can be relevant for a person, can easily be translated to non-business situations. Instead of thinking about crises happening at a business, the situations that should be identified should be situations that one could meet on a normal day, outside the office. If it is an individual carrying out 123CrisisTraining by themselves, it may not be as thorough, and parts of the exercise may fall away, but the essence is still there.

The second exercise is an individual part consisting of five cases. Each case relates to a different area, and each is set to take around thirty minutes. The areas are “accident at your workplace”, “risk of terror”, “violence incident”, “missing colleague”, and “threat against the business”. Each case wants the participant to set themselves into a situation and answer various questions about it. These questions may be about who might need help, what the worst case in the situation may be, what needs to be done, and who should be doing it, just to name a few. This way, the participant can make use of their old and new skills and knowledge after they have gone through the e-learning course and become more confident.

The final exercise is again to be completed by groups of 3-10 participants and consist of the five areas used in the individual exercise. However, the cases are slightly different, and the questions asked are more detailed. Questions include, but aren’t limited to, who needs help, what kind of help is required, what are the challenges in this situation, who is supposed to do a certain task, or which resources do you need or are available? The aim of these exercises is to maintain the skills and knowledge they just learned about, and to give the participants a strengthened sense of security about their own skills, as well as being able to exchange ideas with each other.

2.1.2 The e-learning course

The actual e-learning course – that will say the interactive slideshow – is the main resource of 123CrisisTraining. It covers the three main areas of crisis management, namely the pre-crisis, acute crisis, and post-crisis phases. The course itself is set to take approximately one hour to complete but comes with a number of extra resources that elaborate closer on certain topics. There is a button on the relevant slides that allow the user to open the specific expansions. Alternatively, it is possible to open an overview over all extra material to gain quick access to whatever may be desired. This way, it is not necessary to go through the entire course to find certain information. Another feature that makes the course user-friendly, is the option to access an overview over the three different parts to choose which one wants to go to, as well as the option to continue at the slide where one last left off before exiting the course. This can be especially useful for situations where the user is not able to complete the entire course in one sitting. Depending on a person's way of learning, and the amount of time a person wants to spend with each topic, it may take longer than an hour to go through the course, leaving each individual an easy option to work with the course in their own way without difficulties and inconveniences of navigating the course.

When it comes to the actual slides, information is presented neatly in short paragraphs or bullet points, limiting the amount of text and information that is on each page. Most often, a relevant graphic or diagram is also used to visualize certain things, and to loosen up the page. Additionally, when relevant, an icon can also be found to open extra information as mentioned above. In some cases, the information on the slide will also only be shown when interacting with the graphics on the slide, making it more varying and preventing a monotony of simply clicking from slide to slide. At the end of each of the three chapters, one will be presented with short tests consisting of multiple choice questions. These offer an immediate repetition of the newly completed material and give validation to see if the contents have been understood correctly.

2.2 An overview over the topics in 123CrisisTraining

The exercises that come with the course offer great ways to learn about one's own skills and get one to think about different crisis situations. However, the actual learning component is found in the topics that it takes on. Starting the course are a few slides that describe the learning process and point out that simply reading through the course is not enough to become better at crisis management. It explains how the process takes time, requires involvement of all, and needs to be repeated regularly. It sets a realistic expectation the participants can have from the course and from themselves and gives an overview over what can be expected from the remainder of the course and how to best go through it.

From there, one goes into the first of three parts, the pre-crisis phase. This phase deals with the topics of 1) Risk and Vulnerability Analyses (RVAs), contingency plans, and training, 2) what is a crisis, 3) who is affected, 4) stress and reactions to crises, and 5) mental training. Starting with the RVA, the participant gets a brief explanation of what an RVA is, and how it is useful for a business to have one. This is also the first topic that offers extra information, where the concept of an RVA analysis is explained more thoroughly. It talks about when it is useful for a business to have an RVA, and what requirements the Norwegian government has for businesses concerning risk assessment of violence and threat thereof at the workplace. Lastly, it also offers a list of tools/activities that can be used to create an RVA. The slide about contingency plans has a similar setup, and also contains an access button to further material concerning the topic. Similar to the RVAs immersive material, the contingency plan is described in more detail, and an example to how a contingency plan can be set up is given by showing the potential chapters that should be present. The following slides then go on to explain how a contingency plan can be used actively for training, and leadership and leadership during crises. Organization and leadership are also more generally taken up and explored, and immersive material is also given there to expand on how decisions should be made by the leaders, as well as how organizations can be split up into different administrative levels in a business.

The next topic briefly explores what a crisis is, explaining the difference between accidents, and violence and threat of violence. This will be further explored in the second part. From there, the course goes on to show the different types of groups that may be involved in a crisis. It defines leaders, relatives and survivors, emergency responders, directly affected, eye witnesses, indirectly affected, and the general public as different groups, and explains briefly their potential involvement. The section about stress and crisis reaction focuses on the stress reactions the helpers and first responders may experience and lays out the different reactions one may have. It shows the different degrees of stress, as well as physical and mental manifestations of them. The immersive material goes into more detail here. It also discusses briefly the potential for group reactions of stress. Finally, part one ends by looking into mental training and techniques on how to do so. The reasons for why it is desirable to participate in mental training are given, as well as an example of "visualization" to show how mental training can be done. In the immersive material, to this topic, more methods of mental training are laid out, and the benefits of them are further explained.

Part two, the active crisis phase, can be split up into two main topics. The first topic goes on to look at accidents, whereas the other topic explores crisis situation relating violence and threat thereof. To explain the response to accidents, this topic is split up into four main actions. These are 1) getting an overview over the situation and analyzing the initial impressions, 2) contacting emergency services, 3) informing others that may be harmed or colleagues, and 4) evacuate. Each part consists of a short explanation of what to do, when to do it, and reasons to why it is important to do so. Additionally, first aid is mentioned independently of these four situations, explaining that it may be required to give first aid during any of these four phases. A short overview over what kind of first aid actions may be required and how they may need to be executed is given in the extra material.

The response to violence and the threat thereof is introduced by explaining that the responses to accidents are also relevant in these kinds of situations. However, it is also made clear that it is more difficult to plan for situations where someone actively plans to do something harmful, and that it is crucial to think about saving oneself in a violent situation. The four responses relevant to malicious events are defined as 1) flight, 2) hiding, 3) locking, and 4) self-defense. The first two actions are self-explanatory, and their slides do not have any extra information. For locking, it is briefly explained that it is meant to either lock oneself in, or lock doors and gates to delay an offender. Finally, self-defense is explained to work best when more people “attack” the offender together, but that this kind of behavior should only be used as a last way out as it may result in serious harm to one or several people. The final piece of information given in part two is a list of immediate responses that a business should implement in light of bigger crises. It does not look at an individual’s actions, but rather at what a business as a whole may need to do, such as setting up a crisis-management group, and gathering the victims in a safe location, just to name a few.

Part three takes a closer look at how to help the victims and those otherwise involved in crisis. It focuses on 1) support, 2) informing, and 3) following up, and aims to explain how different people may have different needs after a crisis. The reason for why it is desirable to support those affected by crisis, and how the support should be given is described in immersive material. The reasons to do so are to reduce psychological reactions and prevent long-time effects, reducing health related absence from work and health issues, legal responsibility to give support, and responsibility as leader to support your employees. There are also some important principals that need to be considered when giving support to the victims. First, it should happen at the lowest organizational level, meaning it should be given by the colleagues closest to the victim. It should also be immediate, pro-active and service oriented. Information should also be given, and the event should be treated realistically and not played down. It should be a goal to prevent isolation and feelings of guilt. Lastly, it is also explained that the leader should be direct, open, and should respond immediately. Another part of the immersive material also goes into detail on which kind of reactions can be expected from victims. These include repetition of events, avoidance, physiological reactions, depression and more. These are described in detail and how to react to them is also mentioned.

After the overview over what kind of reactions can be expected, the course focuses on the four levels of responses: 1) stabilization and information, 2) support conversations, 3) systematic group meetings, and 4) professional help. Each level is explained in depth, and is also accompanied with immersive material, where each method is laid out thoroughly. This includes a step-by-step explanation of how support meetings should be conducted, which method should be used (individual or group meetings), and an explanation of how support centers work. The course also takes into account the need to take care of those that helped in a crisis and weren't direct victims. Finally, the last topic of the course focuses on the evaluation process of a crisis, making clear that this differs from a support meeting. Both types may include the same people, but the focus should not be set on supporting those impacted by the crisis (victims or helpers), but to evaluate the situation and the response to it.

2.3 Summary

As seen in this chapter, the 123CrisisTraining e-learning course touches upon a large variety of topics related to crisis. By splitting it up into the three crisis phases, the course has a logical and easily understandable layout. When going through the course, a participant can choose which immersive material they want to look into, and what may be less relevant for them. That way, the course can be gone through efficiently and does not overload the participant with less relevant information. This chapter has given a rough overview of how the course is set up and what it entails. In the later chapters of this thesis, both the course's setup and content will be analyzed to see if there need to be made changes for it to be effective in teaching the lay public, rather than businesses to respond to crises. This will be done by giving the course to respondents to conduct, and then interview these respondents to evaluate their experience. Additionally, an analysis of literature will help in identifying the necessity of teaching the lay public about crisis response, and to identify the most important topics that this course should entail if used to teach the public.

3.0 Theory

As described in Chapter 1.1, this research aims to answer two questions. The first is the question if and what the lay public should learn to be more effective in crisis response. The second question is whether the e-learning course 123CrisisTraining is the appropriate tool to do so. This chapter will be used to build a theoretical framework that will help to answer these questions. In order to be able to answer the first question, it is important to understand which types of situations the public can find themselves in and are supposed to respond to. Here, theories about accidents, emergencies, crisis, catastrophes and disaster will be helpful in formulating an appropriate definition of the situations of interest.

To further define the situations of interest, I will continue by looking at different crisis typologies. 't Hart and Boin (2001) defined different crises by their speed of development and speed of termination. These dimensions can say much about the situation and impact the amount of work that can be done during the different phases of a crisis. Focusing on one typology will not only allow to limit the scope of the thesis to the most relevant situations, but also help identify the different actions the lay public can contribute with, and as a result, what should be in the e-learning course.

Next, I will discuss theories about the different crisis phases. These are relevant as responsibilities of different actors vary from phase to phase. For this study it is also most natural to look at phases of a crisis in order to identify the most important activities different crisis actors have to carry out. They are, thus, a good guideline to see what is important to teach the lay public, and to identify when it is most vital that the lay public is involved. Special focus will be given to the acute crisis phase to show how the role and responsibilities of the lay public can be affected by the arrival of other response groups.

The acute crisis phase is also the phase of most interest in terms of lay public's ability to contribute to the management of a crisis. Literature about the lay public's behavior during crisis will be used to identify actions that the lay public can execute. It is also important to look at the literature concerning common assumptions about public behavior, which often prove to be a misconception. These myths can be limiting factors if not identified, as they may be used as reasons to not teach the lay public about certain response tasks. It may be wrongfully assumed that the lay public will not be able to do certain things, even though they are able to do so. These myths include helplessness, panic, and looting (Helsloot & Ruitenberg, 2004) of which the latter is of less relevance here and will not be discussed further. Instead, I will discuss the phenomenon of the bystander apathy, where public actors are said to fail to respond properly as they believe another bystander has completed the task already, or will set out to do so (Darley et al., 1968b). These behaviors are common expectations about public behavior, but as theory suggests, the public most often acts rational and logical. After clearing up these misconceptions, I will look at theories showing what the public actually does, and can do, to help during crises.

When talking about the public’s involvement during crisis, it is also of interest to look at theories surrounding decision making. To understand how the public’s ability and willingness to contribute to crisis management can be improved, it is helpful to understand how people make decisions, and how uncertainty about a situation can influence these decisions. By identifying how people may respond to uncertain situations, it will be possible to analyze whether learning about crisis management with 123CrisisTraining will improve their ability to take decisions despite uncertainty. Taking too little time to get an overview over a situation or taking too much time before making a decision may both result in negative outcomes, and it is therefore crucial to teach the lay public to make the right decisions quickly to improve their involvement in crisis management.

3.1 Defining the situation

As its name shows, 123CrisisTraining is about teaching people how to prepare for, and respond to crises. There, crisis is defined as a situation that has come out of control and can be categorized as a form of accident or as violence or threat of violence. This is a very simple definition, and thus also very vague. In the literature, many different definitions about crises can be found, although they tend to be different phrasings of the same concepts. One example of such a definition is given by Rosenthal, 't Hart, and Charles (1989) as follows: “[A] crisis is a serious threat to the basic structures or the fundamental values and norms of a social system, which – under time pressure and highly uncertain circumstances – necessitates making critical decisions” (p. 10). According to this definition, a crisis involves a *serious threat* to both infrastructure (structures) or *values* such as a person’s life, *time* is scarce, the situation involves *uncertainties*, and it requires a person to make *critical decisions*. These indicators are not only common in different definitions of crises, but also in those of accidents or disasters (Fritz, 1961; Willoch, 2000). These indicators do not only help to identify the situation, but also point out the challenges a responder may face when involved in a crisis. Time pressure may lead to stress, which can evoke negative reactions that hamper a person’s response abilities, which needs to be considered when looking for improvements. Furthermore, as explained briefly in the introduction of this chapter, uncertainties and critical decisions also pose challenges for the responder and need thus be taken into account.

However, it also important to consider the often-referenced Thomas theorem by Thomas and Thomas (1928), who wrote that "[i]f men define situations as real, they are real in their consequences" (p. 572). Regarding crisis, this will say that if someone defines a situation as a crisis, then it is a crisis. This understanding is crucial for this study, as it points out that there can be different understandings between people about what should be considered a crisis, and that a too narrow definition may in fact be limiting. On one hand, a detailed description may be of disadvantage as it might prevent the inclusion of some events that one person would see as a crisis despite not fulfilling all criteria. On the other hand, it is however important to define some factors, as otherwise any wrongfully labelled situation may be interpreted as a crisis. Crisis has become a word used in common day-to-day conversations about various different things, such as mid-life crisis or simply burning a pizza in the oven. Indicators will help to exclude these kinds of situations.

To properly define the situation of interest to this thesis, it is necessary to not only look at the literature including crisis definitions, but also literature defining similar events like accidents or disasters. Accidents are less severe than crises, which can be seen by the definition from Hollnagel (2004): "[A]n accident can be defined as a short, sudden, and unexpected event or occurrence that results in an unwanted and undesirable outcome" (p. 5). He further describes that an accident "(1) happens unpredictably without discernible human intention or observable cause and (2) leads to loss or injury" (p. 4). Although this definition does include *loss* (of life), when comparing accident to crisis, an accident would include a very limited number of lives lost, whereas crises are on a bigger scale, and most significantly usually take more time to handle. In addition, Hollnagel's definition of accident does not include a situation in which lives were intentionally harmed, i.e. crimes, sabotage, and terrorism. Nevertheless, whether it was intentional or not, first responders may be required to react to the situation to prevent further harm or mitigate the damage that was done. An example here may be a car accident or someone tripping and falling down the stairs, leading to injury.

On the other end, a disaster can be defined as "an event, concentrated in time and space, in which a society, or a relatively self-sufficient subdivision of a society, undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfilment of all or some of the society is prevented" (Fritz, 1961, p. 655). In a way, a disaster is just a larger version of a crisis, with more severe consequences. This can include naturally caused disasters or terrorist attacks.

Engen et al. (2016) showed these differences in a table as seen in Table 3.1. It is made clear that not only are the consequences of different magnitudes, but also the resources required to handle them and the level of involvement (mobilization). However, in each scenario, lay public and first responders may be involved in its management. It is therefore, that all three terms describe relevant situations for this thesis, and that they may be used interchangeably in this thesis.

Table 1 Accidents, crises and catastrophes: central differences (translated from Engen et al. (2016))

	Extent:	Resource requirements:	Mobilization:
Accident	X	X	Local
Crisis	XXX	XXX	Local Regional
Disaster	XXXXX	XXXXX	Local Regional National International

3.2 Crisis phases

A crisis, or in this case any of the relevant situations for this study, can be split into different phases. Most commonly, a crisis gets divided into the pre-crisis, acute crisis, and post-crisis phases. At first, moving from phase to phase was seen as a linear process, but in more recent literature it has been commonly accepted to depict it as a circular process as shown in Figure 1. Although circular, this does not mean that one will return to the old status quo after a crisis, but that one will learn from previous mistakes and vulnerabilities, and improve the situation so that the same accident will not happen in exactly the same way again (or is less likely to occur in the same way) (Engen et al., 2016, p. 265).

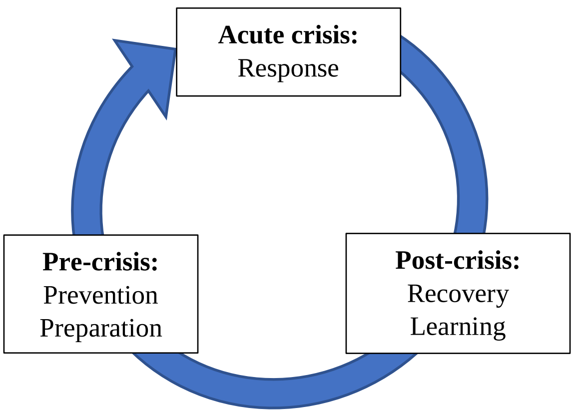

Figure 1 Crisis phases as a circular process (translated from Engen et al. (2016))

As can be seen in Figure 1, each crisis phase is comprised of certain activities that are required to be carried out to improve the situation and reduce the impact of a (potential) crisis. The pre-crisis phase consists of preparation and preventative activities. In the acute phase, one has to respond to the crisis situation at hand, and in the post-crisis phase, resources should be used to recover and to learn from the crisis. These actions can be carried out on different organizational levels by everyone directly or indirectly involved in a crisis, but for this research it is most useful to look at the actions a lay person can carry out during each of these phases.

3.2.1 The pre-crisis phase

In the pre-crisis phase, the lay public's involvement in the prevention component may be substantially limited. The individual may be able to implement barriers and protections that may prevent smaller individual accidents, most notably in their own homes, but it is difficult for an individual to implement ways to prevent situations outside of their immediate area of responsibility. Preventative measures in public places (streets, shopping centers, cinemas, restaurants, etc.) require organized preventative measures from those responsible of the establishment, the municipality, or government.

Preparation, on the other hand, is an area that can benefit highly from the lay public's involvement. In the case of the lay public, preparation means in many ways learning about crisis management. This is a different type of learning to that in the post-crisis phase. I will come back to their differences when discussing the post-crisis phase later this chapter. Here learning refers to acquiring knowledge about the kind of situations that may happen, and the ways in which one may be able to respond to the crisis. It is here where courses like the 123CrisisTraining online e-learning course come into play. As I have described the general content of the course in chapter 2 already, I will not go into detail again here. But to repeat the content briefly, preparation includes understanding how one can be affected by a crisis (stress), and how to handle the impact (stress reduction), it includes mental training and visualizing different scenarios and useful reactions and gaining an understanding of how one can participate in the active crisis management. The usefulness of this kind of preparation is, of course, the focus of this research, and will be discussed more thoroughly throughout. In addition to learning, another way of preparation can also be by acquiring equipment that may be useful during crisis. This may include fire detectors in one's house, food and drink reserves for natural disasters or power outages, or simple first aid equipment (first aid set in a car, face shields on the keychain to reduce hesitation when needing to give mouth-to-mouth).

3.2.2 The acute crisis phase

Figure 1 shows that the acute crisis phase covers the response to the situation. Olson (2000) has a somewhat different division of the crisis phases, in which the acute crisis phase can be split into the impact and response phase. He uses his 5-phase classification (Pre-Impact, Impact, Response, Recovery, Reconstruction) to describe disasters, but it can also be adapted to describe smaller crisis. The difference will be the length of the different phases, and the amount of activities happening in each. Kruke (2012) also splits the acute crisis phase into more distinct phases. His phases are, however, based on the actors involved during these phases. Table 2 shows these phases, which are an excellent way to focus on the response work that can be done by the lay public.

Table 2 Actors on the crisis scene in relation to phase, activity and responsibility (Kruke, 2012 as translated by Kruke, 2015)

Actors	Phase	Activity and responsibility
The directly affected	"The golden hour"	Own life saving and assistance to others in need
The randomly present and passers-by	"The golden hour" +	Ad-hoc assistance to the directly affected
The professionals (blue-lights actors)	Acute phase (30 min +)	Take command upon arrival on the accident scene
The volunteers (organized)	Acute phase (1 hour +)	Defined by themselves and agreed upon with the professionals

As we can take from Table 2, professionals and volunteers need some time to arrive at the place of crisis. This is because they require time to get an overview, organize themselves and their equipment, and often need to get to the affected area first. This leaves the directly affected and the randomly present and passers-by to take care of the situation during "the golden hour" (Kruke, 2015). The time in which these first responders are responsible to manage the situation and reduce losses can vary from a few minutes up to hours, should the crisis happen in a remote location, or should the crisis result in them being cut off from their surroundings (i.e. during an earthquake or flood). Furthermore, in case of large crises and disasters, emergency services might not have the capacities to help everyone, and the harm can only be mitigated through the actions of the first responders and lay public. Examples for these kinds of situations are the Fukushima Nuclear Power Station Disaster that required from the directly affected public to evacuate themselves (Atomic Energy Society of Japan, 2015), or Hurricane Katrina, that cut of many areas from the limited external response, and was dependent on the local population's organization and management of the disaster (Rodríguez et al., 2006). And as Helsloot and Ruitenberg (2004) state, "It takes time to act in a structured way on a large scale. In that first period following the disaster, citizens will mostly have to rely on themselves and spontaneous aid" (p. 106).

Once the emergency services arrive at the scene, they tend to take over the response work, often neglecting capacities and resources already present at the crisis scene. The reason for this can be traced back to a lack of inclusion of the already present public in crisis management plans. This is, in part, due to the negative expectations governments and emergency services have about the public's reaction to crisis (Helsloot & Ruitenberg, 2004). These myths about the public's action will be discussed more thoroughly in Chapter 3.4. Another reason for the lack of involvement can be found in the military approach governments and emergency services use to set up their response work. This military "C^3" model is based on the assumptions of Chaos, Command, and Control, which are the expectations these actors have about the crisis area and the lay public involved in the crisis (Helsloot & Ruitenberg, 2004). Although not identical to the original "C^3" model, modern crisis managers still have many of the same assumptions about the public and these resources get, thus, neglected (Helsloot & Ruitenberg, 2004, p. 104). By improving the average lay public's understanding and capability in crisis management, crisis managers in governments and emergency services may become less likely to make wrong assumptions. It may become more likely that emergency services are willing to include the lay public in their response work, which has the potential to improve crisis management significantly, also after emergency services have arrived. I will take a closer look at how the lay public can contribute to improved crisis management in chapter 3.4.

3.2.3 The post-crisis phase

The final phase of the framework by Engen et al. (2016) consists of the recovery and learning sub-phases. Recovery is just as important as the other phases in a crisis, but for the lay public, and especially for this study, this phase is of less interest. "Recovery is about victims and responders returning to a stable condition, but also reconstruction and reorganization if that is required" (Kruke, 2015, p. 179), making this sub-phase a more organized part where established groups and organizations often take the lead and help organizations are in place. The part of interest for the lay public will here rather be to know what kind of help they can get and where to find it, should it not be offered automatically, especially on a psychological level. This is also the part that is being taken up by 123CrisisTrainig as described in chapter 2.

"Learning is about investigation and exploration of all learning opportunities both on the acute handling of the crisis, but also on the relevance of the pre-crisis training, the reliability of response resources and equipment, and the appropriateness of the response structures" (Kruke, 2015, p. 179). Kruke's definition focuses more on the organizational and big scale actions that can be done, but as a lay person who has been involved in the crisis in one way or another, it can also be of interest to participate in one's own learning process. For a lay person, this can be tightly coupled to the pre-crisis preparation phase as they can use their experiences from the crisis they have been in, to evaluate what they should get better in for the next crisis. They will not have to look at available response resources and equipment, or response structures, but at their individual skills that can contribute to crisis management. Using this experience in the preparation phase and mental training, they will be more aware of how they react to crisis, and what jobs might need to be carried out in the next crisis, allowing for a quicker and more effective response by them.

3.3 Crisis typologies

Defining the situations of interest and looking at the different phases that they can be split into has helped getting a better understanding of what this research needs to focus on. However, the potential situations that may be of interest according to the definitions made so far are still plenty. To improve this thesis, its focus needs to be even narrower. By looking at the theories about crisis typologies, it will be possible to identify the most relevant situations even closer. 't Hart and Boin (2001) identified four major typologies, which are determined by their speed of development and speed of termination. Table 3 shows how the four typologies are defined by a matrix where the speed of termination is combined with that of development. A crisis that develops immediate, without warning, and ends abruptly is called fast-burning. One that develops quickly but takes time to terminate gradually is a long-shadow crisis. A cathartic crisis is one that takes time to develop, but which can be terminated quickly again. Finally, a slow-burning crisis both takes time in its development and in its termination.

Table 3 A typology of crisis development and termination patterns ('t Hart & Boin, 2001)

		Speed of development	
		Fast: Instant	**Slow: Creeping**
Speed of termination	**Fast: Abrupt**	Fast-burning crisis	Cathartic crisis
	Slow: Gradual	Long-shadow crisis	Slow-burning crisis

Using speed of termination and of development may seem straight forward at first, but in many situations, it may be unclear to how quickly it actually developed, or if the crisis is actually terminated. Crises can be very complex and defining when a crisis actually started is often a question of personal understanding. One person may see a situation and identify it as an instant development, but another may analyze the situation more closely and point to long-present conditions that may have led to the crisis. As an example, 't Hart and Boin (2001) describe “plane hijacks and other forms of hostage-takings that are met with swift military intervention or a quick, negotiated resolution” (p. 32) as fast-burning crises. Looking at incidents such as those occurring in Entebbe in 1975 or Mogadishu in 1977 ('t Hart & Boin, 2001) make this classification apparent, but is not always that straight forward. In the hijackings that lead to the 9/11 terrorist attacks, it can either be argued that the development was sudden, or that the development started many years earlier with political conflicts that lead to the formation of the terrorist group al-Qaida. Similarly, the entirety of the 9/11 terrorist attacks can be seen as a fast-burning crisis that started when the hijackings began, and effectively ended when the search and rescue units finished their search for survivors in the skyscrapers and the pentagon. On the other hand, it can be argued that the resulting war on terror is still a part of this crisis and has thus still not ended. This way, the 9/11 crisis could be seen as a fast-burning or slow-burning crisis, or as a matter of fact, any of the four typologies depending on an individual’s interpretation of the situation.

Despite it being difficult to sort a crisis into only one of these typologies, the distinction needs to be made in order to frame the main focus of the research question. Looking at the lay public’s involvement in a crisis, the most interesting situations are fast-burning crises. Going back to the example of the terrorist attacks in the USA on 9/11, the situation that will be of most interest is the one that can be seen as a fast-burning crisis. For the general lay public, the crisis started abruptly when the first plane hit the World Trade Center and ended after the skyscrapers had crashed and an official statement had been given to say the attacks were over. For military personnel and politicians, the crisis only started there in many ways, but these are not the focus here, so it is acceptable to define it as fast-burning. On a smaller scale, day-to-day accidents are much simpler to identify as fast-burning crises, as they tend to happen suddenly, without time to prepare, and are finished once the injured person has been brought to the hospital, the fire has been extinguished, or the culprit has been detained. It is here, again important to understand that this classification is most appropriate for the focus group of this thesis – the lay public. Crises other than fast-burning ones are generally more laid out for the involvement of emergency services or politics, as they tend to be on a larger scale, and because the lay public does not have the resources to prepare fully for crises even if they develop slowly, and neither to handle a slow termination.

3.4 The public's behavior during crisis

By looking at the crisis phases, it was possible to identify what the lay public can do both before, during and after a crisis. Their involvement in the acute crisis phase is most crucial and will be analyzed in more detail, as it is here where lives are saved. To understand what the lay public can do to improve their crisis management abilities, it is first, however, important to understand that certain assumptions about the public's behavior are nothing but myths.

3.4.1 A panicking lay public

To start with, it is often assumed that the affected population will start to panic when confronted with a crisis (Helsloot & Ruitenberg, 2004). Both Perry and Lindell (2003) and Helsloot and Ruitenberg (2004) attribute the popular belief of a panicking public to press coverage, disaster movies, and novels, which all portray most of the population this way, with only a few people being able to take the lead and respond properly. In addition, people often define their reactions or those of others as panic, even if it was quite rational. This is due to a lack of understanding of its definition, as people often see their immediate flight from danger as panic, rather than the rational reaction to the situation. By closer analysis, people's reports of their escape from a burning building may be described by them as a panic reaction, but their escape during which they also help other people does not reflect what Quarantelli (1954) defines as panic: "[A]n acute fear reaction marked by a loss of self-control which is followed by nonsocial and nonrational flight behavior" (p. 272). The common reactions found during crises do not reflect panic, but rational and altruistic behavior. As Perry and Lindell (2003) state, "people tend to act in what they believe is their best interest, *given their limited understanding of the situation*" (p. 50). This is a good premise to use 123 CrisisTraining to give the public improved skills to analyze and understand a situation, and to give them an idea of how they can respond to it effectively.

3.4.2 A helpless lay public

The second myth that is important for this study is the assumption that "Citizens are Helpless and Dependent" (Helsloot & Ruitenberg, 2004, p. 102). Closely linked to the first myth, it is often assumed that the lay public is in panic or shock and doesn't know how to help itself or others. As Quarantelli (1954) describes, "[t]his condition has two components: a feeling of impotency or powerlessness and a sense of "aloneness"" (p. 274). Although this can occur in some situations, most often people find things to do and ways to respond to the crisis once it has struck. As explained before, "the golden hour" is a time in which people cannot depend on professional help from emergency services. It is a time in which, time and time again, the lay public initiated response to crisis by giving first aid, coordinate search and rescue, evacuated areas, or helped in other ways to mitigate the negative impact of the crisis. Countless examples of people's response in even the direst situations (9/11 in the USA, 22. July 2011 in Norway) show that helplessness of the lay public is a rare phenomenon.

3.4.3 Bystander apathy

Bystander apathy may not be one of the three classical myths (Helsloot & Ruitenberg, 2004), but it is just as relevant a phenomenon that needs to be discussed. Bystander apathy is the concept that people are less likely to react and help a person in need if there are other people present. One reason for this can be that they believe these other people can help and will respond instead, making it unnecessary for oneself to act (Darley, Latane, & McGuire, 1968a). The other reason Darley et al. (1968b) identified is that "[i]f everyone else in a group of onlookers seems to regard an event as nonserious and the proper course of action as nonintervention, this consensus may strongly affect the perceptions of any single individual and inhibit his potential intervention" (p. 216). Darley et al. (1968b) termed this "diffusion of responsibility", as an individual's feeling of responsibility spreads to other bystanders, thus decreasing the weight on the shoulders of oneself. Instead, a person may argue that the responsibility is not just with oneself, but with others, and if these do not act, one is not required to act either. Either way, the presence of other people can lead to the inaction, or at least delayed reaction of people to crisis. To prevent this from occurring, it is again important to teach the lay public about it. If they have the skills to analyze a situation better, and are more aware of how they can help, they are less likely to be affected by other's actions. And it often only takes one person to start response and take the lead, for others to assist as well.

3.4.4 Inhibiting and promoting factors to help

Knowing that these myths are unlikely to occur but yet are still a possibility, it is important to understand what the reason for a person to act may be, or what may lead to inaction. Burghofer, Schlechtriemen, and Lackner (2005) researched reasons more specific to giving first aid, but their results can easily be transferred to other response actions. The concept of bystander apathy as presented by Darley et al. (1968a, 1968b) is only one of several factors expressed by Burghofer et al. (2005). Another promoting factor to help is the active observation of the occurrence of crisis. Observing how a situation unfolds gives the lay person a good understanding of the situation and can prevent misinterpretation of the situation where one might be unsure whether it is necessary to help or not. Being uncertain about the situation makes it easy to conclude that nothing is wrong and that it is not necessary to invest precious time into helping a person that might not need it. With a short cost-benefit analysis, a person may quickly argue that it is more important to get to one's meeting, rather than try to help a person that might not actually need help (Burghofer et al., 2005, p. 408).

In addition to these situation-specific reasons, there are also inhibitors and promotors linked to the individual person. Most notably, Burghofer et al. (2005) identified a feeling of competency a mayor indicator on whether one may decide to intervene or help. Their study focused on the competency in first aid, but as I am trying to show in this thesis, there are several other activities during crisis a lay person can contribute with. For either of them, it may be true that a stronger feeling in competency will make it more likely for a person to use their knowledge and get involved in the crisis management. As Burghofer et al. (2005) stated, it is not enough to have learned something once to feel competent enough to be easily willing to give first aid. Instead, it is dependent on the time that has passed since a person last used the necessary skills or went through the training. For 123CrisisTraining, this may mean that even if this research finds that it is a successful way to teach the lay public about crisis management, it is not enough to let people complete the course only once.

3.4.5 What the public can do

Whether it may be panic, helplessness or bystander apathy, we have now seen that there are many negative assumptions about the public's behavior during crisis. It is now time to look at the actual behavior that can be found, and even more so, at the actions that a lay person can carry out to successfully contribute to the management of crisis. First aid is arguably the most common way of contributing to crisis management. This can easily be attributed to the fact that most people in countries like Norway or Germany have to go through first aid training as part of their driver's license acquisition. During these courses, informing emergency services will also be taught, but there are other actions that may only be mentioned peripheral during the basic first aid training, or not at all.

The first of such actions that can be carried out by any first responder, is informing others of the situation. Besides emergency services, it is often also important for other people to know about the situation, especially for those nearby. People may need to be warned about potential danger or may need to be informed about the situation so that they do not cause more harm. A simple example for this can be found by looking at many common car accidents. There, it is crucial that first responders set up warning signs, or block the road with their vehicle so other traffic will not be unaware of the situation and drive into the accident area (Kruke, 2015). On a larger scale, such as during the 22. July attacks in Norway (Gjørv, 2012) or the Southern California Wildfires in 2007 (Palen, 2008), those directly affected often make use of social media and other forms of communication to inform family and friends of their situation, but also to give out general information that may be accessed by other people so they can react appropriately, for example by staying away from dangerous places.

When already in a dangerous situation, it is not just crucial to warn others, but also to evacuate oneself and others if needed. If evacuation is necessary, it is often immediate, and the public has to do so by themselves, and not wait for emergency services to take over control and manage the situation. The most obvious scenarios where evacuation is necessary are fires, and people have been observed to "put themselves in great danger while assisting others in their groups, at times returning to the burning building to search for dear ones" (Aguirre, Torres, Gill, & Lawrence Hotchkiss, 2011, p. 101). This also touches upon another action the lay public can carry out – search and rescue. This can be especially relevant during larger disasters such as earthquakes or avalanches. The problem with evacuation and search and rescue is that it might put one in danger when trying to help another, and the need to help someone, especially someone familiar, might delay evacuation and even result in death (Cornwell, 2003). That is why it is important for the lay public to be able to analyze a situation quickly and understand the best way to prevent harm to oneself, and to others if possible.

When evacuation is not necessary, there is still another thing first responders can do. Whether it may be injured people, or simply some that have seen something horrific and are processing it, it can be valuable to protect these people from onlookers. In the case of the Lavangsdalen traffic accident, one such action was this was not only done to protect those hurt or dead sitting in a bus, but also to protect the young kids sitting in the minibus next to the bus from having to see the dead and injured (Kruke, 2015, p. 181). Here, one of the passengers in the bus was told to pull the curtains, which can be a reference for the final point. By giving out tasks, one person took the role of a leader. Leadership can be of high value in crisis situation, as it is a way to get people involved in the response to it. As described earlier, bystander apathy may result in response being slow or lacking, and it only takes one person to initiate action for others to follow. By taking on a leadership position, response will not only start up, it can also be more orderly, and tasks can be done more efficiently. This way, it can be prevented that some tasks will get done multiple times, while others may not be done at all.

3.5 Decision making

Making decisions is a day-to-day task that most do without thinking about and analyzing the process itself. However, during crises, the decision making process may differ quite significantly from its what one may go through on regular basis when, for example, deciding where to eat or what film to watch. During a crisis, the conditions surrounding the decision making process are far more severe, as people need to “make tough decisions under difficult conditions such as limited time, uncertainty, high stakes, vague goals, and unstable conditions” (Klein, 2008, p. 456). It is therefore of interest to understand how a person tends to make a decision about what to do when facing a crisis situation. By knowing how to arrive at a way to respond to a critical situation, it may be possible to identify certain factors that can help the person to make better decisions more quickly and be more confident in their own decisions.

3.5.1 Naturalistic decision making

When it comes to theories about the decision making process, it is often differentiated between the traditional (classical) decision making theory, and the Naturalistic Decision Making (NDM) models. The traditional decision making theory is based on the belief that people have large amounts of information about a situation available and have the ability to use this to compare all possible solutions with each other to find the best (Okoli & Watt, 2018, p. 1122). These assumptions are unreasonable, especially in a crisis, and NDM models have since been formulated to lay out a more realistic approach to how decisions are made. The NDM models are a more intuitive approach rather than analytical, and do not require complete knowledge and time to find and compare all potential solutions.

A major factor why the NDM approach is more appropriate for real-life crisis situations is the presence of uncertainties. Especially during fast-burning crises with instant development, people involved immediately after the impact often do not know exactly what just happened and how the current situation is. Lipshitz and Strauss (1997) identified three categories of uncertainties that one might experience: “inadequate understanding, incomplete information, and undifferentiated alternatives” (p. 149). Likely, one will have to face each type of uncertainty at the same time and will be forced to decide on how to respond to the situation nonetheless. Furthermore, as described above, this decision will have to be made under time pressure, knowing that the stakes are likely high, and a wrong decision may even result in loss of life.

Lipshitz and Strauss (1997) have formulated the R.A.W.F.S. heuristics to illustrate how decision makers tend to tackle uncertainties in a timely manner. Despite these decision makers often being professionals, the heuristics can still be analyzed to identify the most crucial skills a lay person may need to come to a good solution without needing too much time, and to make them more confident about their decision. In the R.A.W.F.S. heuristics hypothesis (illustrated in Appendix A) the decision making process starts by making sense of the situation [1]. If it does not, additional useful information should be gathered [4b], or appropriate assumptions need to be made [5] about the situation. Afterwards, a possible solution needs to be formulated [2], and if several are available [6], they may need to be compared to find their pros and cons [7]. Lastly, when an appropriate solution has been identified, it should be implemented, or a mental simulation should be conducted to control the result before implementing [3]. For a lay public responder this will mean that he or she needs to have the skills to identify a situation, understand what kind of information may be useful, and if not available, what can best be assumed about the situation. Furthermore, a possible response needs to be found, and if several are available, the best possible one needs to be chosen. How to teach the lay public to do these things, is part of research question of this thesis.

3.5.2 Recognition primed decision making

The Recognition Primed Decision (RPD) model is another example of NDM. This model is based on the observations that decision makers will not compare different potential solutions with each other but start with the first option that comes to mind. Klein (1993) describes the decision makers' process as follows:

> *"They would use available time to evaluate an option's feasibility before implementing it. They would imagine how the option was going to be implemented, to discover if anything important might go wrong. If problems were foreseen, then the option might be modified or rejected altogether, and another highly typical reaction explored" (p. 140).*

The process is dependent on the assessment of the situation, and the experience of the decision maker. As a lay person, the experience with crises may be rather limited and RPD may seem inappropriate. However, mental training or case training as given in 123CrisisTraining may be appropriate to give the lay actor a kind of experience and ability to recognize a situation in a way to make quick decisions as described by the RPD process.

4.0 Research Method

In this chapter, the different methods that have been used to conduct this research will be presented. An explanation will be given to why both interviews, a questionnaire, and a literature analysis have been used to answer the research questions. Furthermore, the ways in which these have been carried out will also be explained and the studies reliability and validity will be discussed.

When starting this research, the entire research design varied significantly from its current, and final state. As Blaikie (2010) defines, the "research design is an integrated statement of and justification for the technical decisions involved in planning a research project. … [D]esigning social research is the process of making all decisions related to the research project before they are carried out" (p. 15). The research design formulates the topic of the research, the research questions, research strategies, theoretical approach, data types, forms and sources, as well as data collection and timing, and data reduction and analysis. When planning this research, this setup by Blaikie (2010) has been used as major guideline. However, most of the components had to be changed significantly during the research process, limiting the full potential of this research. Additionally, the reasons for these changes are indicators showing the current state of the public's interest in crisis management. Because of this, it has been decided to include a description of the initial research design in this chapter.

4.1 The initial research design

When starting the research, the main focus was set on the analysis of the 123CrisisTraining online e-learning course. The initial research questions were aimed to answer what kind of improvements the people who carry this course out may experience, and how different people may experience different levels of improvement. As such, one of the research questions was whether perceived levels of learning after completing the e-learning course would vary between different demographic groups. Additionally, to analyze the impact of 123CrisisTraining more closely, another research question was aimed to answer whether the knowledge that had been learned would be forgotten again after a certain amount of time.

4.1.1 Data collection at schools

To answer the initial research questions, it was planned to mainly collect quantitative data in the form of two questionnaires. As the research was aimed to analyze the impact of 123CrisisTraining on the knowledge, ability and willingness of lay public members to participate in crisis response, pupils at Norwegian “Videregående Skoler” (Year 12 or 13; High School year 12 equivalent) had been identified as the ideal research participants. The reason to choose quantitative data was because it will be an indicator on how different people may react to this specific e-learning course. Each individual may have their own idea about what they need to do in a crisis, and what they might want to learn about crisis response. By surveying many people, common themes could have been identified to pinpoint the most important information that needs to be displayed in the course, and to identify the most common areas of improvement. As the course will be identical for all people conducting it, it is important to find these areas that can help the largest group of people in the best possible way.

The study was supposed to be a comparative one, identifying differences and similarities between different demographic and geographic groups. The comparison was supposed to be facilitated by “study design elements” (Hennink, Hutter, & Bailey, 2011, p. 244), distributing the questionnaire to schools in 2 different municipalities in Norway, as well as rural and urban area located schools in each municipality. All in all, the goal was to have two schools in an urban area and two schools in a rural area in each of the two municipalities, of which one urban and one rural school would have made the research group, and the other schools would have made up the control group.

The choice to focus on pupils in grades 12 and 13 had been made in order to limit the number of participants that had been exposed other forms of crisis training, as for example through work related crisis management courses and exercises. Different municipalities had been chosen in order to analyze whether there may be a difference in crisis related training and exposure to crisis depending on geographic location. Additionally, each municipality has their own local government, which may result in a difference in interest and focus on crisis preparedness also in schools. Similarly, within a municipality, it was of interest to analyze whether there may be a difference between rural and urban locations, as rural locations may have a higher focus on the lay public’s involvement in crisis response due to the scarcer professional resources such as the emergency services.

The data collection was planned to forego by giving 50 pupils at each school a questionnaire to fill out. After receiving the first questionnaire, the pupils in the research group were supposed to receive access to 123CrisisTraining. After around two months, all pupils were supposed to receive another questionnaire in order to see whether the answers of the research group showed an improvement in crisis response ability and willingness over those pupils in the control group.

The two months in between taking the e-learning course and the second questionnaire was supposed to help identify whether pupils felt that some information had been forgotten again.

Unfortunately, it was not possible to conduct this research due to the inability to receive access to the schools. Initially, access was thought through the municipalities' heads of "videregående skoler" within the municipality, with whose agreement, it would have been easiest to receive full support from the schools. Contact with the relevant people from two municipalities that were deemed comparable was established early one, but one municipality immediately dropped out of the research due to their involvement in a similar, governmentally initiated research. A replacement municipality had been found, but it took over a month before those two municipalities finally responded to the numerous inquiries with a negative reply.

After that, I contacted just over 40 schools in three different municipalities by telephone and e-mail to hear whether they were willing to participate in this research. Most conversations on the phone were cut short by a general unwillingness and disinterest in hearing about the research, and a desire to rather receive an e-mail with the details. Some few schools declined immediately on the phone, and some others sent a negative reply up to several weeks after receiving my e-mail. Most schools, however did not reply at all. Only one school voiced interest in participating in the research, which was not enough for this comparative study.

When different schools refused, the common reason was that the schools were generally involved in many different studies. Some were conducted by other bachelor or master students, while others were conducted by groups working for the municipalities or the schools themselves, making them a higher priority for the schools. The reason not to have their pupils participate in more studies was, as they often argued, because they did not want to expose their pupils to too many different studies, as it might be too much work or because it might confuse them. In two other municipalities in which I also wanted to contact schools, I was told that all schools in these municipalities were partaking in research relating safety measures at schools. These studies were organized by the local governments, and they did not want to get involved in a second, for them seemingly similar study. During this process of contacting these schools, the general impression I gained was that most schools did not see the topic of crisis response and teaching their pupils about it to be important enough to invest even a few hours into. On the other hand, it also showed me that certain local governmental bodies have started measures to involve the local lay public in crisis response and aim to educate them about it. These findings that came about during this part of the research process are an important indicator to how crisis management may be seen by the lay public and supported my belief that it is important to teach the lay public about it, giving even more reason to conduct my research.

4.1.2 Data collection at the University of Stavanger

By the time it was clear that not enough schools will participate in the research, a significant amount of time available to conduct the entire research had already passed. This made it crucial to find another research method as quickly as possible, and it was thus decided to instead conduct the research at the University of Stavanger. To keep the comparative aspect, it was planned to evaluate whether there is a difference between people with a more social focus or technical focus. Therefore, it was planned to conduct the research with 100 students from a bachelor in the technical and natural science faculty, and 100 students from bachelors under the social science faculty.

The most appropriate way to get students to participate in the research seemed to be by going into lectures and taking a few minutes to present the aim of the study, and the planned way the questionnaire was supposed to be carried out. Having contacted the responsible professors for different courses, I was allowed to visit three different lectures. I visited STA100_1 Introduction to Probability and Statistics to reach out to students of the technical and natural science faculty, with over 500 students from most first-year bachelor courses from this faculty being registered in this course. Students from the other faculty were reached by presenting the research in two courses with a total of close to 300 students registered in them. These courses were BSS150_1 Sociological theory: newer perspectives and BHO_4 Service economy. These two courses do not contain students from all different social science degrees, but due to time constraints, it was not possible to visit more courses to reach a broader audience. In addition to an oral presentation of the research, information was also laid out on Canvas, the portal used by students gain information and keep contact with the lecturers of the courses they attend. This was done to ensure that the highest possible number of students could be reached.

In the end, only 35 questionnaires had been filled out, resulting in the decision to move away from a comparative study with quantitative data. The data collected in these questionnaires is, however, useful, and has been kept and implemented in the new research design, which will be presented below. It is important to have presented the initial research design here. As mentioned earlier, the process itself has much to say about the view on crisis management by the lay public and will be taken into consideration in the analysis. Additionally, these challenges have shaped much of the research design and methods used and are thus an integral part of this study.

4.2 The final research design

When it became clear that the initial research questions could not be answered with the available data that had been collected so long, the new research questions had been formulated. The focus is no long entirely on the evaluation of 123CrisisTraining, but this research has also become about the actual role the lay public can or should play in crisis response work. To answer the research questions presented in chapter 1.1 the use of the collected questionnaire data was not enough, and new research methods were found. Before going into more detail about which research methods were used, and how they have been completed, it is first important to understand the research strategy that builds the basis of this study.

4.2.1 Research strategy

Blaikie (2010) presents four distinct research strategies, of which each provides a unique way of answering research questions (p. 19). Of these four strategies – inductive, deductive, retroductive, and abductive – a combination of the inductive and the abductive research strategy is most appropriate to describe the approach to this research. The inductive strategy is commonly used to answer 'what' research questions, as its aim is to identify commonalities and patterns (Blaikie, 2010, p. 83). To find out what role the lay public may play in crisis response, descriptions of what the public tends to do in different crisis situations can be taken from accounts in literature, and a generalization about the common behavior can be established. Additionally, the abductive research strategy builds on the understanding a person has of the world and their reasons to act the way they do and interpret situations the way they do (Blaikie, 2010). By interviewing (potential) lay public respondents to crisis, it is possible to gain an understanding of their reasons to act the way they would. These reasons may set boundaries to what should be expected from the lay public during crisis.

When it comes to identifying the strengths and weaknesses of the 123CrisisTraining e-learning course, it is exclusively the opinion of the person going through the course that is of interest. As Blaikie (2010) explains, the inductive and deductive strategies ignore the meanings and interpretations of people (p. 89), whereas the abductive research strategy focuses on these perceptions. The main reason to conduct interviews with lay people who went through 123CrisisTraining is to gain information about their individual experiences and their learning processes. As it is the aim of this research to see whether it is of advantage for the lay public to learn about crisis management and response through this course, it is their experience with it and their learning outcome that is most important and decides on the usefulness of it. At the end, it is through these accounts that a theory can be formulated about how the course should be set up in order to make it useful for the lay public to go through it.

4.2.2 Data collection

Earlier in this chapter, I have already explained that the collection of data has created several challenges and the type of data I wanted to collect has changed several times. In the end, this research consists of three sources of data, a questionnaire, interviews, and an analysis of literature. Data can generally be classified as either primary, secondary or tertiary. The questionnaire and the interviews both create primary data, which are ideal to "answer specific research questions" (Blaikie, 2010, p. 160). Using primary data allows to focus on those areas that are of most interest, and questions can be formulated accordingly. Furthermore, by collecting the data myself, it is possible to judge the quality of the data that has been collected. For example, due to changes of the research design that had to be made after part of the data had already been collected, the relevance of some questions has been reduced, as they focused on answering questions that are no longer part of the research. Yet, the collected data is in no way completely useless and their quality will be discussed in more detail later. To fully be able to answer the research questions, primary data is not enough. Therefore, secondary and tertiary data is also used in the form of accident investigations and other reports detailing the involvement of lay public actors during different crises.

4.2.2.1 Choosing respondents

As explained earlier, part of the reason students at the University of Stavanger were chosen as respondents for this study, was the problem to get access to pupils at different schools. However, in the end, the students are the most likely group of people to have the same or similar set features as the pupils that make them interesting for this study. A major deciding factor in choosing respondents for this study was their likely inexperience with crisis management. As the goal of this research is to identify the usefulness of 123CrisisTraining for the lay public, it is important that the respondents have received as little training in crisis management as possible. By choosing young people such as pupils or students in their first year at University, the likelihood is reduced that the respondents have been exposed to forms of crisis training through work.

The disadvantage of relying on students as respondents over pupils is that at University level, it is possible that a number of students attending the first year of a bachelor's degree have been in the workforce for several years before attending the degree. The parameters of the research group could thus not be as controlled. Furthermore, it was decided not to restrict the participation in a way to prevent certain age groups or those that have work experience from participating. This was done due to concerns of reaching 200 participants, and also because a complicated explanation of participation criteria might have made potential respondents uncertain about whether they were eligible to participate and might have refrained from doing so. As a result, the criteria of participating in this research was that the respondent had to be registered to one of the three courses I visited in order to get information and gain access to the questionnaire. Potential drawbacks of this, as mentioned, is that potential respondents may include people that have received crisis management training or even worked in the crisis management sector. However, even with pupils, the possibility existed that some were volunteers or working for organizations working with crisis management, such as the Red Cross. These limitations were unavoidable and are factored into the analysis of the data.

Finally, a limitation of a maximum of 250 respondents had to be set as each respondent was promised to gain access to 123CrisisTraining. As this is a commercialized program, it was necessary to agree on a number of access codes NorskKrisetrening was willing to hand out.

4.2.2.2 Questionnaire

"A questionnaire is a form used in a survey design that participants in a study complete and return to the researcher. The participant chooses answers to questions and supplies basic personal or demographic information" (Creswell, 2012, p. 382). As the initial plan was to make this a quantitative, comparative study, using a web-based questionnaire was the ideal way to reach and collect data from around 200 planned respondents in the limited time that was available. It was also a cost-efficient solution, as the program used, SurveyXact by Ramboll, is free of charge for students at the University of Stavanger. Furthermore, SurveyXact is a simple and user-friendly program, which requires little time to learn. With the questionnaire, it was also easy to gain an overview over a person's own perceived knowledge about crisis management, and the level of training one had received. By giving basic examples, it was also possible to get a basic understanding of how each respondent perceives their own involvement in the crisis management process.

To gain access, respondents simply had to copy the link that was shared with them through the three courses' dashboards on Canvas and paste it into their browser's taskbar. This method of sharing access was chosen as I believe it to be the technologically simplest way, and as respondents were not required to sign up to anything before gaining access to the questionnaire this way. It is important to make the process as simple as possible in order to animate a larger number of people to participate. A drawback on the other hand was the fact that this method of sharing the questionnaire did not allow for people to save their progress and come back to the questionnaire at a later time. It had to be completed in one sitting. However, when giving the questionnaire to six people that weren't eligible to be part of the research group as a test, no one spent more than 15 minutes on the questionnaire. It was thus deemed appropriate to use this approach of sharing the questionnaire and expect respondents to go through the questionnaire without a break.

Once accessed, respondents received a basic introduction to the questionnaire, explaining the purpose of the research and processes after the questionnaire was handed in. This included a basic time frame of when the first questionnaire had to be completed and when respondents gained access to 123CrisisTraining in order to go through it. Here, respondents were also informed about how their answers would be used and that their information would be handled confidentially. After the introduction, respondents could indicate whether they would prefer being in the control group or research group, which were at the time of conducting this questionnaire still planned to be separate groups. Additionally, they could also indicate whether they were willing to be contacted regarding participation in interviews after the second questionnaire. To reduce information overflow and an unclear layout (i.e. to facility user-friendliness), the questionnaire was split into different “slides”, between which one could navigate by pressing the “next” and “previous” button. To move to the next slide, all questions had to be answered or fields filled in. Otherwise the respondent would receive an indication of which questions were still unanswered.

The questionnaire was split into several topic areas, with a total of 29 numbered questions. In addition, respondents were to fill in basic information about themselves (name, date of birth, degree attending, occupation before attending study program, email address) in order to be able to sort the responses into their relevant groups, and to receive contact details in order to set up their accounts and share the e-learning course with them afterwards. The main questions are split into different areas of interest, with the first asking about the respondents’ understanding of the meaning of crisis (questions 1 & 2), the second about their experience with crisis (questions 3-6), and the third about their crisis related training (questions 7-10). The fourth set of questions looks at their thoughts about crisis (questions 11-14), and the final set asks about their likely behavior during crises (questions15-20). The remaining 9 questions are sub-questions of question 8 (when answering with “Yes”), question 10 (when answering with “Yes”) and question 18 (when answering with “Strongly Disagree”, “Disagree”, or “Undecided”). This was done to ask more detailed questions to those respondents that were relevant for each situation. Screenshots of the questionnaire have been taken to show how it looked when respondents conducted the questionnaire (see Appendix C).

For the construction of the questions, a Likert scale has been used to present answer alternatives when appropriate. As many questions relate to personal opinions about their own set of skills or understanding of a matter, the Likert scale allows the respondent to indicate if they have slight doubts or know that that there is room for improvement by choosing “agree/disagree” rather than “strongly agree/strongly disagree”. This popular scale is well-described in literature, and was thus easy to use in order to gain quantitative results (Creswell, 2012). For questions 1 and 2, alternative scenarios were chosen as answer alternatives to gain an understanding of how respondents may identify a situation. Some questions were simple “Yes” and “No” questions, and still others had alternatives describing the most appropriate actions or situations that can be expected. Questions 10.1 and 18.2 allowed respondents to write short answers, as the potential answer alternatives were too plentiful to list, and some alternatives might have been missed that way. In the end, respondents were also able to comment on the questionnaire or explain the reason why the answered the way they did if desired.

4.2.2.3 Interviews

When it became clear that I will not have the desired number of responses to the questionnaires, it was decided to put a bigger focus on interviews, which were previously only planned to be a supplement to the questionnaire. Now, the interviews are the major source of the primary data collected to answer the research questions. Originally, the plan was to have two to three focus group interviews, with four to five interviewees in each group, depending on the number of questionnaire respondents that were willing to participate in the interviews. After inviting to the interviews, only four respondents agreed to be interviewed. Reason for this low participation can primarily be attributed to the fact that interviews had to be conducted during the exam period at the University of Stavanger. With only four interviewees, it was decided to hold individual interviews instead, with each interview set to take approximately one hour. The interviewees were expected to have gone through 123CrisisTraining before coming to the interview. It was considered to find interviewees outside of the group of respondents who had participated in the questionnaire, however this would have taken too much time as contact with new people would have had to be made. This idea was thus discarded.

The invitations to the interviews were send to those email addresses that respondents listed in their questionnaires. The interviews were conducted in a meeting room at the University of Stavanger, making it easy for all interviewees to attend the interviews. Additionally, the meeting room offered a safe place to talk about potential sensitive information or information the interviewee does not want for other people to hear. In order to make the interviewee feel comfortable, I offered refreshments in the form of coffee, tea, soda, chocolate and cookies.

When choosing the meeting room, I made sure that there were no windows going into the hallway (common at the University) in order to reduce distractions. Being on the third floor, with windows going out to the street, distractions were minimal, and a relaxed and warm environment could be created. This is important as to make the interviewees feel comfortable and more willing to talk. For the same reason, all interviews were conducted in Norwegian, as this is the native language of all four interviewees. This way, I was also able to make it easier for the respondents to express their opinions without the fear of having their meaning altered because of a language barrier. On the other hand, as I am not a native Norwegian speaker, a misunderstanding when asking the questions was still a possibility. However, it did not appear that this posed a problem in any of the interviews.

The four respondents willing to participate as interviewees as well were all male. The youngest interviewee was 20 at the time of the interview (interviewee 3), and the oldest 35 (interviewee 4). The two others were 22 (interviewee 1) and 32 (interviewee 2). As such, two of the four interviewees had worked before starting their degree, meaning they received crisis related training at work prior to going through 123CrisisTraining. Additionally, a third interviewee is part of the Red Cross and has received crisis training there, as well as other voluntary training on specific crisis management topics. This does have an impact on the expected results, as the improvement through the e-learning course are likely to be lower for these interviewees. However, this could not be prevented, and in the hope of receiving some kind of relevant information, the interviews were still carried out. In the end, there was still some information useful to this study, but their previous knowledge has to be factored in the analysis of the data.

I decided on having semi-structured interviews, as this gives the possibility to respond to the information the interviewees give and go in depth about relevant topics. With a semi-structured interview where I can respond to what is being said, it is possible to gain information that may not emerge in structured interviews. Similar to the description of active interviewing (a form of unstructured interview) by Andersen (2006), a semi-structured is not exclusively guided by the interviewer, but also by the interviewee’s accounts. At the same time, having an interview guide with the most important questions and a general setup, allows me to focus on the topics of interest, and intervene if the conversation strays too far from these topics. Having prepared guiding questions in the interview guide, is also a good way to restart the conversation should it die down. See appendix D for the interview guide.

As I had to conduct the interviews on my own, I decided on recording each interview, in order to minimize my own distraction by having to write their answers down. Before the official start of the interview, each interviewee was made aware about them being recorded, and it was explained how these recordings would be used and that they will be deleted once the research is finished. This information was also given to them earlier in the emails asking for their participation. They were also made aware of their option to remove themselves from the study at any time before the study was finished if desired. Finally, before starting to record, they again received an explanation of the study and the reason why I want to interview them.

Three of the four interviews took close to, or just over one hour, while the interview with interviewee 3 was finished after 25 minutes. In this shorter interview, the interviewee appeared to be quite nervous and tended to reply with very concise answers. After several failed attempts of encouraging the interviewee more and making him feel more comfortable, I decided on going through the interview guide in a more direct and structured manner and ended the interview after all questions had been answered by the interviewee, without too many follow up questions. Although nervous, the interviewee did not appear in such a state that the interview had to be ended prematurely. Even with rather short answers, the interview still gave information important to this study. In the case of the other interviews, the interviewees appeared comfortable and happy to talk about their opinions and experiences and elaborate more on their answers if asked. However, in one case, the interviewee was focusing very much on telling about his previous experiences which were plenty, and it was difficult to navigate the conversation back to the analysis of the e-learning course. This was due to the interviewee’s belief that he knew more than the course told him due to his past experiences, and thus tended to ignore the course. In the end, it was nevertheless possible to learn something about his opinion about the course for other, less experienced people.

4.2.2.4 Literature study

Having only a very limited set of questionnaire data, and too few volunteers for interviews, it became clear that the remaining data had to be found in the literature. As the research problem and questions changed, a literature study became also more relevant. Using literature to identify ways in which the lay public can contribute to crisis management allows me to look at a large range of different types of crises. Furthermore, by using different types of literature, such as legislations, white papers, and news articles, it is possible to identify how the involvement of the lay public is viewed by different groups of people. The main groups of interest were the Norwegian government and emergency services, and the lay public. By passing legislations, the Norwegian government can have a major impact on what is expected of the population in times of crisis. Similarly, by the way emergency services approach and manage the lay population before, during, and after a crisis, can have much to say about how the population may respond to a crisis and how they can contribute to successful management of a crisis. Lastly, it is important to know what the lay population trusts itself to do during different crises.

In terms of the learning component of this study, a literature study also appeared to be the most appropriate and most straightforward way to find answers about how an e-learning course might be set up, and how learning could be measured.

To find out about the government's and emergency services' opinion on lay public involvement, I decided to look into current laws and regulations on the topic of crisis and safety, as well as white papers and reports from different governmental organizations. Through this search, I also became aware of a webpage operated by a governmental organization (Kriseinfo.no), which I then also included in the literature study. The search for literature concerning the lay population's opinion of itself was aimed at literature describing different crisis situations. The main focus was thus on news articles but reports from governmental organizations also were relevant for this. I aimed to find relatively new articles but did not consider the published time of the literature to be of major concern, as I believe that the involvement of the lay public in crisis response varies too significantly with time. Literature concerning learning was taken from relevant published articles and books.

The documents that have been used for this study have been found by searching through google, google scholar, and Oria, the main search portal of the library at the University of Stavanger. The main search words used included: straffeloven (penal code), traffiklov (traffic law), sivil hjelp (civil help), ulykke (accident), e-learning, crisis learning. Some literature was also found through references in other literature, or by specifically searching for information about certain crises due to their size (22. July, Lærdal fire). The list of documents used in the literature study is seen below. The English translation of the title is shown below. For original title, see source.

- The Penal Code (2005)
- Road Traffic Act (Vegtrafikkloven, 1965)
- Vehicle Regulations (Kjøretøyforskriften, 1994)
- Regulations for the Use of Vehicles (Forskrift om bruk av kjøretøy, 1990)
- Meld. St. 10 -Risk in a safe society (Det Kongelige Justis- og Beredskapsdepartement, 2016)
- Kriseinfo.no (Direktoratet for samfunnssikkerhet og beredskap, 2011)
- Fires in Lærdal, Flatanger and on Frøya winter 2014 (Direktoratet for samfunnssikkerhet og beredskap, 2014)

- Report from the 22. July-Commission (Gjørv, 2012)
- Civilians help with extinguishing work (Haugli & Fjeld, 2018)
- People are obliged to help – choose to take photos instead (Schibevaag, Torgersen, & Rørvik, 2018)
- Help from civilians saved Per from being paralyzed after car crash (Silseth, 2015)
- Fire chief commends civilians that helped (Skjørtvedt, 2015)
- Individual Preferences in e-Learning (Hills, 2003)
- A model for learning in emergency response work (Sommer et al., 2013)

4.2.3 Data reduction and analysis

"Data produced by most methods of collection require some manipulation to get them into a suitable form for analysis" (Blaikie, 2010, p. 208). As each form of data collection used only offers a limited amount of information, and as the number of replies to the questionnaire were not enough to build an appropriate basis for a quantitative analysis, I chose to combine all data within different categories in a qualitative approach. The main focus will thus not be on the number of respondents with the same answer, but the qualitative essence will be taken from questionnaires. To make the analysis of the interviews easier, all recordings were transcribed, and through color coding, relevant information was categorized after their relevance to the three research questions. Findings from the literature research were also added to these categories, and a combination of all three types of data were used to formulate theories that may answer the research question. This combination of research methods is known as mixed methods research, and the form in which it is presented here, comes closest to the triangulation method as described by Blaikie (2010). During this entire process, data reduction and analysis occurred parallel to each other, as relevant data has been identified and categorized continuously as more data was collected. As the decision to add a literature study to this research was made while parts of the other data had already been collected, this continuous data reduction and analysis was helpful in identifying where the focus of the literature study had to be. As all three methods of data collection had flaws (questionnaire – set up as one of two questionnaires, thus not as precise questions; interviews – most interviewees had some form of experience, so were not the ideal research subjects; literature – secondary or tertiary data not collected by me and thus not as specific and controlled) it was decided to weigh their significance as equally important to the research.

4.2.4 Ethical aspects

When conducting research, it is important to think of potential ethical issues that may arise. The first issue Blaikie (2010) addresses, is that of voluntary participation. For one, that means that no one can be forced to participate in any way, but it also means that once someone is part of the research, they have the possibility to remove themselves and their answers from the research without any negative implications for them (p. 31). It was made sure that this information was known to all potential respondents. To make sure this was understood, respondents were informed about it orally when I presented my research when visiting the courses, and in written form when distributing the link to the questionnaire. Interviewees were additionally informed about their ability to withdraw through an extra email when agreeing on a time for the interviews, and right before conducting the interview. As the initial plan for the questionnaire was to have two questionnaires and split the respondents into a research and a control group, potential respondents were also informed at the beginning of the questionnaire that their participation in the first questionnaire entails the option for them to have to answer the second questionnaire as well. This way, I made sure that potential respondents knew exactly what the participation in this research entails.

Similar to their withdrawal possibilities, respondents and interviewees were also given an explanation of the nature of the research and were told how their answers would be used. This also included the assurance that any kind of information would be treated confidentially, and not be shared with people not part of this research. That being said, as respondents received access to 123CrisisTraining, their names were shared with the responsible person from Norsk krisetrening to set up their accounts. However, this person only received the information necessary for him, preventing any correlation between a person and the answers they gave in the questionnaire or interview. Additionally, when referring to respondents or interviewees in this study, interviewees will only be separated by the numbers 1-4, which were given to them without any specific order. This will also be done with respondents to the questionnaire if necessary. Otherwise, they will only be referred to as a group, namely respondents. This way, confidentiality will be ensured.

Lastly, this research is conducted in good conscience and with integrity, meaning it “is conducted according to acceptable standards of practice and without fraud, deception or dishonesty” (Blaikie, 2010, p. 31). Data will be presented in a way to reflect the opinions and meanings of the respondents and interviewees as good as possible, and in case of inconclusive or difficult to understand data, it will not be altered to aid the research. Furthermore, all relevant data will be presented, meaning nothing will be left out even if it may weaken the potential results or make them inconclusive. The aim of this research is to present the opinions of the people about 123CrisisTraining, no matter if good or bad, in a bid to learn from it and potentially find improvements to the e-learning course.

5.0 Empirical Evidence

In this chapter, all relevant data found through the questionnaire, interviews, and literature study will be presented. Although it may be compelling to do the analysis of some parts right away, especially for the questionnaire, it is important to analyze the combined findings together, rather than each set of information individually. Thus, the data will primarily be presented in this chapter with only few comments on the meaning of the data, while the analysis of the combined findings will be presented in chapter 6.

5.1 Questionnaire data

The questionnaire data presented here was planned to be part of a quantitative study made up of two questionnaires. Due to changes in the research design as explained in chapter 4, only the first questionnaire was completed. The questions asked were aimed to give a basic understanding of respondents' knowledge about crises, and their skills and experience of responding to crisis prior to the completion of the e-learning course 123CrisisTraining. In the questionnaire, the questions were split into different categories, which will also be used here to present the data. As explained in chapter 4, the response to the questionnaire has been very low, and the information gathered through the questionnaire is not representative for a quantitative study. Therefore, rather than quantifying the result, the qualitative meaning of the replies will be the focus.

5.1.1 Respondents' demographics

A total of 35 respondents participated in the questionnaire, which was aimed to gather data from people who had as little as possible crisis management training when conducting the questionnaire. Going into a university rather than schools to gather data widens the range of potential respondents' backgrounds, as students at a university can come from all kinds of backgrounds, and from a wide age range with different levels of work experience. To gain an idea of the basic demographic features, respondents were asked to give their birthdates and previous occupation. At the time of conducting the questionnaire, the respondents' age ranged from 19 to 46, with the majority being between 19 and 25 years of age. One respondent did not enter a correct date of birth (writing 2018 as year) and is thus not part of the age range. The number of respondents sorted by age is shown in Figure 2.

In case of the respondents' occupation, the main interest was to see how many respondents have work experience or have studied degrees such as Societal Safety or Risk Management earlier.

The results have been sorted into four main categories, which were formulated to fit the results and show the most important distinctions. The first group, "Pupil", is the group of highest interest to this study, as they are most likely to have received little or no crisis management training. "Students (safety unrelated courses)" is the second group, which has similar premise of crisis management training as the "Pupil" group. The third group lists all those with previous work experience in industries not directly focusing on safety and security. These are still likely to receive some form of basic crisis management training relevant for their jobs, but less so than those working in the safety and security industry, which is the fourth group as seen in Figure 3.

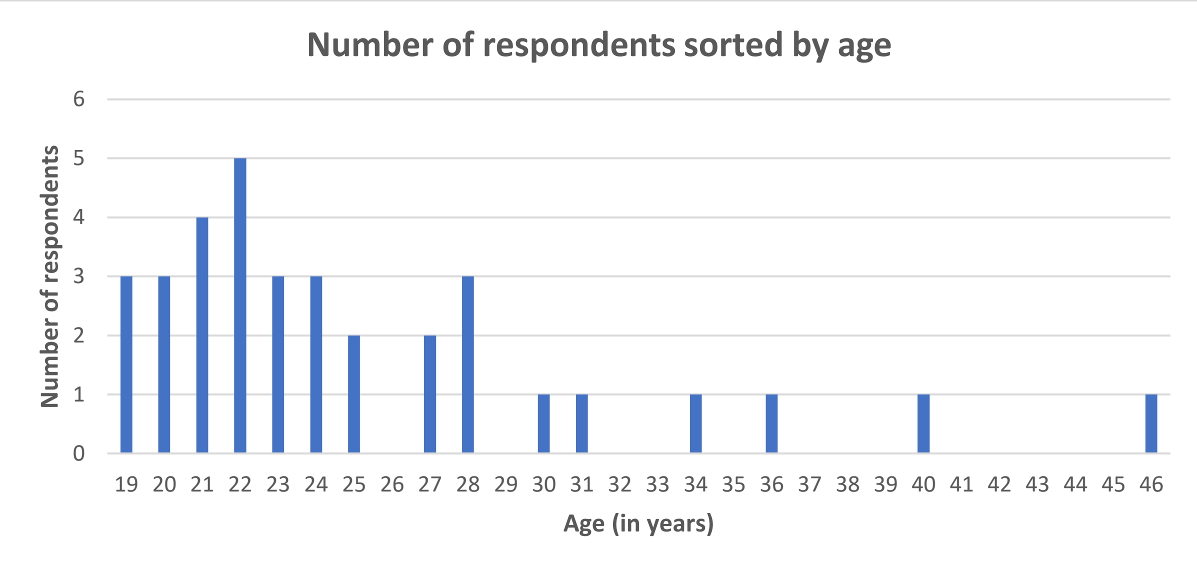

Figure 2 Number of respondents sorted by age

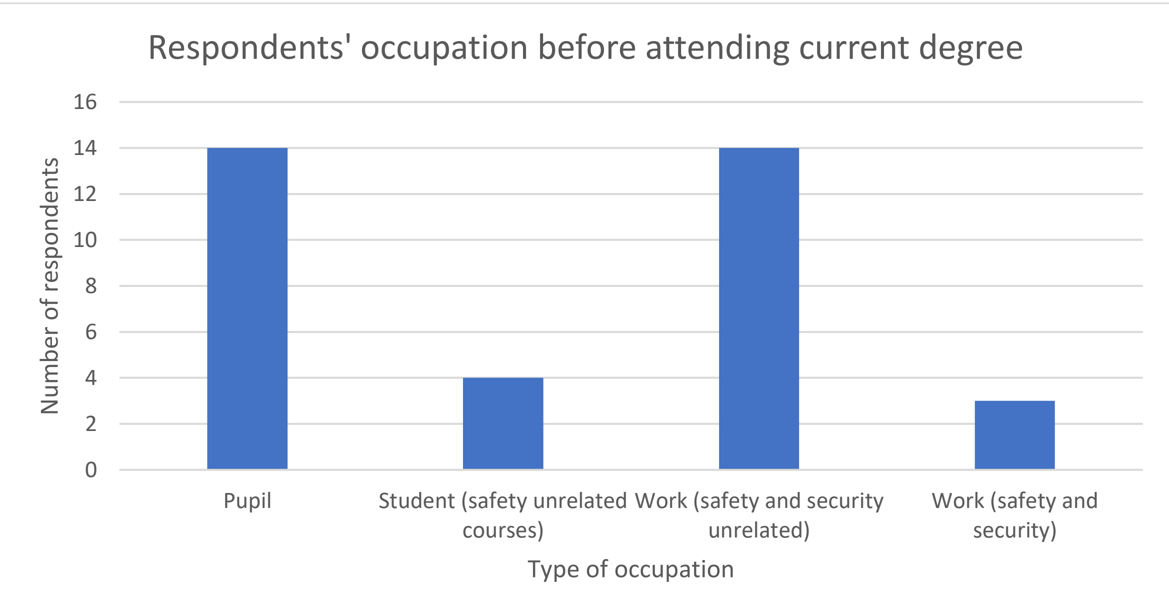

Figure 3 Respondent's occupation before attending current degree

5.1.2 The meaning of crisis

To understand how respondents understand the concept of crisis, they were given a selection of six situations of different magnitude. Each one bears the possibility of injured victims or possible danger. It was not explicitly written that someone was harmed in either case in order to represent the sort of ambiguity and uncertainty that a first responder may have to face in a real-life situation. The first question in this section asks directly which of the situations they may define as crisis, whereas the second questions asks in which situations they would respond to the situation and do something. Respondents could select none, one or more scenarios as their answers, and the results to both questions are shown in figure 4. Additionally, it is also shown how many respondents who defined a situation as a crisis would also respond to it.

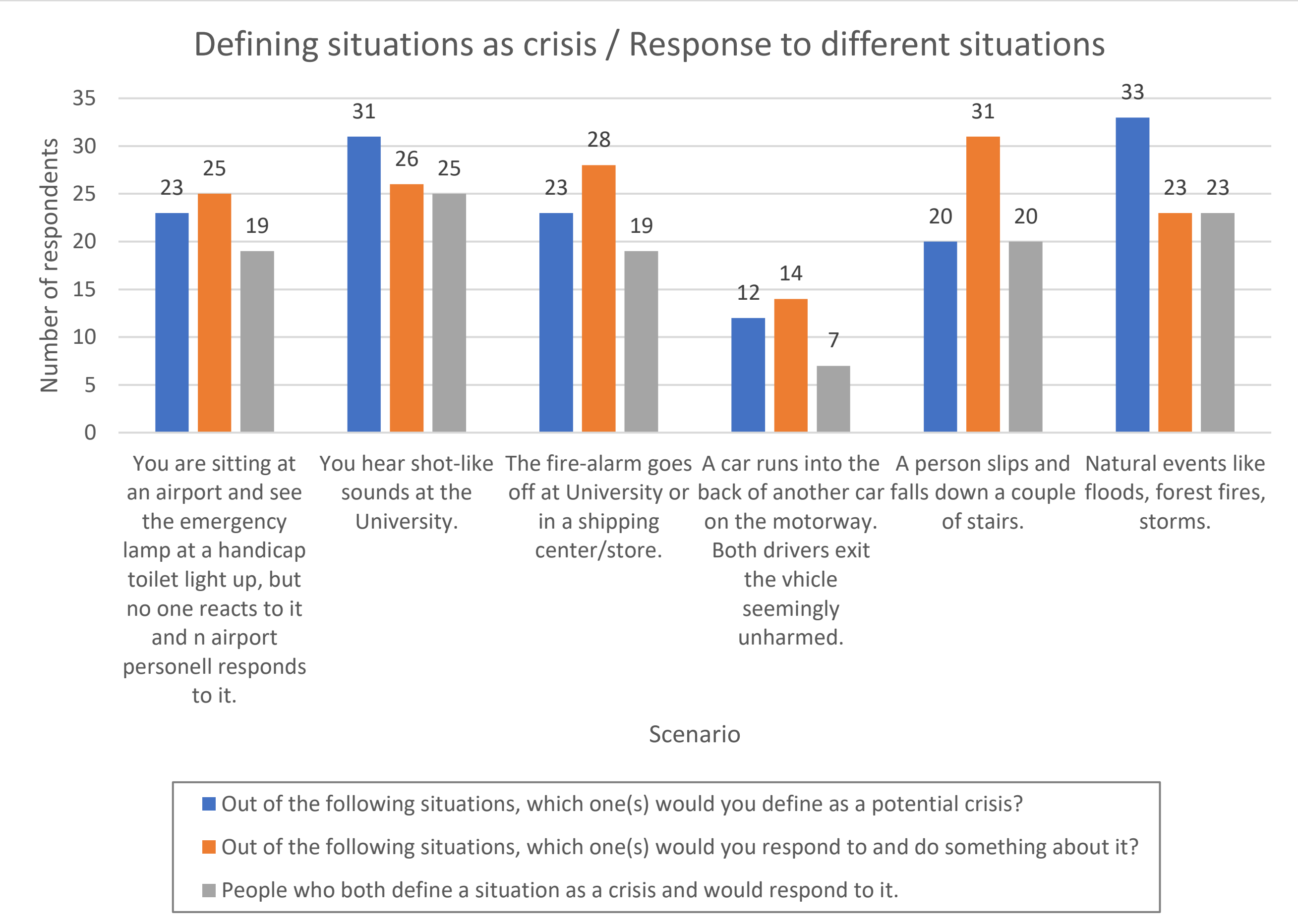

Figure 4 Defining a situation as crisis / Response to different situations

5.1.3 Respondents' experience with crisis and crisis training

When it comes to evaluating the impact of 123CrisisTraining, it is important to know what knowledge a lay public actor conducting the e-learning course may have from before. If the lay public already has an experience with, and knowledge about crisis management, the focus of 123CrisisTraining may need to be different than for completely inexperienced people. To find out what kind of experiences the respondents have, it was asked whether they or someone they know has been in a crisis before, and if they have any kind of crisis related training. First-aid training was specified in the questions, as this is arguably the most common form of training an average Norwegian citizen may have due to the requirement of attending a first-aid course as part of obtaining a driver's license. Table 4 shows the data relating first- or second-hand experience with crisis. Second hand experience through knowing someone who was involved in a crisis is significant as it may have an impact on the awareness of a person and the desire to be prepared. As can be seen, more than half (20) of the respondents have been involved in a crisis themselves, and almost all (32) know someone who was involved. 13 out of the 20 respondents who have been in a crisis also answered that they have actively participated in the management of the crisis, giving them some form of experience. 9 respondents are also part of organizations who actively work with crises.

Table 4 Results of respondents' experience with crisis

Question	**Yes**	**No**
I have been in a crisis situation before (as victim, helper, or onlooker)	20	15
I know someone who has been in a crisis before (as victim, helper, or onlooker)	32	3
I have actively participated in the management of a crisis before	13	22
I am, or have been, an active member of an organization that works with crises (ex. Red Cross, etc.)	9	26

In terms of training, all respondents have received first aid training, while only 14 out of 35 respondents have received other forms of crisis related training (see figure 5). However, when asked whether the respondent knew that there are other things that can be done apart from giving first aid, most respondents agreed (15) or strongly agreed (17) with the statement. Only 2 respondents disagreed with this statement, and 1 was undecided.

When those who received other forms of training were asked to write what kind of training it was, all but two respondents pointed to training they had received as part of their work. Examples included military training, offshore related evacuation and fire training, or passenger/guest management, to name a few. The two remaining respondents are part of the Red Cross and received training there, while one of them also sought out training in search and rescue after avalanches and psychosocial first aid after having experienced a crisis (as explained by the respondent at the end of the questionnaire in the comment section).

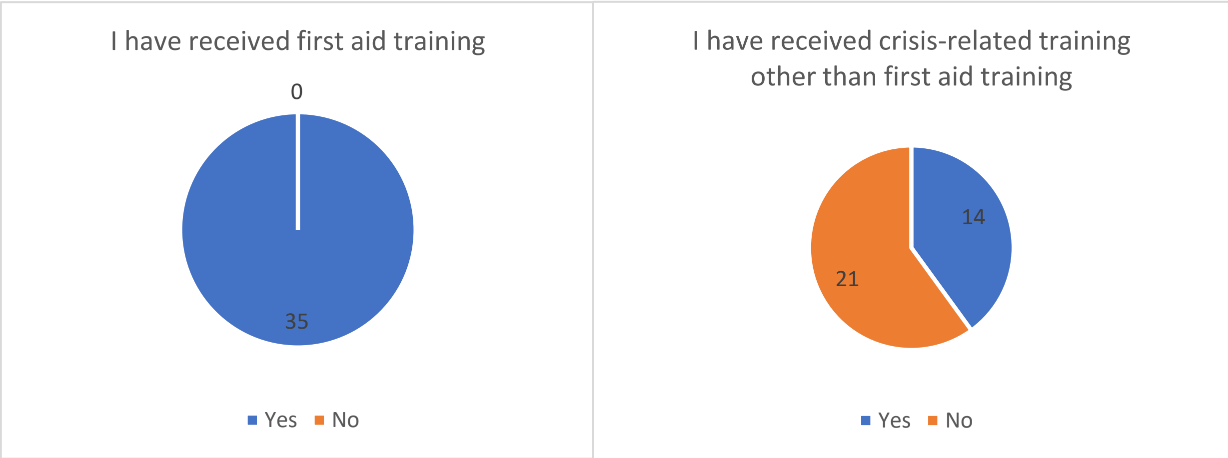

Figure 5 Number of respondents with first aid training versus those with other crisis-related training

For either first aid or other crisis-related training, most respondents received their training more than 6 months ago (first aid training: 32/35; other crisis related training: 10/14). Only three respondents received their first aid training in the last 1-3 months prior to answering, and four respondents received other crisis-related training 4-6 months prior to answering. Despite it being more than half a year since receiving training for most, results show that several respondents still feel confident in their first aid and other crisis-related response skills as seen in Figure 6. However, in the case of first aid training, a majority (22/35) was either undecided or more negative about their skills. It is interesting to note that those three respondents who attended the first aid course most recently were undecided (1) about their confidence in their training or agreed (2) with the statement. They were not the ones most confident in their skills.

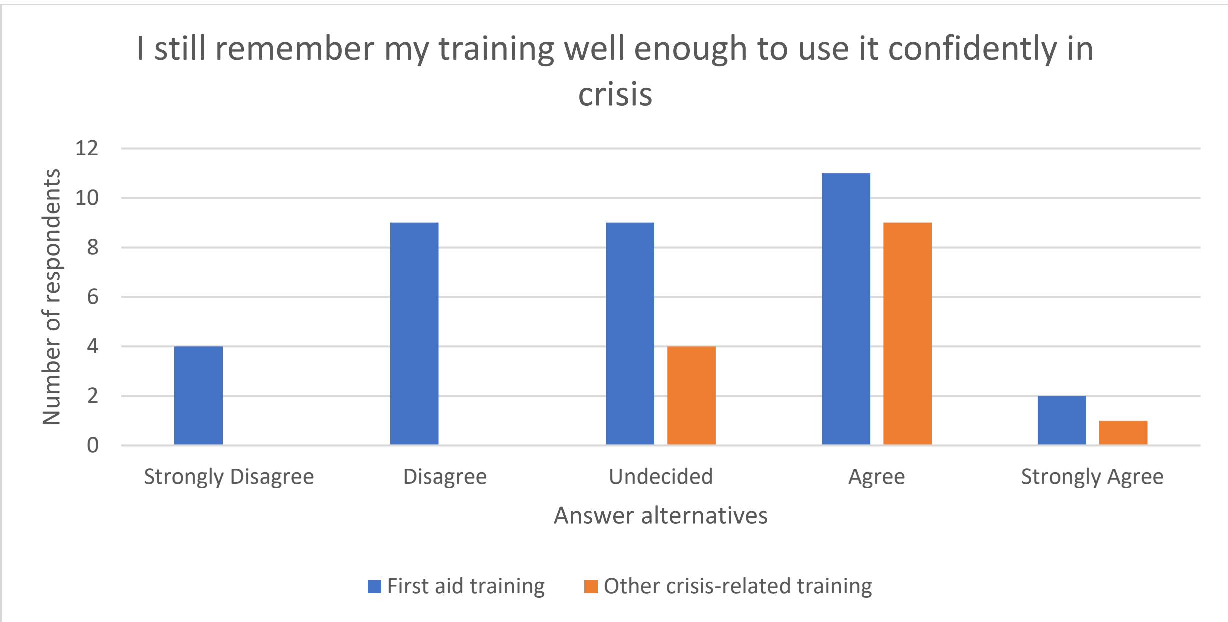

Figure 6 Respondents' confidence in their training

Finally, respondents also indicated to what degree they attended trainings voluntarily, with a majority indicating that they did not participate voluntarily as can be seen in figure 7.

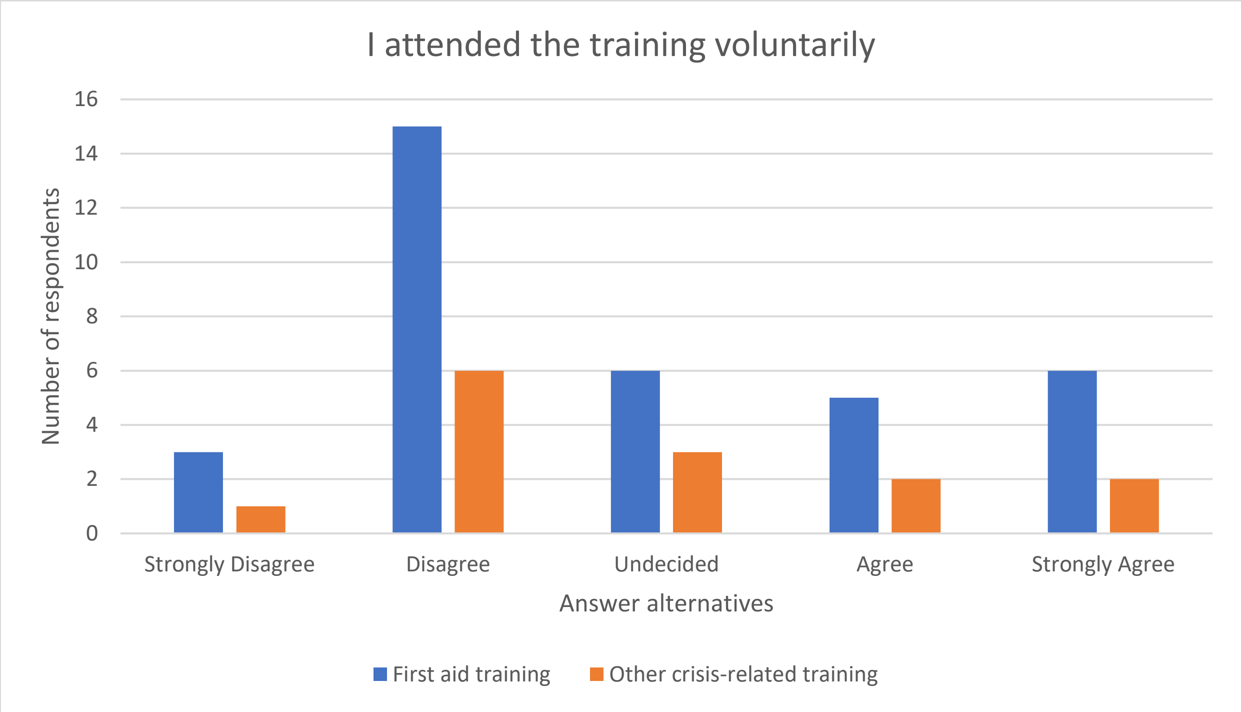

Figure 7 Attending training voluntarily

5.1.4 Thoughts about crisis

The respondents were asked if they thought it likely to be involved in a crisis in one way or another. 30 respondents agreed (17) or strongly agreed (13) with the statement, while only four respondents were undecided, and one disagreed with the statement. When it comes to having mentally prepared oneself for such a situation, less respondents indicate that they have thought about what they would do if they would find themselves in a crisis. However, 23 respondents still indicate that they have thought about it (agree: 13; strongly agree: 10), while five were undecided and seven respondents disagreed, meaning they have not thought about what they would do. Having thought about it or not, most respondents (strongly) agree that they do need to actively participate in the management of a crisis before emergency services have arrived. Only one respondent disagreed and does not think that it is necessary to participate in the management of a crisis. After emergency services have arrived, more respondents think it is unnecessary to help, and several were uncertain. Consequently, less respondents agreed with the statement that they also needed to help once emergency services have arrived. The results are shown in figure 8.

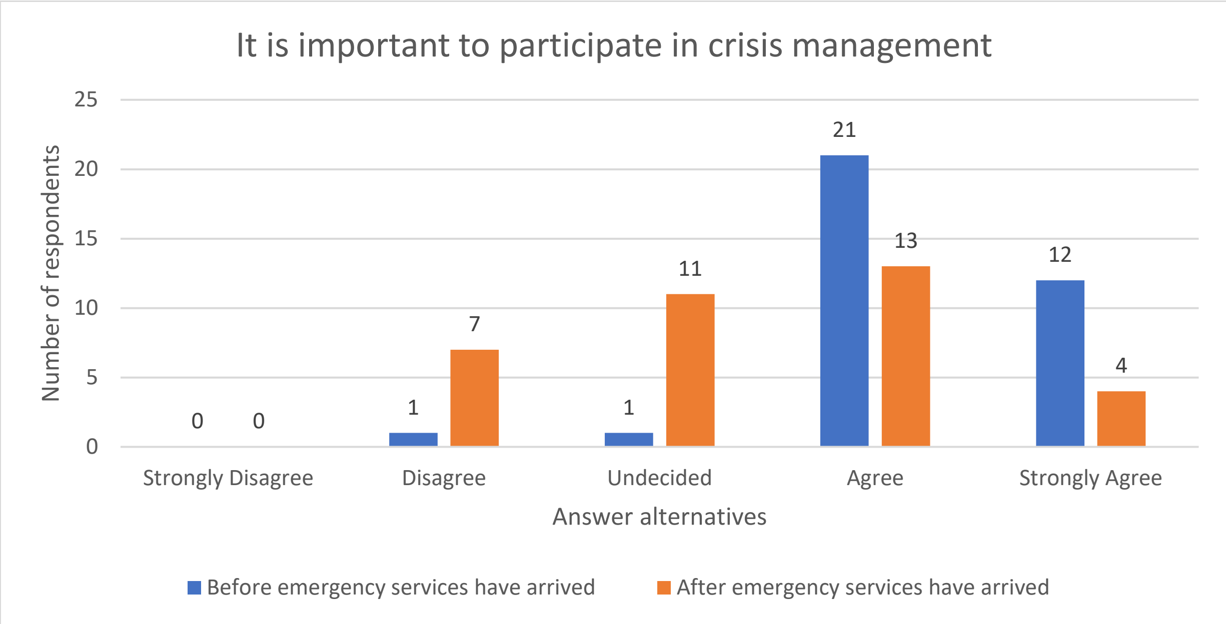

Figure 8 Respondents opinion on helping before and after emergency have arrived at the crisis scene

5.1.5 Respondent's behavior during a crisis

With or without actual experience, respondents were asked to indicate how they would most likely behave in a crisis. 29 of the 35 respondents would describe their crisis management strategy as getting an overview over the whole situation, and then act, while 4 would act as soon as they would see something they can do, as it is important to act quickly. Two respondents were uncertain about their behavior. In terms of leadership, 20 respondents would likely take the leadership, while five of the respondents would wait until someone else would take the lead. The remaining ten respondents would start acting without waiting for others to take the lead but would also refrain from giving orders to others. 19 of the respondents indicated that their first action would be to inform emergency services about the situation, while 6 respondents would act first before informing them. Ten respondents were undecided what they would do first.

The final questions were to see whether there are reasons that may cause the respondents to choose not to help. When asked whether they would help no matter the circumstances, assuming they will not put themselves in immediate danger, eight respondents were not sure if they would help, or answered that they would not help in any kind of situation (see figure 9). One answer had to be disregarded, as the respondent's reason not to help was because it might put him/herself in immediate danger, thus disregarding the precondition of the question.

The respondents selected the following responses as reasons why they might not help: There are other people around that can help instead (5); I am not sure how I can help (6); I might make mistakes (4); Other (3). To explain other reasons, one respondent wrote: "I would categorize all reasons as to my not helping an individual or individuals under "social anxiety". Another wrote that "[t]here might be enough help, and simply standing by in case I'm needed is a good enough action. Or else I might get in the way". The third respondent explained that he/she would leave the area if there are already other people taking care of the situation, so to not to create extra attention.

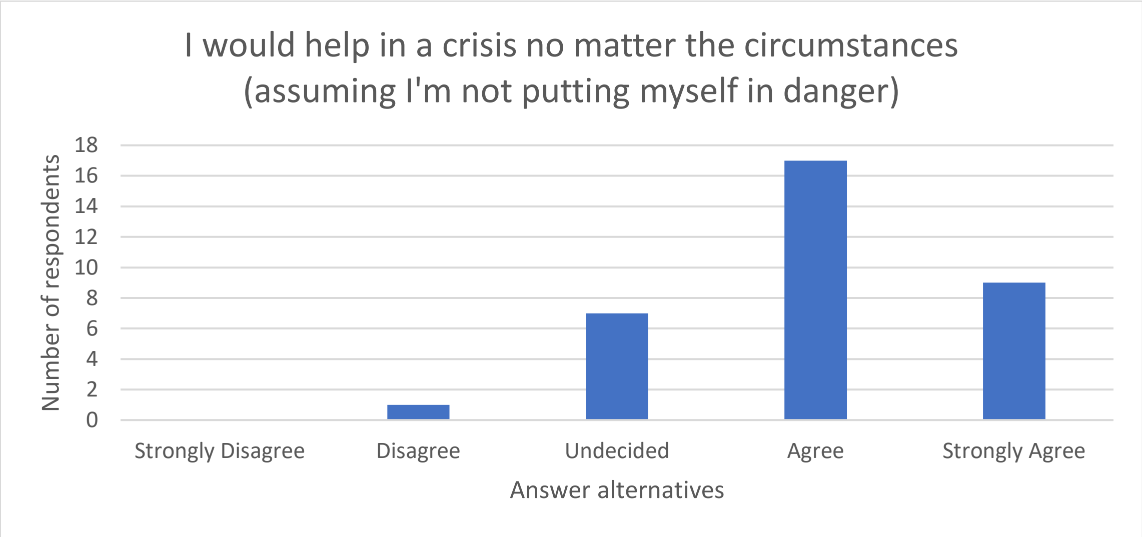

Figure 9 Respondent's willingness to help no matter the circumstances

Finally, respondents answered whether they would be more willing to help if the crisis affects someone they know, and if it would make a difference if the person who needs help is male or female. The results show that respondents generally are more willing to help if they know a person, but that it does not matter to most respondents whether the person in need of help is male or female (see figure 10).

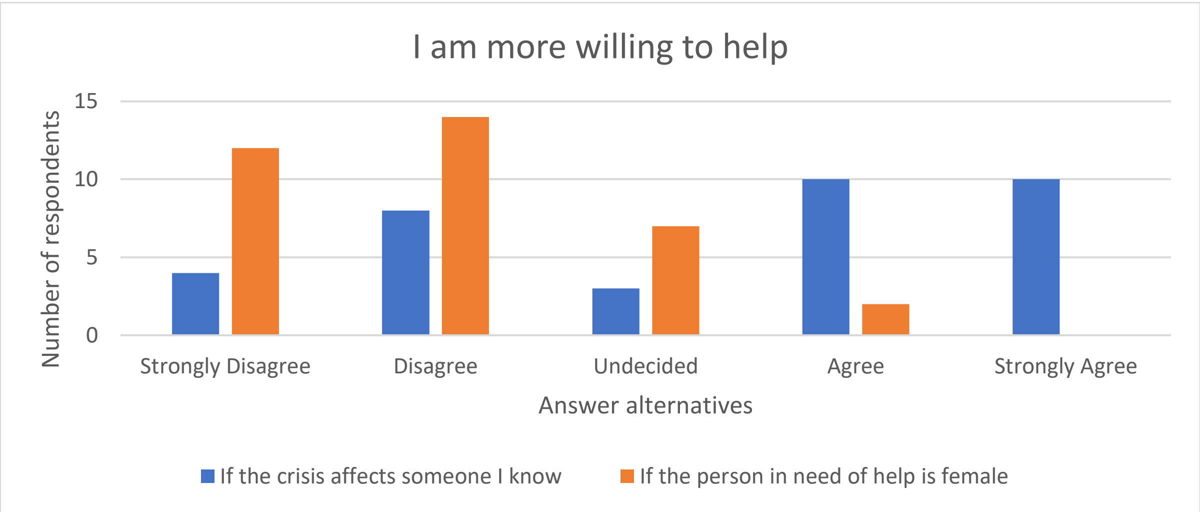

Figure 10 Impact of personal bonds or gender on respondents' willingness to help

5.1.6 Additional comments

At the end of the questionnaire, respondents had the opportunity to comment on anything regarding the questionnaire. In total, eight respondents commented there. Two respondents elaborated on their experience with crises, listing which crises they had been part of and what they had done during the crisis. Three respondents commented that some answers were open for discussion, with one writing “I am very uncertain”, and another stating that his/her “crisis management strategy would depend on the situation”.

One respondent who stated that he would take the lead in a crisis expanded as follows: “About taking the lead. I don't think I would take the lead over the whole situation, but if I were to notice someone who didn't know what to do, and I could help by directing them, I would.” Another respondent explained regarding the question about when to contact emergency services: “I would act first and inform emergency services later. I would collect some information about the emergency and then call the emergency service”.

5.2 Interview data

The interviews were conducted with the aim to see what the interviewees thought about 123CrisisTraining, and what they learned from going through the e-learning course. The findings will be presented systematically by using the following categories: 1) Interviewees’ experience with crisis management, 2) Going through the course, 3) Identifying important crisis management actions/contents of the course, and 4) Learning outcomes.

As explained in chapter 4, all interviews were conducted in Norwegian. For a clear presentation of the interviewees’ answers, all text will be translated into English and paraphrased in a way to keep the meaning of the sentence as close to the original as possible.

5.2.1 Interviewees’ experience with crisis management

From the questionnaires, it was already known that respondents 1 and 4 have been involved in actual crises. Interviewee 1 wrote in the questionnaire and described during the interview again that he was the first to find a girl unconscious outside his house and responded immediately by calling an ambulance and giving first aid in the form of CPR until emergency services arrived (Interviewee 1). Interviewee 4 only wrote in the questionnaire that he had experienced several crises, but he gave several more specific examples throughout the interview. One experience he described as follows: I came to a car accident. …Just jumped in, got some overview. I got her out of the car and called an ambulance (Interviewee 4). Another crisis he was involved in was as part of his work in the navy: The first [big crisis] was the plane crash in Stord. …And when we were informed it was full action. There was aviation fuel everywhere and it burned, and many missing (Interviewee 4).

When asking the interviewees about other forms of crisis training they had received, all interviewees could refer to some form of training. Interviewee 1 explained: I have gone through something similar. Through the municipality once. Had a crisis management course. But it was not as comprehensive as this a little more professional one. I come from a very small municipality and we had very specific crises which were relevant for accurately where we were. So this here [123CrisisTraining] was more general (Interviewee 1). Interviewee 1 also explained that he signed up for the Red Cross after experiencing the previously mentioned crisis, where he received various courses. Interviewee 2 refers to his work offshore where he received safety courses and first aid courses, which needed to be repeated every fourth year (Interviewee 2). Interviewee 3 mentioned that he received lessons in CPR at school and also received some first aid courses as a scout. Interviewee 4 received extensive training through his work, especially in the navy: We had accident exercises two days a week and safety mustering once a year. (Interviewee 4).

5.2.2 Going through the course

The interviewees' comments about going through the course were generally positive, with interviewee 2 saying that it was very easy to go through the course. He stated that it was easy to understand and to get the message it tries to bring across, which was clear to see when taking the small tests at the end of the chapters. It was very easy to exclude the wrong answers because the message was very clear (Interviewee 2). Similarly, interviewee 3 explained: I think it was implemented well. I think it was great that there were exercises at the end because it made it possible to repeat a little and summarize and see if one remembers the things one read through. It was a good number of exercises. (Interviewee 3). The option to learn more about certain topic with the immersive material available was also commented on by interviewee 3 as a good way to set the course up.

Interviewee 1 was also positive about the course as a whole, but felt it was not set up to be gone through by him on his own: The course was good, but it was not set up so that I should take it there and then at home alone and be done with it. …It felt as if it should have been a group or several groups. And then they get split into different roles and should then discuss …but I missed – even though I don't usually like it – a group to work with on this because of the way it was set up (Interviewee 1). Similarly, interviewee 4 also pointed out that group work is important for this course. He specified it more to the part of mental training in the course, as he stated that it is difficult to do mental training in praxis. He believed that it can be a good group training. He believed that it can be smart to gather a group and that you make some points that go into mental training, to see how one would react in a situation (interviewee 4).

Regarding the contents of 123CrisisTraining, interviewee 3 was very positive by stating the course gave good information and good tips (Interviewee 3), while respondent 4 could only comment that he thought it would be a great course for someone without any experience with crisis management from before. However, as he had extensive experience himself, he did not learn anything particularly new (Interviewee 4). Further, interviewee 4 felt that the final part of the course about support of victims was aimed at companies and organizations rather than the public and was thus not as interesting. Interviewee 2, who also has previous training, commented on the content of the course and the necessity of group work by saying: It is actually even less than an introduction. There is actually much more included in crisis training than exactly that, but that is extended when one does the group exercises that are there. After one has done that, one will have a much better understanding (Interviewee 2).

Interviewee 1 compared the content to the other training he received saying 123CrisisTraining was much more general and prepared him not just for the specific situations he learned about in other courses, but for situations no matter where they happen. He elaborated that even if it sometimes talked about specific crisis and specific situations, it was still so general that the information can be used anywhere. Additionally, he said that even with the background information he possesses, the course was good as it not only offered repetition, which one needs constantly, but also talked about things more generally. When asked if he thought if anyone could go through the course, he explained: Yes, because the only thing you need is to know a bit about yourself… As long as you can put yourself into a different situation, you can easily take this course without any background information (Interviewee 1).

5.2.3 Identifying important crisis management actions/contents of the course

5.2.3.1 Acute crisis

Asking about their opinion on the contents of 123CrisisTraining, a major critique from both interviewee 1, 2 and 3 was the little information that was given in the second part of the e-learning course about what to do during a crisis. For example, interviewee 1 stated that he missed the "what do you do when you find a person that has been exposed to a crisis" part, where it explains what he should do in this situation more specifically. He was waiting for this part, but as it did not come, he asked himself the entire time why it was not there (Interviewee 1). Interviewee 2 also expressed his desire to read more about the acute crisis phase, saying that it was good, especially the part about informing emergency services, but that he would also have liked to maybe have this part go more in depth. He mentioned several times that he believes the part about what to do during the actual crisis is most important for the lay public to learn about (interviewee 2). Interviewee 2 also voiced his desire to get it better across in the acute crisis part, that it is important to do something, even if it is just informing emergency services rather than doing nothing at all. Also, that one should not expose oneself to harm and danger to help others (Interviewee 2). According to interviewee 3, he felt that there was very little about what to do during the crisis itself. He stated: It was in a way a lot about before and after. So, I would have maybe liked a bit more there [in the acute crisis part] (interviewee 3). The importance of the acute crisis phase information was also emphasized by all interviewees' immediate focus on this part. Discussions about the first and third part of the e-learning course came after the acute crisis phase had been discussed in all four interviews.

Apart from critique about the lack of more detailed information regarding the acute crisis phase, all interviewees also pointed to positive features of this part. Interviewee 1 focused on the importance of informing emergency services and to make sure not to expose oneself to harm when helping someone else. To exemplify the importance of informing emergency services, he referred to a recent case in the eastern part of Norway, where a fire ended up being bigger than it had to be, due to many people thinking someone else had already called the fire department (Interviewee 1). When asked about the most important parts of the course, interviewee 3 also referred to calling emergency services and helping those in immediate need for help. Interviewee 2 referred to the information given about how to act in case of violence and terror as very good. He argues that he does not think many would think about what they would do in this situation, unlike for fires or car accidents, where he believes people have more of an idea of how to respond to the situation (Interviewee 2). Interviewee 4 also liked to the inclusion of what to do when being attacked with a knife or during a terror attack, stating that this was something he had not seen in any other mainstream courses.

5.2.3.2 Pre-crisis

When asking about important content about the pre-crisis phase, mental training was pointed out to be of significant relevance by most interviewees. They argued that it is important to have thought about what one might do in different situations. Interviewee 1 gives an example: Before a crisis, before the event, I always know where the nearest emergency exist is. However, he also explains that he thinks it is more difficult for an individual in his private life to set oneself into what might happen. It is easier at work, where one generally knows what might happen (Interviewee 1). Interviewee 2 says about mental training: It can be smart to be prepared for a crisis. You can think through what you can do if there is a fire at home, what you do when you arrive at a car accident. And I think that is important (Interviewee 2). Interviewee 4 also talks about mental training, saying he believes it to be difficult to do practically. He argues that it can be a good group exercise as mentioned earlier. He explains that the advantage of the group is that some may have experiences with one thing, and others may have experience with another thing. So, it is a little easier to think through it. This way one will pay attention to something one might not have thought about (Interviewee 4). He also refers to risk and vulnerability analyses and contingency plans, which he believes can be used at home, not in the form of documents, but as ways to think about what may happen and what to do if, for example, the oven starts burning. He also mentions the importance of knowing where emergency exists are located (Interviewee 4).

5.2.3.3 Post-crisis

When talking about the third part, interviewee 3 expressed the most interest. He mentioned that the need to support others, especially family members, was important to him: I thought that they will need a little support but did not know that they would need that much support (Interviewee 3). When interviewee 1 commented on the post-crisis part, he also referred to the importance of knowing about the possibility to give support and tell others about how they can find support. He also identified it as important to have heard about support options for oneself, as he was not aware he could get it after having been involved in a crisis in the past. Interviewee 2 and 3, on the other hand, thought that the third part was less interesting for the lay public. Interviewee 2 stated: And in part 3, it is those parts like the inverted pyramid, the first two parts, they are highlighted. These are likely those that a private person may think most about. They are good I guess (Interviewee 3). However, later he repeats that the important parts are part one and two, and that the public does not need to know that much about the things after the crisis as the professionals take care of those. Interviewee 4 makes a similar comment about part three being of little interest for the public, apart from learning about stress. But he thinks it could be great to include the numbers of crisis-hotlines in this part. He says: So, if you have been involved in a crisis, is there a place you can call? I’m sure there is, but I think not everyone knows about it (Interviewee 4).

5.2.4 Learning outcomes

As explained before, all four interviewees had some degree of crisis management training prior to 123CrisisTraining, likely reducing the potential learning outcome. Interviewee 4 was the only one who did not name any positive outcome for himself from going through the e-learning course. The other interviewees all could point to different ways the course was useful for them. Interviewee 1 summarized the aim of the course by saying: I see for myself that the course is created so you somewhat know what you should do, or to be prepared a little and know what you should do when you are in the midst of a crisis (Interviewee 1). More specifically, he explained that he learned how he needs to behave when he is for example threatened with a weapon at work. Although he thinks he would have been cooperative before, a part of him always wanted to say no. After this course, he knows however that he will not do this (Interviewee 1).

Interviewee 2 also argued that he had lots of previous training and that the course did not talk about anything he hadn't hear before, but he continued: But it is also a good repetition. You get to brush up on your knowledge … And you know that when you go through the same exercise three times, then you know the exercise in the end (Interviewee 2). Interviewee 4 also mentioned that repeating is smart referring to experiences from work. After taking the same course several times throughout the years, he kept remembering most of it with ease. Interviewee 3 said that what he will most likely remember from this course is to think about different scenarios that could happen. Interviewee 3, who had the least amount of previous training said that he learned a lot from the course: I know now that there is actually something I can do to help if I see a situation (Interviewee 3). He explained that the information will be in the back of his head, for example that you have to hide or set up some barriers when someone breaks into your house. I would only attack if there is no other option (Interviewee 3).

More generally, all interviewees thought that the course would be useful for people that have not had previous training, or whose first exposure to crisis management was through this course. Interviewee 1 commented on the usefulness of the course to lay people as it is kept very general: When you have it as general as this course, then you can use it in a specific situation, but the specific situation we were trained in in our municipality, not the general, you can only use in this specific situation… If something happens, you are at least a little prepared (Interviewee 1). Furthermore, interviewee1 described that the course teaches how to think about crisis. That one learns what may happen in situations and that they may not always be the way one expects them to be.

Interviewee 2 also answered generally, saying that a lay person can learn from this course to think about what they can do and what kind of situations they can most likely find themselves in. He refers especially to the first part of the course but points out that the course itself is part of the training that is mentioned in the first part. For interviewee 2, part 1 and 2 are the main focus of the learning from this course, and learning can be improved by creating a conversation about the topic. Meanwhile, the most important topics that people will remember according to interviewee 3 are first aid and what to do during a break in, to ring emergency services, to gain control of a situation and to prevent panic and handle stress. According to interviewee 4, the course did well in pointing out that people may panic, freeze or pull themselves together and take the lead and do something. He also said that it was important that the course talked about getting into the habit to prepare oneself a little by, for example, taking a minute and finding the emergency exits when going to a hotel (Interviewee 4).

On the other end of things, interviewees also commented on the parts of the course that they thought were less relevant and did not teach anything particularly necessary for the lay public. Interviewee 1 thought it was not necessary to go into detail about the definition of crisis, as it is not important if something defines as a crisis or not, as long as someone requires help. Interviewee 2 argued that the main course is in a way less than an introduction to crisis training, as it rather describes what to do to get actual training and know what exactly needs to be done. He also argued that it may appear so general, that one might forget it easily (Interviewee 2). Interviewee 4 argued that the course itself was not very practical, and also expressed that he thought it to be difficult to do mental training. More topic specific, interviewee 2 explained that he thought part three had little relevance for him, as professional support is not given by the public. He also thought it unlikely that he would sit at home prepare himself for different scenarios mentally. According to interviewee 2, it is more important to remember the most important things like calling emergency services and securing the area.

Lastly, both interviewee 2 and 4 gave their opinion on how they thought the course could be set up in order to make learning about crisis easier. Interviewee 2 argued that the best way to learn what one can do during a crisis, is to have a list of things that one can follow: This is the most important thing to do, this is the second most important, and this is number three. So they have something to hang on to. Because if you just say that all those things can be relevant in accidents, but it’s a bit of a different order from case to case, it becomes very vague. That it is maybe better to ask people like, if there is a fire then it is important to do this, this, and that (Interviewee 2). Interviewee 2 also pointed out that he would like to make it clearer in the course that things in a crisis aren’t always clear and you aren’t always able to identify a crisis. It is important to maybe just ask or try to identify if there is something that needs attention or not. Interviewee 4 talked about a different approach to teaching people about the response to crisis. He argued that especially for the “PlayStation generation” it may be ideal to create a simple game where different crisis situations are simulated. He referred to the case of school shootings in the USA to explain his point: The teachers need guns. That is not a solution. But then there was someone who launched a computer game where the scenario was school shootings. How do you act? It was like in a room, lock the door, set a couple of chairs in front of the door and those things, and stay away from the windows. The aim was to survive" (Interviewee 4). According to him, that would make it more attractive and easier to remember, especially for the younger generations.

5.3 Literature study

The main use of the literature study was to find some answers about the topics that could not be answered through the questionnaire or interviews, and to expand on some of the information received there. To present the data in an easily understandable way, it has been kept in the categories after which the research has been conducted. First, literature concerning the role of the lay public in crisis will be laid out, which is split in two parts. Part one looks at literature discussing what may be expected from the public during crisis from the government and related organizations, and part two looks at literature that describes what the lay public has done in different situations. Second, the literature study looks at the learning aspect of this study, laying out literature discussing learning methods and information about e-learning courses.

5.3.1 The role of the lay public in the eyes of the government

The Norwegian government recognizes the importance of the public's involvement in crisis management, making it part of the law, discussing it in white papers and even supporting it by making useful information and guidelines available to the public. One such law discussing the requirement to help can be found in The Penal Code (2005) Section 287, which states that:

A penalty of a fine or imprisonment for a term not exceeding six months shall be applied to any person who fails to
a) provide assistance to the best of his/her ability to a person at obvious risk of losing his/her life or suffering considerable harm to body or health, or
b) seek to avert to the best of his/her ability, by making a report to the police or by other means, a fire, flood, explosion or similar accident that entail a threat to human life or a risk of considerable harm to body or health.

Breach of the duty to assist pursuant to the paragraph is not penalised if the duty could not be fulfilled without exposing oneself or other persons to particular risk or sacrifice.

The law demands any person to help when possible but does not specify in what way one should help apart from informing emergency services. In a similar fashion, the Road Traffic Act (Vegtrafikkloven, 1965) states under § 12 that anyone involved in a traffic accident, with or without fault, shall quickly stop their vehicle and help persons and animals that have been harmed, and otherwise contribute to the measures appropriate to the accident. It further specifies that also those that have come to the accident area after the accident are required to help if necessary. The only measure that is more specifically described in this act, is that vehicles need to be moved should they pose danger. This shall however only happen if the situation allows it, which is also closer described in this § 12 (Vegtrafikkloven, 1965). Further, in case of traffic accidents, the Vehicle Regulations (Kjøretøyforskriften, 1994) also requires every car to be equipped with a hazard warning triangle (§ 41) and Regulations for the use of vehicles (Forskrift om bruk av kjøretøy, 1990) requires cars and motor bikes to be equipped with high visibility vests (§ 1-6).

In a white paper by the Ministry of Justice and Public Security, it is more simply stated that some of the responsibility lies in the hands of individuals, and that some of these are statutory, such as the need to install smoke alarms at home or acting carefully in traffic (Det Kongelige Justis- og Beredskapsdepartement, 2016, p. 25). While the focus of this white paper is on what the government and official organizations can do to prevent or manage different crises, it at least briefly regards individuals, i.e. the lay public, as an important component in this matter. As it is stated, citizens and individuals have a responsibility for their own safety and a joint responsibility for the societies resilience/resistance. This includes to seek knowledge about which risks we can be exposed to, how we can prevent and reduce them, and what we should do if an event occurs (Det Kongelige Justis- og Beredskapsdepartement, 2016, p. 31). Although the focus of this white paper lies primarily on organized voluntary groups, it does acknowledge that every day, "normal people" perform life-saving first aid and rescue people on the water, land and in the mountains. When it comes to searching after missing persons, rescue of persons in terrain and efforts during avalanches, are volunteers the primary resource our society can build on (Det Kongelige Justis- og Beredskapsdepartement, 2016, p. 50). Apart from these mentions, volunteers in this paper are primarily regarded to as those that are organized, and the main focus on individuals is in regard to keeping them informed and out of harm during different crisis. The lay public is not actively implemented as a resource.

However, the Norwegian Directorate for Civil Protection, another governmental organization, recognizes the importance to include the lay public actively during crises. Their webpage Kriseinfo.no is used to give out important information about crises before, during and afterwards (Direktoratet for samfunnssikkerhet og beredskap, 2011). Furthermore, it gives advice to how any person can act before and during different scenarios. It offers information about what should be done before a storm, when discovering a forest fire or fire in a tunnel, what to do in case of power outages, or how to act in case of terrorism, and more.

5.3.2 Examples of lay public involvement in crises

In the report of the terror attacks in Norway on the 22. July, the crucial and life-saving involvement of lay public actors is pointed out. At the site of the first attack, many civilians were involved in life-saving first aid and evacuation (Gjørv, 2012, p. 21). Later, while the police was still on the way to the area of the second attack on the island Utøya, as well as organizing their resources, and planning their approach, campers and other civilians in the area used their own boats to rescue the young victims that jumped into the water to get away from the island (Gjørv, 2012, p. 30). Furthermore, they even assisted by offering their boats to the police to transport them to the island, or even drive victims to the hospital in their private cars (Gjørv, 2012, p. 31). The willingness and readiness of those volunteers to offer not only their help, but also the resources they had, was crucial in the management of this crisis.

Another example of the recognition of lay public help is found in the report of the fires in Lærdal, Flatanger and Frøya in the winter of 2014 (Direktoratet for samfunnssikkerhet og beredskap, 2014). Although the involvement of the lay public is not part of the mandate of the report, short mentions of their efforts have been given. In Lærdal, part of the extinguishing work was done by farmers with their fertilizer spreaders or other private persons with water hoses and other material (Direktoratet for samfunnssikkerhet og beredskap, 2014, p. 26). However, it is also mentioned that during evacuation, some citizen hid from the police to stay back and carry out their own extinguishing efforts (p. 25). While all citizens followed evacuation instructions in Flatanger, and the only civilians who helped in the management of the fire were organized (p. 30-31), many private persons in Frøya chose to fight the fire on their own. The fire department's crews described the resulting situation as chaotic as badly equipped civilians went into the terrain and it was not possible to get an overview over how many people were in the area or where exactly they were (p. 32).

Newspaper articles are also sometimes the source of examples of positive involvement of the lay public in crisis. Haugli and Fjeld (2018) reported on the voluntary help around 50 locals have offered when fires needed to be stopped in the area. Their involvement in the extinguishing efforts was coordinated by the fire department and consisted mainly of filling up buckets with water and transport it to areas that cannot be reached with the fire trucks. In another article, the first responder's quick actions were commended after a collision of cars. Both those that were directly involved and those that were nearby freed victims out of a burning car and gave first aid (Skjørtvedt, 2015). In another car accident related incident, first responders climbed into the car to secure the neck of the victim, while others comforted and calmed the victim down. Yet others took care of the traffic or informed the emergency services about the accident

(Silseth, 2015). In contrast, every now and then media also reports of situations where the lay public behaves inappropriately when arriving at a crisis. Although emergency services are already on the scene, actions from those around can have an impact. According to the article by Schibevaag et al. (2018), both police and paramedics have often experienced people taking pictures of the victims, as for example in Oslo in January 2018, or as has happened in Italy in May 2018.

5.3.3 Learning

Looking at literature concerning e-learning, many positive aspects of this type of learning can be found. Hills (2003) explains that visualization is an important aspect of learning: "E-learning give us the opportunity to create images that we can interact with. Past research shows that both the presentation of a visual image and the ability to interact with that image makes it easier for people to remember" (p. 72). Hills (2003) refers to Rose and Nicholl (1997) when he states:

> *"It has been said that we remember 20 per cent of what we read, 30 per cent of what we hear, 40 per cent of what we see, 50 per cent of what we say, 60 per cent of what we do and 90 per cent of what we see, hear, say and do (Rose & Nicholl, 1997, p. 142). The actual percentages vary with different sources. The principle seems to be universally accepted" (p. 71).*

Another advantage is the ability of the user to choose the parts they want to focus on, and skip those they are not interested in. However, in contrast, Hills (2003) also points out that learners may jump around the material and skips parts to go to those that seem more interesting, and not necessarily follow the instructions that were meant to help teach all the information in the course (p. 77-78). To compensate for this behavior, Hills (2003) writes that "[o]nce the designer accepts this behaviour, then the e-learning material begins to look more like knowledge management websites… encourage[ing] the use of very small self-contained units of material to study" (p. 84).

To evaluate the actual learning outcome, it can be looked to the model developed by Sommer et al. (2013). Although it is meant to help understand the learning process of emergency organizations, the recognition of the importance of the individual in the model (Sommer et al., 2013) makes it also applicable to the lay public's learning process. The model contains four main parts: 1) the person (individual), 2) decision making and response, 3) reflection, and 4) change, confirmation and/or comprehension (see Figure 11 in Appendix B) (Sommer et al., 2013). The individual's learning process is described to depend on the usefulness of the content (practical or theoretical), the context in which the learning takes place, and the commitment of the learner (p. 157-158). Decision making and response, based on the concept of RPD, entails understanding that "[e]ven if an incident was satisfactorily managed… it does not necessarily mean that the performance was excellent, nor does it mean that there is nothing to learn from the response" (p. 159). One must reflect on one's actions to find those than can bring the best outcome. Learning can then be related to changes in structures, behaviours or working methods, confirmation of existing knowledge and/or comprehension of existing practice" (p. 161).

5.4. Summary of empirical data

In this chapter, the results of the questionnaire, interviews, and the literature have been presented. Results from the questionnaire show that all respondents have received first aid training, and that several have received other forms of training. However, the participation in trainings was more likely to be involuntary and the believe to be able to use this training confidently in a real life situation varied. It could be seen that the majority of respondents are aware of how important it is to participate in crisis response before emergency services have arrived, and many would still try to help after their arrival. It could also be seen that respondents have a general idea of how they would approach a situation, and that most would help no matter the circumstances.

The interviews showed that interviewees believe it to be a good idea for the lay public to learn about crisis management. However, the focus of the training differs to a certain degree from interviewee to interviewee. Learning about the acute crisis phase, and about what to do during the actual crisis, is the most important part according to all interviewees, and they pointed to different parts that they liked about it. On the other hand, most interviewees also wish for a more detailed explanation of what to do during a crisis. The explanation of mental training was also popular among the interviewees. It was also positively commented upon the ease of going through and understanding the course, as well as the option to immerse oneself in certain areas if desired. According to the interviewees, it was a disadvantage that they did not have access to groups to perform the group exercises and discuss topics. Also, interviewees commented that some parts of the course were of little relevance for the lay public as they were focused on organizations, most prominently the post-crisis part.

Lastly, the literature study showed that the Norwegian government has several laws that dictate the need of the public to help in crisis if possible. Apart from having to inform emergency services, it is not specified how one should help. Laws are also in place to prevent crisis from happening in the first place, including the need to install smoke alarms at home, have emergency equipment in the form of a high visibility vest and warning triangle in certain vehicles. White papers and news articles show how one can respond to crisis by describing different situations where the public has helped victims in crisis, or where they assisted emergency services in their work. Lastly, literature on learning showed what features make an e-learning course useful and facilitate learning, and what one needs to look at to see if learning has taken place.

6.0 Discussion

In this chapter, I will discuss how the findings of my research can help to answer research problem. To do so, it is important to see how the findings tie in with the theoretical framework presented in chapter 2 and the content of the e-learning course 123CrisisTraining presented in chapter 3. As a reminder, the research problem of this study is as follows: *"Is it appropriate to use an e-learning course to teach the lay public how to respond to, and manage a crisis, and improve their ability and willingness to help?"*. The three research questions that have been formulated in chapter 1.1 will serve as the main guidelines in this chapter.

6.1 What role can, and should, the lay public take in the response to crisis?

6.1.1. Active involvement of the lay public

Kruke (2015) argues that the active involvement of the lay public is crucial in the management of crises. Especially during the "golden hour", the time from the impact of the crisis up to the arrival of emergency services, effective response of the first responders can help reduce the number of casualties, injuries, or damages. The vast majority of respondents to the questionnaire agree that it is important to participate in the management of crisis, if less so after emergency services have arrived (see figure 8, chapter 5.1.4). They argue that they are willing to help no matter the circumstances. However, out of the 20 respondents who have stated that they have been involved in a crisis before, only 13 commented that they have actively participated in the management of the situation. As it was not possible to ask about the reason why they haven't actively participated in a second questionnaire, the significance of this finding is inconclusive. The fact that 20 respondents have been involved in a crisis, and 32 respondents know someone who has been, may be part of the reason why they would be so willing to help, as it may have given them first- or second-hand experience about what needs to be done.

According to Helsloot and Ruitenberg (2004), governments and emergency services often assume the public to take a more passive role when it comes to crisis. The lay public is often neglected as a resource due to expectations of panic and helplessness, and the assumption that the public needs to be controlled and helped during a crisis (Helsloot & Ruitenberg, 2004). To a certain degree, this seems to be reflected in the description of the public's role during crisis in the white paper "Risiko i et trygt samfunn" (Risk in a safe society) (Det Kongelige Justis- og Beredskapsdepartement, 2016). It suggests that in terms of the public, it is important to inform them about crisis, what has happened, what the authorities do, and how they should behave… If many in the society experience unrest or fear, good crisis communication will be of big importance (p. 58). The public is generally described as a group that needs protection, help, and information. On the other hand, it is also mentioned that the public has a responsibility to take care of their own safety, and that in many cases, it is the public that performs a number of life-saving actions during crises.

The expectation that the lay public can indeed be a resource in the eyes of the Norwegian government is also reflected in the law. Considering that The Penal Code (2005) Section 287 demands of the public to give assistance to those who need it, strongly implies that the government does think of the lay public as some kind of resource. The same can be said about § 12 in the Road Traffic Act (Vegtrafikkloven, 1965). Furthermore, the webpage Kriseinfo.no, created by the Norwegian Directorate for Civil Protection, strongly suggests that the Norwegian government does not have the same perception of a passive public as Helsloot and Ruitenberg (2004) argue they would have. It seems rather that the government has recognized the potential improvement of crisis management by including the lay public actively in the process and creating a webpage where they can find out how they can respond to different crises. The recognition of the public's importance is most evident in the report of the 22. July attacks in and around Oslo, where it was explicitly stated that the involvement of the lay public was crucial in keeping the crisis from being even more severe (Gjørv, 2012).

Looking at the findings shown in Figure 4 (see chapter 5.1.2), it appears that the respondents themselves are somewhat less certain about their need to respond when being given different scenarios. It seems that even if some respondents identify a situation as a crisis, they might not feel the need to act. During the interview with interviewee 1, another possible explanation came to light. As he stated, he would see a big storm/hurricane (natural event) as a crisis but does not think he as an individual would be able to anything to stop the storm (interviewee 1). This may point to uncertainty about what one can do as an individual in certain situations, rather than an unwillingness to help. The fact that the majority of respondents would respond to the different scenarios (except to the car example), even if the respondent does not always define the situation as a crisis, points towards a general agreement within the respondent group, that it is necessary to help.

6.1.2 What can the lay public do during a crisis?

Most respondents, including the four interviewees expressed that they believed it to be important to participate in crisis management once a crisis occurred. They even seem to have a basic idea of how they would approach leadership when given the option between taking the lead, waiting until someone else takes the lead, or acting independently without having a leader say what to do or taking the lead self. Considering the concept of “diffusion of responsibility” (Darley et al., 1968b), it seems positive that most respondents categorize themselves as a person who would either take the lead, or would not need to wait for another person to take the lead, but just act independently of eventual other bystanders. It seems only five respondents may be affected by something like diffusion of responsibility or bystander apathy, as they indicated that they would not respond due to other people being around.

In terms of more specific actions a member of the lay public can carry out during a crisis, the literature offers many examples. Remembering the very first lines of this thesis, “90% of lives are saved by people like you. You can be a hero by learning and providing first aid” (International Committee of the Red Cross, 2014). First aid is arguably the most obvious way one can help victims in a crisis. The report on the 22. July attacks (Gjørv, 2012) or the articles laying out the response to car accidents (Silseth, 2015; Skjørtvedt, 2015) are excellent examples to see that they lay public can help by giving first aid, and even save lives by doing so. The importance of giving first aid is also reflected by the necessity to take part in a first aid course before receiving a driver’s license, and even more so by having it taught in school as interviewee 3 explained. Having training on first-aid as one of very few mandatory lessons on crisis management and response strongly suggests its importance. *Norsk Krisetrening* clearly also recognizes the importance of first aid as it is included in 123CrisisTraining.

Another action any person can carry out during crisis, regardless of their training, is to inform emergency services about the crisis as soon as possible. This is also one of the things every person is expected to do, as it is mandatory by law to do so (The Penal Code, 2005). Interviewees 1 and 3 also both explicitly commented on the importance of this action and the usefulness of it being part of 123CrisisTraining. The example given by interviewee 1 about the fire in the east of Norway that ended up being bigger than it had to be due to no one calling emergency services, is a good indicator to how important of an action it can be. Although without a specific example, 123CrisisTraining also explains the importance to inform by stating that there have been crises where no one called the emergency services due to a believe that someone else had done so already. This suggests that the concept of bystander apathy (Darley et al., 1968a) is possible to occur during a crisis, and it might be important for the lay public to know about it.

Besides calling emergency services and giving first aid, 123CrisisTraining also discusses the need to gain an overview over the situation and reflect, to inform others that might become exposed to the crisis, and to evacuate. Helsloot and Ruitenberg (2004) explain that the public is rarely in panic, and generally think about how to make the best of the situation. 29 of the 35 respondents to the questionnaire declared that they would approach a crisis by getting an overview over the situation before acting, which may be interpreted as a form of reflection. Reflection is necessary to identify how one may be able to help, but also to see whether there is still a source of danger making it difficult or unwise to act in a certain way. This way, uncertainty may be reduced, and it may be easier to make appropriate decisions. In order to prevent more harm to others or to oneself, it is also important to inform those around about the situation. As Kruke (2015) describes, without warnings, other cars might drive into an accident area, potentially harming themselves or others in the area. Especially for car related accidents, laws are in place to help with the warning, as warning triangles (Kjøretøyforskriften, 1994)and high visibility vests need to be in vehicles (Forskrift om bruk av kjøretøy, 1990). The article by Silseth (2015) offers an example of a situation where first responders informed others about the danger ahead. Evacuation can be very important as seen in the car accident described by Skjørtvedt (2015), where victims were freed from a burning car, or on a larger scale in the case of the 22. July attacks, where citizens and camping tourists used their boats to help evacuate victims from the island and the water around Utøya (Gjørv, 2012). These are prime examples to show that evacuation can save lives just as much as first aid. In a way, for the citizens and camping tourists, this may rather be categorized as search and rescue, which, according to Cornwell (2003), bears the danger of exposing oneself to danger in order to help others. This was the case on the 22. July as the culprit shot at the boats. It may be argued that it is therefore important to make the public aware of this tendency, so that they will think clearly about their actions before rushing in to help, even if in this case everything went well with those who did.

The final actions the lay public can perform during a crisis as described in 123CrisisTraining are related to violence and threat of violence. On Utøya, those that had the chance tried their best to flee and hide, without any explicit descriptions of anyone locking themselves into a building or room, or trying to attack the assailant (Gjørv, 2012). Despite many dying, it seems likely that without trying to flee and hide, even more people would have died. Interviewees 2 and 4 voiced the opinion that the information regarding the behavior in case of violence and threat thereof was very important and useful. Interviewee 1 also seemed to agree, as he explained that he now knew that attacking someone is the very last resort if he should ever be threatened at work.

In addition to those actions that are all to some extend described in 123CrisisTraining, I found certain other things the lay public may be able to contribute with in my research. Kruke (2015) explains that covering those injured from onlookers can be a big help. Looking at the examples given in the news article by Schibevaag et al. (2018), it seems to be evident that victims may be exposed to unwanted attention and may even end up on someone's photo. It is unlikely that anyone would want to be in this kind of situation and additionally have onlookers stare and take photos.

In the report on the fires in Lærdal, Flatanger, and Frøya (Direktoratet for samfunnssikkerhet og beredskap, 2014), as well as the report of the 22. July attacks (Gjørv, 2012), descriptions of the lay public offering their resources can be found. During the fires in Lærdal, farmers helped fighting the fires with their farming equipment, and private persons used water hoses. On the 22. July, the lay public offered their boats to the police to reach the island, or they drove victims to hospitals with their own cars, as emergency services did not have the capacities to do it all on their own. In the case of another fire, the resources offered came in the form of man power, as 50 locals helped carry buckets of water to the needed areas to fight the fire (Haugli & Fjeld, 2018). These examples show that lay public involvement can also be crucial after emergency services have arrived. In contrast, the Frøya fire gave an example of where the involvement of the public may have been a disadvantage, as locals did not follow evacuation orders from the fire department and went into the terrain to fight fires by themselves (Direktoratet for samfunnssikkerhet og beredskap, 2014). As this resulted in the fire department being unsure about how many people were in the area, and where exactly they may be, their work was more difficult because of the involvement of the public. It can be argued that this is an example to point to another important action the lay public may carry out during crisis: Follow instructions given by emergency services. Otherwise it may make their job more difficult and create unnecessary confusion and uncertainty.

Finally, Kriseinfo.no gives a number of very specific actions one can and should carry out in case of different situations. Many actions described can be categorized under those that have been mentioned already, like informing emergency services or evacuating. In case of fires, it suggests that one should start extinguishing it if possible and gives closer detail on how to do so. For long-lasting power outages, it suggests looking for alternative heat and light sources, or how to prepare food. However, although important things to do during these situations, they may be less relevant as 123CrisisTraining tries to give general information that is usable in many situations, rather than only one specific situation.

6.1.3 What can the lay public do before and after a crisis?

The pre-crisis phase contains two main activities, prevention and preparation (Engen et al., 2016). The Norwegian government expects of the population to be a part of the preventative measures, and also enforces certain kinds of preparation. The citizens are required to take care of their own safety, and make sure to act carefully in traffic, just as an example (Det Kongelige Justis- og Beredskapsdepartement, 2016). Everyone is expected to be informed about what can happened and how it can best be prevented, its likelihood reduced, or managed if it occurs. In a way, this seems to be relatable to RVAs and contingency plans, which are described in 123CrisisTraining. In the "terror" section, Krisetrening.no also mentions the need of mental training to be prepared. Interviewee 1, 2, and 4 all expressed their believe that mental training is important in order to be prepared, but both interviewee 1 and 4 argue that it can be difficult for a lay person to do mental training. With six respondents indicating that they might not help because they are unsure about how they can help, it seems appropriate to have them go through mental training and think about what they can do. As Burghofer et al. (2005) explained, a feeling of competency in a skill is important for someone to be willing to use that skill in a crisis. Mental training may help to feel more confident in a skill, and so does physical training, likely also reducing the fear to make mistakes that four respondents expressed. Burghofer et al. (2005) suggests that the time since the last training has great impact on how confident one is. The data from the questionnaire does not give an indication about this, but most likely only due to the way the questions were asked (too small time intervals for the time since last training). However, both interviewee 2 and 4 argued that they believe it to be smart to repeat training regularly as it helps with remembering things.

In terms of the post-crisis phase, it appears that there is relatively little for the lay public to do, which makes it no less important. Interviewee 3 felt that it is important to give support to those in need, especially family members. Interviewee 1 also saw the importance in this, and the possibility to tell others where they can find more support if needed. Furthermore, interviewee 1 also argued that it is helpful to know oneself where to find help if one needs it, as he believes that not many may know about this possibility. Otherwise, the work done in the post-crisis phase seems to be more focused on organized groups, emergency services, and the government. The learning component of this phase is relevant for the lay public, but I believe this go closely together with the training and preparation part of the pre-crisis phase, as learning will probably not happen in a formal way with a change of structures or similar in case of an individual.

6.2 In which way should the e-learning course be set up in order to teach the lay public how to respond to crisis?

6.2.1 What is good about 123CrisisTraining?

Generally, all four interviewees that went through 123CrsisTraining described it as straight forward and simple to understand. That relates to both the physical setup, and the content of the course. In terms of the physical setup, Hills (2003) explained that the advantage of e-learning is the ability to choose between the different parts, and focus on those that one is interested in. 123CrisisTraining is set up so one can choose to look at each of the three phases, pre-, acute, and post-crisis phase separately if desired. Additionally, the immersive material relating to various parts of the course can be accessed at any time, making it easy to pick exactly those parts out that one wants. Interviewee 3 seems to agree with this theory, as he explicitly stated that the freedom to choose which immersive material one focuses on is good. With its setup, it can be argued that 123CrisisTraining comes close to being what Hills (2003) calls a knowledge management website.

Another positive aspect of e-learning courses is the ability to combine visual learning with verbal, audio, and physical learning. As Hills (2003) states, it seems to be universally accepted that a combination of reading, hearing, seeing, saying and doing something gives the best outcome in case of learning about that something. It can easily be argued that 123CrisisTraining contains more than just one of these learning methods. Reading is given by the text on the slides, and the visual aspect is given by the small illustrations or pictures of the topic discussed that can be found on almost all slides. In some few cases, slides are even interactive and different parts have to be selected for the information to show. In terms of the hearing and speaking components, the course seems to include this by including group work at the beginning and end of the course. It might even be considered a form of doing, as the group exercises are laid out to present a form of RVA and contingency plan creation. However, as the e-learning course was primarily developed for organizations, the group work might fall away if it is given to individuals instead, depending on whether they will have the chance to meet with other individuals that take the course in order to conduct the group work. Independent of the group work, interviewees explain that they like the inclusion of the short quizzes at the end of each chapter, as it allows them to see if they understood the things they read. It could be argued that this is a form of learning by doing.

In terms of the content, all interviewees could point to certain topics they thought of as being important for the lay public. However, what one interviewee may think of as important, may be of less relevance in the eye of another. During the acute crisis, informing emergency services, as well as the slides on how to act in case of violence and threat thereof received the most positive comments. This being said, all interviewees indicated that the acute phase was the most important of the phases, and that all that was listed there was relevant for a lay person. In case of the pre-crisis phase, interviewees 1, 2, and 4 argued that the slides about mental training are important, which may suggest that they need to be in the course for it to be relevant for the lay public. Interviewee 4 also made a compelling argument regarding RVAs and contingency plans, stating that he believes it to be a good idea to apply these concepts mentally in a very simple form at home. His explanation may suggest a tight link between RVAs and contingency plans, and mental training. Lastly, for the post crisis-phase, interviewees suggested that knowing about giving support is important, as well as knowing where one might get support if support from family and friends is enough.

6.2.2 What could be changed about 123CrisisTraining?

The first major change that interviewees argue is required, relates to the necessity to have a group to work the questions with. This is not a direct suggestion to change anything about the course, but rather about the way the lay public needs to go through the course. As it is, the course is aimed at organizations, and it is not being sold to individuals. However, it suggests that if it were of debate to sell to individuals too, a way would need to be found to ensure that individuals have access to groups with whom they can work on the exercises. As interviewee 4 describes, having a group to discuss the content of the e-learning course with can be a great advantage as one might think about something this way one would not have thought of alone.

Another major change interviewees 1, 2, and 4 suggest is the expansion on the acute crisis phase. Although all interviewees like what is in this part already, they described that they would like to have more exact information about what they can do in different situations. Considering all the different actions described in the literature (as discussed in chapter 6.1.1) several important actions can be added to the e-learning course to improve the lay public's understanding. This may include information about offering resources to emergency services and being involved after emergency services have arrived in general, or how to behave and what to think of in case of a tunnel or forest fires (Direktoratet for samfunnssikkerhet og beredskap, 2011), just to name a few. However, while interviewee 1 expressed the wish to have more information about what to do during a crisis, he also argued that a positive factor of this course is its general approach. By being general, you are prepared for any situation, which may then not be the case when going into too much detail about specific crises. It may be argued that the course can have parts of both, giving a general understanding of what to do in any crisis, and then a closer look at certain situations. As with other parts of the course, this might be dependable on the individuals' desire and is probably difficult to choose for everyone. It may be an advantage to have both options available if one can choose more precisely what to look at, or maybe making the detailed information part of the more immersive material.

As for interviewee 4's suggestion to use a kind of game to present the information, it might seem a good way to have the lay public "actively" learn by doing things, but the question remains whether it can replace the course or even parts of it. It may be a positive addition, but by adding too much, it might make it too complex and too long to complete, as it is likely that the courses approximate one hour duration was already too long for people to invest time into, and thus leaving me with the low response rate I had

In case of the post-crisis phase, interviewees expressed that it is not as important to the lay public, suggesting that parts of it can be left out. Apart from the slide about stress reactions, stabilizing and informing, and support conversations, the third part of the course is described to be focused on organizations as explained by interviewee 2. Interviewee 4 voices a similar opinion, suggesting that a slide with emergency help numbers may be added, as this can be important information for someone who may need help.

6.3 What results may be expected from completing the e-learning course?

6.3.1 Influencing learning: Content, context, and commitment

According to Sommer et al. (2013) there are three main factors that influence the learning process of a person; The usefulness of the content, the context in which the learning takes place, and the commitment of the learner (p. 157-158). As was evident with the four interviewees who conducted 123CrisisTraining, the usefulness of the content was rather limited for interviewees 1,2 and 4. This was in large part due to the different types of training these three interviewees had received before taking on 123CrisisTraining. As all three interviewees stated, they learned little or nothing new from this e-learning course. However, as already the questionnaire data implies, this will not be the case for everyone. Interviewee 3 is also a good example, showing that the content can be new and useful, even if one has had first aid training previously. In addition, the usefulness of the course also depends on the beholder. As interviewee 4 describes, he believes it to be important that people use the concept of RVAs and contingency plans at home and prepare themselves mentally for different scenarios, as he himself does. On the other hand, interviewee 2 does not think that he would sit at home and prepare himself mentally. Also, in case of 123CrisisTraining, certain parts are directed so specifically towards organizations, that the interviewees do not see much of a benefit from that knowledge. The main part not relevant for the lay public, according to interviewee 1, 2, and 4 is the post-crisis part. Although, they argue that information about stress and simple support of others can be relevant and useful.

The context in which the e-learning course was carried out is also likely to have had an impact on the learning outcome. First and foremost, as has come up several times before, the e-learning course includes several group exercises. The way in which this research had to be carried out, did not allow for group exercises and every interviewee had to go through the course on their own. Therefore, a potentially important part of the course fell away, which was also something the interviewees commented on. They believe that more could have been learned with groups. However, as this this would likely be the way for other lay persons as well if the course were open to the public the way it is now, it is arguably a good representation. It suggests that changes need to be made to facilitate learning. Another contextual factor that may have impacted the learning outcome may be the timing of the research. Due to the various changes explained in chapter 4, interviewees ended up having to go through the course during their exam period. This may factor directly in with the commitment aspect, as it may have resulted in interviewees being distracted from the course and not being committed to this learning experience as they otherwise might have been. Interviewee 2, for example, mentioned that he did not go through any of the immersive material due to lack of time because of exams. On the other hand, considering that more than 700 students were approached to be part of this study, and only 35 responded to the questionnaire, and of those, only four participated in the interview, it may be the case that these 4 interviewees were interested in this research and the e-learning course more than the average person.

6.3.2 Learning results

As for the actual results that have been experience by either of the four interviewees, they may be categorized by either "changes in structures, behaviours or working methods, confirmation of existing knowledge and/or comprehension of existing practice" (Sommer et al., 2013, p. 161). Starting, interviewee 1 experienced a form of confirmation, as he was assured that the best thing to do if he should ever get threatened, is to be cooperative and not try to play the hero. Interviewee 2 commented, that despite not learning anything new, the course offered a repetition of the knowledge he already had, making it also a form of confirmation. Interviewee 3 expressed his surprise to how much help a family member may need after having been involved in a crisis, likely changing the way he would approach such a situation. He also commented on useful it was to learn about what to do in case of terror, referring to hiding, running away, locking, and attacking as a last resort. More generally, he explained that he learned a lot of new things through this course, and that he now knows that there is something he can do if he sees a situation. Interviewee 4, with arguably the most amount of previous knowledge about crisis management was the only one not commenting in any way that would suggest that he himself might have learned something. However, he, as well as interviewees 1, 2, and 3, commented on what he would expect the course to teach lay public without previous knowledge.

Interviewee 1 believes that, by going through this course, a lay person will gain a basic understanding of what should be done during a crisis, or how to be prepared for one. Because of the way the e-learning course is set up, a lay person should gain basic knowledge that can be used in any kind of situation. He also suggests that one will learn how to think about crisis, being more aware that a situation may not always be the way one expects. Interviewee 2 answered along the same lines, also believing that a lay person can learn to think about crisis and mentally prepare for situations that may happen to him/her. He also believes that the course can start a conversation about crisis, which suggests that people will become more aware of potential crises. With a different focus, interviewee 3 believes that the things most likely remembered by the lay public will be to call emergency services, how to take care of stress and prevent panic, and how to best gain control in a situation. Interviewee 4 believes that taking leadership will be something lay persons may remember, as well as that they will become aware that some people may freeze or panic when crisis strikes. Finally, he believes that people will be more likely to prepare themselves. This shows again, how the learning outcome from this course may vary between different people, making it difficult to pinpoint any specific part that is of most importance and people will learn most about.

7.0 Conclusion

This research was built around the believe that the lay public can more often than not be a major resource in the response to, and management of crisis. Having studied societal safety for one and a half years prior to setting out on this research has convinced me, that there is much a lay person can learn to be more effective when handling crises. The e-learning course 123CrisisTraining was developed by a number of professionals having vast experience in crisis management and seemed a good alternative to teaching the lay pubic about crisis. Having received permission to use 123CrisisTraining in my research, I set out to answer the following research problem:

"Is it appropriate to use an e-learning course to teach the lay public how to respond to, and manage a crisis, and improve their ability and willingness to help?"

Initially planning to make this a quantitative study that compares the impact of the e-learning course between pupils in different parts of the country, an abundance of refusals and general disinterest in participating in the study forced me to take a different approach. In the end, this has become a study looking at data collected from students at the University of Stavanger through a questionnaire and interviews, as well as relevant literature. A brief summary of the main findings, as well as the conclusions drawn from them is given below.

7.1 What role can, and should, the lay public take in the response to crisis?

Theory suggests that governments and emergency services tend to see the lay public as a passive group during crisis that needs help (Helsloot & Ruitenberg, 2004). The literature study has shown that in the case of Norway, it is hardly the case as regulations and laws are in place to enforce the active participation of the public in crisis management. The public is expected to inform itself and prepare for crisis that are likely to strike. This also includes the need to partake in the active prevention of crisis, and should they still occur, the management and mitigation of it. As examples in both literature and from the interviewees has shown, the lay public can participate by doing many things, including taking the lead, getting an overview and analyzing the situation, search and rescue efforts, first aid, informing other, evacuating, or helping emergency services with their man power or resources, just to name a few. Although 123CrisisTraining covers several actions, the possibility to help goes beyond that which is described there. From the numerous findings and examples given in the empirical evidence, it is clear that the lay public can, and should play an active role in crisis management as long as appropriate. This means as long as they do not put themselves into dangerous situations and/or a situation where they do not feel confident in their role. The more prepared they are, and the more aware they are of the various things they can contribute with, the more likely it may be for the lay public to be able to help in crisis.

7.2 In which way should the e-learning course be set up in order to teach the lay public how to respond to crisis?

The general set up of the course seems to exhibit many of the qualities that make an e-learning course a good choice of learning material. It allows a person to selectively go through the content, making it possible to look at those areas one is most interested in, which some interviewees expressed their appreciation for. Including the group work exercises, the course also combines reading, visual, speaking, hearing and active components, which theory suggests being the best form of learning (Hills, 2003). However, for the lay public, it is uncertain how group exercises can be implemented. The small exercises at the end of each part also offer a good way to repeat and actively test one's knowledge, which interviewees were happy about, as it is a form of immediate confirmation that the material was understood. Three of the four interviewees argued that that the information about the acute crisis phase needs to be more detailed and talk about what one can do in different situations. On the other hand, the interviewees would take out most of the post crisis phase, as it is too focused on what organizations can do. They would only keep information about basic support a lay person can give to others or can receive if needed, and how to cope with stress. For most other parts, interviewees had different opinions about the significance of the content, as one interviewee might think of it as important, and the other as less significant. As a conclusion, it may an improvement of the course if the acute phase would include more detail, and the information in the post-crisis phase may be reduced to the most important parts. However, as this is based on the opinions of 4 interviewees, of which 3 have received several types of crisis related training before, it cannot be said with certainty. The logistical setup, on the other hand is suggestively adequate the way it is, as interviewees liked it, and literature points to this way of presenting e-learning as positive. Although, it is important that the lay public would also be able to perform group exercises.

7.3 What results may be expected from completing the e-learning course?

Learning results are dependent on the usefulness of the content, the context in which learning takes place, and the commitment of the learner (Sommer et al., 2013, pp. 157-158). The content has been discussed earlier and has generally many positive aspects. In case of three of the four interviewees, the content was however nothing new as they had various types of crisis training from before. The context for the interviewees was also a disadvantage as they had to go through 123CrisisTraining in the middle of their exam period, which may have reduced their commitment to it. On the other hand, as these are the only four of over 700 people who agreed to partake in the research and look at the e-learning course, it may suggest that they are more committed than the average lay person may be.

In case of actual results, the previous training from three of the four interviewees meant that they gained relatively little or nothing from taking this course. The remaining interviewee expressed however that he learned much that he did not know before, and that he recognizes now that he can actually contribute in the management of different situations (Interviewee 3). Comprehending an existing practice like this is one of the three categories that describe learning, the other two being changes in structures, behaviours or working methods, and confirmation of existing knowledge (Sommer et al., 2013, p. 161).Two of the interviewees also described a confirmation of their existing knowledge, as one remembered many things he learned before (Interviewee 2), and the other got confirmed that the actions he would have taken in case of him being threatened are the right ones (Interviewee 1).

7.4 Final conclusion and further research

As a final conclusion, and to answer the question asked by the research problem, it is difficult to say whether it is appropriate to use an e-learning course to teach the lay public how to respond to, and manage a crisis, and improve their ability and willingness to help. The Norwegian lay public consists of a large number of people. With only four interviewees, there were already clear differences in their opinion about the course, what was important, and how much they learned from it. This study has no basis for a generalization of its findings, especially as three of the four interviewees that were used as primary sources did not meet the hoped for requirements of having as little crisis training as possible before taking 123CrisisTraining. In terms of the e-learning course, the research showed that it contains many positive features, but if it should be used to teach the lay public, certain alterations may make it more useful and appropriate for this group.

To be able to gain a clearer picture of the impact of 123CrisisTraining, more research needs to be done with a large population sample. This way it might be possible to pinpoint those parts of the course that are of interest to most people in the population.

It may also be of interest to do a research that is closer to the one originally planned, where one looks at potential differences between demographic and geographic groups. This might help answering whether a single e-learning course would be appropriate for a large population, or if courses should be more customized to certain groups.

Lastly, it would also be interesting to see whether there are other, similar courses, and find out about the differences and similarities. Comparing different courses and finding people's preferences may be helpful in identifying in what makes a good e-learning course.

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Appendix A

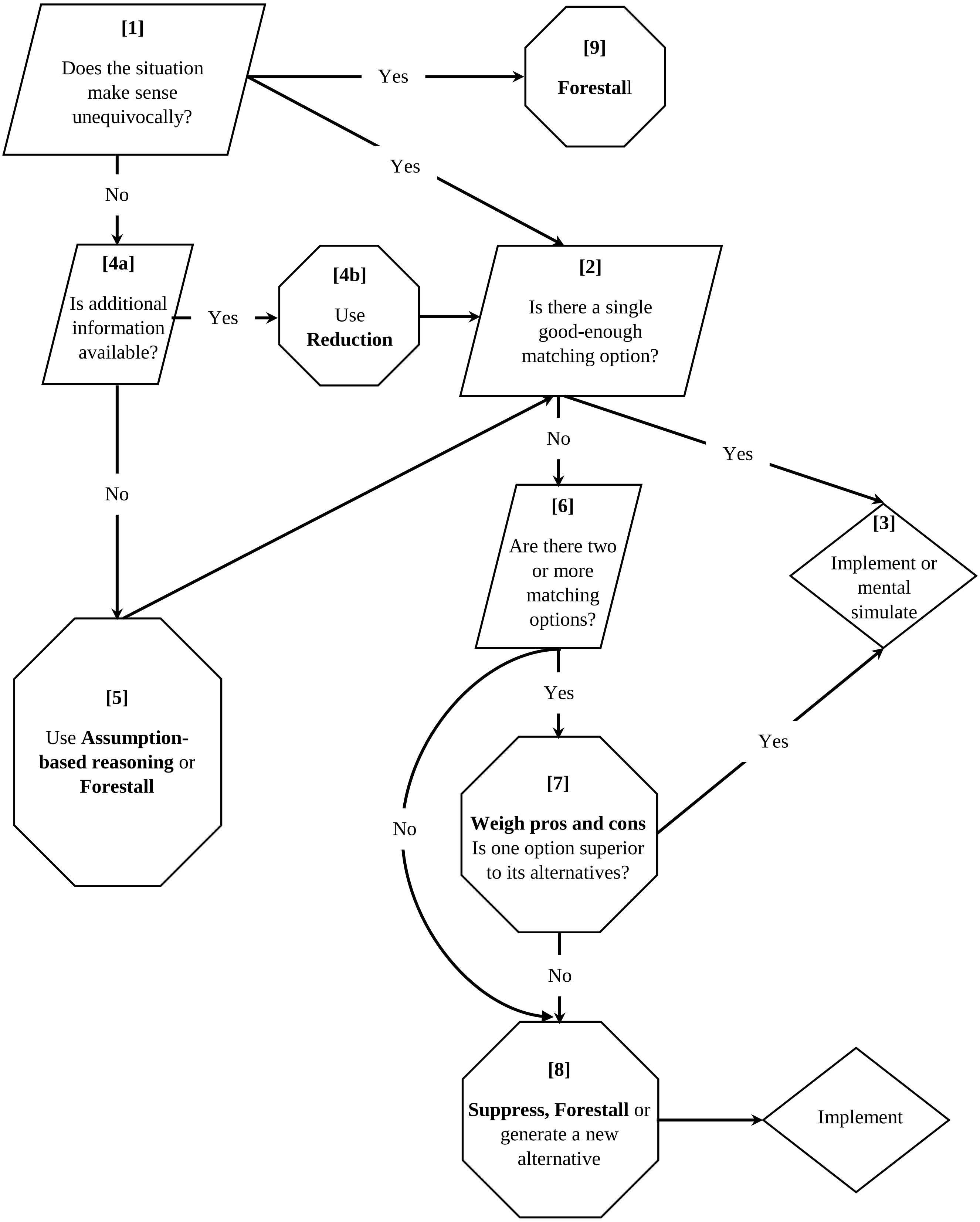

Figure 11 Coping with uncertainty: The R.A.W.F.S. heuristics hypothesis (Lipshitz & Strauss, 1997)

Appendix B

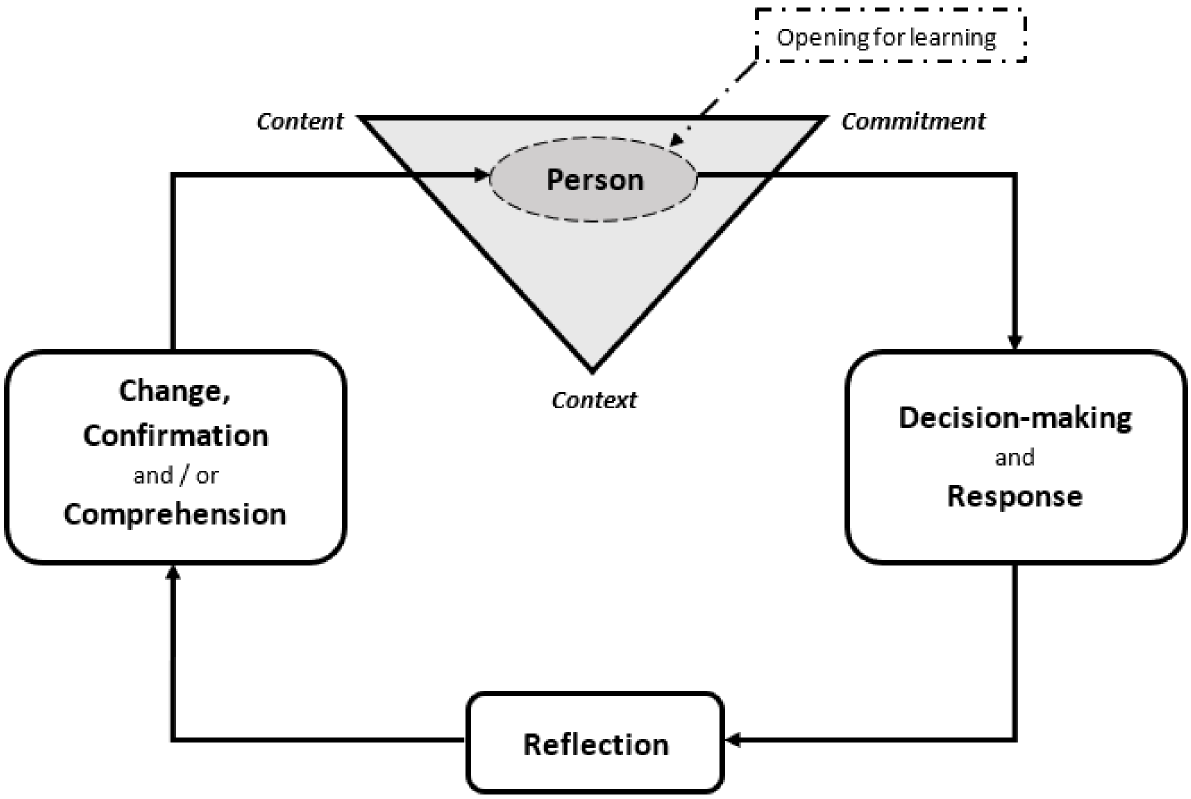

Figure 12 Learning in emergency response work (Sommer et al., 2013)

Appendix C

The questionnaire as seen in a browser:

Slide 1:

Introduction

This survey is part of a master thesis in Societal Safety that aims to analyze whether an online e-learning course can improve a person's ability and willingness to act during a crisis. The first 100-120 participants will receive access to the e-learning course 123CrisisTraining (course in Norwegian). Half of the participants will be asked to go through this course before the 16th of April and fill out another survey a few weeks later (latest date: 7th of May). If you want to be part of this group, please indicate this below. If there are not enough students who indicate that they want to be part of this further study, I will have to choose the remaining participants at random.
By participating in this survey, you will agree to not make copies of the content of the 123CrisisTraining course, neither for yourself or for 3rd parties.

You will be asked to share some of your personal information, that is your email address and date of birth. This information will be handled confidentially and will be used to give you access to the e-learning course and second survey, and to contact you if we have further questions. After the study is finished all the personal information will be deleted. Results will be used in the thesis without association to a specific person and everything will be strictly confidential.

I want to interview a few people after they have answered the second survey. If you are open to be contacted about an interview, please indicate this below. By agreeing to be contacted, you do not agree to actually participate in an interview, only to be contacted to discuss your participation.

Thank you for your attention.
Daniel Kornherr

Previous | 11% | Next

Slide 2:

I want to be part of the research study group, carrying out the e-learning course by the 16th of April and answer the second survey prior to the 7th of May

- Yes
- Only if not enough other students want to be part of it

I am willing to be contacted and asked about whether I want to participate in an interview

- Yes
- No

Previous | 17% | Next

Slide 3:

About yourself

Name

Date of birth (yyyy-mm-dd)

Gender
- Male
- Female

Study program currently attending (i.e. Bachelor of Petroleum Engineering)

Occupation before attending current study program (i.e. pupil, student studying ..., engineer, teacher, etc.)

E-mail address

Previous 23% Next

Slide 4:

Understanding the meaning of crisis

1) Out of the following situations, which one(s) would you define as a (potential) crisis?
- You are sitting at an airport and see the emergency lamp at a handicap toilet light up, but no one reacts to it and no airport personnel responds to it.
- You hear shot-like sounds at the University.
- The fire-alarm goes off at University or in a shopping center/store.
- A car runs into the back of another car on the motorway. Both drivers exit the vehicle seemingly unharmed.
- A person slips and falls down a couple of stairs.
- Natural events like floods, forest fires, storms, etc.

2) Out of the following situations, which one(s) would you respond to and do something about it?
- You are sitting at an airport and see the emergency lamp at a handicap toilet light up, but no one reacts to it and no airport personnel responds to it.
- You hear shot-like sounds at the University.
- The fire-alarm goes off at University or in a shopping center/store.
- A car runs into the back of another car on the motorway. Both drivers exit the vehicle seemingly unharmed.
- A person slips and falls down a couple of stairs.
- Natural events like floods, forest fires, storms, etc.

Previous 29% Next

Slide 5:

Evaluating a person's ability and willingness to act during a crisis

When referring to a crisis in this survey, it is referred to a situation that can be described as "a set of circumstances in which individuals, institutions or societies face threats beyond the norms of routine day-to-day functioning, but the significance and impact of these circumstances will vary according to individual perception". This will include anything from a person falling down the stairs and getting hurt, car accidents, fires at home or in public areas like shopping centers, natural disasters, or terrorism, just to name a few.

When answering any of the questions, think of situations you may have been in before yourself, and about what you did and why you did it. There are no wrong answers, and the most important part is that you answer truthfully.
If you are unsure about an answer, choose the one that seems most appropriate to you, even if it doesn't fit a 100%.
At the end of the questionnaire, you will be able to explain any answers or write other comments if you wish to do so.

Previous 35% Next

Slide 6:

Your experience with crisis

3) I have been in a crisis situation before (as victim, helper, or onlooker)
- Yes
- No

4) I know someone who has been in a crisis before (as victim, helper, or onlooker)
- Yes
- No

5) I have actively participated in the management of a crisis before
- Yes
- No

6) I am, or have been, an active member of an organization that works with crises (ex. Red Cross, etc.)
- Yes
- No

Previous 41% Next

Slide 7:

Your crisis management training

7) I have received some form of training that taught me how to respond to crises
- Strongly Disagree (no training)
- Disagree (very little training)
- A little training
- Agree (quite some training)
- Strongly Agree (a lot of training)

8) I have received first aid training
- Yes
- No

Previous 47% Next

Slide 8 (only shown if “Yes” is selected in question 8)):

First aid training

8.1) The last time I received first aid training was
- less than 1 month ago
- 1-3 months ago
- 4-6 months ago
- more than 6 months ago

8.2) I attended the first aid training voluntarily (not just because I had to as part of obtaining my driver's license)
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

8.3) I still remember my first aid training well enough to use it confidently in crisis
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Previous 52% Next

Slide 9:

9) I am aware that there are things other than giving first aid that can be useful during crisis
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

10) I have received crisis-related training other than first aid training
- Yes
- No

Previous 58% Next

Slide 10 (only shown if "Yes" is selected in question 10)):

Other crisis-related training

10.1) What kind of training have you received?

10.2) The last time I received this training was (if different types of training, answer for the most recent one)
- less than 1 month ago
- 1-3 months ago
- 4-6 months ago
- more than 6 months ago

10.3) I attended this training voluntarily (not because I had to as part of, for example, work)
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

10.4) I still remember my training well enough to use it confidently in crisis
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Previous 64% Next

Slide 11:

Thoughts about crisis

11) I think it is likely that I will find myself in a crisis one day (as victim, helper, or onlooker)
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

12) I have thought about what I would do if I would find myself in different crisis situations (ex. car accident, fire, flooding, avalanche, terrorism, etc.)
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

13) I think it is important for me to actively participate in the management of a crisis before the emergency services arrive
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

14) I think it is important to help once the emergency services have arrived
- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Previous 70% Next

Slide 12:

During a crisis

15) My crisis management strategy can best be described as

- ○ Get an overview over the whole situation first, then act.
- ○ Act as soon as I see something I can do. It is important to act quickly.
- ○ Unsure.

16) Based on my personal experiences in critical situations, I would approach leadership in a crisis situation by

- ○ taking the lead
- ○ waiting until someone else takes the lead
- ○ doing the things that need to be done, but I do not give orders to others or wait to receive orders

17) I would act first and inform emergency services later

- ○ Strongly Disagree
- ○ Disagree
- ○ Undecided
- ○ Agree
- ○ Strongly Agree

18) I would help in a crisis no matter the circumstances (assuming that helping does not put me in immediate danger)

- ○ Strongly Disagree
- ○ Disagree
- ○ Undecided
- ○ Agree
- ○ Strongly Agree

[Previous] 76% [Next]

Slide 13 (only shown if “Undecided”, “Disagree”, or “Strongly Disagree” is selected in question 18)):

18.1) What might be a reason/reasons for you not to help?

- ☐ I am busy and might miss an appointment because of it
- ☐ It is raining/windy and would be inconvenient to help
- ☐ There are other people around that can help instead
- ☐ I am not sure how I can help
- ☐ I do not like the person(s) that might need my help
- ☐ No one else is helping
- ☐ I might make mistakes
- ☐ Other

18.2) If you selected "Other" as an answer above, please elaborate

[Previous] 82% [Next]

Slide 14:

19) I would be more willing to help if the crisis affects someone I know

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

20) I would be more willing to help a woman over a man

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree

Previous 88% Next

Slide 15:

Comments about my answers or the survey in general

Previous 94% Next

Slide 16:

End of Survey
After submitting this survey, you will not be able to go back and change your answers.

Thank you for answering this survey!
Your participation is essential not only for my thesis, but also in the quality check and development of a crisis training course that can help improve everyone's ability and willingness to help others in crisis.

I will be in contact with you shortly via the e-mail you provided to inform you about further participation in this study as described in the beginning of this survey.

Thank you again for your participation!

Previous 100% Finish

Appendix D

Interview guide questions:

1. Hva synes du om 123krisetrening? Hvordan var det å gå gjennom kurset?

- Var det for mye/lite informasjon, kjedelig, spennende, etc.?

2. Hva var nytt for deg, og hva var informasjon du allerede kjente til?

3. Var det noe som var mer relevant/nyttigere for deg enn andre deler? Hvorfor?

4. Ville du ha tatt noe ut for å lære mer om et annet tema istedenfor?

5. Hvilke deler av kurset kunne du tenke deg å anvende aktivt framover?

6. Hva har du lært om ting du kan gjøre før, under eller etter en krise for å bistå i krisehåndtering?

7. Føler du deg bedre forberedt til å kunne handle i en krise nå? Hvordan?

8. Hvordan forstår du konseptet «krise» nå? Er det annerledes enn før?

9. Hva synes du er sannsynlige situasjoner for deg å være involvert i? Hvordan ville du håndtert forskjellige situasjoner?

10. Hvor viktig synes du er din involvering i håndtering av en krise? Hva med større kriser som flom, skogbrann, etc.?

11. Hvis du har noen erfaringer fra kriser du håndterte før, kan du fortelle litt om utfordringer du ha hatt i denne situasjonen?

11.a) Føler du at det ville ha vært lettere hvis du ville ha godt gjennom kurset på forhånd?

12. Hva synes du om å få folk til å lære om det som står i kurset/om krisehåndtering?

13. Til slutt, kan du oppsummere hva du synes de 2-3 viktigste deler av kurset er?