The Evaluation of a VR Training Against Ethnic Profiling

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6 June 2022

UNIVERSITY OF TWENTE.

The Evaluation of a VR Training Against Ethnic Profiling

Master Thesis

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06-06-2022

Preface

Before you lies the thesis 'The Evaluation of a VR Training Against Ethnic Profiling'. This thesis was written as part of my graduation from the master Psychology of Conflict, Risk and Safety program at the University of Twente. This research was commissioned by the National Police of the Netherlands.

I would like to thank a number of people for making this research possible. First of all, my supervisors Peter de Vries, from the University of Twente, and Bas Böing, from the Police. Without them, this research would not have been possible. Thank you for your great collaboration and helpful feedback on every process in the study. I would like to especially thank Bas Boing for his help with the data collection. Secondly, I would also like to thank my second supervisor Miriam Oostinga from the University of Twente for her feedback on the design of the research.

I would also like to thank Tom Hoheker and Ferry Hoogeveen of the Amsterdam Police, and Roeland Post and Jan Maarsingh of the Police Academy. They were essential for recruiting participants in this study. And of course, I also want to thank all the participants, police officers in the field and students of the police academy, for volunteering their precious time.

Finally, I would like to thank my friends and family for their support and motivational conversations. They have helped me to complete this thesis.

I wish you a lot of pleasure reading this thesis.

Els Mulder

Enschede, 6 June 2022

Abstract

Ethnic profiling is a worldwide problem. Police officers should become more aware of ethnic profiling and what can be done against it. The first step is to make ethnic profiling negotiable among police officers. This can be done through a VR training. In this research the effectiveness and implementation of a VR training is analyzed. In this research (N = 103) a 2x3 design is used. With experience (experience vs. unexperienced) and presentation (2D vs. 3D vs. control) as the independent variables and knowledge, attitude, and psychological safety as the dependent variables. The research also consists of a 2x2 design, with experience and presentation (2D vs 3D) as the independent variables and presence, engagement, and fun as the dependent variables.

     The training starts with an interactive simulation in VR or on a smartphone. Afterwards a discussion is created with a conversation leader. The choices made by the participants are reviewed and the framework of action made by the Police is discussed. After the training, each participant receives a questionnaire which is analyzed.

     The results seem to indicate that the that the training has an effect on the knowledge and attitude of police officers towards ethnic profiling and the feeling of psychological safety. The use of VR makes participants feel more present, engaged, and creates more fun in the simulation compared to the same simulation on a smartphone. The VR training could be a good intervention to create more awareness for ethnic profiling among police officers but further research is necessary.

Introduction

"On May 25, Minneapolis police officers arrested George Floyd, a 46-year-old black man, after a convenience store employee called 911 and told the police that Mr. Floyd had bought cigarettes with a counterfeit $20 bill. Seventeen minutes after the first squad car arrived at the scene, Mr. Floyd was unconscious and pinned beneath three police officers, showing no signs of life."(Hill, Jordan, Willis, & Stein, 2020)

George Floyd was a 46-year-old black man who was killed due to brute police force in the United States. His death created a lot of commotion worldwide. His death was captured on video by witnesses and shared widely on social media. The video footage resulted in a variety of discussions about ethnic profiling all around the world. People started to protest against ethnic profiling in so called Black Live Matter protests all over the world.

Ethnic profiling is not something that only happens in the United States it also happens in the Netherlands. Another example of ethnic profiling is the well-known case of the Dutch rapper Typhoon. In 2016 he was stopped by the police because they thought it was suspicious that a person of color was riding in an expensive car (AD, 2016). After his openness about ethnic profiling a lot of other well-known Dutch people told their story about their experience with ethnic profiling.

Ethnic profiling has been a greatly discussed topic within the police force in the Netherlands. The Black Live Matter protests highlighted this problem even more. Amnesty International (2013) have found in their research that the way the Dutch police officers conduct proactive police work forms a risk for human rights in the Netherlands. Proactive police work occurs when police officers act on their own initiative and not on behalf of, for example, the control room. Police officers can choose who they want to stop. Statistics show that ethnic minorities are more often submitted to police checks than others. Lamers (2015) concludes in his research that ethnic background plays a considerable role in the choice of police officers to stop and search people. His research was done in the Netherlands in the police-unit Oost-Brabant where he asked police officers question through a survey. According to Amnesty International (2013) ethnic profiling is a form of discrimination that contributes to the stigmatization of ethnic minorities. Besides the point that ethnic profiling is discriminating it is also bad for the image of the police. Amnesty International gives two reasons. Firstly, the legitimacy of the police can be questioned when they would profile based on ethnicity. Secondly, ethnic profiling could have a negative effect on the relationship between the police

and citizens. Ethnic profiling could decrease the trust in the police by citizens. There is a great chance that citizens who feel inferior because of the actions of a police officer on the street will not seek help from the police and are not open to help the police (Amnesty International, 2013).

Fortunately, ethnic profiling within the police force is generally something that does not happen deliberately. Smith and Alpert (2007) argue in their research that ethnic profiling occurs from unconscious stereotypes that people create throughout their lives. This could be bad experiences with people with a migrant background or prejudice that is imposed by society. However, those stereotypes are most often not a representation of reality. An earlier study of stop and search practices has found that 72.9 percent of the people stopped by the police due to speed violation were black even though overall, according to a visual survey, 74.7 percent of speed violators were whites and only 17.5 percent were Black (Smith & Alpert, 2007).

The National police force of the Netherlands has implemented different interventions because it is important to make police officers more aware of ethnic profiling and it is important to create tools to reduce and prevent ethnic profiling (Amnesty International, 2013; Kuppens & Ferwerda, 2019). Landman and Sollie (2018) give a list of some of these interventions: the use of bodycams, implementing (in)formal guidelines, implementing stop forms, investing in diversity, reducing implicit prejudices and more proactive checks. Unfortunately, their research shows that not enough research has been done into the effectiveness of the measurements to conclude that they are effective. Because the effect of the interventions created are not clear and ethnic profiling is still a significant problem, a new intervention was created with the use of technology.

A 360°-Virtual Reality (VR) training could be another intervention to reduce implicit prejudice and attitudes. The goal of this training is to give police officers more knowledge about ethnic profiling and create a safe work environment where ethnic profiling can be openly discussed. This learning method is interactive and can be used within a group. During the learning method the participants get to experience an interactive movie in which they can make their own choices through VR-glasses about stopping and searching someone. After the experience, the choices made are discussed in a group. In addition to providing knowledge, participants are also encouraged to discuss the substantiation of their choices with each other.

The goal of this research is to examine the effectiveness of this 360°-VR learning method. Because, as Landman and Sollie (2018) concluded, the effectiveness of most

interventions created to prevent ethnic profiling is not researched. It is important to first analyze the effectiveness of an intervention before implementing it into the organization. This research will also investigate what would be the most effective format to implement the learning method on.

The research question is as follows: *How effective is the VR learning method and what is the most effective way to implement this method?*

Changing Behavior with Virtual Reality

Virtual Reality (VR) can be used to change behavior. VR has been used to change social behavior by letting people experience the perception of other people. An example for this is the research that Peck, Seinfeld, Aglioti, and Slater (2013) have done. They researched racial bias and found that implicit racial bias significantly decreased for people who have seen themselves in a virtual mirror with a black body. Further research shows that the effects of the experiment at least are effective for one week (Banakou, Hanumanthu, & Slater, 2016). This shows that VR can be used to decrease the amount of discrimination or ethical profiling through letting people experience the world through someone else's perspective, even when it is for a short period of time.

However, changing someone's perspective is not the only way to use VR to change social behavior. VR can be used to change someone's view and attitude towards a subject when a participants views the effect of their choices. Joo, Ahn, Bailenson, and Park (2014) have conducted an experiment to reduce unnecessary waste. Participants would experience the cutting down of a tree in VR and see the effects this had on the forest in which they stood. Afterwards the result showed that the participants who had participated in the VR experience used less paper than the participants who only received a pamphlet about paper waste. This shows that a VR experience can cause a noticeable increase in behavior and in this case was more effective than a written communication method.

The goal of the VR learning method is to reduce implicit prejudice and attitudes. The VR learning method creates a realistic experience of the reactions of people towards ethnic profiling for the police officers. They will experience how important their choice are and how they could change a conversation. During the VR learning method the participants will talk about everybody's experience in the VR simulation. Hopefully through this the participants will learn from each other and change their attitude towards the subject of ethnic profiling. Consequently, it is hypothesized that:

H1: Police officers who have participated in the VR learning method have a more positive attitude towards the subject of ethnic profiling than police officers who did not participate in the training.

Influence of Work Experience on Changing Behavior

A difference in learning for experienced police officers and for police officers fresh out of the academy has never been researched. But because of the shift from the National police to a more diverse police team the difference between the old and new police officers became clearer (Rohmensen, 2019). The police force has their own culture and police officers who have more work experience perceive the police culture stronger than police officers with less experience (Rohmensen, 2019). Changing the behavior of experienced police officers could be more difficult because of this. Resnick, Palmer, Jenkins, and Spellbring (2000) show that age is an indicator for how people perceive themselves to be capable of changing their behavior. Older adults perceive themselves as less likely to change their behavior. Young adults are more open towards changing their behavior. Because of these reasons it seems likely that the VR learning method would have more effect on the unexperienced police officers than on the experienced police officers. Unexperienced police officers are more likely to change their attitude positively than experienced police officers, because of their openness to changes their behavior. This result is the following hypothesis:

H2: The VR learning method creates a more positive attitude towards the subject of ethnic profiling among the less experienced police officers than among the more experienced police officers.

Enhancing Knowledge

To increase the awareness of the subject of ethnic profiling and implicit biases regarding ethnic profiling the knowledge about the subject should be increased. More knowledge results in more awareness. To increase the knowledge of police officers the National police force has created a framework of action. This framework of action has been distributed among all police officers.

    Framework of action. The framework of action is an official policy for police officers to use for proactive checking (Nationale Politie Nederland, 2017). The goal of the framework

of action is to reduce ethnic profiling among police officers. The framework of action creates clear guidelines on proactive checking. The following objectives are formulated in this:

1. Selection must take place based on objectifiable deviant behavior;

2. The reason for the check must always be explained in an understandable way;

3. The treatment should always be professional;

4. Reflection should be regularly applied to one's own and group actions.

This framework of action is distributed among the police officers and taken into account in performance reviews. Especially point four is important in creating awareness of implicit biases among the police officers. Point one talks about objectifiable deviant behavior. What this exactly entails is researched by Kleijer-Kool and Landman (2016) in their research into proactive checking. According to them the following indicators point to a justification:

- Information that concretely point to criminal behavior;

- Behaviors and circumstances that fit within a modus operandi;

- Recent antecedents that fit a suspicion of a specific criminal offence;

- The presence of citizens at a certain ('criminal') place at a certain time;

- The discovery of a criminal offence;

- A control with traffic enforcement as the goal; and

- Low-threshold interventions: addressing and asking questions (Kleijer-Kool & Landman, 2016).

Indicators that do not point to a justification are:

- Intuition or gut feeling;

- Behaviors of citizens in response to the presence of the police;

- Antecedents that do not fit a specific suspicion;

- Out-of-placement of citizens; and

- Behaviors who, for unclear reasons are interpreted as suspicious (walking without a purpose, etc.) (Kleijer-Kool & Landman, 2016).

How effective this new framework of action is against ethnic profiling and implicit biases is not scientifically researched.

This framework of action will be used in this study to analyze the knowledge and attitude of the participants. The whole framework of action will be explained and discussed with the participants. Because of this, it is likely that the participants in the VR training will have more knowledge about the subject of ethnic profiling than police officers who did not participate. This results in the following hypothesis:

H3: Police officers who have participated in the VR learning method have more knowledge about the subject of ethnic profiling than police officers who did not participate in the training.

Psychological Safety

It is important to research if the VR training makes ethnic profiling a topic that can be openly talked about with and among police officers. This is only possible if the psychological safety in the organization is good. Psychological safety is the extent to which the environment is evaluated as safe for confronting differences with others in ways that lead to learning and change.

Because of the reorganization of the police force the workspace has felt less safe for police officers (de Vries & Ufkes, 2016). Research of the National Police Association (2015) shows that 70 percent of the participants indicated that collegial trust has decreased. It is important that there is a safe working climate for the police officers. The VR training therefore wants to ensure that people can talk openly with each other without judging each other. During the training participants will discuss their choices with each other. It is hoped that after the training, officers will feel safer to speak their mind. This is hopefully achieved by creating an open atmosphere during the discussion and allowing everyone to express their opinion. The following hypothesis is created:

H4: After the VR learning method the participants will feel safer to talk about ethnic profiling than before the training.

Virtual Reality

VR is a tool that has been around for many years. VR is a reality where everything seems the same as in the real world, but anything is possible. Due to VR-glasses users are being emerged into a new world. VR can be used for many different things. For example, for therapy and training to reduce or get rid of phobias or post-traumatic stress. It can also be used to create scenario's to learn new skills in ways that would be dangerous in real life (Bailenson, 2018; Cornet, Den Besten, & Van Gelder, 2019). VR is a tool that can be used for educational purposes because it can be interactive and realistic. Making VR interactive creates a new dimension. When the choices of VR users influence the upcoming events, the illusion is

created that choices matter, and the VR world feels more realistic (Spanlang, Frölich, Descalzo, Antely, & Slater, 2007).

There are especially two factors that differentiate VR from the use of a smartphone: engagement and presence. Engagement is the degree to which the learner is engaged or immersed in the virtual environment while blocking stimuli from the real world. This can be achieved by using VR glasses. It is not possible to create the same feeling of emersion on a smartphone. Presence refers to the participants perception of this immersion. This concerns the feeling that the participant is actually in the virtual environment, rather than in the real environment (Cornet et al., 2019). Although presence can also be important in other media, such as television, it has been extensively researched especially in the context of VR due to the stronger immersive nature of VR. It has been found that the degree of engagement and presence has a positive influence on the motivation and involvement in the learning process of the participants (Fox, Arena, & Bailenson, 2009; Witmer & Singer, 1998), and that the experience of presence has a positive influence on the effectiveness of virtual treatments and learning environments (Fox et al., 2009).

Cornet et al. (2019) also conclude that VR can be a suitable tool for information and training among target groups that have a low level of motivation for traditional methods. Reason for this is that VR also creates entertainment for the participants. VR is fun and something people would like to experience. It is a great way to address difficult issues like ethnic profiling, make issues like this more negotiable and learn from the experience in VR.

Because engagement, presence and fun are important factors for the success of education and VR seems to create these three factors more than the use of a smartphone the following is hypothesized:

H5: The VR training is more effective on engagement, presence and fun than the same training on a smartphone.

Method

The National Police in the Netherlands has asked the University of Twente to study the implementation of a new learning method using VR to make ethnic profiling more negotiable among police officers.

Design and Participants

Most of the research is conducted with a 2 (Experience: inexperienced vs. experienced) x 3 (Presentation: 2D vs. 3D vs. control group) between-participants design. Experience and Presentation are the independent variables. The dependent variables are the knowledge about ethnic profiling, the attitude towards the subject of ethnic profiling and the feeling of psychological safety. A small part of the research will only focus on a 2x2 design with difference between 2D and 3D and experience as the independent variables and engagement, presence, and fun as dependent variables.

The participants were police officers from different police stations through the Netherlands, but predominantly in the city of Amsterdam, and police officers in training at the Police Academy. Overall, 103 police officers participated in this research (74 male; 29 female), with a mean age of 31 ($SD = 9.85$). Only participants who completed the whole survey have been used in this study. The distribution between the participants can be seen in Table 1.

Table 1. Distribution between participants.

		Presentation		
		2D	3D	Control
Experience	Not experienced*	**24** participants	**22** participants	**14** participants
	Experienced	**14** participants	**22** participants	**7** participants

*Working experience is less than 5 years, education included.

Procedure

Start of the experiment. A group consist of approximately 8-12 participants. At the start of the experiment the participant were told that there are three different conditions and that they would be randomly put into a condition. The participants were also told that the conversation leader should not know the condition they have participated in and to remember

a code shown to them at the end of the simulation. The code told the choices the participants had made in the simulation. The conversation leader was blind to the conditions in this experiment to prevent bias.

The participants in the three groups were expected to do different tasks. Participants in the control condition received a questionnaire to fill in. The participant in the 2D condition received a smartphone with the simulation and headphones. The participants in the 3D condition received a VR headset with the simulation and headphones.

The simulation. The simulation is a game where the participants went through a scenario where their choices mattered for the outcome. The scenario started at station Sloterdijk in Amsterdam. At first the participants found themselves in the shoes of an officer on duty. They were asked to look around and to see if they saw someone that they would like to talk to. They had two minutes to look around and make their choice.

Although there were several people at the station there were only two (groups of) people they could choose to approach. The first possible choice was a group of youngsters hanging around the entrance of the train station. The group of youngsters did not commit any crime but they were noticeable for certain characteristics that are known to attract the attention of police officers, such as age, ethnicity, type of clothing and group composition. The second choice was a man who talked to various people. Judging by the reaction of the people, he was bothering them.

When the participants had made their choice it was up to the participants to determine how far they were willing to go to achieve their goal. In both storylines, the participants were asked at different times and under time pressure to make a choice based on the information available. They got a few other choices such as asking for ID or searching the person. They could also choose to stop the conversation and leave the chosen person(s) alone.

At the end of the simulation the participants were shown a code. There were 10 different outcomes. From 'Alpha' to 'Juliet'.

The discussion. When the 2D and 3D conditions were finished with the simulation they would go to the conversation leader to talk about the simulation and their choices. In the beginning of the research the two groups were separated when they talked to the conversation leader. Later in the research this was not possible due to the available time. The discussion was recorded with the Sociometric software. This software is made to analyze discussions between participants. The software did not work for our research thus only the first discussions were recorded. The discussion followed the guidelines of the instruction manual

given by Böing (2020) (Appendix B). The discussion started with the question which code the participants received and what mark they would give their choices. Each code represented a unique sequence of choices made in the simulation. At the end of the discussion the framework of action created by the National Police was discussed.

     End of the experiment. After the discussion the 2D and 3D conditions received a questionnaire. This questionnaire was almost the same as the questionnaire for the control condition. However, in this questionnaire questions were also asked about the training and the experience of the simulation. The questionnaire was used to analyze the dependent variables. The full questionnaires can be found in Appendix A.

Measures

There are six dependent variables in this research. At first three dependent variables for the work experience and presentation: the knowledge of ethnic profiling, the attitude towards the subject of ethnic profiling, and psychological safety. Second the three different variables for the experience of the simulation: engagement, presence, and fun. How each variable is analyzed is discussed below. Some measurements contained items that required reversed scoring and some items were only asked in the 2D and 3D conditions because they are about the training.

     Attitude. To measure the attitude of participants towards ethnic profiling several questions are asked about their opinion of ethnic profiling. Four items were created to measure attitude. These items focus on the attitude towards the subject of ethnic profiling. Two items were asked to the control, 2D and 3D condition. An example is: 'Ethnic profiling is a problem'. These two items were asked on a five-point scale from 1 (strongly disagree) to 5 (fully agree). An attitude score was created by averaging the scores on these 2 items. The Cronbach's α of this scale is .63. How higher the score the better the attitude of the participants in preventing ethnic profiling.

     The other two items were only asked towards the 2D and 3D condition because they were about the effects of the training: 'This training contributes to the fact that I now feel more driven to prevent ethnic profiling' and 'Has your opinion changed after the training?'.

     Knowledge. The variable Knowledge can be split into two different variables. Some questions in the survey focus on the implementation of the knowledge of the participants and other questions focus entirely on the knowledge about the subject of ethnic profiling.

To measure how the participants apply their knowledge in practice factors from the research of Kleijer-Kool and Landman (2016) were used. These factors are formed into 15 items with a five-point scale from 1 (Never) to 5 (Always). This scale measures the knowledge towards ethnic profiling due to the factors the participants use to stop and search someone. Some factors are very broad. Examples are: 'behavior' and 'intuition'. Other factors are more specific. Examples are: 'overrepresentation of certain groups in crime statistics' or 'seeing someone who, in terms of appearance (age, gender, clothing style, ethnicity, etc.), fits into the image of criminal groups'. A knowledge in practice score was created by averaging the scores on these 15 items. The Cronbach's α of this scale is .84. How higher the score the better the knowledge of the participants is about preventing ethnic profiling. Meaning they use better factors to stop and search someone.

To measure the knowledge of the participants on the subject of ethnic profiling the same factors from the research of Kleijer-Kool and Landman (2016) are used. This time 10 items are created on a six-point scale ranging from 0 to 5 (0. I don't know, 1. Never, 2. Rarely, 3. Sometimes, 4. Often, 5. Always). This scale measured the extent to which the factors could play a role into checking someone according to the framework of action. Examples of these factors are: 'Having a gut feeling when seeing one or more people' or 'Behaviors and conditions that clearly fit within an MO'. Two other items were added to measure knowledge. These questions were more direct asking about the knowledge the participant thought it had of the framework of action. These two items were asked on a five-point scale from 1 (strongly disagree) to 5 (fully agree). The question "This training ensures that I know more about (preventing) ethnic profiling" was only asked to the 2D and 3D condition and is therefore left out of the knowledge score. A knowledge score about the subject of ethnic profiling was created by averaging the scores on these 11 items. The Cronbach's α of this scale is .75. How higher the score the more knowledge the participant had about preventing ethnic profiling.

Psychological safety. To measure the psychological safety three items were created. Two of these items were only asked to the participants in the 2D and 3D conditions. These three items asked about the willingness of the participants to talk about the subject of ethnic profiling with others. These questions were asked on a five-point scale from 1 (strongly disagree) to 5 (fully agree). The higher the score, the more psychological safety is present among the participants to talk about ethnic profiling.

Presence. To measure the difference between the effects of the 2D and 3D simulation different questions about the experience in the simulation were asked. Three items were created to measure presence. 'During the simulation I often thought I was at Sloterdijk station', 'during the simulation the situation at Sloterdijk station felt realistic' and 'during the simulation the interaction with the other people felt realistic'. These questions were asked on a five-point scale from 1 (strongly disagree) to 5 (fully agree). These three items together formed a scale for presence. The Cronbach's α of this scale is .73. How higher the score the more the feeling of being present during the simulation.

Engagement. To measure the engagement during the simulation two items were created. These items are also only asked towards participants of the 2D and 3D conditions. These two items are: 'During the simulation I had the feeling that my choices influenced the course of the story' and 'during the simulation I felt involved in the story'. These two items together form a scale for engagement. The Cronbach's α of this scale is .79. How higher the score the more the participant felt engaged in the simulation.

Fun. To measure the amount of fun during the simulation only one item was created, 'I had a lot of fun during the simulation'. This question was asked on a five-point scale from 1 (strongly disagree) to 5 (fully agree). How higher the score the more fun the participant had during the simulation.

Results

Table 2 shows the means, SDs and correlations among the dependent variables. For the variables knowledge, attitude, and psychological safety, only the questions asked among the control, 2D and 3D conditions are used. Questions not asked among the control condition are not taken into account. The reason for this is that the N is not the same among the different questions. The variables presence, engagement and fun are only asked among the 2D and 3D conditions. As can be seen from Table 2, there are positive correlations between the variables presence, engagement, and fun. There is also a correlation between knowledge in practice and knowledge about ethnic profiling, and between knowledge in practice and attitude. However, these correlations are weak.

Table 2. Means, standard deviations, and correlations

Variables	N	M	SD	1	2	3	4	5	6
1. Attitude	103	2.21	0.77						
2. Knowledge in practice	103	3.36	0.27	-.33*					
3. Knowledge about ethnic profiling	103	3.41	0.56	-.22	.37*				
4. Psychological Safety	103	3.33	1.13	-.05	-.12	-.11			
5. Presence	82	3.45	0.85	.01	.09	-.03	-.06		
6. Engagement	82	3.74	0.85	.09	-.03	-.01	-.01	.74*	
7. Fun	82	4.09	0.71	-.04	-.01	-.02	-.01	.68*	.61*

* Correlation is significant $p < 0.01$.

This research is conducted with a 2x3 design and a 2x2 design. First, the focus will be on the 2x3 design. After these result the 2x2 design will be analyzed. To reduce the risk of a Type 1 error and a multivariate analysis of variance (MANOVA) has been conducted with Experience and Presentation as independent variables and knowledge, attitude, and psychological safety as dependent variables. This analysis yielded only a marginal significant multivariate effect of Experience, $F(4, 94) = 2.23$, $p = .072$, $\eta^2 = .087$; Wilks' Lambda = .91. The variable Presentation did not reach significance ($F(8, 188) = 1.39$, $p = .205$, $\eta^2 = .056$; Wilks' Lambda = .89), neither did the interaction between Presentation and Experience ($F(8, 188) = 1.01$, $p = .37$, $\eta^2 = .045$; Wilks' Lambda = .91.

Follow-up analysis show that there is a significant difference between experienced and unexperienced participants and their knowledge about the subject of ethnic profiling after the training. Unexperienced police officers have less knowledge about the subject of ethnic

profiling than experienced police officers ($M_{unexperienced}$ = 3.28, $SD_{unexperienced}$ = 0.65 versus $M_{experienced}$ = 3.59, $SD_{experienced}$ = 0.30; $F(1, 97)$ = 6.32, p = .014, η^2 = .061). There is also a marginal difference between experienced and unexperienced police officers and their feeling of psychological safety ($M_{unexperienced}$ = 3.48, $SD_{unexperienced}$ = 1.08 versus $M_{experienced}$ = 3.12, $SD_{experienced}$ = 1.18; $F(1, 97)$ = 3.11, p =.081, η^2 = .031). Unexperienced police officers feel safer to talk about ethnic profiling than experienced police officers. No significant difference is found between experienced and unexperienced police officers and their attitude towards ethnic profiling ($F(1, 97)$ = 2.46, p = .120, η^2 = .025) and between how they use the knowledge in practice ($F(1, 97)$ = 2.25, p = .137, η^2 = .023).

The null hypotheses of H1, H2, H3, and H4 cannot be rejected when looking at the results of the MANOVA. To research these hypotheses further additional analysis have been done. These results are not as strong because of the insignificant results of the overall MANOVA.

Attitude

To test the prediction that police officers who participated in the VR training have a more positive attitude towards the subject of ethnic profiling (H1), and if there is a difference between experienced and unexperienced police officers (H2), an ANOVA was conducted with Presentation and Experience as the independent variable and attitude as the dependent variable. The ANOVA shows a marginal significant difference in the attitude of the participants and the variable Presentation $F(2, 97)$ = 2.37, p =.099, η^2 = .05. There is no significant difference in the variable Experience $F(1, 97)$ = 0.75, p =.390. A Tukey post hoc test revealed that participants in the 3D group scored significantly higher than participants in the control group (M_{3D} = 2.02, SD_{3D} = 0.74 versus $M_{control}$ = 2.50, $SD_{control}$ = 0.61, p = .039). There is no significant difference in the score of the 3D and 2D group or the 2D and control group. This means that participants in the 3D group score higher on attitude towards the subject of ethnic profiling than participants in the control group.

Knowledge in practice

To measure how police officers apply their knowledge in practice an ANOVA was conducted with Presentation and Experience as the independent variables and the dependent variable knowledge in practice. The ANOVA shows a significant difference in the variable Presentation $F(2, 97)$ = 3.12, p =.049, η^2 = .06). There is no significant difference in the

variable Experience $F(1, 97) = 2.25$, $p = .137$). A Tukey post hoc test revealed that participants in the 3D group score significantly higher than participants in the control group ($M_{3D} = 3.41$, $SD_{3D} = 0.27$ versus $M_{control} = 3.20$, $SD_{control} = 0.25$, $p = .017$). Participants in the 2D group score also significantly higher than the participants in the control group ($M_{2D} = 3.38$, $SD_{2D} = 0.24$ versus $M_{control} = 3.20$, $SD_{control} = 0.25$, $p = .041$). There is no significant difference in the score of the 3D and 2D group. This means that participants in the 3D and 2D group apply their knowledge about ethnic profiling better in practice than participants in the control group. When analyzing each item separately it is shown that the significant difference between the 3D, 2D and the control group lies in the following factors: Intuition and gut feeling. A Turkey post hoc test reveals that these factors are significantly used more often by the participants in the control group. The use of these factors do not improve the prevention of ethnic profiling. Intuition $M_{3D} = 2.91$, $SD_{3D} = 0.74$ versus $M_{control} = 2.10$, $SD_{control} = 0.44$, $p < .001$ and $M_{2D} = 2.97$, $SD_{2D} = 0.97$ versus $M_{control} = 2.10$, $SD_{control} = 0.44$, $p < .001$. Gut feeling $M_{3D} = 3.09$, $SD_{3D} = 0.68$ versus $M_{control} = 2.52$, $SD_{control} = 0.75$, $p = .004$ and $M_{2D} = 3.18$, $SD_{2D} = 0.77$ versus $M_{control} = 32.52$, $SD_{control} = 0.75$, $p = .001$. The results of these factors are shown in Figure 1.

Figure 1. Factors influenced by the variable Presentation.
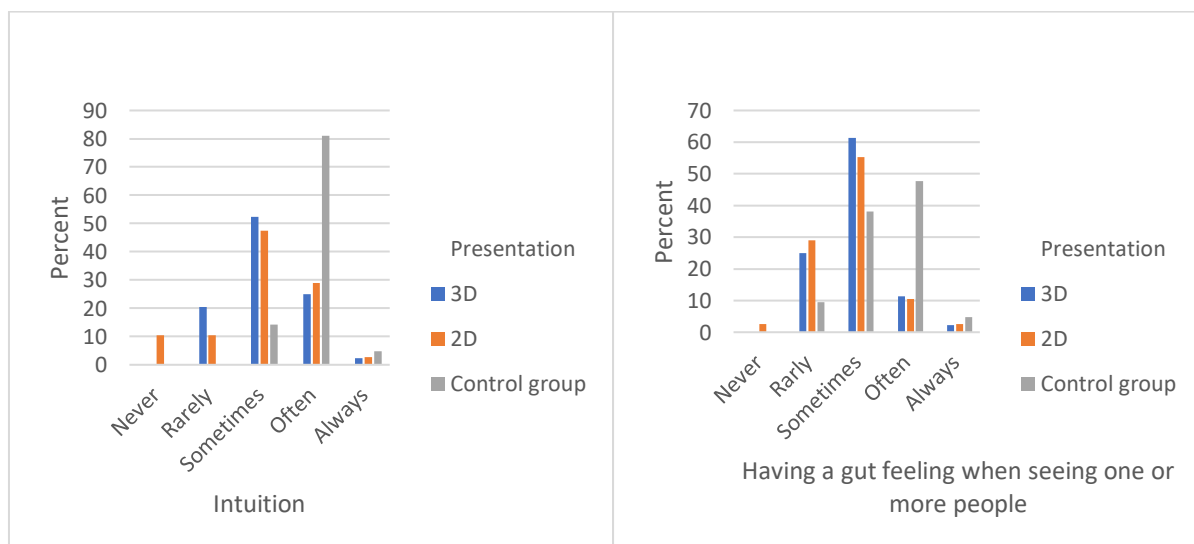
Knowledge about ethnic profiling

To measure the knowledge about ethnic profiling among police officers and to test the prediction that police officers who participated in the VR training have a more knowledge about the subject of ethnic profiling (H3), an ANOVA was conducted with Presentation and

Experience as the independent variables and knowledge about ethnic profiling as dependent variable. The ANOVA shows a significant difference in the variable Experience, $M_{unexperienced}$ = 3.28, $SD_{unexperienced}$ = 0.65 versus $M_{experienced}$ = 3.59, $SD_{experienced}$ = 0.30; $F(1, 97)$ = 6.32, p =.014, η^2 = .06). Experienced police officers have more knowledge about the subject of ethnic profiling than the unexperienced police officers. There is no significant in the variable Presentation $F(2, 97)$ = 0.05, p =.948).

The results show that on the proposition "I know what is meant by ethnic profiling according to the framework of action of the National Police" most participants (79.7 percent) agree with the statement. Table 3 shows the items that show a significant difference between unexperienced and experienced police officers. Experienced officers score higher on all the items, this means that they have more knowledge specifically on these items.

Additionally, we looked at the option "I don't know" that was available in the different answers. An ANOVA is conducted with Presentation and Experience as the independent variables and the question I know or I do not know as the dependent variable. The ANOVA shows no significant difference between the Experience of the police officers ($F(1, 97)$ = 0.99, p =.32). There is also no significant difference between the Presentation of the training ($F(2, 97)$ = 0.22, p =.801).

Table 3. Means and standard deviations for knowledge items that show a significant difference between the two conditions: experienced and unexperienced.

| | Knowledge | | | | |
| | Unexperienced* n=60 | | Experienced n=43 | | |
Item	M	SD	M	SD	p
1. I know what is meant by ethnic profiling according to the framework of action of the National Police.	3.67	1.02	4.19	0.66	.022
2. Indicate to what extent you think 'Overrepresentation of certain groups in crime statistics' can play a role in the consideration of checking someone according to the framework of action.	3.52	1.16	4.12	0.96	.005
3. Indicate to what extent you think 'Behaviors and conditions that clearly fit within an MO' can play a role in the consideration of checking someone according to the framework of action.	3.32	1.03	3.93	1.01	.003
4 Indicate to what extent you think 'Seeing someone who, in terms of appearance (age, gender, clothing style, ethnicity, etc.), fits into the image of criminal groups' can play a role in the consideration of checking someone according to the framework of action.	3.33	1.16	3.98	1.11	.009

* Police officers with a working experience of < 5 years, education included.

Psychological Safety

To test if the training influences the psychological safety of police officers (H4) a MANOVA was conducted with presentation and experiences as the independent variables and all items (3 in total) related to psychological safety as the dependent variables. The three items are analyzed separately because they were not all asked to the control condition. Only one item showed a marginal significant difference in the variable Experience. Unexperienced police officers feel safer to talk about ethnic profiling than experienced police officers ($M_{unexperienced}$ = 3.48, $SD_{unexperienced}$ = 1.08 versus $M_{experienced}$ = 3.12, $SD_{experienced}$ = 1.18; $F(1, 97)$ = 3.11, p =.081, η^2 = .031). Participants mostly disagree with the question: 'Often I feel reluctance to talk about ethnic profiling'. 48.5 percent disagrees with the statement, 25.2 percent agrees with the statement and 26.2 percent does not have an opinion. When asked if the opinion of the participant has changed relative to the reluctance to talk about ethnic profiling after their participation, 91.5 percent of the participants says that their opinion has not changed. When asked if the training helps to talk about (preventing) ethnic profiling, 70.8 percent of the participants agrees, 19.5 percent neither agrees or disagrees and 9.8 percent disagrees.

Experience in the Simulation

To test the hypothesis that participants in the 3D condition are more positive on presence, engagement, and fun in the experience than the 2D condition (H5), a MANOVA was conducted with Experience and Presentation as the independent variables and presence, engagement, and fun as the dependent variables. This part of the research is in a 2x2 design because questions about the simulation were not asked to the participants in the control condition. There were 44 participants in the 3D group and 38 participants in the 2D group. The MANOVA analysis yielded a significant multivariate effect of presentation, $F(3, 78)$ = 9.15, p <.001, η^2 = .265; Wilks' Lambda = .74. The variable Experience did not reach significance ($F(3, 76)$ = 0.94, p = .425, η^2 = .036; Wilks' Lambda = .96), neither did the interaction between presentation and experience ($F(3, 76)$ = 0.22, p = .884, η^2 = .009; Wilks' Lambda = .99.

There is a significant difference between the 2D and 3D condition and their score on presence, engagement, and fun. Participants in the 3D condition felt more present in the simulation than participants in the 2D condition (M_{3D} = 3.85, SD_{3D} = 0.60 versus M_{2D} = 2.99, SD_{2D} = 0.87; $F(1, 78)$ = 26.80, $p < .001$, η^2 = .256). Participants in the 3D condition also felt more engaged in the simulation than participant in the 2D condition (M_{3D} = 4.08, SD_{3D} 0.52

versus M_{2D} = 3.34, SD_{2D} = 0.98; $F(1, 78)$ = 18.71, $p < .001$, η^2 = .194). And finally, participants in the 3D condition also experienced more fun than participants in the 2D condition (M_{3D} = 4.30, SD_{3D} = 0.55 versus M_{2D} = 3.84, SD_{2D} = 0.79; $F(1, 78)$ = 10.66, p = .002, η^2 = .120). These results are in line with H1.

To test whether the variables presence, engagement or fun mediate between the independent variable presentation and the dependent variables knowledge, attitude and psychological safety a mediation analysis is conducted, using process of Hayes. Presentation is a significant predictor of presence ($B = 2.57$, $p < .001$), engagement ($B = 1.47$, $p < .001$) and fun ($B = 0.45$, $p = .003$). But the indirect effects of the mediation were not significant. This means that presence engagement and fun do not mediate between the independent variable Presentation and the dependent variables knowledge, attitude, and psychological safety. This is shown in Figure 2 and 3.

Figure 2. Presence, engagement, and fun as mediators.
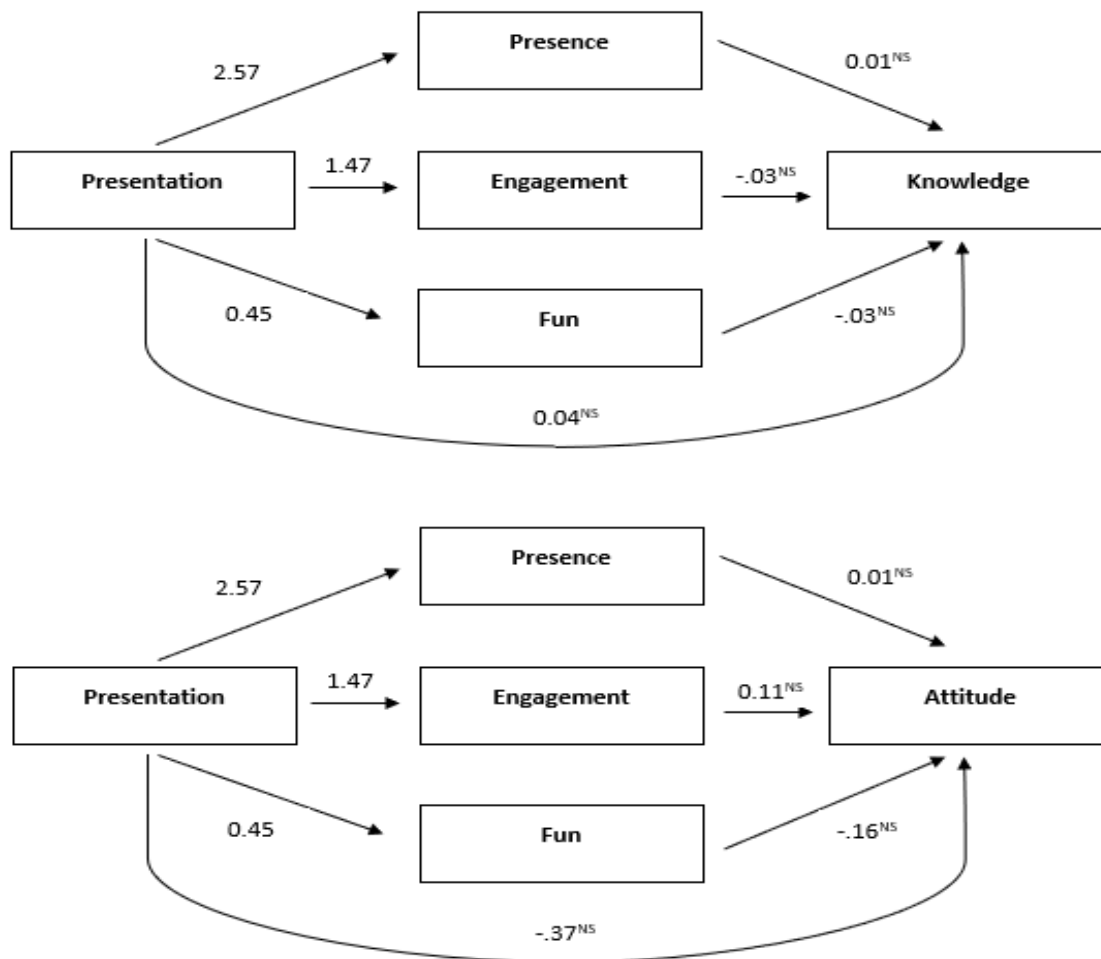
Figure 3. Presence, engagement, and fun as mediators.
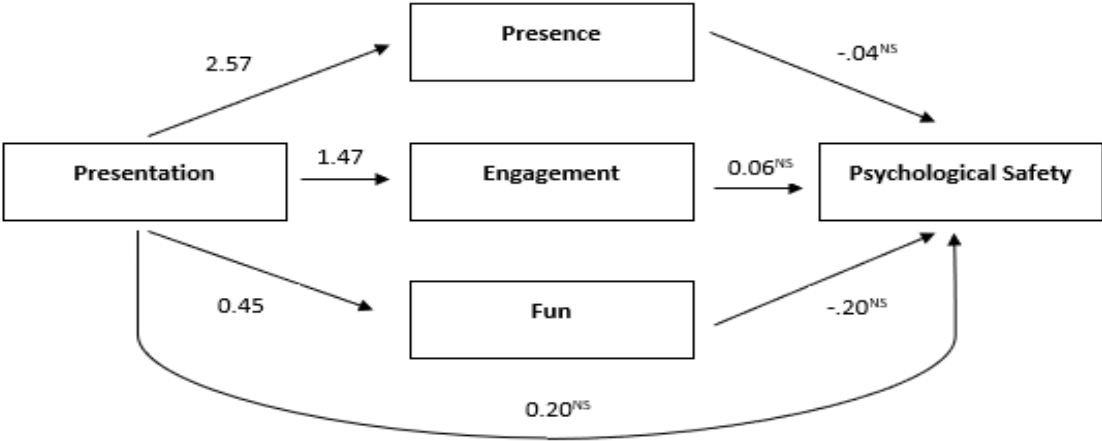
Conclusion and Discussion

This report is made to examine the effectivity of a VR training created to make ethic profiling more open to discussion among police officers. The effect of the training is analyzed through the factors presentation and experience. At first the effect of these factors is analyzed against the variables: knowledge, attitude, and psychological safety. This research also analyzed the variables: presence, engagement and fun and their difference between de training on a smartphone and in VR.

Overview of the Results

  Attitude. The overall analysis showed no significant difference between the presentation of the training and the attitude of the experience and attitude. The additional analysis shows a difference in attitude between the attitude of the control group and the 3D group. Participants in the 3D group score significantly higher than participants in the control group. This is in line with hypotheses 1 that stated that police officers who have participated in the VR learning method have a more positive attitude towards the subject of ethnic profiling than police officers who did not participate in the training. There was no significant difference between the 2D group and the 3D group and the 2D group and the control group.

  Hypotheses 2 cannot be accepted. The additional analysis shows no significant difference between the experience of the police officers and their attitude towards ethnic profiling.

  Knowledge. The variable knowledge is divided into two different variables: knowledge in practice and knowledge about ethnic profiling. The additional analysis shows that for the variable knowledge in practice a significant difference was found between the knowledge of the 2D and 3D group compared to the control group. The participants that used the smartphone or VR seem to use their knowledge about preventing ethnic profiling better during their work than the control group. This was mostly seen in the use of their intuition and gut feeling. Participants in the control condition used these factors more often than the participants in the 2D and 3D condition.

  The overall analysis showed a marginal significant difference between experienced and unexperienced police officers and their knowledge about the subject of ethnic profiling. Police officers with more experience know more about the subject of ethnic profiling than police officers with less experience.

To answer hypothesis 3, police officers who participated in the training have more knowledge about ethnic profiling than police officers who did not participate in the training. However, the difference is found within the use of the knowledge in practice and not the overall knowledge.

Psychological safety. The overall analysis showed a marginal significant difference between the experience of the police officers and their feeling to feel free to talk about the subject of ethnic profiling. Police officers with more experience felt less safe to talk about ethnic profiling than police officers with less experience. Overall, the police officers noted that they do not feel reluctant to talk about ethnic profiling and that this opinion has not changed after the training. Hypothesis 4 cannot be accepted.

Experience simulation. The analysis showed a significant difference between the 2D and 3D condition and their feeling of presence, engagement, and fun. The use of VR results in a higher feeling of presence, engagement, and fun. A mediation analysis showed that the variables presence, engagement, and fun do not mediate between the presentation of the training and the variables attitude, knowledge, and psychological safety. Hypothesis 5 can be accepted. It is clear that the VR training is more effective on presence, engagement and fun than the same training on a smartphone.

Theoretical Reflection

The result that the participants in the training showed a better attitude towards the subject of ethnic profiling than the participants in the control group is in line with the theories that were found. The researches into racial biases from Banakou et al. (2016) and Peck et al. (2013) showed that ethnic profiling decreased due to the use of VR. The expectation that unexperienced police officers would have a more positive attitude towards ethnic profiling due to their capability to easily change their behavior, as seen in a research done by Resnick, et al. (2000) was not shown in the results. The research of Resnick et al. (2000) is about the age difference and a change in attitude. In this research the difference between the experienced and unexperienced police officers is not analyzed. It could be that the participants age does not differ that much what could explain that there was no significant difference found. To see if there would be a difference further research must be conducted.

The framework of action was created to enhance the knowledge of police officers about proactive checking and how this can be done without ethnic profiling. The framework (Nationale Politie Nederland, 2017) was discussed with the participants in the training. The

results have shown that explaining and discussing the framework of action does improve the knowledge of the participants compared to the control group who did not participate in the training.

The results showed that the police officers feel safe to talk about ethnic profiling. This is not in line with the research done by de Vries and Ufkes (2016). The explanation for the opposite result could be the way the research was set-up. A relax and open atmosphere was created for the participants, experimental and control conditions.

As indicated by research done by Cornet et al. (2019) and Fox et al. (2009) the use of VR resulted in a higher feeling of presence, engagement, and fun. The results show this clearly.

Limitations and Recommendations for Future Research

There are several limitations that occurred during the experiment that can influence the outcomes one way or another. They will be discussed below and recommendation for future research will be given.

First of all, the power of the analysis is not very high. It was hard to find experienced police officers who had the time for an experiment. This research has been done during the COVID-19 pandemic which also did not help in the recruitment of participants. This resulted in a small sample size and increases the margin of error. It could be possible that when the study is conducted a second time the results will be different.

Second, the COVID-19 pandemic resulted into taking several measures to continue the collection of data. One of these measures is to take the training outside. Doing the training outside could change the behavior of the participants. Outside could feel less safe because you are in a more open environment, not closed off to the group that is participating. Most experienced police officers have done the training outside. The unexperienced police officers did the training inside in classrooms. This could have influenced the marginal difference between the experienced an unexperienced police officers and the feeling of psychological safety. A recommendation for future research is to make sure the environment for each condition stays the same.

Third, the attention of the participants was not always optimal. The training was during their workhours and they could be called any moment. This created the feeling that not every participant was as involved as the other. Some police officers were still listening to their transceivers. To make sure that the participants were involved in the experiment the sessions

were shortened through canceling the separated discussions in the 3D and 2D conditions. The discussions were put together, 3D and 2D participants discussed their experiences and result together. To make sure this did not influence the result during the discussion it was not made clear who participated in the 3D or 2D condition. For the discussion itself it did not matter in which condition the participant participated. It was the same for both conditions. For future research it is important to make sure the police officers are really participating in the training by making sure they are not working at the same time.

Fourth, at the start of the thesis it was also the plan to do a conversation analysis of the discussions. There was a special program available that would analyze separate factors of the conversation between the participants. After a few tries it seemed that this program was not exactly what was expected and did not work properly for the experiment. Only a few minutes of a few discussions were recorded. This was not enough to research. For future research it would be advised to analyze the conversations because during the experiment it became clear that not every conversation was the same. Per group it differs how interested participants were and what their opinion was. Missing this information has not affected the results of this research. However, there would be more information about the best way to implement the training. .

Fifth, it cannot be ruled out that socially desirable behavior plays a role in the answers given by the participants. Ethnic profiling is a difficult subject among police officers and society this could enhance the change of socially desirable behavior. Especially with questions about attitude and psychological safety. However, it should be noted that social desirability may have had an effect in an absolute sense, but not in a relative sense. In other words, social desirability cannot explain why differences between the different groups were found in this study, these findings therefore remain unaffected.

Finally, this research was a short-term research and not a long-term research. It is thus not clear if there is a difference in behavior after the training on long term. The questions asked after the intervention can be seen as intentions of the police officers. There is no assurance that their behavior is the same as they have told in the questionnaire. Future research is important to analyze the effects of the intervention on actual controls of the police officers, this could be in a VR-simulation but also in their daily work.

Implications

The results of this research can be used for further research. This research shows how VR can be used for a sensitive topic. Examples could be discrimination of sexuality and gender or experiences of loss and grief. Further research must show how divers VR can be. This research also shows how to evaluate intervention and research their effectivity. In the past there have been a lot of intervention to reduce ethic profiling among police officers, these interventions were never statistically researched. The effect of these interventions is not known (Landman & Sollie, 2018). This research can be used as an example for new researches into the effectivity of different interventions. Especially interventions that use VR.

The results of this research show that VR can be implemented in a several ways. The National police can use VR for other subjects that do not receive the necessary interest of police officers. Through creating a fun element it is possible that people become more interested in the subject.

Conclusion

To answer the research question: *How effective is the VR learning method and what is the most effective way to implement this method?* Overall, the results seem to indicate that the VR learning method is effective in changing the knowledge and psychological safety of police officers. When looking further into these results it they do not seem very clear. That the training enhances the attitude towards ethnic profiling is not found in the results. It seems that the 3D, VR learning method is more effective than the 2D, smartphone method. This is mostly because VR creates more presence, engagement, and fun for the participants. During the experiment it was clear that police officers were more drawn to the idea of using VR than doing the experiment on a smartphone. In conclusion, the result point to a positive effect of the VR training. There is also a positive effect for the 2D training compared to the control condition. But, the VR training engages participants more and makes them more willingly to participate in the intervention.

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Questionnaire for the 2D and 3D condition

Vragenlijst experimentele groep

Je hebt zojuist deelgenomen aan een gesprek over professioneel controleren en het voorkomen van ongewenste controles zoals etnisch profileren. Mogelijk heb je daarvoor een simulatie op de smartphone of in een VR-headset gedaan. Middels deze vragenlijst willen we ontdekken hoe je naar dit vraagstuk kijkt, wat jouw kennis is t.a.v. dit vraagstuk, en wat je van deze training vond. Als je snel leest kan het lijken alsof sommige vragen in de vragenlijst dubbel gesteld zijn. Lees dus de vragen goed voordat je antwoord geeft. Ook is het belangrijk dat je alle vragen beantwoord. Dit onderzoek zal gebruikt worden om een rapport te schrijven op aanvraag van de Nationale Politie. We doen er alles aan om de privacy zo goed mogelijk te beschermen. Er wordt op geen enkele wijze vertrouwelijke informatie of persoonsgegevens naar buiten gebracht, waardoor iemand jou zal kunnen herkennen. De gegevens worden opgeslagen op een beveiligde locatie van de Universiteit Twente. De gegevens zijn onderdeel van een groter onderzoek en kunnen ook gebruikt worden voor secundaire analyse. Dit onderzoek is beoordeeld en goedgekeurd door de ethische commissie van de faculteit BMS van de universiteit.

Deelname aan het onderzoek is geheel vrijwillig. U kunt uw deelname ten alle tijden stoppen, of weigeren dat uw gegevens voor het onderzoek mogen worden gebruikt.

Vraag 1: Ik erken voldoende geïnformeerd te zijn en neem vrijwillig deel aan dit onderzoek. Ook geef ik toestemming voor het gebruik van geluidsopnames tijdens de discussie.

o   Ja

o   Nee

Vraag 2: Wat is je geslacht?

o   Man

o   Vrouw

o   Anders

Vraag 3: Wat is je leeftijd?

_____

Vraag 4: Hoeveel jaar werk je (ongeveer) bij de politie? Opleiding meegerekend

_____

Vraag 5: Was het van tevoren bij jou bekend dat dit onderzoek zou gaan over professioneel controleren en het tegengaan van ongewenste controles, zoals etnisch profileren?
o   Ja
o   Nee

Vraag 6: Hoe heb je de simulatie gespeeld?
o   VR headset
o   Smartphone

Vraag 7: Wat was de uitkomst van de simulatie?

o   Alfa
o   Bravo
o   Charlie
o   Delta
o   Echo
o   Foxtrot
o   Golf
o   Hotel
o   India
o   Juliet
o   Ik heb geen keuze gemaakt

Vraag 8: Geef aan in welke mate jij onderstaande factoren een rol laat spelen in jouw afwegingen om iemand te controleren

	Nooit	Zelden	Soms	Vaak	Altijd
Gedrag	◯	◯	◯	◯	◯
Informatie	◯	◯	◯	◯	◯
Uiterlijke kenmerken	◯	◯	◯	◯	◯
Intuïtie	◯	◯	◯	◯	◯
Eerdere ervaringen	◯	◯	◯	◯	◯

Vraag 9: Geef aan in welke mate jij onderstaande factoren een rol laat spelen in **jouw afwegingen** om iemand te controleren

	Nooit	Zelden	Soms	Vaak	Altijd
Er is sprake van informatie die concreet wijst op strafbaar gedrag of een signalering	◯	◯	◯	◯	◯
Het hebben van een onderbuikgevoel bij het zien van één of meerdere personen	◯	◯	◯	◯	◯
Eerdere ervaringen met soortgelijke situaties	◯	◯	◯	◯	◯
Oververtegenwoordiging van bepaalde groepen in de misdaadstatistieken	◯	◯	◯	◯	◯
Antecedenten die suggereren dat iemand ooit crimineel actief was	◯	◯	◯	◯	◯
Gedragingen en omstandigheden die ondubbelzinnig passen binnen een MO	◯	◯	◯	◯	◯
Gedragingen van burgers in reactie op de aanwezigheid van de politie	◯	◯	◯	◯	◯
Zien van iemand die qua uiterlijke kenmerken (leeftijd, geslacht, kledingstijl, etniciteit etc.) past in het beeld van overlastgevende of criminele groepen	◯	◯	◯	◯	◯
Zien van iemand die qua uiterlijke kernmerken (leeftijd, geslacht, kledingstijl, etniciteit etc.) niet op die plaats thuis hoort	◯	◯	◯	◯	◯
Aanwezigheid van burgers op bepaalde ('criminele') plaatsen op bepaalde tijden	◯	◯	◯	◯	◯

Er volgt een aantal stellingen waarbij je kan aangeven of je het er mee eens bent of juist mee oneens.

Vraag 10: Ik weet wat volgens het beleid van Nationale Politie onder etnisch profileren verstaan wordt.

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 11: Deze training zorgt ervoor dat ik meer weet over (het voorkomen van) etnisch profileren.

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 12: Geef aan in welke mate jij denkt dat onderstaande factoren volgens het handelingskader een rol mogen spelen in de afweging om iemand te controleren

	Nooit	Zelden	Soms	Vaak	Altijd	Weet ik niet
Er is sprake van informatie die concreet wijst op strafbaar gedrag of een signalering	○	○	○	○	○	○
Het hebben van een onderbuikgevoel bij het zien van één of meerdere personen	○	○	○	○	○	○
Eerdere ervaringen met soortgelijke situaties	○	○	○	○	○	○
Oververtegenwoordiging van bepaalde groepen in de misdaadstatistieken	○	○	○	○	○	○
Antecedenten die suggereren dat iemand ooit crimineel actief was	○	○	○	○	○	○
Gedragingen en omstandigheden die ondubbelzinnig passen binnen een MO	○	○	○	○	○	○
Gedragingen van burgers in reactie op de aanwezigheid van de politie	○	○	○	○	○	○
Zien van iemand die qua uiterlijke kenmerken (leeftijd, geslacht, kledingstijl, etniciteit etc.) past in het beeld van overlastgevende of criminele groepen	○	○	○	○	○	○
Zien van iemand die qua uiterlijke kernmerken (leeftijd, geslacht, kledingstijl, etniciteit etc.) niet op die plaats thuis hoort	○	○	○	○	○	○
Aanwezigheid van burgers op bepaalde ('criminele') plaatsen op bepaalde tijden	○	○	○	○	○	○

Er volgt een aantal stellingen waarbij je kan aangeven of je het er mee eens bent of juist mee oneens

Vraag 13a: Etnisch profileren vind ik een probleem.

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 13a: Is je mening hierover veranderd ten opzichte van voor de training?

o   Voor de training vond ik etnisch profileren een minder groot probleem

o   Voor de training vond ik etnisch profileren een groter probleem

o   Ik ben niet van mening veranderd

Vraag 14a: Ik voel vaak weerzin om over etnisch profileren te praten als iemand daarover begint.

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 14b: Is je mening hierover veranderd ten opzichte van voor de training?

o   Voor de training had ik minder weerzin om over etnisch profileren te praten

o   Voor de training had ik meer weerzin om over etnisch profileren te praten

o   Ik ben niet van mening veranderd

Er volgt een aantal stellingen waarbij je kan aangeven of je het er mee eens bent of juist mee oneens.

Vraag 15: Deze training helpt mij om over (het voorkomen van) etnisch profileren te praten.

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 16: Deze training draagt eraan bij dat ik mij nu meer gedreven voel om etnisch profileren te voorkomen.

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 17: Door het voorkomen van etnisch profileren kan de politie beter haar werk doen

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Hier volgt een aantal vragen over jouw beleving in de simulatie.

Vraag 18: Ik dacht tijdens de simulatie vaak dat ik echt op station Sloterdijk was

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 19: Tijdens de simulatie had ik het gevoel dat mijn keuzes effect hadden op het verloop van het verhaal

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 20: Tijdens de simulatie voelde de situatie op Station Sloterdijk realistisch aan

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 21: Tijdens de simulatie voelde ik mij betrokken bij het verhaal

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 22: Tijdens de simulatie voelde de interactie met de andere personen realistisch aan.

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Vraag 23: Ik had veel plezier tijdens de simulatie.

o   Helemaal mee eens

o   Mee eens

o   Niet mee eens/ niet mee oneens

o   Mee oneens

o   Helemaal mee oneens

Dit is het einde van de enquête. Hartelijk bedankt voor je deelname!

De resultaten worden volledig anoniem behandeld en zijn opgeslagen op een beveiligde server van de Universiteit Twente.

Klik op het pijltje om de gegevens te verzenden.

Questionnaire for the Control Condition

Vragenlijst controle groep

Je bent zojuist uitgeloot voor een gesprek en experiment over etnisch profileren met VR-technologie. Middels deze vragenlijst willen we ontdekken hoe je naar dit vraagstuk kijkt en wat jouw kennis is t.a.v. het voorkomen van etnisch profileren. Als je snel leest kan het lijken alsof sommige vragen in de vragenlijst dubbel gesteld zijn. Lees dus de vragen goed door voordat je antwoord geeft. Ook is het belangrijk dat je alle vragen beantwoord. Na het invullen van de vragenlijst willen we je alsnog uitnodigen om de VR-training te beleven. Dit onderzoek zal gebruikt worden om een rapport te schrijven op aanvraag van de Nationale Politie. We doen er alles aan om de privacy zo goed mogelijk te beschermen. Er wordt op geen enkele wijze vertrouwelijke informatie of persoonsgegevens naar buiten gebracht, waardoor iemand jou zal kunnen herkennen. De gegevens worden opgeslagen op een beveiligde locatie van de Universiteit Twente. De gegevens zijn onderdeel van een groter onderzoek en kunnen ook gebruikt worden voor secundaire analyse. Dit onderzoek is beoordeeld en goedgekeurd door de ethische commissie van de faculteit BMS van de universiteit.

Deelname aan het onderzoek is geheel vrijwillig. U kunt uw deelname ten alle tijden stoppen, of weigeren dat uw gegevens voor het onderzoek mogen worden gebruikt.

Vraag 1: Ik erken voldoende geïnformeerd te zijn en neem vrijwillig deel aan dit onderzoek. Ook geef ik toestemming voor het gebruik van geluidsopnames tijdens de discussie.

○ Ja

○ Nee

Vraag 2: Wat is je geslacht?

○ Man

○ Vrouw

○ Anders

Vraag 3: Wat is je leeftijd?

_____

Vraag 4: Hoeveel jaar werk je (ongeveer) bij de politie? Opleiding meegerekend

_____

Vraag 5: Was het van tevoren bij jou bekend dat dit onderzoek zou gaan over professioneel controleren en het tegengaan van ongewenste controles, zoals etnisch profileren?

○ Ja

○ Nee

Vraag 6: Geef aan in welke mate jij onderstaande factoren een rol laat spelen in jouw afwegingen om iemand te controleren

	Nooit	Zelden	Soms	Vaak	Altijd
Gedrag	○	○	○	○	○
Informatie	○	○	○	○	○
Uiterlijke kenmerken	○	○	○	○	○
Intuïtie	○	○	○	○	○
Eerdere ervaringen	○	○	○	○	○

Vraag 7: Geef aan in welke mate jij onderstaande factoren een rol laat spelen in **jouw afwegingen** om iemand te controleren

	Nooit	Zelden	Soms	Vaak	Altijd
Er is sprake van informatie die concreet wijst op strafbaar gedrag of een signalering	◯	◯	◯	◯	◯
Het hebben van een onderbuikgevoel bij het zien van één of meerdere personen	◯	◯	◯	◯	◯
Eerdere ervaringen met soortgelijke situaties	◯	◯	◯	◯	◯
Oververtegenwoordiging van bepaalde groepen in de misdaadstatistieken	◯	◯	◯	◯	◯
Antecedenten die suggereren dat iemand ooit crimineel actief was	◯	◯	◯	◯	◯
Gedragingen en omstandigheden die ondubbelzinnig passen binnen een MO	◯	◯	◯	◯	◯
Gedragingen van burgers in reactie op de aanwezigheid van de politie	◯	◯	◯	◯	◯
Zien van iemand die qua uiterlijke kenmerken (leeftijd, geslacht, kledingstijl, etniciteit etc.) past in het beeld van overlastgevende of criminele groepen	◯	◯	◯	◯	◯
Zien van iemand die qua uiterlijke kernmerken (leeftijd, geslacht, kledingstijl, etniciteit etc.) niet op die plaats thuis hoort	◯	◯	◯	◯	◯
Aanwezigheid van burgers op bepaalde ('criminele') plaatsen op bepaalde tijden	◯	◯	◯	◯	◯

Er volgt een aantal stellingen waarbij je kan aangeven of je het er mee eens bent of juist mee oneens.

Vraag 8: Ik weet wat volgens het beleid van Nationale Politie onder etnisch profileren verstaan wordt.

○ Helemaal mee eens

○ Mee eens

○ Niet mee eens/ niet mee oneens

○ Mee oneens

○ Helemaal mee oneens

Vraag 9: Geef aan in welke mate jij denkt dat onderstaande factoren volgens het handelingskader een rol mogen spelen in de afweging om iemand te controleren

	Nooit	Zelden	Soms	Vaak	Altijd	Weet ik niet
Er is sprake van informatie die concreet wijst op strafbaar gedrag of een signalering	○	○	○	○	○	○
Het hebben van een onderbuikgevoel bij het zien van één of meerdere personen	○	○	○	○	○	○
Eerdere ervaringen met soortgelijke situaties	○	○	○	○	○	○
Oververtegenwoordiging van bepaalde groepen in de misdaadstatistieken	○	○	○	○	○	○
Antecedenten die suggereren dat iemand ooit crimineel actief was	○	○	○	○	○	○
Gedragingen en omstandigheden die ondubbelzinnig passen binnen een MO	○	○	○	○	○	○
Gedragingen van burgers in reactie op de aanwezigheid van de politie	○	○	○	○	○	○
Zien van iemand die qua uiterlijke kenmerken (leeftijd, geslacht, kledingstijl, etniciteit etc.) past in het beeld van overlastgevende of criminele groepen	○	○	○	○	○	○
Zien van iemand die qua uiterlijke kernmerken (leeftijd, geslacht, kledingstijl, etniciteit etc.) niet op die plaats thuis hoort	○	○	○	○	○	○
Aanwezigheid van burgers op bepaalde ('criminele') plaatsen op bepaalde tijden	○	○	○	○	○	○

Er volgt een aantal stellingen waarbij je kan aangeven of je het er mee eens bent of juist mee oneens

Vraag 10; Etnisch profileren vind ik een probleem.

○ Helemaal mee eens

○ Mee eens

○ Niet mee eens/ niet mee oneens

○ Mee oneens

○ Helemaal mee oneens

Vraag 11: Ik voel vaak weerzin om over etnisch profileren te praten als iemand daarover begint.

○ Helemaal mee eens

○ Mee eens

○ Niet mee eens/ niet mee oneens

○ Mee oneens

○ Helemaal mee oneens

Vraag 12: Door het voorkomen van etnisch profileren kan de politie beter haar werk doen

○ Helemaal mee eens

○ Mee eens

○ Niet mee eens/ niet mee oneens

○ Mee oneens

○ Helemaal mee oneens

Dit is het einde van de enquête. Hartelijk bedankt voor je deelname!
De resultaten worden volledig anoniem behandeld en zijn opgeslagen op een beveiligde server van de Universiteit Twente.

Druk op het pijltje om uw gegevens te verzenden.

Appendix B: Instructions for the Discussion

Stap 1

Informeer eerst bij iedereen wat zijn/haar surveillance-code was. Vraag daarnaast om een rapportcijfer voor die controle. Belangrijk is dat er in dit stadium nog niets inhoudelijks wordt gedeeld over de simulatie. Dit zou namelijk het gesprek kunnen beïnvloeden.

- Noem de code?

- Welk rapportcijfers geef jij jezelf?

Stap 2

Nadat je iedereen om de code hebt gevraagd, begin je bij de deelnemers met de 'alfa' uitkomsten. Wat hebben zij gezien, of beter gezegd: wat niet? Grote kans dat ze de drugsdealer niet hebben gezien. Belangrijk om dit goed uit te vragen, net als bij een verhoor(plan). Deelnemers hebben gedurende de simulatie nog al eens de neiging om op een later moment de zaken weer net iets anders voor te stellen.

- Wat heb je gezien?

- Is dat alles dat je gezien hebt? Zeker weten?

Tip: er zitten altijd wel deelnemers tussen die ook een van de omstanders (geen acteurs) wilden controleren. Ga hier met een knipoog mee om, maar feitelijk zijn ook die controles niet rechtmatig.

Stap 3

Richt je daarna op de deelnemers die wel de drugsdealer hebben 'gespot'. Laat hen goed benoemen wat ze hebben gezien. Laat hen ook iets zeggen over de jongens bij de ingang. Grote kans dat ze benoemen dat ze die niet aanspreekwaardig vinden (BELANGRIJK!).

- Wat heb je gezien?

- Heb je de jongens bij de ingang ook gezien?

- Waarom heb je hen niet aangesproken?

Stap 4

Mocht er variatie zijn binnen een verhaallijn (de drugsdealer of het groepje jongens), bespreek je hierna ook die verschillen op eenzelfde manier. Immers, op dit moment is het de deelnemers duidelijk dat er twee verhaallijnen zijn. Interessant is ook het 'tegen elkaar uitspelen' van de deelnemers die de drugsdealer wel / niet hebben gefouilleerd (bijv. india vs foxtrot), of de deelnemers die de drugsdealer wel / niet hebben laten gaan (bijv. hotel vs india). Dat 'tegen elkaar uitspelen' klinkt naar, maar is nodig om een beetje glans in de dialoog te krijgen. Het mag dus een beetje schuren.

- Waarom heb je niet gefouilleerd? En jij wel? Hoe zit dat?

- Waarom heb je de man laten gaan? En jij niet? Hoe zit dat?

Stap 5

Toon nu de deelnemers het overzicht met de 4 stappen uit het handelingskader (pagina 3) via een dia op de beamer (of een hand-out i.g.v. ontbreken van een beamer) en geef hen een korte leespauze om de 4 punten tot zich te nemen. Let op: dit is de quick & dirty benadering. Uiteraard kun meer inzoomen

op het belang van procedurele rechtvaardigheid. Zie hiervoor deze handleiding en/of de bijgeleverde presentatie.

Stap 6
Als iedereen aan beurt is gekomen en de 4 punten gelezen zijn, kun je met de deelnemers de opbrengsten bespreken. Wat hebben we geleerd van elkaar? Hoe verhouden de keuzes en het gedrag van de collega in de VR zich tot de 4 punten uit het handelingskader? Ga opnieuw de deelnemers af en stel de volgende vragen:

- Wat heb jij geleerd?

- Hoe verhouden jouw keuzes zich tot het handelingskader?

- Wat vond je van het gedrag van de collega waarmee je zojuist op straat was?

- Denk je dat de persoon/personen een prettig politiecontact hebben gehad? Waarom denk je dat?

- Doen we het reflecteren (stap 4 HK) in de praktijk wel voldoende?

Een van de opbrengsten is vaak dat deelnemers zijn gaan inzien dat we allemaal (ondanks hetzelfde uniform) andere keuzes maken. Daar kunnen we goede redenen voor hebben, dus is het belangrijk om elkaar hierop te bevragen (en wel via de VLOW-methode: Vragen, Luisteren, Oordeel uitstellen en Waarderend onderzoeken).