



CROSSING LINES TOGETHER

How and why citizens participate in the police domain

WENDY SCHREURS

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Wendy Schreurs

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Crossing Lines Together: How and why citizens participate in the police domain

Cover design: Cynthia Schreurs, Doetinchem

Lay-out: Anna Bleeker | www.persoonlijkproefschrift.nl

Printed by Ipskamp Printing, proefschriften.net

ISBN: 978-90-365-4849-6

DOI: 10.3990/1.9789036548496

Thesis, University of Twente, 2019.

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CROSSING LINES TOGETHER

HOW AND WHY CITIZENS PARTICIPATE IN THE POLICE DOMAIN

DISSERTATION

to obtain
the degree of doctor at the University of Twente,
on the authority of the rector magnificus,
Prof. dr. T.T.M. Palstra,
on account of the decision of the Doctorate Board,
to be publicly defended
on Friday the 1st of November 2019 at 16:45 hours

by

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General introduction

"The Marshalltown, Iowa Police Department would like the public's assistance in locating Corey Brown. He is 13 years old, 5'0, brown hair and 98 pounds. [...] A search command post was formed at St Henry's Catholic Church, 211 W. Olive Street. Close to 200 people were there at 2 p.m. Wednesday to volunteer to help search. Police Chief Mike Tupper said the authorities are ramping up their search efforts. He said the best thing people can do is get on social media and share updates. The authorities do not want people going out to search on their own as it could hinder their efforts, he said." (Times-Republican, January 23, 2019).

This news item from a US newspaper is a good example of police attempts to involve citizens in detecting, reporting, and solving crime. In current society, efforts to tackle crime depend not merely on police action but also on participation of citizens and cooperation between citizens and the police. The rise of internet access as well as the use of social media facilitate communication with both fellow citizens (e.g., neighbors) and institutions, and afford easy access to crime-related information from sources other than the police. This easy access to crime-related information and communication with other citizens also enables citizens to participate at their own initiative.

The resulting increase in citizen participation can for instance be seen in cases where large groups of citizens assist the police in finding a missing person as illustrated in the news item above (Times-Republican, January 23, 2019), or when information of a police case is rapidly dispersed to the public via social media. This for example happened in The Netherlands in 2017 where a young woman called Anne Faber went missing after a bike trip. For two weeks, hundreds of citizens helped searching for her physically, while thousands of citizens participated online by spreading the information about the case, giving suggestions on where and how to search. Eventually, the offender and subsequently her body were found with the help of DNA retrieved from her jacket which was found by assisting citizens (NRC, June 8, 2018).

The primary goal of this doctoral thesis is to gain understanding into citizen participation in the police domain, by capturing a broad spectrum of psychological drivers behind different types of participation behavior. Before further elaborating on the framework for my research, I will first place citizen participation within larger societal developments

Developments in society and the police domain

In the last three decades, citizens have been increasingly expected to take a more participatory role in society. In their direct environment, citizens are for instance required to act more often as informal care givers, for example to their elderly parents (Hiel et al., 2015). Further, they are expected to be more involved in the mitigation of the consequences of risks and disasters such as floods and earthquakes. These actions can for example consist of citizens protecting their house to avoid that it collapses during an earthquake (Paton, Bajek, Okada, & Mclvor, 2010), or acquiring an emergency kit and knowledge on how to evacuate in case a flooding would occur (Kerstholt, Duijnhoven, & Paton, 2017). Also regarding crime prevention and in the detection and prosecution of offenders, citizens are increasingly involved (Yetano, Royo, & Acerete, 2010). Bellingcat is an example of the latter, which is a global network of citizens acting as investigative journalists who examine international conflicts through online open sources and with the help of multiple experts and the public. They for instance collected evidence of the origin of the Buk missile launcher deemed responsible of the MH17- plane crash (NOS, 2018). Within the Netherlands, Bellingcat assisted the police in identifying the location of a fugitive who was convicted for two attempted murders and escaped prison with the help of crowdsourcing and image search of locations in the videos the fugitive posted online (Van Ess, 2019).

In line with the examples above, the police have realized the large potential of citizen capital in fighting crime and creating safer neighborhoods (Bullock & Sindall, 2014; Gill, Weisburd, Telep, Vitter, & Bennett, 2014). Throughout the world there is increasing recognition of the need for public support for and cooperation with law enforcement. Research shows that the police can benefit from citizen capital, particularly when a vast majority of citizens is willing to participate (Tyler, 2004; Tyler & Fagan, 2008). The importance of legitimacy and the relation with citizens led to a new police strategy called community policing, which generally focusses on building strong ties and working closely with members of the community (Gill et al., 2014; Kerstholt, De Vries, & Mente, 2015). Cornerstone of this strategy is that police officers put more emphasis on crime prevention, problem solving, and face-to-face interactions in order to improve police effectiveness (Cordner, 2014).

These societal developments and the changing role of citizens in the police domain highlight the importance of the citizen perspective. It is important

to know why citizens behave in a certain way, more specifically, why they participate and whether underlying psychological drivers differ for various forms of participation behavior. With this knowledge, police practitioners and policy makers can stimulate participation, and anticipate on different aspects of citizen behavior.

In the following paragraphs, I will first elaborate on the role of citizens in community policing and in which ways they can participate in the police domain. After this, I will review literature regarding why citizens participate in the police domain from different theoretical perspectives, what possible psychological drivers of participation behaviors, and whether these drivers can be reinforced in order to influence participation behavior. Finally, an overview of the empirical studies in this thesis is given.

The role of citizens in community policing

Although researchers use somewhat different definitions of community policing due to different interpretations and implementations among countries (Van der Vijver & Zoomer, 2004), there is consensus that citizen participation is a key element of community policing. In community policing, the focus lies on problem solving, where police officers use processes which are focused on proactively and systematically identifying problems and the development of effective responses. A very important first step in identifying these problems and solving crime is the involvement of citizens in security issues.

The primary goal of the implementation of community policing is to reduce crime and disorder (objective safety), to increase citizens' subjective safety, for example by increasing police legitimacy, reducing risk perceptions of crime and increasing trust in the police (Bullock & Sindall, 2014; Gill et al., 2014). Whether these broad effects of community policing as one concept are actually realized is hard to establish, for instance because of the broad range of activities citizens can engage in and the associated varying effects (Van der Land, Van Stokkum, & Boutellier, 2014; Weisburd & Eck, 2004), as well as the many possible coinciding changes in society (e.g., the simultaneous implementation of other policing strategies to decrease crime, and changing economic and political circumstances; Corder, 2014). Nevertheless, it is possible to examine effects of specific participation activities, such as the implementation of neighborhood watches (Akkermans & Vollaard, 2015; Bennett, Holloway, & Farrington, 2006) or community meetings (Gill et al., 2014; Weisburd & Eck, 2004), although these

studies show mixed effects on the reduction of crime and disorder. Since the participatory activities citizens can engage in vary to such a large extent (Gill et al., 2014; Van der Land et al., 2014; Van Steden, Van Caem, & Boutellier, 2011), citizen participation should not be treated as one broad concept. It is important to know whether types of behaviors can be distinguished before looking into the broad spectrum of psychological drivers of this behavior.

As the effects of community policing are hard to measure, the evidence of the reduction of crime and disorder (objective safety) is scarce so far (Gill et al., 2014). However, previous research did show positive effects on subjective safety such as crime and disorder perceptions and police legitimacy (Gill et al., 2014; Tyler & Fagan, 2008). As citizens' subjective safety and relation with the police are likely to be related to citizens' willingness to cooperate and participate, this stresses the importance of focusing on the citizen perspective when looking into community policing and citizen participation.

When focusing on the citizen perspective, we first need to define what citizen participation entails. Citizen participation is a concept known in different fields (e.g., disaster management, politics, and crime prevention) and used to have a quite narrow definition. Research used to focus on organizational decision-making processes, such as citizens as advisors on boards or committees and as policy makers on neighborhood councils for municipalities (Perkins, Florin, Rich, Wandersman, & Chavis, 1990). In research by Perkins, et al. (1990), this definition was extended to behaviors that involve all organized activities in which individuals participate without compensation in order to achieve a common goal.

As citizen participation is voluntary behavior, it also has common ground with the concept of volunteerism. Previous research used to have narrow definitions for volunteerism which were typically defined from an institutional perspective. Whittaker, McLennan & Handmer (2015) defined volunteering behavior, for example, in terms of deliberately chosen and planned, long-term activities that are undertaken through formal organizations.

However, this does not align with recent developments in society, in which citizens act independently, and also perform shorter-term types of voluntary behaviors. Hence, Whittaker et al. (2015) introduced the concept of informal volunteerism, which included behaviors performed as individuals or as part of a

group, and can be on a long-term basis and deliberately and carefully planned, or on a short-term basis and more spontaneous and unplanned.

In community policing, the role of citizens is also often examined from a police or institutional perspective, although recently more focus is given to effects on citizens' subjective safety (Gill et al., 2014; COPS, 2014; Van der Land et al., 2014). Due to societal developments described earlier, citizens also increasingly act independently from the police and in different compositions. They can act individually, in collaboration with other citizens (e.g., neighbors) or in collaboration with the police. In this thesis, I will look at citizen participation from a citizen perspective and specifically at participation behavior in the police domain. Therefore, citizen participation will be defined in this thesis as "*citizens engaging in the police domain on a voluntary basis, which can be performed individually, in collaboration with other citizens and/or with institutions with the aim to prevent and solve crime*".

In order to examine why citizens participate and to reinforce (desired) participation behavior, insight is needed in what citizen participation encompasses and whether there are different psychological drivers related to different participation activities.

Taken together, the main aim of this thesis is threefold: (1) to examine in which ways citizens can and are participating in the police domain, (2) to examine a broad spectrum of psychological drivers underlying (different types of) citizen participation and (3) to explore interventions to increase citizen participation in the police domain.

Citizens participation in the police domain

From a police perspective, citizens can be very useful in problem solving as being the 'eyes and ears' of the police by reporting suspicious circumstances or by providing intelligence after a crime has occurred (Terpstra, 2010). For example, when a robbery has taken place, the police can send a message to a large group of citizens to look out for the suspects, significantly increasing the chance that the person(s) will be detained.

This is however not the only way how citizens are involved. Citizens can also participate at their own initiative and independently of the police. With the rise of internet and social media, citizens are becoming more empowered to

participate and do this more independently of the police. They can for example more easily gather information about crime and ways to protect themselves from crime. In practice, citizens have joined hands by open crowd sourcing and used the information on the internet in order to locate fugitives (for example Bellingcat; NOS, 2018).

Citizens can participate in different compositions, they can participate independently, in collaboration with social networks such as their neighbors or with institutions such as the police and municipality. One example in which citizens can act independently, is when victims of phone theft go after the offender themselves with the use of a "track my phone" application without even involving the police (NOS, 2017). A good example of collaboration between neighbors is the rise of neighborhood-WhatsApp groups. In these online groups, neighbors keep each other up to date when they witness suspicious activity or crime in their neighborhood. They do this with the aim to be able to take preventive measures, to inform the police or to confront the 'offender' themselves (Akkermans & Vollaard, 2015). These neighborhood-WhatsApp groups are more of a broad and long-term nature, but citizens can also collaborate in reaction to a specific case. This could be seen in the example discussed in the beginning of the introduction of the missing student Anne Faber, where citizens started search groups shortly after her disappearance. Third, citizens can also collaborate with the police, for example by providing information about a specific crime as a response to an explicit call by the police, often broadcasted via TV shows such as Crime Watch.

As there is a broad range of activities citizens can do to participate in the police domain, it is likely that psychological drivers vary between different kind of activities. It could be possible, for example that different drivers are involved in reporting a specific crime (e.g., more individual-related drivers) than in joining a neighborhood watch (e.g., where social drivers are likely to play a larger role). Therefore, it would be helpful to have a classification of the types of participation in order to gain insight in what drives citizens to perform different activities. Recently, a first classification of the activities citizens can perform has been made based on a broad range of citizen involvement in the police domain. These categories were the result of desk research on examples of participation activities in practice, a survey amongst municipalities and police as well as interviews with representatives of these example projects (Van der Land et al., 2014). Categories of participation for example included

neighborhood surveillance, providing intelligence and collecting and spreading information amongst neighbors regarding safety. However, this classification is primarily made from an institutional perspective, and based on a distinction between specific tasks that citizens can perform. Thus, it is organized around the physical manifestation of the activities and does not necessarily depart from the perspective of citizens themselves.

Additionally, choices whether or not to participate are arguably based on psychological drivers, and are likely to be reflected in citizens' actual behavior. Therefore, and building upon this earlier work, I will specifically look into whether these activities can be classified in categories based on actual behavior of citizens, and focus on a broad spectrum of what drives citizen to engage in different participation activities.

Why citizens participate in the police domain

Decision-making processes.

In police practice, a rational approach of citizens is often assumed. From this perspective, police organizations provide citizens with information with the aim to educate citizens and increase police legitimacy and trust. They for example provide the public with knowledge on actual crime figures, information about the criminal justice system and courses of action on how to participate (Wünsch & Hohl, 2009). However, this rational approach is not fully in line with how citizens make behavioral decisions. Besides these rational considerations, more emotional and intuitive factors play a large role in decision-making. In decision-making research, dual-process and dual-system theories make a distinction between two decision processes, the deliberate and intuitive process (Kahneman, 2002). These two systems do not necessarily function separately, but can both affect a decision at the same time (Evans & Stanovich, 2013; Kahneman, 2002).

Via the deliberate system, people make decisions analytically, by trading off the costs and benefits for all possible options. This type of decision making is effortful, slow and deliberate (Kahneman, 2002). In practice, in order for citizens to be able to make a decision whether to participate, it is necessary that they are aware of the situation first. This situation awareness can be achieved by, amongst others, making an estimation of the seriousness and consequences of the risk (Paton, Smith, Daly, & Johnston, 2008), of how much effort alternative

actions cost and whether someone feels capable to perform these actions (Floyd, Prentice-Dunn, & Rogers, 2000).

Via the intuitive system, decisions are made automatically, fast and unconsciously. Intuitive decisions are often based on heuristics, where people turn to mental shortcuts, for example based on a person's previous experience, gut feeling, and emotions (Evans & Stanovich, 2013; Slovic, Peters, Finucane, & MacGregor, 2005; Slovic & Västfjäll, 2010). Sometimes, situations are just too complex or individuals simply do not have enough time in order to consider all the advantages and disadvantages of all alternative courses of action. This can lead to an increased influence of more unconscious processes on decision behavior. These processes for example consist of previous knowledge and experiences, moral values and emotions (Bechara, Damasio, Tranel, & Damasio, 1997).

The influence of the intuitive system on behavior has also been shown in adjacent domains to citizen participation. For example in volunteerism, related to citizen participation, previous research showed the role of altruistic motivations (Boss & Hetem, 2011; Clary & Snyder, 1999; Whittaker et al., 2015). Another related field is that of pro-social behavior, as some forms of citizen participation can also be seen as pro-social (e.g., helping a victim after witnessing a crime) or for the common good (e.g., joining a neighborhood watch). Pro-social behavior has been shown to be driven by emotions such as personal distress, and other-oriented emotions like empathy and sympathy (Zaki & Mitchell, 2013; Eisenberg, Eggum, & Di Giunta, 2010). The importance of the intuitive system and its drivers in these adjacent domains indicates the likelihood that these play a role in citizen participation in the police domain as well.

In this thesis, it will be explored to what extent intuitive drivers play a role in citizens' decision-making in the police domain. This could, for example, be the case in the decision whether to intervene in situations regarding crime or antisocial behavior. These decisions often have to be made in a short time frame, which makes them more likely to adhere to fast, heuristic and intuitive decision-making (Gigerenzer & Gaissmaier, 2011; Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008). In these situations, the intuitive process can help people to make fast decisions and overcome limitations of information

capacity, situational complexity, and ambiguity by turning to mental shortcuts (Shiv, Loewenstein, & Bechara, 2005; Slovic & Västfjäll, 2010).

There are also types of citizen participation, in which more deliberate processes are likely to play a role as well. For example, when citizens make the decision whether to join a neighborhood watch, are seeking information regarding crime, or decide to join a meeting with the neighborhood police officer. In these situations, decisions are likely not made in the heat of the moment, and citizens have more time to deliberate about the costs and benefits of certain actions, possibly in combination with intuitive decision processes. In this thesis, the aim is to capture a broad spectrum of psychological drivers, in which both intuitive and deliberate psychological drivers will be taken into consideration.

Individual-, community-, and institutional-related psychological drivers

As illustrated by the many ways citizens can participate in the police domain, participation in the police domain can be performed in different compositions. It can be performed individually and independently, in collaboration with neighbors and in collaboration with the police. This makes it relevant to examine whether individual-, community- and institutional-related psychological drivers will play a role in participation behavior in the police domain.

Previous research has used a model that not only takes into account individual psychological factors, but also recognizes the added values of the community and institutional-related factors. This theory, called the Community Engagement Theory (Paton, 2013; Paton, Okada, & Sagala, 2013; Paton et al., 2008), predicts citizens' preparatory behavior for natural hazards. The theory proposes that *individual* beliefs, social network characteristics in the *community*, and the relationship between community and *institutions* influence the extent to which citizens are willing to receive information and to use this information to prepare for hazards. The Community Engagement Theory has been described as an all-hazard theory: it has been validated for disasters such as floods, tsunamis, and earthquakes, and across different cultures (Paton et al., 2013). To date, however, the domain of application has not been extended beyond the context of natural hazards; consequently, applicability to social safety risks such as crime has yet to be assessed.

In this thesis, I will examine whether the individual-, community-, and institutional-related psychological drivers of the Community Engagement Theory are also relevant in the context of social safety hazards such as crime and associated preparatory behaviors such as reporting suspicious circumstances to the police or joining a neighborhood watch to detect crime. Citizen participation in the police domain is in comparison to the physical safety issues in Paton's research more of a social safety nature. I expected that individual-, community-, and institutional-related psychological drivers can be used to predict and influence citizen participation in the police domain as well. I further expected, as crime is associated with morality considerations (Haidt, 2003a, 2012; Harkness & Hitlin, 2014) and based on research specifically focused on citizen collaboration the police domain (Tyler & Fagan, 2008) that morality and police legitimacy could be important drivers for participation behavior in the police domain.

Citizens' individual-related drivers.

The police domain has a specific moral character; the fight against crime and antisocial behavior is based on moral rules and judgments concerning which behavior is right and wrong. When individuals decide whether to act on crime, for example when they witness a crime or experience nuisance from antisocial behavior, these decisions to act (e.g., report to the police, intervene directly, or join a neighborhood watch) are likely to be based on personal moral assessments of what is right and wrong (Harkness & Hitlin, 2014). For instance, some people might find it very wrong when someone steals a bar of candy, while others might see it as a minor transgression. When a situation conflicts with the moral values a person adheres to, this can elicit moral emotions (Haidt, 2003a). Emotions are strong drivers for behavior in general (Slovic & Västfjäll, 2010; Zeelenberg et al., 2008) and, in turn, likely to be predictive for behavioral decisions to participate in the police domain as well.

For example, when someone witnesses a bike theft, this person will make a judgment on how wrong they believe this theft is. If this situation conflicts with their moral values, it can lead to the experience of moral emotions such as anger or disgust (Haidt, 2003a). These emotions could subsequently lead to a higher willingness to do something about the situation, for example calling the police or stopping the suspect from taking the bike. Alternatively, (moral) emotions such as fear for the offender could inhibit the person from acting in

this situation. Concluding, morality seems to be a very important intuitive driver of participation behavior in the police domain.

Another prevalent psychological driver for behavior in psychological research is attitude (Ajzen & Fishbein, 2005; Bohner & Dickel, 2011). Citizens can have a positive attitude towards participation, for example because they want to help their neighborhood. Others might be convinced that the police are primarily responsible for the safety in their neighborhood and therefore have a negative attitude towards citizen participation.

When people have a positive attitude to a specific behavior, they are more likely to conduct that specific behavior than when they have a negative attitude towards this behavior. In the past, attitude used to be seen as a more analytic and reasoned concept because of the systematic weighing up of advantages against disadvantages of certain behavior (Ajzen & Fishbein, 2000). More recently, however, research has shown that attitude can also be strongly influenced by intuitive, more automatic processes, and is often based on previous experiences and knowledge. Particularly when people have a low motivation or a limited cognitive capacity, attitudes can emerge from intuitive beliefs. Furthermore, attitudes tend to be strong and resistant to change and bias, especially when they are based on values or are of personal relevance as opposed to more rational considerations, such as factual information about the attitude object (Ajzen & Fishbein, 2005; Honkanen & Verplanken, 2004).

Another perspective highlighting the importance of individual-related drivers is the previously introduced Community Engagement Theory, developed as an all-hazard theory but up till now mainly applied to natural hazards and not social ones (such as crime).

The individual-related drivers of this theory include risk perception, self-efficacy, and response efficacy. Risk perception is the perceived likelihood of a risk. In the scope of this thesis, the risk would be the likelihood that crime and disorder will occur, and the perception of the consequences of that risk. When people perceive the risk as high, they will be more likely to experience negative emotions and act in order to mitigate that risk by regulating those emotions and taking protective measures (Paton et al., 2008). These emotions (e.g., fear) can cause the assessment of a risk to be misguided by systematic illusions. For example, the vividness of previous catastrophes may lead to negative

emotions, and consequently a high assessment of risk. Due to these mental images people experience the proximity of the risk as closer to the self and as more personally relevant than actually is the case (Slovic & Västfjäll, 2010).

Self-efficacy refers to the extent to which a person perceives him- or herself as being capable to perform a certain task (Floyd et al., 2000; Paton & McClure, 2013). When a person perceives him/herself as capable to perform the adaptive response, he or she is more likely to act, and are for example more likely to take protective measures (Paton, 2003; Paton, Smith, & Johnston, 2005). In addition, whether people believe that the adaptive response is effective in reaching the anticipated goal is known to be an important driver of behavior (Floyd et al., 2000; Paton et al., 2013). This is called response efficacy. If people believe that a specific task will not lead to the preferred outcome, this will decrease the probability of accepting and implementing protective measures to enhance personal safety (Kievik & Gutteling, 2011).

Community-related drivers.

Citizen participation can be restricted to an independent, individual response, but it may also include activities where citizens communicate and cooperate with other citizens in their community in order to enhance safety and security in their neighborhood (e.g., joining a neighborhood watch). Therefore, it is important to also take into account the social environment. Previous research on the Community Engagement Theory points at three community-related drivers which would increase citizen participation behavior.

The first factor is the sense of community. When citizens experience their neighborhood as a closely knit community rather than a group of individuals who merely happen to live in the same area, they are more likely to participate with their neighbors (Ohmer & Beck, 2006). Second, previous research has shown that when citizens experience high collective efficacy, meaning that they have the capacity as a community to accomplish a certain task together (Hipp, 2016), it will increase their willingness to engage in their community (Paton, 2013; Paton & McClure, 2013). This suggests that when citizens feel that they have the capacity to create a safer neighborhood as a community, their community engagement in the safety domain will increase. Third, the more citizens already have participated in their community, for example by organizing a street barbecue, attending public meetings or joining a neighborhood crime watch, the more likely they are to participate again. When citizens have

experienced participation behavior in the past, they have a broader network of community members which makes it easier to enroll again (Paton, Okada, & Sagala, 2013).

Institutional-related drivers.

In many forms of citizen participation, citizens will come in contact with institutions such as the police or their municipality. They can, for example, come in contact when they report something to the police, or when they attend a meeting with a neighborhood police officer to receive information about crime prevention. They can, for instance, collaborate with the municipality by giving input on the physical design of their neighborhood, e.g., where benches should be placed or removed to prevent nuisance and loitering. Even when citizens participate on their own initiative and entirely without police involvement, their perception of institutions can still influence whether and to what extent they participate.

In the Community Engagement theory, it is assumed that when citizens believe that they have a fair and empowering relationship with institutional agencies, they are likely to take more responsibility for their own safety. Empowerment in the police domain can be described as citizens' capacity to gain control over their own safety and tackle safety issues in their neighborhood while supported by external resources (Paton et al., 2008).

Trust in institutions is another factor taken into account in the Community Engagement Theory. In the police domain this would, of course, specifically concern trust in the police. In order to be willing to collaborate with the police and judiciary power (Paton et al., 2008; Stoutland, 2001). The degree of trust citizens have in the police is known to be dependent on their belief that the police share their priorities, act competently, behave dependably and treat citizens with respect (Stoutland, 2001). On the one hand, the absence of trust may result in citizens who are less inclined to participate with the police. On the other hand, if trust is absent this also might lead to more and/or other forms of citizen participation because citizens might consider it necessary to handle safety issues on their own. This can also increase the risk of citizens taking the law into their own hands (Haas, 2010; Lub & De Leeuw, 2019).

Similarly, past research has shown that police legitimacy increases citizens' cooperation with the police and encourages compliance with the law.

Police legitimacy is the extent to which the public accepts the police as an authority and belief that police officers do their work in a fair manner (Tyler & Fagan, 2008). As this driver is well known in police research but not part of the Community Engagement Theory, we will examine the added value of this driver in explaining participation in the police domain. It is expected that police legitimacy will also increase citizen participation and lower the likelihood that they will take the law into their own hands (Tyler & Fagan, 2008).

Interventions to of reinforce participation behavior

As described earlier in this introductory chapter, decisions to behave in a certain way are often unconsciously influenced by intuitive decision processes such as emotions and values (Haidt, 2012; Kahneman, 2002). Furthermore, in order for citizens to be able to make a decision whether to participate, it is necessary that they are aware of the situation first (Paton, Smith, Daly, & Johnston, 2008; Floyd, Prentice-Dunn, & Rogers, 2000). In this thesis, we will therefore focus on the combination of increasing situational awareness (e.g., by providing information) and by focusing on citizens' emotions and values and whether these can reinforce citizens action tendency to participate.

One intervention which is often used to influence behavior is to provide information to citizens about the risk or event from the government (Bakker, van Bommel, Kerstholt, & Giebels, 2018; Kievik & Gutteling, 2011). Kievik and Gutteling (2011) for instance examined such an intervention by providing information about how to protect oneself or the community in a risk situation of potential flooding. They showed that by providing this information, efficacy beliefs were fostered and citizens became more motivated to take self-protective actions. In the police domain, this could for example be done by providing information about how to participate. For example, when the police aim to stimulate reporting behavior, they could provide information on in which circumstances and in which manner (via which phone numbers or website) citizens can report to the police.

In another attempt to involve citizens and to stimulate them to participate, the police share detailed information about unsolved crimes with the public, for example via television programs such as Crime Watch. Interestingly, exactly how these showcased crimes are communicated varies between episodes and cases. For example, some cases prominently feature victim statements to convey the nature and impact of the crime, especially pertaining to the physical

or psychological damage victims have suffered, while others do not. As far as we know, no research has been conducted on the effects the different ways of communicating have on the willingness of citizens to participate. In an adjacent domain, a study did show that citizens are more likely to perform pro-social behavior (in this case donating for charity) after being confronted with a victim or person in need. Being confronted with a victim induced affective feelings such as empathy with the victim and positive emotions (Västfjäll, Slovic, Mayorga, & Peters, 2014). Hence, it might be the case that showing the public the impact of the crime to the victim could also increase participation behavior.

Overview thesis

In this thesis, I aim to capture a broad spectrum of psychological drivers which could theoretically influence citizens' participation behavior in the police domain. In 6 empirical studies (reported in Chapters 2-6), I examine both intentional and actual participation behavior and explore the interconnected individual-, community-, and institutional-related psychological drivers. Please see Table 1.1 for an overview of the research goals, methodological approach and variables per empirical chapter.

For the studies discussed in this thesis, different theoretical perspectives, methods and samples are used. In order to have a comprehensive examination of psychological drivers, we explore multiple theoretical perspectives from different domains. These include the morality domain (Graham, Meindl, Koleva, Iyer, & Johnson, 2015; Harkness and Hitlin, 2014; Haidt, 2012; Haidt, 2003), decision models (Evans and Stanovich, 2013; Slovic and Västfjäll, 2010; Kahneman, 2002; Bechara, et al., 1997), the police domain (Jackson, Huq, Bradford, & Tyler, 2013; Jackson and Bradford, 2010; Terpstra, 2010; Hinds, 2009; Tyler and Fagan, 2008), literature regarding bystander theories (Pouwelse, Mulder and Mikkelsen, 2018; Thornberg, 2010) and the risk domain (such as theories on preparatory behavior for natural hazards; Paton, 2013; Kievik and Gutteling, 2011; Slovic et al., 2005; Floyd et al., 2000). As we were, due to pragmatic reasons, not able to take into account all the theoretical perspectives and associated psychological drivers in all studies, we examine different theoretical perspectives across the five empirical chapters.

All independent variables convey a form of participation behavior, including reporting crime to the police, intervening (e.g., when someone addresses or stops an offender when witnessing a crime), joining an online neighborhood

watch, and gathering information (for example on how and under which circumstances citizens can report crime to the police). With one exception involving a student population, the studies are conducted with citizen samples differing in size and composition.

Before providing a detailed description on the content of the separate chapters of this thesis, I will first give an overview of the structure consisting of three main components. In the first part (Chapters 2 and 3), the focus lies with participation behavior in the police domain in broad terms. This includes the development of a classification of participation behavior as well as a first exploration of reporting and intervening behavior. In this part, the focus is on individual-related psychological drivers, including moral values, moral emotions and general attitude. In the second part (Chapters 4 and 5), the focus shifts towards a theoretical perspective from the risk domain. Here the Community Engagement Theory is taken as a starting point, which broadens the scope to community- and institutional-related drivers and their effects on individual-related behavior such as direct intervening behavior, as well as community-related behavior in terms of membership orientation of an online neighborhood watch. In the final part (Chapter 6), institutional-related participation behavior is the main interest, examining the public's response to a call for assistance in a Crime Watch television show when two key features of these shows are varied.

Detailed description of the next chapters of this thesis.

In **Chapter 2**, a survey among Dutch citizens was distributed with the aim of developing a classification of participation behavior based on actual behavior citizens have performed in the past. As a result, we established a classification of four types of participation behavior in the police domain. Secondly, in order to gain more insight into drivers behind citizen participation, we start our examination of drivers by focusing on three different but interconnected psychological drivers: the attitude towards citizen participation, moral values, and moral emotions.

In **Chapter 3**, we explore in two online vignette studies which intuitive decision processes influence citizens reporting and intervening behavior. Participants were given five moral scenarios in which respondents imagined witnessing five types of crime or antisocial behavior (e.g., a bike theft, bar fight). During this study we examined to what extent the perceived moral wrongness

of the crime and moral emotions influence how likely it is that participants will either (1) not interfere, (2) call the police or (3) intervene.

In **Chapter 4**, we shift our focus towards drivers community- and institutional-related drivers in addition to individual-related drivers, departing from the Community Engagement Theory by Paton et al. (2005). This chapter includes citizens from 3 municipality panels and examines whether psychological drivers of the Community Engagement theory can predict (1) citizens' willingness to receive information on how to act in order to prevent crime and (2) their willingness to report to the police and intervene themselves when a crime would occur.

In **Chapter 5**, we examine whether the same psychological drivers of the Community Engagement theory influence whether citizens already joined or are willing to join an online neighborhood watch, a form of community-related behavior. Surveys were distributed door-to-door in a larger neighborhood in the east of The Netherlands known to include blocks with and without online neighborhood watches.

In **Chapter 6**, the focus is on an institutional intervention tying into moral emotions and moral wrongness to increase reporting and intervening behavior. Passing citizens on a town square were exposed to one of four Crime Watch videos, varying with regard to inclusion of a victim statement (absent vs. present) and type of crime (bike theft vs. distraction burglary). After watching this video, participants were "coincidentally" exposed to the offender from the video. We recorded their actual reporting behavior, their willingness to report and intervene in the future, as well as possible underlying psychological drivers.

In **Chapter 7**, I present the general conclusions and discussion of this thesis, including the main findings of the empirical chapters and the theoretical and practical implications. I also reflect on the strengths and limitations of the thesis as well suggest directions for future research.

Table 1.1. Overview of the empirical chapters

Component	Chapter	Research goals	Method	Participants	Dependent variables: participation behavior	Independent variables
1	2.	<ul style="list-style-type: none"> - Develop a classification of participation behavior in the police domain from a citizens' perspective - Examine the influence of the psychological drivers across different types of behavior 	<ul style="list-style-type: none"> - Online survey 	<p>Citizens N= 217</p>	<ul style="list-style-type: none"> 4 types of actual participation behavior - Collaborative participation - Social control - Responsive participation - Detection 	<ul style="list-style-type: none"> - Attitude towards citizen participation - Moral values - Moral emotions
2	3.	<ul style="list-style-type: none"> - Explore psychological drivers behind intervening behavior in the police domain 	<ul style="list-style-type: none"> - Online vignette study - 5 scenarios regarding crime or antisocial behavior 	<p>Study 1: Students N= 213</p> <p>Study 2: Citizens N = 170</p>	<p>Both studies: Three types of (intentional) behavior</p> <ul style="list-style-type: none"> - Not interfering - Calling the police - Intervene 	<ul style="list-style-type: none"> - Perceived moral wrongness - Moral emotions
2	4.	<ul style="list-style-type: none"> - Examine psychological drivers of citizens' willingness to report and intervene 	<ul style="list-style-type: none"> - Online study in collaboration with three citizen panels 	<p>Citizens N= 1245</p>	<ul style="list-style-type: none"> - Actual reporting & intervening behavior - Willingness to report and intervene - Actual information gathering 	<ul style="list-style-type: none"> 1. Individual-related drivers - Risk perception - Negative emotions - Moral values - Self-efficacy - Response efficacy

Table 1.1. Continued

Component	Chapter	Research goals	Method	Participants	Dependent variables: participation behavior	Independent variables
						<ul style="list-style-type: none"> 2. Community-related drivers <ul style="list-style-type: none"> - Sense of community - Collective efficacy - Community participation 3. Institutional-related drivers <ul style="list-style-type: none"> - Trust - Empowerment - Legitimacy
5.		<ul style="list-style-type: none"> - Examine which psychological drivers influence membership (orientation) of a neighborhood-WhatsApp group 	<ul style="list-style-type: none"> - Survey study - Participants in one neighborhood with an active neighborhood-WhatsApp group 	<p>Citizens N= 214</p>	<ul style="list-style-type: none"> - Being (or willingness to become) a member of a neighborhood-WhatsApp group 	<ul style="list-style-type: none"> 1. Individual drivers <ul style="list-style-type: none"> - Risk perception - Negative emotions - Self-efficacy - Response efficacy 2. Community-related drivers <ul style="list-style-type: none"> - Sense of community - Collective efficacy - Community participation 3. Institutional-related drivers <ul style="list-style-type: none"> - Trust
3	6.	<ul style="list-style-type: none"> - Explore psychological drivers of actual reporting behavior and the willingness to report and intervene 	<ul style="list-style-type: none"> - Field experiment in three city centers 	<p>Citizens N= 100</p>	<ul style="list-style-type: none"> - Actual reporting behavior - Willingness to report crime to the police and intervene 	<ul style="list-style-type: none"> - Type of crime - Victim statement





2

Citizen participation in the police domain: the role of citizens' attitude and morality

This chapter is based on:
Schreurs, W., Kerstholt, J.H., De Vries, P.W. & Giebels, E. (2018). Citizen participation in the police domain: the role of citizens' attitude and morality. *Journal of Community Psychology*, 46(6), 775 – 789. doi: 10.1002/jcop.21972

In the police domain, there has been more and more attention to the large potential of citizen capital in fighting crime and creating safer neighborhoods (Bullock & Sindall, 2014; Gill et al., 2014). While traditional forms of policing rely on responsive control, where only the police are responsible for fighting crime, a more recent police philosophy called community policing focuses on the cooperation between the police and the community (Gill et al., 2014; Kerstholt et al., 2015). Community policing consists of three key elements: organizational transformation, problem solving, and citizen participation. Organizations are transformed to facilitate the community policing philosophy by the alignment of management, structure and information systems. In order to focus more on problem solving, the processes used by police officers are focused on proactively and systematically identifying problems and the development of effective responses. Citizen participation is about partnerships between the police and individuals and organizations in the community (COPS, 2014). So far, research on community policing has, on the one hand, focused on the effects of community policing on crime reduction and subjective safety. On the other hand, it tapped into organizational issues, such as how the police organization should be structured for the effective implementation of community policing (Connell, Miggans, & McGloin, 2008; Terpstra, 2010; Weisburd & Eck, 2004). One reason for the increased attention to the use of citizen capital in the police domain is that the police simply do not have the resources to be constantly present. At the same time, citizens know the ins and outs of their neighborhood; they know where problems lie, and when something suspicious is going on. As such, they can be widely used as the eyes and ears of the police.

To date, citizens are mostly involved in policing activities as the 'eyes and ears' of the police by providing intelligence (Terpstra, 2010). For example, when someone is missing, the police can send a message to a large group of citizens to look out for that person, significantly increasing the chance that the person will be signaled. One example of a citizen participation success story covered by the media in the US was when a hospital worker spotted an abducted 4-year old girl just after seeing an amber alert message on social media during her lunchbreak and notified the police, which led to her rescue (Sowers, 2016, October 12). Another Dutch example of citizen participation concerned the capture of a burglar where the police asked the public in the specific area for more information and gave them a suspect description. That same evening the police were able to make an arrest in the case after receiving multiple tips from citizens (Nu.nl, 2016, February 17).

This is not the only way citizens can be involved however. Recently, Van der Land et al. (2014) made a classification of a broad range of citizen involvement. Categories of participation include surveillance in the neighborhood, contributing to criminal investigations by providing intelligence, conflict mediation, advising the police about the main problems in the neighborhood, seeking personal contact with the police, and collecting and spreading information amongst neighbors regarding safety. However, this classification is based on a distinction of specific tasks that can be performed by citizens. Thus, it is organized around the physical manifestation of the activities and does not necessarily depart from the perspective of citizens themselves. However, choices whether or not to participate are arguably based on psychological drivers, which may be unrelated to physical manifestations. Moreover, attempts to influence citizens to participate with the police would require insight into these very drivers in order to be effective rather than their mere behavioral manifestations. For example, the specific categories of surveillance and conflict mediation in the classification proposed by Van der Land et al. (2014) may both be instantiated by the same psychological drivers, such as a concern for others. Therefore, we posit that a meaningful categorization of participation activities is preferably based on the co-occurrence of actual participation behavior reflecting similar underlying psychological drivers of the activities.

Although the large potential of citizens in the police domain is increasingly acknowledged, research shows that, in reality, only a small proportion of citizens is actually participating (Bullock & Sindall, 2014; Van Sluis, Cachet, Van Os, Prins, & Marks, 2010). This is the case despite government programs to stimulate participation (Maton, 2008), and despite the ever increasing possibilities for communication between police and citizens, afforded by for example social media (Fieseler & Fleck, 2013). Given this low participation level, more studies on the psychological drivers of citizens' participatory actions are warranted. After all, the motivation to reap the benefits of community policing sparks interest in ways to increase citizens' participation, and, hence, of the psychological drivers of participation. In the present study the focus will therefore be on citizen participation in the police domain and the underlying psychological mechanisms. For the scope of this study we operationalize citizen participation in the police domain as all behaviors citizens can perform in order to increase safety in the neighborhood. This concerns a wide variety of behaviors (e.g., reporting crime, joining a neighborhood watch, attending a meeting with police officers) and includes both individual action as well as

collaboration with neighbors and/or the police. In order to gain more insight into drivers behind citizen participation, the first aim of our study is to examine which participation behaviors co-occur. Secondly, we are interested in whether they are influenced by different psychological drivers.

Theoretical background

Drivers for citizen participation.

Previous studies did focus on drivers of participation in the police domain. Pattavina, Byrne, and Garcia (2006) showed for example that social cohesion, and public social control were main influencers of participation in crime prevention behaviors. Choi and Lee (2016) additionally found that citizen cooperation in community policing was influenced by community attachment, crime problems in the community, confidence in the police and personal gains of participating. Also police legitimacy was shown to be a driver for cooperation with the police such as reporting crime and the willingness to join meetings with the police (Tyler & Fagan, 2008). However, these drivers are mainly based on interpersonal and institutional factors while not many of these factors focus on how individual decisions to participate in the police domain are made. As an addition, we will therefore further explore which psychological drivers might influence citizens' decision to participate in the police domain.

Attitude.

Citizens may have a broad range of opinions that are relevant for participation behavior. For example, their decisions whether to participate can be influenced by opinions about who is primarily responsible for the safety in their neighborhood or the extent to which they themselves are actually able to reduce crime. This particular set of evaluative judgments can be described as the attitude towards citizen participation. As attitudes are generally known to be a driver for behavior (Ajzen & Fishbein, 2005; Bohner & Dickel, 2011), the attitude towards citizen participation will most likely be related to actual participation in the police domain as well. Previous research, for example, showed a relationship between attitude towards police legitimacy and the willingness to participate among youths (Hinds, 2009), and a relation between the presence of community policing programs to increase positive contact between youth and the police and a positive attitude (Leroux & McShane, 2017). Attitudes tend to be strong and resistant to change and bias, because they are often based on values or are of personal relevance (Ajzen & Fishbein, 2005; Honkanen & Verplanken, 2004). In theories of reasoned action and planned

behavior, values are one of the background factors of behavioral beliefs which are related to attitude (Ajzen & Fishbein, 2005). Research suggests that moral values are particularly important in this respect (Honkanen & Verplanken, 2004; Sparks & Shepherd, 2002). In the context of citizen participation in the police domain, for example, this might occur when citizens would regard participation in safety measures as a moral duty or when they personally experience safety problems. Hence, underlying drivers for the attitude of participation behavior appear to be of a moral nature (Boer & Fischer, 2013; Honkanen & Verplanken, 2004; Slovic & Västfjäll, 2010; Sparks & Shepherd, 2002).

Morality in the police domain.

Crime, disorder, and morality are three interwoven concepts (Cromby, Brown, Gross, Locke & Patterson, 2010). In the police domain, citizen participation is aimed at discouraging others' wrongful behavior such as reducing crime and disorder, and promoting 'right' behavior (Fischer & Poland, 1998). In order to determine what is right or wrong, people need to make a moral assessment of a situation or certain behavior based on their personal moral values. When witnessing a crime, for example, citizens could assess the crime as morally wrong, which might lead them to report it to the police. More long-term participation behaviors, such as joining a neighborhood watch or thinking along with police policy, can be instigated by moral assessment of long-term disorder and crime in one's own neighborhood as well. Moral values, and moral emotions are comprehensively described in the Moral Foundations Theory (Haidt, 2012). As noted above, moral values form the foundation of moral reactions, whereas emotions are instigated when these values are breached. Haidt (2012) distinguishes between five main moral values; care, fairness, loyalty, authority, and sanctity. These values are triggered by specific cues; for example, care is triggered when a person assesses that others are suffering or in distress. Alternatively, when someone is being robbed of his property, this likely triggers values of fairness. When behavior conflicts with one's moral expectations and values this likely results in the experience of emotions such as anger, shame or gratitude.

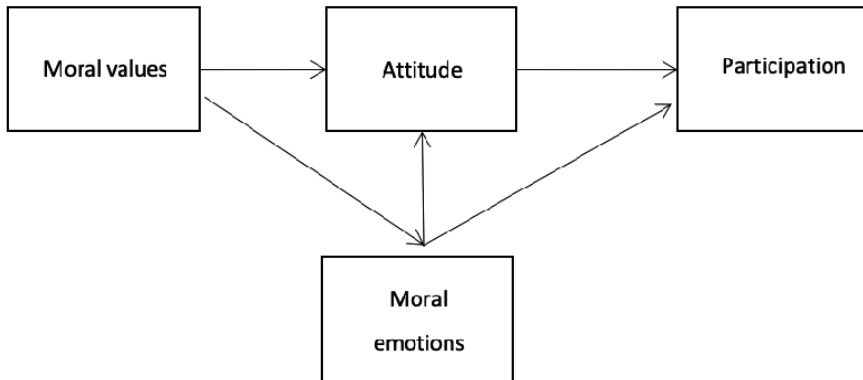
The function of these emotions is twofold. First, they arise when certain behavior is in line with or against a moral code and indicate to the experiencer whether behavior should or should not be accepted. Secondly, when these emotions are expressed they show violators that when they breach someone's values they might have to adapt their behavior in the future (Harkness & Hitlin,

2014). Prior research has also shown that the adherence to moral values increases the likelihood of moral action or ethical behavior in volunteerism (which is presumably related to participation behavior; Derryberry, Mulvaney, Brooks, & Chandler, 2009). To sum up, the adherence to moral values is likely to elicit the experience of moral emotions and might subsequently lead to participation behavior. Hence, important drivers regarding morality in participation behavior in the police domain are moral values (Haidt, 2012; Honkanen & Verplanken, 2004; Sparks & Shepherd, 2002) and moral emotions (Haidt, 2003a; Slovic & Västfjäll, 2010).

With regard to emotions, four families are distinguished. Other-condemning emotions comprise negative feelings about the character or actions of others and include anger, contempt, and disgust. Self-conscious emotions are, from an evolutionary perspective, focused on helping oneself to fit into groups and include shame and embarrassment. Other-praising emotions are positive emotions regarding others and contain gratitude, awe, and pride and, finally, sympathy is mentioned as the most important other-suffering emotion. Furthermore, some emotions are arguably associated with certain moral foundations (e.g., disgust with the sanctity foundation and sympathy with the care foundation), but so far no framework exists which clearly integrates the moral values with moral emotions (Graham et al., 2012; Haidt, 2003a; Horberg, Oveis, & Keltner, 2011).

To summarize, we expect moral values to be the foundation for the attitude towards citizen participation and the experienced emotions. Furthermore, we expect the attitude and emotions to mediate the relation between the adherence to moral values and participation behavior, and the emotions to influence attitude. These expected interrelations are displayed in Figure 2.1.

Figure 2.1. *Expected model of relations between participation behavior and the attitude, moral values, and moral emotions*



Present study

The main objective of this study is to examine whether actual participation behavior in the police domain can be predicted by three different but connected psychological drivers: the attitude towards citizen participation, one's moral values, and moral emotions. We furthermore explore whether a classification of participation behavior in the police domain can be made and whether the influence of the psychological drivers will differ across different types of participation behavior.

Method

Participants

Data gathering was conducted in the period 2015-2016. As we were interested in drivers of actual participatory behavior, and given the anticipated low participation rates, we contacted a wide variety of organizations and groups throughout the Netherlands in which citizens were already participating in the context of community policing (e.g., neighborhood watches, neighborhood councils of citizen representatives). We asked them via personal contact and/or email to distribute an online questionnaire among their members, with the explanation that we were interested in their opinions regarding participation in the safety domain. More respondents were generated via snowballing, and also included citizens who did not engage in (much) participatory action (approximately 30% of the sample). Together, this generated sufficient inter-subject variability in participation behavior.

Removal of five participants who did not fill out the online survey seriously led to a convenience sample of 217 Dutch citizens. The average age of the participants was 49 years ($SD = 16.4$ years), 51.4% of the participants was male and 48.6% was female. For 0.9% of the respondents the highest completed educational level was primary education, for 9.5% high school, 21.7% intermediate vocational education, and 67.1% had completed higher education. Participants lived throughout the Netherlands with all twelve provinces represented. On average, respondents had lived in their current neighborhood for 16.8 years ($SD = 15.00$ years).

Compared to the Dutch population in 2015 (50.5% men, 49.5% women (CBS, 2015)) we have a few more men and fewer women in our sample. Furthermore, the proportion of higher educated citizens in the sample is higher than in the Dutch population (67.1% in the sample versus 31.7% in the Dutch population (Onderwijs in Cijfers, 2016)).

Procedure

Participants were asked to participate in an online survey concerning citizen participation in the police domain. After giving informed consent, participants were asked about their actual participation behavior in the police domain *in the last year*. Following this, three blocks of questions were given in random order (to avoid transgression effects between these variables). These question blocks contained questions regarding moral values, moral emotions and the attitude concerning citizen participation in the police domain. The survey ended with some demographical questions.

Measures

Dependent variable.

Participation behavior was measured by asking participants to what extent 21 statements applied to them concerning different participation behaviors they had actively participated in during the past year on a seven-point Likert scale ranging from not at all (1) to very much (7). These 21 behaviors were derived from multiple existing classifications of participation behavior as described earlier (Van der Land et al., 2014; Van Steden et al., 2011) and integrated to include the full range of participation behavior (see Table 2.1). Their relevance to the context was also checked and confirmed in several short interviews with neighborhood police officers. Examples are: 'calling the police', 'being a member of a neighborhood watch' and 'correcting neighbors regarding their behavior'.

Because the extent to which these behaviors can be engaged in differs (e.g., becoming a member of a neighborhood watch is a onetime behavior, while one can call the police multiple times), we standardized the participation behavior items in order to be able to make a more informative comparison. In order to examine whether participation behavior consists of multiple factors, we conducted a principal component factor analysis with varimax rotation with the 21 types of measured participation behavior. The Kaiser-Meyer-Olkin measure is .84, which is above the recommended value of .5 (Field, 2013). The factor analysis, with varimax rotation, shows six underlying factors with an eigenvalue larger than 1 (see Table 2.1). Cronbach's alpha was computed for all factors as a lower bound estimate of reliability with a reliability of .60 considered to be acceptable (Loewenthal, 2001). Because of low reliability scores of the fifth and sixth factor we chose to include only the four remaining factors in subsequent analyses. These factors will be further referred to as collaborative participation ($\alpha = .87$), social control ($\alpha = .77$), responsive participation ($\alpha = .72$) and detection ($\alpha = .66$), which respectively explain 32%, 10%, 8% and 6% of the variance (56% in total). *Collaborative participation* involves collaboration with the police, for example by thinking about and shaping policy, attending meetings with a neighborhood police officer or answering questions from the police.

Social control concerns behavior regarding others in the neighborhood, such as being a role model for the youth, being alert for signals of inappropriate behavior and discussing problems about crime and nuisance with neighbors. *Responsive participation* concerns behavior after a transgression has occurred, such as calling the police, reporting nuisance and keeping track of, and mediating in, neighborhood quarrels. Finally, *detection* includes detecting crime or criminals through joining neighborhood watches (physical or via WhatsApp), citizen net or identifying offenders via the internet. As such, this factor structure implies that participation behavior can be organized around four distinguishable components. Associated items per factor and the factor structure are shown in Table 2.1.

Table 2.1. Factor loadings for 21 items from a self-constructed citizen participation scale in the police domain

Items	M	SD	Collaborative Participation	Social control	Responsive Participation	Detection
			$\alpha = .87$	$\alpha = .77$	$\alpha = .72$	$\alpha = .66$
1. Answering questions from the police	1.93	1.46	.54		.47	
2. Attended a round through the neighborhood with police officer	1.70	1.46	.78			
3. Attending a meeting with the neighborhood police officer	2.23	1.92	.79			
4. Thinking along with the police about their policy	2.24	1.93	.86			
5. Shaping and influencing police policy	1.67	1.37	.82			
6. Correcting others regarding their behavior	2.54	1.72		.51	.46	
7. Discuss problems about crime and nuisance with neighbors	3.71	2.07	.37	.68		
8. Being alert for signals of inappropriate behavior	4.07	1.89		.69		.38
9. Being a role model for the youth	4.33	2.03		.74		
10. Calling the police	2.46	1.72	.48		.50	
11. Reporting nuisance	2.39	1.76	.39		.54	
12. Mediating in neighborhood conflicts	1.50	1.06	.40		.66	
13. Keeping track of neighborhood quarrels	2.22	1.55			.71	
14. Identifying offenders via the internet	1.54	1.33			.30	.58
15. Being member of 'citizen net' or amber alert	2.33	1.91				.62
16. Being member of a neighborhood watch	1.32	1.15				.66
17. Being member of a neighborhood-WhatsApp group	2.31	2.26				.75
Eigenvalue			6.58	2.07	1.61	1.31
Percentage of variance explained			31.35	9.83	7.65	6.24
					N	

Table 2.1. Continued:

Note. Means (M) and standard deviations (SD) are reported before standardization. Factor loadings < .3 are suppressed, only items loading on factors with Eigenvalue >1 are shown

Independent variables.

Attitude towards citizen participation was measured by asking participants how much they agreed with fourteen opinion statements concerning participation in the police domain on seven-point Likert scales (1 = never, 7= very often, see Table 2.2). Because no existing scale of attitude towards citizen participation exists, a scale was constructed for our research ($\alpha = .84$) based on four elements often referred to in the literature (Clary & Snyder, 1999; Lerner & Keltner, 2000): personal values (e.g., 'I should contribute to the safety of my neighborhood'), skills enhancement (e.g., 'By participating, I can develop myself further'), perceived effort (e.g., 'It takes too much effort to be active in my neighborhood') and allocated responsibility (e.g., 'The government is responsible for the fight against crime').

Table 2.2. Items and descriptives of the self-constructed scale for attitude towards citizen participation

Items	Mean	SD
1. The help of citizens in reducing crime is meaningful	5.81	1.29
2. Citizen participation in the identification of perpetrators is useful	5.71	1.25
3. It is fun to deploy myself for the safety of my neighborhood	4.49	1.78
4. I should contribute to the safety of my neighborhood	5.33	1.61
5. The police has to ensure the safety in my neighborhood ^a	3.09	1.51
6. It is my duty to help to make my neighborhood safer	4.95	1.58
7. Only the government is responsible for the fight against crime ^a	5.38	1.63
8. Helping in my neighborhood yields personal benefits	4.54	1.58
9. It takes too much effort to be active in my neighborhood ^a	5.00	1.65
10. By participating I can develop myself further	3.96	1.67
11. Addressing neighbors regarding their behavior will have negative consequences for me ^a	4.57	1.70
12. By helping in my neighborhood, I can extend my network	4.82	1.61
13. I think it is important to help others	5.68	1.28
14. I think everyone has to take care of him-/herself ^a	6.00	1.34

Note. ^a items were reverse coded.

Moral values were measured by asking participants to evaluate the personal relevance of the thirty statements of the validated Moral Foundations Questionnaire (MFQ30; Graham, Haidt, & Nosek, 2009; Haidt, 2012). Some statements were slightly adjusted in order to fit our specific (Dutch) context (for example 'Whether or not someone's action showed love for his or her country', was changed into 'Whether or not someone does good deeds for his or her neighborhood'). A factor analysis did not show a clear distribution of moral values across the five foundations known in the literature (Haidt, 2012) but displayed a scattered distribution. Separate reliability scores for three of the five moral foundations showed to be unacceptably low as well (α below .60). Therefore, we chose to take all moral values items as one construct ($\alpha = .85$) in order to measure the degree of adherence to moral values instead of differentiating between types of moral value dimensions.

Moral emotions were measured with the use of the moral emotions: anger, disgust, contempt, shame, embarrassment, guilt, compassion, gratitude, elevation, fear, pride and schadenfreude (Haidt, 2003a). Participants were asked to rate to what extent they felt these emotions in general on a seven-point Likert scale (1 = not at all, 7= a lot). Because we wanted to measure actual participation behavior that has already taken place, we asked about their dispositional emotions (emotions with which people tend to react across situations and time) instead of momentary emotions (immediate affective reactions to a specific object or situation; Gambetti & Giusberti, 2009). However, previous research showed that dispositional and momentary emotions are strongly related and should yield similar results (Gambetti & Giusberti, 2009; Lerner & Keltner, 2000). A factor analysis was executed in order to discover different factors, which showed three main factors. These factors - largely in line with the classification proposed by Haidt (2003) - can be labeled as *self-conscious emotions* (guilt, embarrassment, shame, fear, and sympathy; $\alpha = .79$, $EV = 3.63$, $R^2 = 33.0\%$), *other-condemning emotions* (contempt, disgust and anger, $\alpha = .71$, $EV = 1.78$, $R^2 = 16.2\%$) and *other-concerning emotions* (gratitude, awe, and pride, $\alpha = .64$, $EV = 1.22$, $R^2 = 11.1\%$). Schadenfreude was loading on a fourth factor, but also loaded sufficiently on other-condemning emotions (.48). Therefore, we added schadenfreude to other-condemning emotions ($\alpha = .70$).

Common method bias

Because the dependent as well as the independent variables were self-reported measures collected at the same time and with the same instrument, there is a chance on variance in the data which is attributable to the data instead of to the constructs measured (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In order to investigate whether the common methods approach biased the data, we conducted a Harman's single factor test for all four models, which all showed a common variance < 28.3%, which is under 50% and therefore seen as acceptable (Lowry & Gaskin, 2014). This suggests that the variance in the data is not likely to be attributed to the common method bias.

Results

Descriptive statistics and correlations

Means, standard deviations, reliabilities and correlations for the dependent and independent variables are shown in Table 2.3. Mean scores of all separate participation behaviors can be found in Table 2.1. Mean scores of the four types of participation behavior (before standardization) showed that participants are mostly involved in social control ($M = 3.67$, $SD = 1.49$), secondly in responsive participation ($M = 2.14$, $SD = 1.13$) and the least in collaborative participation ($M = 1.96$, $SD = 1.43$) and detection ($M = 1.88$, $SD = 1.19$). This means that respondents are more likely to control behaviors of others in their neighborhood and report to the police than that they are actively collaborating with the police in meetings or become active themselves in detecting crimes, for example by joining a neighborhood watch. Although the sample included relatively active citizens, the mean scores for participation behavior were still moderately low (below half-point scale). Because the frequencies of the measured participation behaviors participants could engage in differed, the participation behavior items were standardized before further analyses. The four types of participation do correlate with each other significantly, $r_s > .30$, $p_s < .01$. Respondents were more likely to perform all four types of participation behavior when they had a more positive attitude towards citizen participation (collaborative: $r = .33$, social control: $r = .40$, responsive: $r = .18$ and detection: $r = .34$, $p_s < .01$). Moral values did not correlate significantly with participation. Of the three families of moral emotions, only other-concerning emotions were correlated to one of the four types of participation behavior. The more respondents reported other-concerning emotions, the more they engaged in social control ($r = .26$, $p < .01$).

Table 2.3. Means, standard deviations, reliabilities and intercorrelations among the variables

Variables	M	SD	α	1	2	3	4	5	6	7	8	9
Participation behavior												
1. Collaborative participation	1.96 ^a	1.43 ^a	.87	---								
2. Social control	3.67 ^a	1.49 ^a	.77	.49**	---							
3. Responsive participation	2.14 ^a	1.13 ^a	.72	.60**	.57**	---						
4. Detection	1.88 ^a	1.19 ^a	.66	.43**	.45**	.30**	---					
5. Attitude	4.95	.88	.84	.33**	.40**	.18**	.34**	---				
6. Moral values	5.08	.79	.78	.11	.10	.02	.02	.31**	---			
Moral emotions												
7. Other-condemning emotions	2.88	1.05	.71	-.04	.03	.10	-.05	-.19**	.07	---		
8. Other-concerning emotions	4.48	1.09	.64	.10	.26**	.06	.04	.14*	.15*	.10	---	
9. Self-conscious emotions	4.48	.99	.79	-.09	-.12	-.08	-.12	.11	.10	.44**	.31**	---
10. Age	49.17	16.37	---	.20**	.16*	.10	-.03	.32**	.26**	-.14*	-.06	-.30**
11. Gender	---	---	---	-.22**	-.10	-.11	-.02	-.13	.16*	-.01	.10	.27**
12. Education	---	---	---	-.09	-.16*	-.04	-.03	-.10	-.28**	-.10	.03	.12
13. Years lived in the neighborhood	16.83	14.96	---	.19**	.18**	.04	.06	.19**	.17*	-.16*	-.16*	-.26**

Note. * $p < .05$, ** $p < .01$, ^a = before standardizing

Path analysis

A path analysis (with the use of AMOS) was made to examine the hierarchical relations of the constructs in an exploratory manner. We tested the expected model (Figure 2.1; where the three families of moral emotions were included and allowed to correlate) for the four factors of participation behavior (collaborative participation, social control, responsive participation and detection) in one model. The model showed a significant fit ($X^2(4) = 2.632, p = .621$; NFI = .994; CFI = 1.000; RMSEA = .000), however, many paths showed to be non-significant. In order to illustrate the model in a clearer way, we only show the significant paths in Figure 2.2. Regression weights, standard errors and significance levels of all significant and non-significant paths can be found in Table 2.4.

In the path analysis, moral values were indeed located at the basis of the model and positively associated with attitude ($\beta = .39, p < .01$) and other-concerning emotions ($\beta = .24, p < .05$). This means that when people adhere more to moral values, they had a more positive attitude towards citizen participation in the police domain and were more likely to experience emotions such as gratitude and awe. When people had a more positive attitude, they were in turn also more likely to engage in all four types of participation (β s between .16 and .32, $ps < .01$). Self-conscious emotions such as guilt and shame were not related to attitude, while other-concerning emotions ($\beta = .12, p < .05$) increased a positive attitude and other-condemning emotions ($\beta = -.16, p < .05$) negatively influenced attitude. In other words, people who experienced emotions such as anger and disgust had a more negative attitude to participating in the police domain, while people who experience gratitude and pride more often had a more positive attitude.

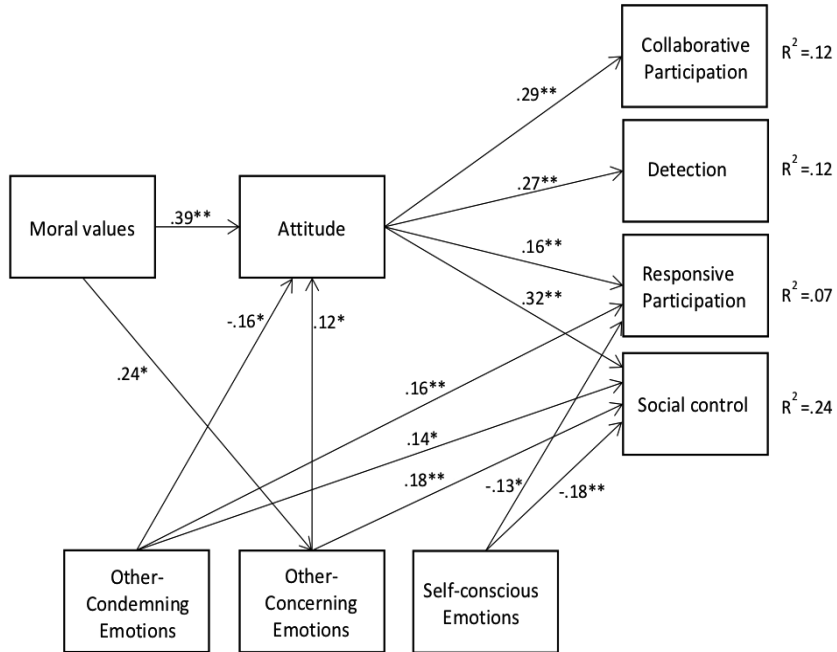
When comparing the four types of participation behaviors, we see that collaborative participation and detection were only influenced by moral emotions through attitude; social control and responsive participation, on the other hand, proved to be influenced by emotions directly as well (although still as part of a mediation pathway). Respondents were more likely to perform responsive participation when they felt other-condemning emotions such as anger and disgust ($\beta = .16, p < .01$) and less likely when they experienced self-conscious emotions such as shame and fear ($\beta = -.13, p < .05$). For social control, respondents were also more likely to participate when feeling more other-condemning emotions ($\beta = .18, p < .01$), and less likely when they experienced self-conscious emotions such as guilt and fear ($\beta = -.18, p < .01$). Furthermore,

participants who experienced more other-concerning emotions ($\beta = .14, p < .01$) were also more likely to engage in social control. Of the four types of participation, these models explained 24% for social control, 12 % for detection, 12% for collaborative participation and 7% for responsive participation.

Table 2.4. Unstandardized regression weights, standard errors (S.E.) and p values of the full path analysis model (as shown in Figure 2.2)

Path	Regression Weight	S.E.	p
Moral values -> Attitude	.39	.08	<.01
Moral values -> Other-concerning emotions	.24	.11	.03
Moral values -> Other-condemning emotions	.10	.09	.30
Moral values -> Self-conscious emotions	.14	.10	.15
Other-condemning emotions -> Attitude	-.16	.07	.02
Other-concerning emotions -> Attitude	.12	.05	.03
Self-conscious emotions -> Attitude	-.10	.07	.12
Attitude -> Collaborative Participation	.29	.06	<.01
Other-condemning emotions -> Collaborative Participation	.05	.06	.41
Other-concerning emotions -> Collaborative Participation	.06	.05	.24
Self-conscious emotions -> Collaborative Participation	-.09	.06	.16
Attitude -> Detection	.27	.05	<.01
Other-condemning emotions -> Detection	.05	.05	.37
Other-concerning emotions -> Detection	.02	.04	.68
Self-conscious emotions -> Detection	-.09	.05	.11
Attitude -> Responsive Participation	.16	.06	.01
Other-condemning emotions -> Responsive Participation	.16	.06	.01
Other-concerning emotions -> Responsive Participation	.04	.05	.36
Self-conscious emotions -> Responsive Participation	-.13	.06	.03
Attitude -> Social Control	.32	.05	<.01
Other-condemning emotions -> Social Control	.14	.06	.01
Other-concerning emotions -> Social Control	.18	.05	<.01
Self-conscious emotions -> Social Control	-.18	.06	<.01

Figure 2.2. Path analysis of moral values and three types of moral emotions on four types of participation behavior in the police domain; collaborative participation, social control, responsive participation and detection



X² (4) = 2.632 p = .621; NFI = .994; CFI = 1.000; RMSEA = .000, * p < .05, ** p < .01.
 Note. Only significant paths are shown, regression weights and p-values of all paths can be found in Table 2.4. The three groups of moral emotions were allowed to correlate, and the four types of participation (collaborative participation, detection, responsive participation and social control) were standardized before analysis and were allowed to correlate.

Discussion

The aim of the current study was to provide insight into actual participation behavior in the context of community policing. We were interested in whether different types of participation behavior in the police domain can be distinguished based on co-occurrence, and if so, whether these types of participation are influenced differently by three psychological drivers: attitude towards community policing, moral values, and moral emotions. The results indicate that participation behavior in the police domain should not be treated as one uniform concept, but, rather, should be differentiated in four different types of behavior. These are, in order of prevalence: social control, responsive participation, collaborative participation, and detection. Social control involves citizens correcting each other regarding their anti-social behavior (e.g., discussing associated problems with neighbors). Responsive participation

includes behaviors as a response to crime or antisocial behavior (e.g., calling the police). Collaborative participation includes behaviors where citizens collaborate and meet with the police (e.g., answering questions from the police), and detection focuses on detecting crime or assisting in the identification of offenders (e.g., being a member of a neighborhood watch).

Since the models only explain a small proportion of variance, the results should be interpreted with caution. Our findings showed that the attitude towards citizen participation is a strong predictor for all four types of actual participation behavior, which is consistent with our expected model as well as the connection between attitude and behavior found in previous research (Ajzen & Fishbein, 2005; Honkanen & Verplanken, 2004). Attitude concerns a set of evaluative judgments towards community policing, such as whether participating is seen as meaningful in reducing crime, whether it takes too much effort, or is seen as the sole responsibility of the police and not that of citizens. An implication of our finding would be that behavior can be stimulated by influencing attitude towards citizen participation. This could be done, for example, by stressing the usefulness of participation to citizens to the police as well as to citizens themselves, or to accentuate the responsibility citizens have to participate in society.

We predicted that attitude would emanate from moral values, which we extracted from Haidt's Moral Foundations Theory. As expected, our results did show that the adherence to moral values was indirectly associated with all four types of participation through attitude and moral emotions, although this indirect relation only applied for other-concerning emotions. Note, however, that this concerns moral values as a general construct, as we did not find support for the five separate moral foundations this theory describes (Graham et al., 2012; Haidt, 2012). The same low reliabilities of these five foundations were found in previous research with the MFQ in the Netherlands (Quintelier, Ishii, Weeden, Kurzban, & Braeckman, 2013), suggesting that the MFQ is culturally sensitive. Nevertheless, analyses with a general scale for moral values show that that people who consider morality more important have a more positive attitude towards community policing as well as more other-concerning emotions (e.g., gratitude and pride).

Comparing the influence of psychological drivers on the four types of participation, we also found some apparent differences with regard to moral

emotions. It stands out that collaborative participation and detection are not directly influenced by moral emotions (only through attitude) while social control and responsive behavior are (even though still as part of a mediation pathway). An explanation might be the more preventive and long-term nature of collaborative participation (e.g., discussing crime and nuisance with the police or on a policy level) and detection (e.g., joining a neighborhood watch) in comparison to the more reactive and direct nature of social control (e.g., correcting others regarding their behavior) and responsive participation (e.g., reporting nuisance and mediating in neighborhood conflicts), which are more likely to be evoked by moral emotions. As results showed that social control and participation behavior were performed relatively more by participants in comparison to detection and collaboration, this might suggest that citizens are more inclined to participate when the behavior is emotionally driven.

Although this study was exploratory, these results can give policy makers some insight in participation behavior in the police domain and in ways to influence this behavior. For example, when the police want to design strategies to stimulate responsive participation such as calling the police or reporting nuisance, they can focus on emotions. These strategies could focus on increasing feelings of disgust and anger towards the perpetrator as well as decreasing feelings of fear and guilt people might experience in anticipation of making the report. This could for example be done in the form of leaflets or commercials, or on a smaller scale in communication between neighborhood police officers and their neighborhood. However, this might have ethical constraints and might lead to negative consequences such as vigilantism. When stimulating collaborative participation, such as joining meetings with neighborhood police officers, these strategies could work more effectively when the focus is more on a positive attitude towards citizen participation and less on emotions. Further research on whether and, if so, how attitude and moral emotions can be influenced in order to stimulate participation behavior is recommended. In a practical setting, it would for example be interesting to examine further whether a neighborhood police officer can influence other-concerning emotions in the neighborhood by promoting social cohesion. In addition, whether this, in turn, might lead to more social control among citizens themselves could be an area of study. This could, for instance, be achieved by introducing already active citizens to other citizens who would like to participate in order to form a closer network.

Limitations

We acknowledge some limitations of the current study. A first limitation is that a convenience sample was used, which is not necessarily a representative sample of the general Dutch population. Therefore, we cannot make firm conclusions regarding the prevalence of participation behavior based on this study. However, as our aim was to study actual participation behavior and its underlying psychological drivers, we needed a sample with a large variety in participation behavior. Moreover, the fact that our focus was more on establishing relationship between moral emotions, attitudes and behavior that could reasonably be expected not to differ much between individuals and groups, e.g., different age groups, rather than assessing how the general population feels about these variables, in our view renders representativeness a relatively minor issue here (for a discussion, see Kardes (1996); Petty and Cacioppo (1996)). Nevertheless, in future studies, it would be interesting to also focus on citizens who are not active at all, and whether these psychological drivers could also predict why citizens do not participate.

Another limitation is that we did not measure race/ethnicity, while this might affect attitudes towards the police and therefore people's willingness to participate. In this sample this might not have significant consequences, but in other contexts in other parts of the world this can influence police-community relations and the willingness to participate and should definitely be taken into account in future research (Wehrman & Angelis, 2011).

Furthermore, since the separate participation behaviors differed in possible frequency and meaning (someone can for example become a member of a neighborhood watch once, but call the police multiple times, and how often someone calls the police also depends on circumstance) we were not able to draw firm conclusions about the frequency of separate behaviors. However, we were able to show the existence of a classification of different subtypes of behavior which might be explained by different underlying mechanisms. Furthermore, the disparity of different behaviors might have led to noise in the data, but we think that, by standardizing the participation behaviors before analysis as well as the reasonably large sample size, we have partially reduced this noise. The participation behaviors measured contained a range of citizen activities from very effortless to more effortful participation behaviors and might not only be specific to community policing. In line with Gill et al. (2014), we see community policing as a philosophy of cooperation between citizens

and the police, in which we focused on the citizens' perspective instead of the top-down organizational perspective (as there has been more research so far on the latter than on the previous). Therefore, we argue that it is appropriate that also more police-light activities were included in the scale of citizen participation in the police domain.

Another limitation is that the attitude and moral emotions were measured after participation behavior was already performed (or not performed), and therefore might have been adjusted afterward due to experiences of participating or not participating. One might argue that the participation behavior could also have influenced the attitude towards citizen participation and emotions instead of the other way around. Therefore, for future research, it is recommended to take into account the attitude and emotions before the decision is made to participate as well as after the participation behavior. Finally, this study purely focused on a few individual psychological drivers, but this does not mean we do not acknowledge the importance of other individual indicators such as self-efficacy and perceived behavioral control as well as societal indicators, such as social cohesion, community efficacy or community organization, as important drivers for behavior. Hence, we recommend to address these indicators to be addressed in future research concerning citizen participation in the police domain (Kerley & Benson, 2000; Xu, Fiedler, & Flaming, 2005).

Conclusion

This study highlights the importance of the citizen's perspective in citizen participation in the police domain. Although the results should be treated with caution, they did point to the relevance of distinguishing between actual participation behavior in the police domain and taking into account underlying psychological drivers. Four types of participation behavior can be distinguished between; social control, responsive participation collaborative participation, and detection. The degree to which people adhere to moral values showed to be an important (indirect) foundation for citizens' participation behavior regarding neighborhood safety. Furthermore, the attitude citizens have towards community policing influenced all four types of participation, while moral emotions only play an important role in social control and responsive behavior, which also happen to be the most prevalent types of participation behavior. In practice, these findings might be of assistance in designing strategies or interventions to stimulate citizen's participation behavior in the police domain.





3

Witnessing a crime: citizen intervention and the role of morality

This chapter is based on:
Schreurs, W., Kerstholt, J.H., De Vries, P.W. & Giebels, E. (Submitted for publication). Witnessing a crime: Citizen intervention and the role of morality.

The authors would like to thank Sabrina Perick for her assistance with the data collection.

Imagine that you are walking through town and see someone stealing a bike. You stand still for a moment and have to make a split-second decision on how you are going to act in this situation. You might think about how morally wrong it is and how much you despise people stealing from each other and therefore experience feelings of anger or disgust. Or you might be afraid to intervene. What would you do: not interfere and walk away, call the police, or approach this person and intervene?

Police forces were founded in order to prevent citizens from being their own judge and settle differences while influenced by personal and emotional involvement (Van Beers, 2000). For a long time the responsibility of safety was indeed assigned to the police forces, but recently citizens have been encouraged to become active themselves in creating safe communities (Bullock & Sindall, 2014; Kerstholt et al., 2015; Van der Land, 2014). They are, for example, expected to report crime to the police, look out for suspicious situations and correct their fellow citizens when behaving antisocially (Van Steden et al., 2011). There are two main trends that explain this increased involvement of citizens in police work. First, in many countries such as the USA, UK and the Netherlands, police forces have been confronted with budget cuts and reallocation of resources in response to societal developments such as increased terrorist threats (Evans, Dillon, & Rand, 2015; "AmericanPoliceBeat, 2016; Politie, 2015). Using the capacity of citizens could alleviate this demand for scarce resources. For example, by asking citizens to look out for particular suspects, capacity is enlarged by many eyes and ears on the street. A second trend is that citizens become more empowered to take responsibility for their own safety (Francescato & Zani, 2010; Maton, 2008), not in the least due to ICT developments such as social media (Fieseler & Fleck, 2013; Kerstholt et al., 2015). Through internet citizens can easily inform themselves about crime related activities, and social media allows them to quickly share their knowledge through their network. However, this increase of participation also comes with risks, the major one probably that citizens take the law into their own hands and go too far in their participatory behavior (vigilante justice). For example, they may use disproportional violence to stop an offender, or naming and shaming offenders via social media while they are not yet proven guilty (Haas, 2010; Trottier, 2012).

Decisions to intervene in crime-related events are likely to be based on personal moral assessment of what is right and wrong (Harkness & Hitlin,

2014). If a situation conflicts with moral values (e.g., a theft or an assault), the person may experience moral emotions such as anger or disgust (Haidt, 2003) which in turn, triggers behavior towards action. So, on the one hand, citizens are stimulated to participate in the police domain, but on the other hand, their emotional involvement may easily lead to actions beyond acceptable boundaries such as disproportional violence or naming and shaming. This tension makes it of utmost importance to know the psychological mechanisms underlying citizens' responses to criminal events, as to best select strategies to keep vigilante justice under control.

In this contribution, we therefore focus on decision processes that underlie intervening behavior of citizens in the police domain. In two studies, we explore the influence of perceived moral wrongness and moral emotions on citizens' decision (not) to intervene.

Moral decision processes

People use different ways to arrive at decisions. In decision-making research, a distinction is made between intuitive and deliberate decision processes. In this two-system view, decisions can be made automatic, heuristic, and intuitive (referred to as System 1) and effortful, slow, and deliberate (referred to as System 2; Evans et al., 2015; Kahneman, 2002). Via the deliberate system, people make decisions by calculating the costs and benefits for all alternative decision outcomes before deciding how to behave. However, individuals mostly do not have the time, ability and capacity to make such deliberate analytic decisions and consequently rely on intuitions (Haidt, 2012; Zeelenberg et al., 2008). This will likely be the case for intervention decisions in crime-related situations as well (Gigerenzer & Gaissmaier, 2011; Zeelenberg et al., 2008). Such situations allow only little reaction time, are quite complex and ambiguous, do not have a clear right or wrong course of action and, and as argued above, are driven by emotional reactions. Together, these factors make it likely that decisions to intervene or not are mainly triggered by intuitive decision processes (Shiv et al., 2005; Slovic & Västfjäll, 2010).

Morality is one well known intuitive factor which influences decision processes (Harkness & Hitlin, 2014; Haidt, 2003). People are known to be morally motivated to act in a certain way after witnessing acts of injustice. Intervening behavior after witnessing a crime can be associated to the innocent bystander in bystander literature. The innocent bystander witnesses

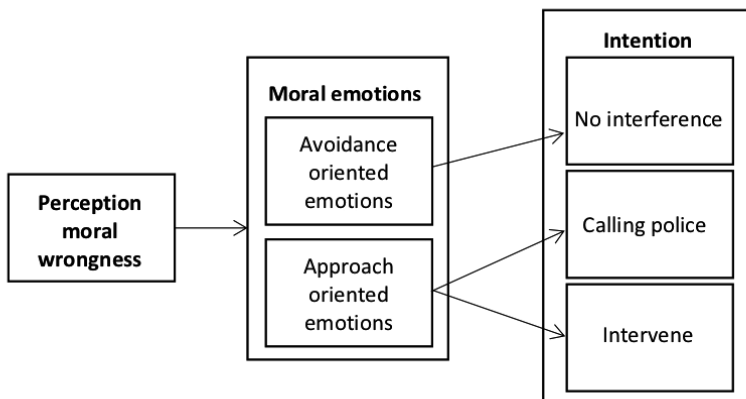
a situation in which he or she is not involved and where another person is in distress or pain. The bystander is faced with the decision whether or not to intervene (Thornberg 2010). Previous research has shown that bystanders who witness workplace bullying will intervene because they recognize the ethical inappropriateness or the moral wrongness of the situation, and therefore feel morally motivated to act (Pouwelse, et al., 2018). Bystander literature can be linked to citizen intervention after witnessing crime as both concern people intervening after witnessing injustice such as bullying, harassment or crime. However, in the scope of this study we will not take into account the number of bystanders present. When someone's moral values are violated, for example the value of fairness which is violated after someone witnesses a crime (Haidt, 2012), is likely to elicit moral emotions, such as anger and sympathy. Bystander situations have been shown to arouse moral and empathetic distress which transforms into the experience of emotions such as sympathy, guilt or anger and becomes a prosocial motive to intervene (Thornberg, 2010).

In the intuitive system, emotions are conceptualized as motivational drivers for behavior (Zeelenberg et al., 2008). Emotions are known to be linked to behavior by having associated action tendencies of approach or avoidance behavior (Lerner & Keltner, 2000). Anger, for example, is known to instigate approaching behavior by moving towards the source of the anger while when people experience fear, they are more prone to avoid the situation (Lerner & Keltner, 2001; Zeelenberg et al., 2008). This could, for example, mean that a person who experiences anger towards a bicycle thief will be more likely to intervene than a person who is afraid of the thief or has concerns about victimization if one would intervene (Chaurand & Brauer, 2008; Haidt & Joseph, 2004; Madero-Hernandez, Fisher, & Wilcox, 2016). Hence, the moral emotions people experience are likely to be associated with the behavioral decision people make. Haidt (2003a) identified four categories of moral emotions. Self-conscious emotions consist of self-centered emotions related to how people see themselves and their thoughts on how they are perceived by others, such as shame and embarrassment. Other-condemning emotions consist of negative feelings about the character or actions of others and include anger, contempt, and disgust. Other-praising emotions are positive emotions regarding others and encompass gratitude, awe, and pride, and finally, sympathy is mentioned as the most important other-suffering emotion (Haidt, 2003a).

Present study

In the present study, we are interested in decision processes behind intervening behavior in the police domain with a focus on morality. In the following, we will describe two online survey studies which are equal in method, but with different samples. We gave individuals five scenarios describing a crime or antisocial behavior and asked them whether they would intervene, how wrong they perceived the situation sketched in the scenario to be and about their experience of moral emotions. We first expect that perceived moral wrongness indirectly influences the intention to intervene through moral emotions. Second, as different emotions have different action tendencies, we expect that approaching emotions leads to action (either calling the police or intervening) and avoidance emotions to inaction. These expectations are combined in a conceptual model visualized in Figure 3.1.

Figure 3.1. Conceptual model



Study 1

In the first study, we explored whether moral emotions influenced the intention to not interfere, call the police and intervene. We also explored whether the relation between the perception of moral wrongness and the behavioral intention was mediated by moral emotions. We first tested whether this conceptual model (Figure 3.1) was applicable to a student population.

Method Study 1

Design and participants.

The study was a within-subjects design, where all participants were presented with five scenarios. Participants were collected via convenience sampling. A total of 213 university students (13.6% Dutch, 77.9% German, and 8.5% of another nationality) participated in an online survey. The survey was conducted in the participants native tongue (Dutch and German, back translation was used to translate the survey. Mean age was 20 years ($SD = 1.81$ years), 23.0% of the participants was male and 77.0% female. The study was approved by the institutional ethical committee and all participants gave informed consent before the study.

Procedure.

The participants were asked to participate in an online survey concerning citizen participation in the police domain. They were offered five scenarios in which they had to imagine that they witnessed a suspicious situation. Respondents were asked to estimate the likelihood that they would not interfere, call the police, or intervene. In order to have a broad range of scenarios, they were designed to loosely correspond with one of five moral foundations explicated in the Moral Foundations Questionnaire (Haidt, 2012).¹ The topics of the scenarios were a child abduction (care), a bicycle theft (fairness), a bar fight against a friend (loyalty), a struggle between a police officer and an unknown suspect (authority) and a known convicted pedophile walking across a school playground (sanctity). The full scenarios are presented in Table 3.1. In order for the scenarios to be as realistic as possible, the scenarios were designed to be ambiguous. In the scenarios, it was not clear whether the person in the scenario was actually committing a crime or what the motives for his/her suspicious behavior were. In the scenario of the possible child abduction, for example, respondents were told the child appeared to look very similar to the missing child, and in the scenario of the bar fight respondents were not informed about the cause of the fight. Each time, the five scenarios were followed by questions concerning participant's behavioral intention, moral emotions felt towards the scenarios and how wrong participants perceived the behavior of

1 Before receiving the scenarios, respondents were asked to fill in the Moral Foundations Questionnaire 30 (Haidt, 2012). The MFQ did appear not to be a reliable measure in this context ($\alpha < .60$), therefore, we were not able to link the scenarios to the specific moral foundations, and the MFQ was not taken into account in the analyses but we further did analysis with moral values as one construct.

the 'transgressor' in the scenario to be. The survey ended with demographic questions concerning age, gender, and nationality.²

Table 3.1. Scenarios, the moral foundation they represent and means and standard deviations of the perceived moral wrongness of the scenario

Scenario	Moral foundation	No interference (SD)	Calling the police (SD)	Intervene (SD)
1 You have received an Amber alert on your phone that a little boy from your neighborhood is missing. When you go to the grocery store you see a child, who really looks like the missing boy, walking out of the store with a young couple.	Care	3.13 (2.09)	5.54 (1.64)	3.14 (1.95)
2 You walk in the city and see a man hanging around a bicycle. When you walk towards it you see he is carrying a large bolt cutter. Therefore, you suspect he wants to steal the bicycle.	Fairness	3.29 (2.11)	4.99 (1.89)	2.94 (1.89)
3 You are in a bar together with your friends. Suddenly, you see someone approaching one of your friends and hitting him/her. You don't understand why and don't know what has happened beforehand.	Loyalty	2.12 (1.78)	4.35 (2.18)	4.64 (2.21)
4 You walk down the street and see a police officer struggling with someone. The officer tries to arrest the person but the person won't comply and hits and kicks the officer multiple times.	Authority	3.32 (2.23)	4.50 (2.26)	3.36 (2.26)
5 A pedophile who is convicted for the kidnapping and sexual abuse of a seven-year old girl lives in your neighborhood. He has completed his sentence and is returning to his house. A few days after you have heard this you see him standing on a school playground.	Sanctity	3.30 (2.27)	5.19 (2.09)	2.61 (1.96)

Note. 7-point Likert scales, likelihood ranging from 1 (very small) to 7 (very large)

2 In this study a cognitive load manipulation was added, however due to no differences between the high cognitive load and low cognitive load condition on the constructs, these were not taken into account in further analyses.

Measures.

Behavioral intention was measured by asking participants to rate the likelihood of three types of behavioral intentions on a seven-point Likert-scale; 'I will not interfere', 'I will call the police and try to remember the suspect's description' and 'I will intervene and hold the suspect until the police arrive'. These behavioral intentions were respectively designed to correspond to no participation behavior, participation behavior involving the police and participation behavior with an escalation risk (i.e. risk of transgressing towards vigilantism) in real life. Average scores of each of the three types of behavioral intentions were calculated across the five scenarios.

Moral emotions were anger, disgust, contempt, shame, embarrassment, guilt, compassion, gratitude, elevation, fear, pride and schadenfreude (Haidt, 2003a). Participants were asked to rate to what extent they felt these emotions after reading the scenario on a seven-point Likert scale (1 = not at all, 7 = a lot). A factor analysis was conducted in order to discover different emotional factors, which showed three main factors. These factors -largely in line with the classification proposed by Haidt (2003) - can be labeled as *self-conscious emotions* (guilt, embarrassment, fear, shame and sympathy, $\alpha = .82$, $EV = 4.96$, $h^2 = 41.3\%$), *other-concerning emotions* (gratitude, pride, awe and schadenfreude, $\alpha = .81$, $EV = 1.81$, $h^2 = 15.1\%$), and *other-condemning emotions* (anger, disgust and contempt $\alpha = .83$, $EV = 1.42$, $h^2 = 11.8\%$).

Perception moral wrongness was measured by asking participants how good or wrong they thought the behavior of the 'transgressing' person in the scenario was on a seven-point Likert scale (1 = very good, 7 = very wrong). An average over the five scenarios was computed ($\alpha = .59$).

Results

Descriptive statistics and correlations.

Means, standard deviations and correlations are shown in Table 3.2. Of the three intentional behaviors, respondents were most likely to call the police ($M = 4.69$), then to not interfere ($M = 3.52$), and to intervene ($M = 3.47$) respectively. The intention not to interfere was positively correlated with self-conscious emotions ($r = .20$, $p < .01$). Calling the police was also positively correlated with self-conscious emotions ($r = .23$, $p < .01$) but also with other-condemning emotions ($r = .31$, $p < .01$), and the perception of how moral wrong the behavior of the transgressor in the scenario was ($r = .25$, $p < .01$).

For intervening, other-condemning emotions ($r = .21, p < .01$) also correlated positively ($r = .21, p < .01$).

Table 3.2. Correlations, means, standard deviations and reliability scores of Study 1 (student population)

Variables	M	SD	α	1	2	3	4	5	6	7
Behavioral intention										
1. No interference	3.52	1.14	.53	---						
2. Calling police	4.69	1.25	.60	-.15*	---					
3. Intervene	3.47	1.28	.69	-.40**	.43**	---				
Moral emotions										
4. Self-conscious	2.78	.97	.87	.20**	.23**	.10	---			
5. Other-concerning	2.05	1.01	.85	.08	.10	.12	.60**	---		
6. Other-condemning	3.43	1.09	.80	.08	.31**	.21**	.51**	.30**	---	
7. Perception moral wrongness	5.59	.76	.56	-.12	.25**	.08	-.06	-.10	.21**	---

Note. N=220

Regression analyses.

In order to test the conceptual model (Figure 3.1), we first performed three separate linear regression analyses with three dependent measures: no interference, calling the police and intervening. As predictors we inserted the independent measures which we expected to relate with participation behavior, which were self-conscious emotions, other-concerning emotions and other-condemning emotions. The model was controlled for age and gender. These results are shown in Table 3.3. The linear regression analysis showed that self-conscious emotions ($\beta = .33, p < .01$) contributed significantly to predicting the intention of no interference. The intention to call the police was significantly predicted by other-condemning emotions ($\beta = .30, p < .01$). The intention to intervene was significantly predicted by other-condemning emotions ($\beta = .24, p < .01$). These models have an explained variance of 5% for no interference, 12% for calling the police and 7% for intervening.

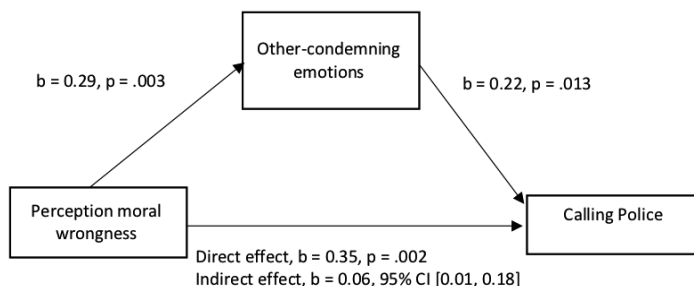
Table 3.3. Regression analyses Study 1 (student population)

Steps and variables entered	No interference		Calling police		Intervene	
	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>
1. Age	.02	.71	-.05	.27	-.06	.19
Gender (1=male, 2=female)	-.02	.91	.47	.02	-.42	.04
2. Self-conscious emotions	.33	<.01	.06	.64	-.05	.70
Other-concerning emotions	-.13	.20	.04	.74	.08	.50
Other-condemning emotions	-.03	.68	.30	<.01	.24	<.01
R ² change	.05	<.05	.09	<.001	.04	<.05
R ²	.05	<.05	.12	<.001	.07	<.05

Note. N= 220

In order to measure the indirect relation of the perception of moral wrongness of the scenario with the behavioral intention, we conducted mediation analyses with self-conscious emotions, other-concerning and other-condemning emotions as mediators for no interference, calling the police and intervening (by the use of Process; Hayes, 2013), see Figure 3.2). Only one mediation effect was found. There was a significant indirect effect of perception moral wrongness on calling the police through other-condemning emotions, $b = 0.064$, BCa CI [0.007, 0.176]. This represents a relatively small effect, $\kappa^2 = .038$, 95% BCa CI [0.004, 0.099].

Figure 3.2. Mediation analyses between perception moral wrongness and intervening behavior with moral emotions as mediator (study 1, student sample)



Note. No mediation effects were found for other-condemning emotions on no interference and intervene, and for self-conscious and other-concerning emotions on no interference, calling police or intervene.

Common method bias.

Because the dependent as well as the independent variables were self-reported measures collected at the same time and with the same instrument, there is a chance on variance in the data which is attributable to the data instead of to the constructs measured (Podsakoff et al., 2003). In order to investigate whether the common methods approach biased the data, we conducted a Harman's single factor test, which showed a common variance of 39.59%, which is under 50% and therefore seen as acceptable (Lowry & Gaskin, 2014). This suggests that the variance in the data is not likely to be attributed to the common method bias.

Conclusion

The results show that different psychological drivers influence three different types of intervening behavior; not interfering, calling the police or intervening. People are more inclined not to interfere when they experience more self-conscious emotions such as shame and fear. The likelihood to call the police increases when people experience more other-condemning emotions such as anger and disgust. These other-condemning emotions mediate the relation between how morally wrong someone finds the behavior of the transgressor in the scenarios and their intention to call the police. This means that when people who assess the situation as more morally wrong, experience stronger other-condemning emotions such as anger, which consequently leads to people being more inclined to call the police. Whether people actually intervened themselves was also related to the experience of more other-condemning emotions such as anger and disgust. Other-concerning emotions such as pride and sympathy did not show to influence the behavioral intention.

This study presents some interesting results, however, we do not know whether it is appropriate to use a student sample. Contradicting views on the generalizability of student samples on the general population exist (Kardes, 1996; Petty & Cacioppo, 1996). On the one hand, academics argue that the observed responses of student samples in social psychology research does not reflect responses of society at large. Students for example supposedly differ from the general population in that they have a weaker self-definition, and therefore have weaker attitudes and are more easily influenced (Petty & Cacioppo, 1996). On the other hand, Kardes (1996) argued that students do provide useful informative data about basic psychological processes and relations between psychological constructs. Also, in the domain of this study

(intervening behavior after witnessing a crime), some differences between students and the general population might exist. The general population, for example, have more life experience than students, which makes them more likely to have more experience with moral dilemmas. In order to be able to generalize our results, we decided to replicate the same study with a more representative sample. Hence, we distributed the same questionnaire among the general population.

Study 2

In a second study, we examined whether the same conceptual model (Figure 3.1) was applicable to the general population. We asked citizens about their intention to not interfere, to call the police and to intervene after being presented with the same scenarios as in study 1. As the participants of the Study 1 had a Dutch as well as a German nationality, for this study we also collected Dutch and German citizens from the general population.

Method

Design and participants.

The study was a within-subjects design where all participants received the same five scenarios. A total of 170 Dutch (97) and German (73) citizens participated in an online survey. Participants were collected via a convenience sample. Mean age was 39 years ($SD = 16.3$ years), 35.9% of the participants was male and 64.1% female. Due to the expected higher variation in education and income amongst the general population in comparison to college students, we also included these variables in the citizen sample. The highest completed educational level for 1.2% of the respondents was primary education, for 25.9% high school, 22.9% intermediate vocational education, 34.1% higher vocational education and 15.9% reported holding a university degree. 27.3% had a yearly income below €20.000, 34.5% had an income between €30.000 and €50.000, 22.7% between €40.000 and €60.000, and 15.5% above €60.000. In comparison, the modal income in 2016 was €36.500. The study was approved by the institutional ethical committee and all participants gave informed consent before the study.

Procedure.

The procedure of study 2 was similar to the procedure of study 1.

Measures.

Instruments were similar to Study 1 except for two added questions regarding income and the highest obtained educational level. A factor analysis was conducted in order to discover emotional factors, which showed the same three main factors as in study 1: *other-concerning emotions* (gratitude, pride, awe and schadenfreude, $\alpha = .83$, $EV = 1.96$, $h^2 = 16.3\%$), *self-conscious emotions* (guilt, embarrassment, fear, shame and sympathy, $\alpha = .86$, $EV = 5.52$, $h^2 = 46.0\%$) and *other-condemning emotions* (anger, disgust and contempt $\alpha = .81$, $EV = 1.09$, $h^2 = 9.0\%$).

Results

Means, standard deviations and correlations are shown in Table 3.4. Of the three intentional behaviors, the general population was also most likely to call the police ($M = 4.91$). However, in contrast to the student population, they were more likely to intervene ($M = 3.34$) than not to interfere ($M = 3.03$). Again, the intention not to interfere was positively correlated with self-conscious emotions ($r = .23$, $p < .01$). Calling the police was positively correlated with other-condemning emotions ($r = .29$, $p < .01$) as well as with the perception. For intervening, other-concerning emotions ($r = .29$, $p < .01$) and the perception of moral wrongness ($r = .19$, $p < .05$) also correlated positively.

Table 3.4. Study 2 (general population) correlations, means, standard deviations and reliability scores

Variables	M	SD	α	1	2	3	4	5	6	7
Behavioral intention										
1. No interference	3.03	1.29	.59	---						
2. Calling police	4.91	1.23	.58	-.25**	---					
3. Intervene	3.34	1.28	.59	-.40**	.44**	---				
Moral emotions										
4. Self-conscious	2.23	.94	.84	.23**	.02	-.03	---			
5. Other-concerning	1.88	1.01	.82	.03	.09	.29**	.50**	---		
6. Other-condemning	3.91	1.29	.83	.03	.29**	.15	.43**	.30**	---	
7. Perception moral wrongness	6.01	.76	.59	-.13	.33**	.19*	-.18*	-.13	.29**	---

Note. $N = 170$

As in study 1, we again performed three separate linear regression analyses with no interference, calling the police and intervening as dependent measures

in order to test the conceptual model for citizens (Figure 3.1). These models were besides for age and gender also controlled for education and income, as more variation on these variables was expected between citizens than between university students. These results are shown in Table 3.5. The linear regression analysis showed that the influence of self-conscious emotions ($\beta = .38, p < .01$) was significant on not interfering. Participants were more inclined to call the police when they experienced more other-condemning emotions ($\beta = .29, p < .01$). The intention to intervene was positively predicted by other-concerning emotions ($\beta = .40, p < .01$), negatively by self-conscious emotions ($\beta = -.31, p = .01$), and was marginally significantly predicted by other-condemning emotions ($\beta = .14, p = .08$). These models have an explained variance of 9% for no interference, 14% for calling the police and 20% for intervening, which is quite higher than the explained variance for the student population in study 1.

Table 3.5. Regression analyses study general population

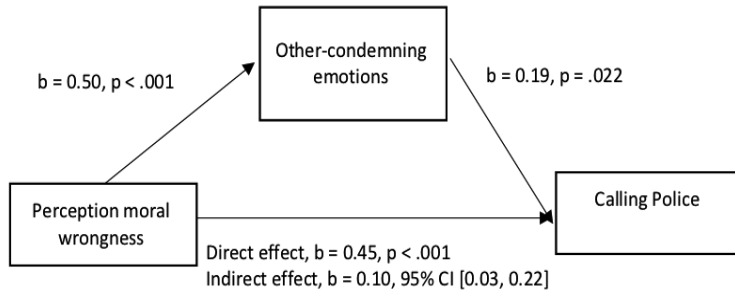
Steps and variables entered	No interference		Calling police		Intervene	
	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>
1. Age	.00	.75	.02	<.01	.01	.02
Gender (1=male, 2=female)	.50	.02	.05	.81	-.61	<.01
Education	-.02	.69	-.06	.21	-.03	.59
Income	-.04	.34	-.01	.74	-.07	.09
2. Self-conscious emotions	.38	<.01	-.41	.25	-.31	.01
Other-concerning emotions	-.09	.52	.05	.67	.40	<.01
Other-condemning emotions	-.09	.28	.29	<.01	.14	.08
R ² change	.05	<.05	.08	<.001	.10	<.001
R ²	.09	<.05	.14	<.001	.20	<.001

Note. N=170

In order to measure the indirect relation of the perception of moral wrongness of the scenario with the behavioral intention, we conducted mediation analyses with self-conscious emotions, other-concerning and other-condemning emotions as mediators for no interference, calling the police and intervening (by the use of PROCESS (Hayes, 2013), see Figure 3.3). Here we found only one mediation effect. There was a significant indirect effect of perception moral

wrongness on calling the police through other-condemning emotions, $b = 0.097$, BCa CI [0.028, 0.216]. This represents a relatively medium effect, $\kappa^2 = .060$, 95% BCa CI [0.019, 0.128].

Figure 3.3. Mediation analyses between perception moral wrongness and intervening behavior with emotions as mediator (study 2, general population)



Note. No mediation effects were found for other-condemning emotions on no interference and intervene, and for self-conscious and other-concerning emotions on no interference, calling police or intervene.

Common method bias.

In order to investigate whether the common methods approach biased the data, we conducted a Harman's single factor test, which showed a common variance of 36.70%, which is under 50% and therefore seen as acceptable (Lowry & Gaskin, 2014). This suggests that the variance in the data is not likely to be attributed to the common method bias.

Conclusion study 2

The results found in this study with a general population sample are quite similar to the results found in the first study with a student sample. The results for the general population also show that citizens who experience more self-conscious emotions such as shame and fear are more inclined not to interfere. When the general population perceives the behavior of a transgressor as more morally wrong, they experience more other-condemning emotions such as anger and disgust and subsequently have a higher intention to call the police. The intention to intervene is increased by the experience of other-concerning emotions such as pride and sympathy and decreased by the experience of self-conscious emotions such as shame and fear. This is in contrast to Study 1 where only other-condemning emotions related to intervening (which were marginally significant in the citizen sample).

General Discussion

The aim of this study was to explore the influence of the perception of moral wrongness and moral emotions on citizen intervening behavior in the police domain. We conducted two studies in which we used a student sample and a sample from the general population. Even though these contradicting views regarding the generalizability of student samples exist, our two studies showed quite similar results with regard to two of the three types of behavior: not intervening at all and calling the police. This speaks for the generalizability of our results to subgroups of the population.

As noted by Lerner and Keltner (2000), emotions are linked to behavior by having action tendencies towards approaching or avoidance behavior. Anger, for example, is related to approach behavior, while fear instigates avoidance behavior. Congruously, our results show that in both samples emotions with an avoidance tendency (self-conscious emotions such as fear) were indeed related to not interfering. Approaching emotions, on the other hand, influenced the likelihood of calling the police and intervening. Other-concerning emotions (such as pride and sympathy) increased intervening behavior among citizens from the general population, other-condemning emotions (such as disgust and anger) increased calling the police in both samples and intervening in the student sample. However, the category of other-condemning emotions did appear to consist of both approach- as well avoidance-oriented emotions (e.g., anger vs. disgust). A possible explanation why these emotions with different action tendencies belong to the same category can be found in the moral nature of disgust in these studies. In general, disgust is known to have an avoidance tendency distancing oneself from the object which elicits disgust (Lerner & Keltner, 2000). However, moral disgust has a slightly different effect, as it leads to the desire to avoid or neutralize the threat posed by the transgressor of a moral violation and subsequently to the desire to punish the transgressor (Haidt, 2003a; Tybur, Lieberman, Kurzban, & DeScioli, 2013). Therefore, disgust in the moral scenarios in the police domain can lead to people wanting to punish the offender by calling the police or even by intervening themselves. Concluding, the relation of moral emotions with intervening behavior can be explained by the approach-avoidance framework of moral emotions.

We expected the perception of moral wrongness to influence all types of intervening behavior indirectly via moral emotions. Our results, however, showed in both samples, that this was only the case for calling the police through the

experience of other-condemning emotions. We would have expected this to be related to intervening behavior as well, as this was also shown in bystander intervention after witnessing bullying (Pouwelse, Mulder and Mikkelsen, 2018). A possible explanation is that moral wrongness in the police domain is associated with authority (more than in a bullying situation). Calling the police can be seen as an authoritative action. When individuals assess other's behavior as morally wrong, this is already focused on the wrong behavior of others and makes it more likely to elicit other-condemning emotions than self-conscious and other-concerning emotions. When a situation is perceived as more morally wrong and elicits anger, people might have a higher need for authoritative action which increases the likelihood to call the police.

Limitations

This study also has some limitations. We choose to measure moral emotions after asking respondents about their behavioral intention, with the aim to let respondents make an unconscious decision without being influenced by a rationalization of which emotions they experienced. After making this decision we asked respondents about the moral emotions they experienced while reading the scenario. A disadvantage of this method is that we can only draw conclusions about the relation between constructs, but not about causality. We do not know whether participants experienced these emotions before making their decision, or whether the decision to not interfere, call the police or intervene influenced their answer on the emotions they experienced as well. One might argue that emotions such as anger and fear are more likely to be experienced before making this decision, while emotions such as shame and pride are more likely to result from the decision whether to intervene itself. Although we were interested in exploring the relation of intervening behavior with multiple moral emotions, in further (experimental) research, this disadvantage could be solved by using physiological measures to measure emotions while reading the scenario and making the decision to intervene, and asking respondents about the emotions they experienced after the decision as well.

In these studies, we used imagined situations and intentional behavior opposed to actual behavior. Therefore, we do not know whether people would act in the same way and experience the same psychological drivers for that behavior in actual situations. Future research could measure in an experimental manner what people actually do in such situations. Although, this method of

placing respondents in such situations would clearly come with some ethical concerns.

Another limitation is that we explored the effects of the psychological drivers of intervening behavior across scenarios. There were situational differences between the scenarios we did not control for, which could influence intervening behavior. The scenarios differ for example on the seriousness of the crime (bike theft vs. kidnapping) which might influence the perceived danger of intervening and the personal relevance (unknown victim vs. a friend being the victim). One might argue that people are more inclined to intervene when the crime is more serious and when the victim is known to them. Therefore, it is recommended to systematically examine differences on these types of dimensions in future research. However, the fact that we did find results across scenarios suggests that these results apply across situational differences. This insight can be helpful for governmental institutions when designing communication strategies in order to stimulate citizens to intervene when they witness a crime.

Conclusion and implications

Concluding, in two studies with a sample of college students and of the general population, we found quite similar results. The results have shown that intuitive decision processes such as emotions and the perception of moral wrongness are indeed important in the decision citizens make to act when they witness a crime. Different emotions play a role leading to different types of behavioral outcomes. When individuals experience self-conscious emotions, they are more likely to not interfere at all, while the experience of other-condemning emotions will more likely result in individuals calling the police. Whether people actually intervene themselves, is dependent on the other-condemning or other-concerning emotions they experience. Furthermore, the more people perceive the behavior of the transgressor as morally wrong, the more likely they are to experience other-condemning emotions and subsequently the more likely they are to call the police.

Implications of these exploratory studies are that when the police would want to stimulate intervening behavior or discourage vigilantism, they should take into account that moral emotions have an influence on individual's behavior to intervene and the perception of moral wrongness on calling the police. In some situations, the police would want citizens to intervene (for example when

it is about a minor offense or it takes too long for the police to arrive) while in other situations the police would only want citizens to call them and remember the suspect's description (for example when it is too dangerous for citizens to intervene themselves). Communication strategies currently used by the police, often focus on the rational system, by encouraging citizens to participate in order to catch more offenders and reduce crime. This research gives insight that the intuitive system has an important and often unconscious influence on the behavior of citizens. Besides the elicited moral emotions, the underlying views of what is morally right and wrong is important in order to influence specific behavior. These insights should definitely be taken into account when designing communication strategies in the future.





4

Community resilience and crime prevention: Applying the Community Engagement Theory to the risk of crime

This chapter is based on:
Schreurs, W., Kerstholt, J.H., De Vries, P. W. & Giebels, E. (Submitted for
publication). Applying the community engagement theory to the risk of crime.

Citizens are increasingly expected to take a more participatory role in society, requiring them to act as care givers, prevent and help solve crime, and mitigate the consequences of hazards and disasters. In the context of public safety, this shift towards a shared responsibility between the government and citizens increases the need for the latter to be knowledgeable about a wide range of uncertain risks and to properly prepare themselves in case these risks become reality (Yetano et al., 2010). In the Netherlands, for example, citizens living in areas below sea level need to prepare themselves for a serious flooding, as a quick evacuation will probably not be feasible in such a situation (Kerstholt et al., 2017).

To date most attention regarding risk preparedness has focused on hazards such as floods, tsunami's and earthquakes. In the past decade, however, social safety disasters have gained notoriety in the public's eye. The 9/11 terrorist attacks, and the more recent terrorist attacks near Christmas markets in Berlin in 2016 and Strasbourg in 2018, for instance, have had their impact throughout the Western world (Haridakis & Rubin, 2005), and the same can be said for other human-made risks, such as those pertaining to technological hazards, cybercrime, organized crime, and crime undermining local authority and interfering in businesses (RIVM, 2016). These types of crimes have disruptive effects on individuals and communities alike. Terrorist attacks, for example, may strike fear in the heart of citizens (Haridakis & Rubin, 2005), and affect the community by pitching groups within societies against each other. Crime undermining local authority may have disastrous consequences for the regular economy and the quality of society (Broekhuizen, Meulenkamp, Stoutjesdijk, & Boutellier, 2018). Criminal money invested in legitimate businesses may for example result in unfair competition, and drug shacks, hemp plantations and synthetic-drug laboratories may pose physical risks in the form of nuisance, noise, fire, and chemical spillage (Lam, Van der Wal, & Kop, 2018). Taken together, it is increasingly realized that crime risks can have severe negative and dislocating effects on the community, stressing the importance of making communities resilient to crime.

Since most citizens would know the ins and outs of their own neighborhood, they would be the most likely candidates to know where criminal activities are likely to happen and to actually recognize crime in action. As such, they can have a valuable role in crime prevention and as sources of crime-related intelligence for the police (Bullock & Sindall, 2014; Terpstra, 2010). In the past

decade, governments have increasingly pursued opportunities for citizen engagement and citizens, in turn, have become more aware of possibilities to actively participate (Yetano et al., 2010). These developments are perhaps best signified by the increase in a number of so-called online neighborhood watches in the Netherlands. Often involving both citizens and police officers, these online neighborhood watches provide an online means to connect people with the aim to prevent crime and increase crime-solving rates by signaling suspicious activities in their neighborhood (Lub, 2016; Pridmore, Mols, Wang, & Holleman, 2018; WABP, 2018). This greater demand on citizens to partake in the fight against crime on the one hand, and the increasing opportunities for them to do so on the other, underscores the importance to know which psychological factors drive people to actually take these opportunities.

Multiple well-known psychological theories have been developed to predict citizens' preparatory and adaptive behavior for hazards and disasters, for example the Protective Action Decision Model and the Protection Motivation Theory, (Terpstra, 2011; Lindell & Perry, 2012; Floyd, Prentice-Dunn & Rogers, 2000). These theories mainly address individual- and social-related factors. Another theory aiming to predict citizens' preparatory behavior, called the Community Engagement Theory (Paton, 2013; Paton et al., 2013; Paton et al., 2008), takes into account institutional-related drivers as well. This theory proposes that *individual* beliefs, social network characteristics in the *community*, and the relationship between community and *institutions* influence the extent to which citizens are willing to receive information and to use this information to prepare for hazards. The Community Engagement Theory has been described as an all-hazard theory: it has been validated for disasters such as floods, tsunamis, and earthquakes, and across different cultures (Paton et al., 2013). To date, however, the domain of application has mainly focused on the context of natural hazards; consequently, applicability to social safety risks such as crime has yet to be assessed. In the present study, it will therefore be examined whether the individual-, community- and institutional-related psychological drivers of the Community Engagement Theory also apply to the context of social safety hazards such as crime.

Applying the Community Engagement theory to the risk of crime

According to Paton (2013), dealing with uncertainty represents a common denominator in people's experience of various hazardous events. In the example of a flooding, citizens may be uncertain about the exact time and

place of the flooding, its intensity, and its potential consequences (Kerstholt et al., 2017). Taking preparatory action can be seen as a means to cope with these uncertainties. This should be no different for the risk of becoming a victim of crime: whether or not citizens would become a victim of crime is highly uncertain, as is the severity of the crime itself and its consequences for individuals and their community.

Obviously, exactly which specific preparatory actions are required would depend on the nature of the risk. For an earthquake, these action can for example consist of protecting your house to avoid that it collapses during an earthquake and stock up on food and water (Paton et al., 2010), whereas for a flooding one could acquire an emergency kit or knowledge on how to evacuate or where safe locations can be found (Kerstholt et al., 2017). These preparatory behaviors aim to mitigate negative consequences in case the specific risk occurs. For crime, mitigation may involve reporting a suspicion of crime to the police through the correct channels or discussing such suspicions with neighbors. Preparations would then be to get information on how to act when a crime occurs, for example how to report to the police, using which channels, or how to intervene.

Crime is a special domain in comparison to the domain of natural hazards, in the sense that the police have a monopoly on violence. In crime prevention, citizens are not free to do anything they want but are bounded by laws and regulations. This emphasizes the relevance of relationships between citizens and institutions as the police: collaboration between the former and the latter should ensure that citizens abide by these rules and do not take the law into their own hands. However, citizens increasingly act out of their own initiative, do not always seek contact with the police, and do not always adhere to these rules or regulations. A government's vision of a greater citizen participation in the fight against crime may therefore increase the risk that this participation turns into vigilantism, where citizens for example use unauthorized violence or violate privacy rights of the suspect (Haas, de Keijser, & Bruinsma, 2014; Lub & De Leeuw, 2019). Ideally, therefore, citizens should not act fully independently. Police officers, or the police as an organization, should assist citizen participation by informing them about the relevant laws and regulations, and provide some oversight to ensure these are abided by. For example, a burglary in progress should be stopped by citizens calling in the help of the police,

rather than apprehending the suspect themselves, and, perhaps, use violence (Jackson, et al., 2013).

All in all, it could be argued that the Community Engagement Theory's all-hazard applicability would also apply to how people make choices in actual information gathering and whether they are willing to act when crime occurs (for example by reporting to the police and intervening when witnessing a crime).

Psychological drivers

The Community Engagement Theory takes into account three types of psychological drivers: individual-, community- and institutional-related drivers.

Individual-related drivers.

The individual-related drivers include beliefs regarding the hazard, as well as regarding the appropriate preventive or responsive behavior. Risk perception is one of these individual-related drivers. Operationalized as the perceived likelihood of the risk to occur and the perceived severity of the consequences (Paton et al., 2008), a higher risk perception has been shown to lead to more information seeking (Ter Huurne & Gutteling, 2008).

Previous research on preparatory behavior for hazards has shown that whether people see themselves as capable to perform the specific behavior, also known as self-efficacy, will influence whether they will actually perform that behavior. Besides self-efficacy, also response efficacy (also called outcome expectancy), i.e. the belief whether the advised behavior will have the anticipated effect, is expected to increase preparatory behavior (Floyd et al., 2000; Paton, 2013). Additionally, risk information that is perceived as high in self-efficacy and response efficacy increases the likelihood that citizens prepare themselves for flood risk (Kievik & Gutteling, 2011).

In the police domain, and in crime prevention specifically, morality plays an essential role (Cromby, John, Brown, Steven D, Gross, Harriet, Locke, Abigail, & Patterson, Anne E, 2010). In order for citizens to report crime or to intervene, they first have to decide whether they classify certain behavior they have witnessed, for instance someone stealing a bicycle, as right or wrong (Harkness & Hitlin, 2014). Experiencing a conflict with their moral values then leads to the experience of moral emotions such as anger or disgust (Haidt, 2003a), in turn

motivating behavior such as reporting the crime to the police. Further, previous research has shown that the experience of negative emotions (for example fear) will influence people's eagerness to gather information about a risk and courses of action (Nabi, 2003). In the case of crime, this information could be about courses of action regarding reporting crime to the police or intervening when being a witness of crime. Hence, for the purpose of this study morality was added to the individual-related drivers in the form of moral values and moral emotions.

Community-related drivers.

The Community Engagement Theory takes several community-related drivers into account. The first one is citizen's sense of community, entailing to what extent they feel connected with their neighborhood (Ohmer & Beck, 2006; Paton & Johnston, 2001). Second, citizens may also experience a certain degree of collective efficacy, meaning that citizens feel that they are capable as a community to perform a certain action (Hipp, 2016; Ohmer & Beck, 2006), for instance, to protect the community against crime. Third, whether citizens have participated in their community on a broad range of domains in the past (e.g., organized a street barbecue, attending public meetings or joined a neighborhood crime watch) is expected to increase the likelihood of reporting and intervening behavior when the occasion arises. By participating in the community, citizens engage in social contacts, making it easier to gather information on how to act. This in turn might increase confidence to act again in the future (Paton et al., 2013).

Institutional-related drivers.

In crime prevention, the institutional-related drivers are just as, or maybe even more, important than in the case of a natural hazard. When acting on a criminal activity in their neighborhood, citizens may either directly contact the police, or are very likely to encounter the police in the process. Additionally, citizens are probably more likely to assist the police by intervening or report a crime to them when they trust the police (Jackson & Bradford, 2010; Stoutland, 2001), and see the police as a legitimate authority (Jackson et al., 2013; Tyler & Fagan, 2008). Finally, according to the Engagement Community Theory, citizens are more likely to engage in the public domain when they feel empowered. This means that when citizens feel that they have influence on (local) government policy and that their opinions are heard by the local governments, they are more

likely to participate in the public domain (Paton, 2013), e.g., by reporting crime to the police or by citizen intervention.

Present study

In the present study, it will be examined whether the Community Engagement Theory also applies to the context of a human-made risk, namely to the risk of being exposed to crime. This paper investigates the relation between individual-, community-, and institutional-related psychological drivers with 1) actual information gathering about how to report to the police and how to be able to intervene as a community (as a way to measure preparatory behavior), and 2) the willingness to act if crime did occur to them or in their neighborhood (as a way to measure intentional behavior after the risk has occurred).

Method

Participants and procedure

In total, 1245 Dutch citizens participated in the online survey. They were asked to participate through the citizen's panel of three municipalities located in the south of The Netherlands. Participants were already member of the citizen panel of their municipality at the time of data collection, and received an email whether they would like to participate in an online study on reporting and intervening behavior regarding crime in their neighborhood. The response rate across municipalities was 18.7%.

The survey started with asking for informed consent and some demographic questions regarding age, gender, and education. After this they filled in questions regarding individual-, community-, and institutional-related psychological drivers of the Community Engagement Theory. Next, participants filled in questions regarding their willingness to act on crime in the future. Also, some additional questions regarding membership of neighborhood-WhatsApp groups and open questions regarding their motivations to act were asked. However, since they provided no additional information, they will not be elaborated upon in this paper. At the end of the survey, actual information gathering was measured by asking participants whether they were willing to receive information regarding how to report to the police and how to organize themselves in a neighborhood-WhatsApp group. When they agreed, they actually received the information.

Measures

Dependent variables.

Actual information gathering was measured by asking participants whether they were willing to receive information regarding how to report crime and how to organize themselves in a neighborhood-WhatsApp group. Their answers were recoded into "no" (not willing to receive any information; coded as 1) and "yes" (willing to receive information about reporting and intervening; coded as 2). When they wanted to receive information, participants actually received links to the information. Because of constraints on lengths imposed by one of the municipalities this variable was only asked in two of three municipalities (N= 762).

Willingness to report and intervene was measured by asking participants whether they were willing to act themselves in crime situations. Participants reported to what extent the following four items were applicable to them; "I would call the police when I witness crime", "I would discuss suspicious circumstances with a police officer", "If I were to witness a crime, I would be inclined to intervene to try to stop the offender" and "Together with my neighbors, I would take the initiative to prevent crime in my neighborhood" (scale 1 = not at all applicable, 5 = very applicable, $\alpha = .70$).

Independent variables.

All independent variables described below were measured on a 5-point Likert-scale, unless described otherwise. They were all based on the items used in the Community Engagement Theory (Paton, 2013), except for the construct of 'moral values' and 'negative emotions'. The items were adapted to the context of social safety (e.g., the focus of risk perception was on crime instead of on a natural hazard, and efficacy focused on the ability to create a safer neighborhood, and organizing as a community in order to prevent crime).

Individual-related drivers

Risk perception was measured by asking participants how likely they thought it was that crime took place in their neighborhood (*Crime Likelihood*, $\alpha = .87$) and that crime would lead to certain consequences (*Crime Consequences*, $\alpha = .86$; Paton et al., 2008).

Moral values were measured by asking participants how important they felt that nine specific moral values were guiding principles in their live. The

items were based on the altruistic and egoistic values as defined in a study by Steg, Bolderdijk, Keizer, and Perlaviciute (2014). An example item is "Social justice: correcting injustice, care for the weak" and "Authority: the right to lead and command" (scale: 1 – not important, 7 = very important). Altruistic values consisted of the values social justice, helpful, a world at peace and equality; $\alpha = .76$). Egoistic values consisted of the values wealth, social power, influential, ambitious, authority; $\alpha = .73$).

Negative emotions were measured by asking respondents how they felt when thinking about the possibility of crime taking place in their neighborhood. Respondents were specifically asked for four emotional states (afraid, worried, angry, and furious; $\alpha = .89$).

Self-efficacy was measured by asking respondents how much they perceived themselves to be capable of contributing to a safer neighborhood (6 statements, $\alpha = .82$, e.g., "I know how to report crime to the police" and "I consider myself capable to prevent crime in my neighborhood").

Response efficacy was measured by asking participants to what extent they thought specific measures they could take would be effective (six statements, $\alpha = .78$, e.g., "participating in a neighborhood-WhatsApp group promotes the safety in my neighborhood").

Community-related drivers

Sense of community was measured by giving participants eight statements regarding their connection with the neighborhood, e.g., "I feel connected with the people in my neighborhood" ($\alpha = .91$).

Collective efficacy was measured by asking to what extent they perceived that they were able to solve problems in collaboration with other neighbors, by giving six statements ($\alpha = .85$, e.g., "In difficult situations, as a neighborhood we are able to work together on a solution").

Community participation was measured by asking participants about their previous experience with a broad range of community participation as well as regarding reporting and intervening behavior specifically (nine statements, $\alpha = .81$, e.g., "I attend neighborhood activities such as a neighborhood barbecue or party", and: "I have called the police in the past to report crime").

Institutional-related drivers

Trust in the police was measured by asking participants to what extent they trusted the police on 9 statements based on Stoutland (2001; $\alpha = .93$, e.g., "you can trust the police when you need them" and "the police does everything it can to prevent crime").

Police legitimacy was measured based on previous research of Tyler and Fagan (2008). Reliability score was relatively low ($\alpha = .66$), a factor analysis showed that taking only the positively framed items into account had a higher reliability ($\alpha = .89$). The scale consisted of five items, such as "In general, the police are a legitimate authority and people have to obey the decision of police officers" and "You have to do what the police tell you to do, even if you do not like the way they treat you".

Empowerment was measured by asking participants to what extent they felt they could have influence on what happened in their neighborhood on an institutional level, and was based on research of Paton (2013) with eight items such as "Voting in local elections affects what is being dealt with in the neighborhood" and "I believe that elected representatives take my opinion seriously" ($\alpha = .80$).

Results

Descriptive statistics and correlations

Means, standard deviations and correlations for the dependent and independent variables are shown in Table 5.1. As we had a large sample, we tested for multicollinearity between independent variables. This was not the case, as all VIF's were below 3 (while below 5 is recommended) and tolerance levels were above 0.2 (Ringle et al., 2015). In total, 55.7 % of participants was willing to receive information. The willingness to receive information (no = 1; yes = 2) was positively correlated with risk perception – crime consequences ($r = .13, p < .01$), risk perception – crime likelihood ($r = .13, p < .01$), negative emotions ($r = .14, p < .01$), altruistic values ($r = .12, p < .01$), egoistic values ($r = .07, p < .05$), collective efficacy ($r = .09, p < .05$) and previous community participation ($r = .09, p < .05$), and negatively correlated with trust in the police ($r = -.08, p < .05$). Whether citizens were willing to report and intervene, correlated positively with altruistic values ($r = .14, p < .01$), egoistic values ($r = .08, p < .01$), self-efficacy ($r = .36, p < .01$), response efficacy ($r = .44, p < .01$), sense of community ($r = .22, p < .01$), collective efficacy ($r = .33, p < .01$), past community

participation ($r = .37, p < .01$), trust in the police ($r = .35, p < .01$), police legitimacy ($r = .19, p < .01$) and empowerment ($r = .23, p < .01$). The municipality correlated with the willingness to receive information ($r = -.08, p < .05$).

Regression analyses

Actual information gathering.

A multilevel logistic regression analysis was conducted with actual information gathering (1 = no, 2 = yes) as dependent variable, the municipality as grouping variable and the psychological drivers as covariates. The results (see Table 5.2) showed that Risk perception – crime likelihood ($\beta = .40, p = .003$), negative emotions ($\beta = .29, p < .01$) and altruistic values ($\beta = .24, p < .01$) were positive predictors and self-efficacy ($\beta = -.43, p < .01$) was a negative predictor for the willingness to gather information. Egoistic values were marginally significant ($\beta = .13, p = .083$). The variance between municipalities was not significant ($p = .62$), and the accuracy rate of predicting information gathering was 62.2%

Table 5.1. Means, standard deviations, reliabilities and intercorrelations among the variables

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Actual information gathering ^a	M	1.56														
	SD	.50														
2. Willingness to act	M	2.83	.10**													
	SD	.90														
3. Risk perception – Crime consequences	M	3.08	.13**	.01												
	SD	.83														
4. Risk perception – Crime likelihood	M	2.81	.13**	-.02	.67**											
	SD	.87														
5. Negative emotions	M	2.55	.14**	-.01	.52**	.56**										
	SD	.98														
6. Altruistic values ^b	M	6.00	.12**	.14**	-.06*	-.05	-.07*									
	SD	.91														
7. Egoistic values ^b	M	3.56	.104	.07*	.08**	.06*	.07*	.16**	-.02							
	SD	1.04														
8. Self efficacy	M	3.34	.68	-.08	.36**	-.05	-.12**	-.11**	.09**	.13**						
	SD	.68														
9. Response efficacy	M	3.28	.67	.07	.44**	-.23**	-.23**	-.23**	.20**	.10**	.37**					
	SD	.67														
10. Sense of community	M	3.59	.74	.07	.22**	-.22**	-.19**	-.15**	.16**	.13**	.20**	.30**				
	SD	.74														

Table 5.1. Continued

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
11. Collective efficacy	3.31	.62	.08*	.33**	-.17**	-.14**	-.15**	.20**	.15**	.26**	.40**	.54**	-				
12. Community participation	2.32	.73	.09*	.37**	.24**	.12**	.20**	.01	.17**	.25**	.17**	.26**	.34**	-			
13. Trust in the police	3.21	.73	-.08*	.35**	-.27**	-.25**	.27**	.21**	.03	.25**	.76**	.30**	.34**	.08**	-		
14. Police legitimacy	3.57	.73	-.01	.19**	-.09**	-.08**	-.05	.05	.09**	.10**	.28**	.12**	.14**	.12**	.41**	-	
15. Empowerment	3.10	.71	.07	.23**	-.16**	-.17**	-.18**	.20**	.10**	.18**	.43**	.29**	.45**	.19**	.46**	.23**	-
16. Age	59.76	12.34	.18**	.00	.01	.01	.04	.08*	.01	-.06	-.01	.10**	.00	.01	.03	-.09**	-.01
17. Gender ^c	1.39	.49	-.02	-.05	-.01	.03	.02	-.08	-.13**	-.12**	.01	-.02	.03	-.08**	.07*	-.06*	.04
18. Education	n/a	n/a	-.01	.00	.00	-.07	-.13**	.03	-.05	.02	.02	-.03	.04	.10**	.02	.03	.16**
19. Years in neighborhood	21.47	13.72	.09*	-.05	.01	.00	-.00	-.03	.00	-.02	-.04	.12**	-.06	.01	.01	-.06	-.11
20. Municipality	n/a	n/a	-.08*	.06	.00	.23**	.19**	-.01	.07*	.07**	-.08**	.06*	.03	.05	-.12**	-.10**	.03

Note. * $p < .05$, ** $p < .01$, ^a 1=No, 2=Yes, ^b measured on a 7-point scale (opposed to a 5-point scale), ^c 1 = male, 2 = female

Table 5.2. Multilevel binary logistic regression analysis of psychological drivers on actual information gathering about how to report and organize as a community to prevent crime (No=1, Yes=2), with municipality as grouping factor

Variable	β	S.E. β	t	p	Exp (B)
Risk perception – Crime consequences	-.20	.13	-1.62	.105	0.82
Risk perception – Crime likelihood	.40	.13	2.95	.003	1.49
Negative emotions	.29	.10	2.85	.005	1.34
Altruistic values	.24	.09	2.71	.007	1.28
Egoistic values	.13	.08	1.74	.083	1.14
Self-efficacy	-.43	.13	-3.34	.001	0.65
Response efficacy	.12	.19	0.64	.523	1.13
Sense of community	.11	.13	0.82	.410	1.11
Collective efficacy	.12	.16	0.73	.468	1.13
Community participation	.13	.13	1.00	.318	1.13
Trust in the police	.26	0.18	1.43	.153	1.30
Police Legitimacy	-.14	0.13	-1.14	.255	0.87
Empowerment	.04	0.13	0.33	.738	1.05

Note. N=762, accuracy rate 62.2%

Willingness to act.

A multilevel linear regression analysis was conducted with the willingness to act as dependent variable, the municipality as grouping variable and the psychological drivers as covariates. The results (see Table 5.3) showed that self-efficacy ($\beta = .22, p < .01$), response efficacy ($\beta = .36, p < .01$), collective efficacy ($\beta = .13, p = .01$) and past community participation ($\beta = .30, p < .01$) were positive predictors for the willingness to act. Police legitimacy ($\beta = .06, p = .054$) and trust in the police ($\beta = .09, p = .083$) were marginally significant. The variance between municipalities was not significant ($p < .50$). SPSS does not provide an explained variance for multilevel regression analyses, but since the municipalities did not have an effect on the model, a linear regression analyses was conducted which showed the same significant predictors and an R^2 of .32.

Table 5.3. Multilevel linear regression analysis of psychological drivers on the willingness to act, with municipality as grouping factor

Variable	β	S.E. β	t	p
Risk perception – Crime consequences	.03	0.03	0.77	.445
Risk perception – Crime likelihood	.03	0.04	0.74	.457
Negative emotions	.01	0.03	0.47	.636
Altruistic values	.04	0.02	1.61	.108
Egoistic values	-.03	0.02	-1.23	.219
Self-efficacy	.22	0.04	6.32	.000
Response efficacy	.36	0.05	6.73	.000
Sense of community	-.02	0.04	-0.48	.633
Collective efficacy	.12	0.05	2.64	.008
Community participation	.30	0.03	8.74	.000
Trust in the police	.09	0.05	1.74	.083
Police Legitimacy	.06	0.03	1.93	.054
Empowerment	-.05	0.04	-1.33	.184

Note. N=1245, $R^2 = .32$

Discussion

This study examined whether the Community Engagement Theory by Paton and colleagues would also apply to a human-made risk, specifically to crime. This paper investigated the relation between individual-, community-, and institutional-related psychological drivers with actual information gathering about courses of action and with the willingness to act after being exposed to crime.

Results showed that actual information gathering was only influenced by individual-related drivers, and not by community- and institutional-related drivers. Regarding individual-related drivers, risk perception showed to influence information gathering. This result is in line with previous research by Ter Huurne and Gutteling (2008), showing that risk perception had a direct effect on the intention to seek information on chemical transport. The present study showed that this is also the case for the risk of crime occurring. When citizens perceive the likelihood of a crime to occur as higher, they are more likely to gather information about the risk.

Additionally, citizens scoring higher on altruistic values such as social justice, were more often inclined to gather information. This is in line with previous research, in which moral values have shown to increase moral behavior. When people have high altruistic values, they might be more motivated to help society and gather information on how to mitigate the risk of crime (Bardi & Schwartz, 2003; Steg et al., 2014).

Our results did show that when participants experienced more negative emotions (e.g., being afraid and angry), they were also more likely to be willing to receive information. Previous research also showed that in order to cope with these negative emotions, it is likely that the need for information increases, which in turn increases actual information gathering regarding the courses of action about the risk (Nabi, 2003). Furthermore, citizens felt less capable to act (lower self-efficacy) were more willing to gather information. Furthermore, when citizens felt less capable in reporting crime and intervening, they are in need for information regarding courses of action of the risk in order to increase their feelings of capability. This corresponds with research of Kievik and Gutteling (2011) showing that when information regarding risk communication is perceived as high in self-efficacy, it increases the likelihood that citizens prepare themselves for flood risk.

The willingness to act was influenced by all three types of psychological drivers, the individual and community-related drivers, and marginally by institutional-related drivers. As such our results are in line with Community Engagement Theory and elaborates the applicability of this model to other domains such as crime.

Citizens who felt more capable of reporting and intervening (self-efficacy) were more willing to act when a crime would occur. Interestingly, citizens with a low level of self-efficacy were more willing to receive information, while citizens with higher self-efficacy were more willing to report and intervene. This suggests that it might be useful to provide information which increases people's self-efficacy (Kievik & Gutteling, 2011). Further, citizens who believed that reporting and intervening would be effective in fighting crime (response efficacy) increased the willingness to act. This is in line with the Community Engagement Theory on natural hazards (Kerstholt et al., 2017; Paton, 2013).

Regarding community-related drivers, citizens with higher beliefs of collective efficacy, meaning that they felt capable as a community to deal with crime, were more willing to report and intervene. Also, citizens who had participated more in their community were also more willing to act. This also corresponds with the Community Engagement Theory, as well as with previous research on citizen participation in the police domain (Chapter 4; Paton et al., 2013). Reporting and intervening behavior can be seen as a social behavior, citizens might discuss crime with their neighbors before reporting it and by participating on other domains in the neighborhood will increase their social contacts and knowledge, making them feel more confident of being capable to act again in the future.

The institutional-related drivers only had a marginal effect, showing that citizens with a higher trust in the police and who saw the police more as a legitimate authority were more willing to report and intervene.

When looking at the difference between informing and acting it can be seen that the first was only influenced by individual-related psychological drivers, while the latter was influenced by individual-, community- and marginally by the institutional-related drivers. An explanation could be that seeking and information gathering is typically individual behavior, while reporting and intervening behavior is more related to the community since the crime is probably not only affecting the individual but the community as well. Possibly, people would not like to intervene on their own when considering the risks intervening might have (e.g., getting into a fight) but would like to rely on neighbors to help them if necessary.

Furthermore, the institutional-related drivers did not influence information seeking at all, while it would be expected that at least police legitimacy would have a significant effect, since reporting and intervening behavior is also likely to be linked to the police (Gill et al., 2014; Jackson et al., 2013). It would be recommended in future research to also examine motivations behind the (un)willingness to gather this information. However, these were only marginally significant. One possible explanation is that the level of trust and legitimacy are quite high (means of 3.21 and 3.57 respectively and low in variety (SD's are both .73), which could be due to a bias in the sample via citizen panels. Another explanation could be that low as well as high levels of police legitimacy can increase information gathering and the willingness to act. Citizens feeling high

levels of legitimacy might be very motivated to participate with the police by reporting and gathering information how to, while citizens who experience low levels of police legitimacy are more motivated to act on their own and are less interested in collaboration with the police. Future research could look into the role of high and low legitimacy.

The willingness to receive information and to act only correlated with each other weakly. Since this was not an experimental but a correlational study, based on these results it cannot be concluded whether the willingness to report and intervene increases after receiving the information. It would be interesting for future research to examine whether giving citizens information with courses of action would actually increase their willingness to act.

Limitations

This study does come with some limitations. First of all, this study did not measure actual reporting and intervening behavior, but only the intention. This might have influenced the results. It was expected that when citizens are asked about their intention, they have more time to think about their behavior and make an analytic decision. On the other hand, when they would actually be exposed to crime, more intuitive decision processes, like emotions, would have more weight in the decision to behave in a certain way. However, a measure of actual information gathering behavior was included. Citizens were asked whether they were willing to receive information about how to report crime, after which they actually received this information.

Secondly, for this study existing citizen panels were used to collect data. This might have caused a selection bias, since citizens who are willing to be a member of these voluntary citizen panels are already a selection of more active citizens. This might have increased the willingness to receive information and to report and intervene in the future. For future research, it would be recommended to take a more representative sample of society. The main interest of this paper was however to examine the influence of psychological drivers on citizens willingness, which was possible to do by using this sample.

Practical implications

The findings of this study give practitioners in the field (i.e. police and municipalities) some insight in the psychological drivers behind reporting and intervening behavior. When institutions want citizens to be informed about how

to keep their community safe and how to participate, they should mainly focus on the individual-related psychological drivers. For example by stressing that the information can help to increase feeling capable to act effectively when necessary in order to increase self-efficacy and response efficacy (Kievik & Gutteling, 2011). When trying to increase reporting and intervening behavior, the community-related drivers are also of importance. One recommendation is to focus on increasing citizen participation in communities, by organizing events and meetings and trying to involve large groups of citizens. When citizens have participated before and have more knowledge about how to report and what to do when they come across suspicious circumstances or crime, they are more likely to participate again in the future. When designing strategies, especially on increasing intervening behavior, it is important to keep in mind that this could also come with some negative effects, such as citizens taken the law into their own hands.

Concluding, the Community Engagement Theory is not only applicable for natural hazards, but also for human-made risk such as crime. All three types of psychological drivers, individual-, community-, and marginally institutional-related, are relevant in explaining the willingness to report and intervene when witnessing a crime. Human-made safety risks are gaining importance in society (such as terrorism, organized crime and crime undermining local authority). As these hazards can have great negative and dislocating effects on the community, it is of extra importance to have insight in the psychological drivers to take preparatory actions, further increasing societal resilience.





5

Why do citizens become a member of an online neighborhood watch? The influence of individual-, community- and institutional-related psychological drivers on membership

This chapter is based on:
Schreurs, W., Franjkić, N., Kerstholt, J.H., De Vries, P. W. & Giebels, E. (Invited to revise and resubmit). Why do citizens become a member of an online neighborhood watch? The influences of individual-, community- and institutional-related psychological drivers on membership

In past decades, neighborhood watches have sprung up in cities all over the world. This is facilitated by the rise of the Internet, and more recently, social media, which increasingly empower citizens to collectively deal with their own safety (Fieseler & Fleck, 2013), for example through an online neighborhood watch. Such initiatives are usually also welcomed by local police forces, as they simply do not have the capacity and resources to be present 24/7 at every corner (Bullock & Sindall, 2014). As a result, police organizations have started to pay more attention to civic involvement and actively stimulate citizens to participate in the safety in their neighborhood (Gill et al., 2014). In order to design efficient strategies to stimulate such initiatives, it is important to know what drives citizens to join these online neighborhood watches.

A prominent type of online self-organization through social media are WhatsApp neighborhood crime prevention groups. Members of such "neighborhood-WhatsApp groups", usually living in the same street or neighborhood, can for instance alert each other about suspicious circumstances they have noticed and act accordingly. In the Netherlands for example, there were already more than 8500 neighborhood-WhatsApp groups active in 2018, each on average existing of twenty to fifty members (Lub, 2016; Pridmore et al., 2018; WABP, 2018). Although the Netherlands seem to be on the forefront of this development, as far as our knowledge goes, these initiatives appear to be on the rise elsewhere as well (e.g., in the UK). An example of another online application is Next Door (active in Western Europe and Australia), which is designed to stay in contact with neighbors on multiple topics, such as planning a neighborhood event, finding a local baby-sitter, but also on safety and crime prevention ("NextDoor," 2018).

Although there has not yet been a lot of research regarding the effectiveness of these fairly new online neighborhood-WhatsApp groups, the first results suggest a decline in burglaries in neighborhoods where such groups were active (Akkermans & Vollaard, 2015). The effects of "physical" neighborhood watches, however, have attracted more attention among researchers. A meta-analysis about the effectiveness concluded that half of the studies showed a reduction in crime, while the other half showed uncertain effects (Bennett et al., 2006).

In previous research on neighborhood watches in general, the focus has predominantly been on the effectiveness and less on the social effects of

neighborhood watches: the psychological drivers behind an individual's decision to join and participate in neighborhood watches have not been studied for as far as we are aware. Knowledge of the latter, however, may be instrumental in stimulating membership of these groups, as well as in centralizing communication between these groups with local police units. Therefore, this research will focus on (a) which psychological drivers can predict membership of neighborhood-WhatsApp groups, and (b) among non-members: whether these drivers can predict their willingness to become a member in the future.

Psychological drivers

The decision to become a member of an online neighborhood watch is likely to be based on individual considerations and perceptions, for instance on the perceived risk of becoming a victim of a crime and on beliefs regarding effectiveness of an online neighborhood watch in reducing crime (Jackson, Allum, & Gaskell, 2006; Kanan & Pruitt, 2002). But even though individual motives will be of importance to decisions to become a member of a Neighborhood-WhatsApp group, this behavior might also be influenced by the specific community. As noted by Gil de Zúñiga and Valenzuela (2011) for example, individuals who have stronger social networks with neighbors or acquaintances participate more. Thus, citizens who have more contacts in their neighborhood might also be more involved. In addition to the influence of the community, human behavior might be affected by their relationship with the police. Citizens are not the only ones responsible for the safety in their area, but need to cooperate with the police. It might, for example, be predicted that a concept such as trust in the police will affect participation behavior as well.

Hence, community-related drivers, as well as individual- and institutional (the police) -related drivers might be of importance when looking into psychological drivers behind membership of neighborhood-WhatsApp groups. Previously, the influence of these different drivers on preparatory or preventive behavior has been studied in the domain of natural hazards (Paton, 2013; Paton et al., 2008). Paton and colleagues introduced the Community Engagement Theory, which integrates individual-, community- and institutional-related drivers, in order to gain more understanding about citizens' preparatory behavior for natural hazards. This Community Engagement Theory has been validated for different types of disasters such as earthquakes, flooding's and tsunamis, and in a range of countries (Kerstholt et al., 2017; Paton, 2013; Paton

et al., 2013). As comparable results were found in these different contexts, Paton and colleagues considered it to be an all-hazard approach: all three types of psychological drivers (individual, community and institutional) were relevant in predicting preparatory behavior (Paton, 2013). However, this conclusion applies to safety in the context of natural hazards, and thus refers to physical safety. As joining an online neighborhood watch is more of a social safety issue, it would be interesting to investigate whether similar factors are also predictive for social safety issues. In this study we take a first step in this direction by testing Community Engagement Theory within the context of membership of neighborhood-WhatsApp groups as a means to prevent and detect crime. For this purpose, the psychological drivers were translated to the context of social safety.

Individual-related drivers.

The Community Engagement Theory takes three individual-related drivers into account; risk perception, self-efficacy and response efficacy (Kerstholt et al., 2017; Paton et al., 2008). Previous research, however, showed that emotions were also an important driver for preparedness behavior for natural hazards (Kerstholt et al., 2017; Terpstra, 2011) and, even more important for the present context, for citizen participation in the safety domain as well (as shown in Chapter 2) . For this reason, negative emotions were added to the model for the purpose of this study.

Risk perception is the perceived likelihood of a risk, here concerning crime and disorder, and the perception of the consequences of that risk. When people perceive the risk as high, they will be more likely to act in order to mitigate that risk by taking protective measures (Paton et al., 2008).

Due to the experience of strong negative emotions (such as feeling anxious, feeling worried, angry or helpless), the assessment of a risk can be misguided by systematic illusions, for example by giving a higher weight to catastrophes, proximity and personal relevance (Slovic & Västfjäll, 2010). Past research has shown that these emotions have an effect on moral behavior in general (e.g., pro-social behavior; Harkness & Hitlin, 2014; Teper, Zhong, & Inzlicht, 2015), and more specifically on participation behavior in the police domain (Chapter 2). The latter study also showed that the experience of other-condemning emotions, such as anger, influence responsive participation (e.g., reporting something to the police) and social control (discussing problems with neighbors, or addressing

others about their disorderly behavior). However, they did not have any effect on detection (e.g., joining networks such as Amber alert, or neighborhood watches; Chapter 2).

Whether people feel capable to perform a certain task, also called self-efficacy, can contribute to people's intentions to perform certain preparing behavior as well as their actual behavior (Paton & McClure, 2013). In the case of membership of an online neighborhood watch, this for example concerns whether citizens see themselves as capable to join such a group, to collect information regarding suspicious circumstances and contact neighbors about this.

Response efficacy (also known as outcome expectancy), can be described as the faith people have in their adaptive response, and to what extent they believe that the response will be effective in protecting themselves or others (Floyd et al., 2000). If people are negative about the outcome, this decreases the probability of accepting and implementing protective measures, while positive expectations can motivate people to prepare and organize themselves (Kerstholt et al., 2017; Paton et al., 2008). For our study this would mean that when citizens believe that joining an online neighborhood watch will reduce crime, they are more likely to join.

Community-related drivers.

Three community-related drivers are taken into account in the Community Engagement Theory. These are the sense of community people have, collective efficacy, and how much citizens have participated in their neighborhood on other domains.

When citizens experience their community as close-knit and involved, they might be more likely to participate than when the community consists of unconnected individuals who just happen to live in the same neighborhood (Ohmer & Beck, 2006). Collective efficacy refers to the capacity of a group to accomplish a certain task (Hipp, 2016). In the context of neighborhood-WhatsApp groups, this can be translated to the perceived capability to create a safer neighborhood as a community. Additionally, the more citizens already have participated in their community, the larger their social network can become. Previous research has shown that individuals who already have a large network, are more likely to participate again compared to citizens with a

smaller network (Gil de Zúñiga & Valenzuela, 2011). Due to earlier experiences, citizens could gain a broader network of community members, and gain more knowledge on how to participate. This depends, of course, on the valence of the previous experiences. If these experiences were negative, they will be less likely to participate again and their collective efficacy will decrease as a result as well.

Institutional-related drivers.

People's willingness to take responsibility for their own safety increases when they believe that they have a fair and empowering relationship with institutional agencies (Stoutland, 2001). For this to be established, citizens need to trust the institutions (which is the police in this domain; Paton et al., 2008; Stoutland, 2001). Previous research showed that the degree of trust citizens have in the police is known to be dependent on their beliefs that the police share their priorities, act competently, behave dependably and treat citizens with respect. When this trust is absent, citizens might be less likely to see the police as their ally and less inclined to collaborate with the police (Stoutland, 2001). However, when trust is absent this also might lead to more citizen participation, when citizens are motivated to handle their safety on their own. This could also increase the risk of citizens taking the law into their own hands (Haas et al., 2014). When joining a neighborhood-WhatsApp group, trust in the police may play a role in two ways. When citizens trust the police, they might be willing to assist the police, or in contrast, if they do not trust the police at all, they might want to take control of crime prevention into their own hands.

To sum up, in this study we were interested which psychological drivers (individual, community and institutional) from the Community Engagement Theory are related to membership of neighborhood-WhatsApp groups. Additionally, if they were not a member at the time of the study, we further examined to what extent these factors contribute to accounting for differences in their willingness to become a member in the future.

Method

Participants and procedure

Participants were recruited by selecting one neighborhood within one medium-sized city in The Netherlands (in the east of the country), of which was known that neighborhood-WhatsApp groups were present. Participants were recruited by going door-to-door between 5:30 and 8:30 PM in a period of two working weeks, asking citizens to participate in the study. If people were

not at home, a second attempt was done to reach the residents on another day. When participants were willing to participate (approximately 85% of the reached participants), a survey on paper was left behind and an appointment was made to pick up the survey at a later time of day. In total, this resulted in 214 participants.

Participants were informed that the goal of the study was to examine the existence of WhatsApp groups in the neighborhood regarding safety, and citizens' motivations behind membership. The survey started with asking for informed consent. After that, participants were asked to fill in whether they were a member of a neighborhood-WhatsApp group, and if they were not a member of such a group, whether they were willing to become a member in the future. After this they filled in questions regarding psychological factors (including the added drivers explained above) of the Community Engagement Theory. The survey ended with some demographic questions regarding age, gender, and education.³

In total, 214 citizens participated in the study. Of these 214 participants, 86 participants (40.2%) were a member of a WhatsApp group, while 128 participants (59.8%) were not. Of the members of a WhatsApp group, 55.8% was female, the mean age was 56.9 (SD = 12.8), 66.3% completed higher education, and they lived on average 18.5 (SD = 9.8) years in their current neighborhood. For participants who were not a member of a WhatsApp group, 53.1% was female, the mean age was 56.9 (SD = 13.1), 48.7% completed higher education, and they lived on average 21.0 (SD = 10.4) years in their current neighborhood. It stands out that members were more often highly educated than non-members. Except for this difference, no other clear differences between members and non-members concerning demographics were present.

Measures

Dependent variables.

Membership was measured by asking respondents whether they were a member of a neighborhood-WhatsApp group at this moment (yes (2)/no (1)).

3 The survey also included some open questions regarding motivations of being (or not being) a member of such a group, but did not have additional value to the quantitative data and are therefore not reported in this paper. Since they were measured at the end of the survey, they could not have influenced the scale-items.

Willingness to become a member was measured among the participants that indicated that they were not a member. They were asked *whether they would like to become a member* of a neighborhood-WhatsApp group (yes (2)/ no (1)).

Independent variables.

All independent variables described below were measured on a 5-point Likert-scale. They were all based on the items used in the Community Engagement Theory (Paton, 2013), except for the construct of ‘negative emotions’ as indicated earlier. The items were adapted to the context of social safety (e.g., the focus of risk perception was on crime instead of on a natural hazard, and efficacy focused on the ability to create a safer neighborhood, and organizing as a community in order to prevent crime). A factor analysis on all items was conducted to examine whether the items loaded on the constructs as anticipated. As a result, some items were removed. All items can be found in Table 4.1, including the removed items.

Individual-related drivers

Risk perception was measured by asking participants how likely they thought it was that crime took place in their neighborhood and would lead to personal consequences (Paton et al., 2008). The factor analysis showed three separate factors for risk perception (of which one was unreliable, $\alpha < .70$) and the third factor was therefore not taken into account in further analysis. The first factor concerns the consequences of crime (four statements, $\alpha = .87$, e.g., “damage to your house or possessions”, “not feeling safe in your neighborhood”, “that your life gets disrupted through psychological damage” and “that you and/or your family members end up in a threatening situation”). This factor will be called *crime consequences* in further analyses. The second factor concerns the likelihood criminal activity taking place in the neighborhood and being a victim of that crime (three statements, $\alpha = .79$, items were “criminal activity such as burglary or robbery taking place in their neighborhood”, “suffering from criminal activities in your neighborhood” and “becoming a victim of criminal activity in your neighborhood”). This construct will be called *crime likelihood* in further analyses.

Negative emotions were measured by asking respondents how they felt when thinking about the possibility of crime taking place in their neighborhood.

We specifically asked for six emotional states (tense, anxious, worried, angry, feeling unsafe and helpless, $\alpha = .91$), which all scored on one factor.

Self-efficacy was measured by asking respondents how much they perceived themselves to be capable of contributing to a safer neighborhood (6 statements, $\alpha = .72$, e.g., "I consider myself able to share information about suspicious circumstances with my neighbors").

Response efficacy was measured by asking participants to what extent they thought specific measures they could take would be effective (five statements, $\alpha = .82$, e.g., "participating in a neighborhood-WhatsApp group promotes the safety in my neighborhood").

Community-related drivers

Sense of community was measured by giving participants four statements regarding their connection with the neighborhood ($\alpha = .80$, e.g., "I feel connected with the people in my neighborhood").

Collective efficacy was measured by asking to what extent they perceived that they were able to solve problems in collaboration with other neighbors, by giving six statements ($\alpha = .83$, e.g., "In difficult situations, as a neighborhood we are able to work together on a solution").

Community participation was measured by asking participants about their previous experience with a broad range of community participation (five statements, $\alpha = .74$, e.g., "I attend public meetings when it concerns neighborhood issues").

Institutional-related drivers

Trust in the police was measured by asking participants to what extent they trusted the police on 5 statements ($\alpha = .90$, e.g., "I trust that the police have a lot of knowledge to prevent crime").

Table 4.1. Overview of all items of the independent variables

Independent variables	Items
Risk perception – Crime likelihood	How likely is it, ... 1. That criminal activity such as burglary or robbery taking place in their neighborhood 2. That you suffer from a criminal activity such as a burglary or robbery in your neighborhood 3. That you will become a victim of criminal activity in your neighborhood
Risk perception – Crime consequences	Suppose a criminal activity takes place in your neighborhood. How likely do you think it is the following will happen? 1. damage to your house or possessions 2. not feeling safe in your neighborhood 3. that your life gets disrupted through psychological damage 4. that you and/or your family members end up in a threatening situation
Negative emotions	How do you feel when you think about the possibility of crime taking place in their neighborhood? 1. Tense 2. Anxious 3. Worried 4. Angry 5. Feeling unsafe 6. Helpless
Self efficacy	1. I consider myself able to supervise the neighborhood 2. I consider myself able to share information about suspicious circumstances with my neighbors 3. I consider myself able to be alert of signals of crime and disorder 4. I consider myself able to share information about suspicious situations with my neighbors 5. I consider myself able to join a neighborhood-WhatsApp group 6. I have access to the resources required to participate in a neighborhood-WhatsApp group
Response efficacy	1. I think the neighborhood becomes safer when I keep surveillance 2. Surveillance contributes to higher feelings of safety in the neighborhood 3. Participating in a neighborhood-WhatsApp group promotes the safety in my neighborhood 4. A neighborhood-WhatsApp group contributes to higher feelings of safety in the neighborhood 5. Warning or informing neighbors regarding suspicious circumstances contributes to a safer neighborhood
Sense of community	1. I feel like I belong in my community 2. I believe my neighbors would help me if necessary 3. I would never move out of this community 4. I feel connected with the people in my neighborhood 5. I often have friends from the neighborhood come over to see me ^a

Table 4.1. *Continued*

Independent variables	Items
Collective efficacy	<ol style="list-style-type: none"> 1. As a neighborhood we are capable to make decisions, even if we differ in opinions 2. As a neighborhood we can improve the quality of life in the community, even when resources are scarce 3. In difficult situations, as a neighborhood we are able to work together on a solution 4. The people in this community can work together, even when it required more effort than normal 5. In general, we as a community first try to solve our problems ourselves 6. As a community, we are able to increase safety in the neighborhood
Community participation	<ol style="list-style-type: none"> 1. I have worked with others on something to improve community life 2. We have worked together as a community to improve the safety in our neighborhood 3. I participate in local activities or events (e.g., neighborhood festivals, street barbecues) 4. I attend public meetings when it concerns neighborhood issues 5. I have been involved in volunteer activities intended to benefit the quality of living in my community (e.g., joined local groups, neighborhood prevention)
Trust	<ol style="list-style-type: none"> 1. I trust that the police take into account the needs of the residents in our neighborhood 2. I trust that the police have a lot of knowledge to prevent crime 3. I trust that the police take adequate measures if there is a threatening situation 4. I trust that the police will inform me on time 5. I trust that the police give me the right advice on how I should act

Note ^a Item removed from construct for further analysis as a result of the factor analysis

Results

Descriptive statistics and correlations

Means, standard deviations, and correlations for the dependent and independent variables are shown in Table 4.2. Whether citizens currently are a member of a neighborhood-WhatsApp group (no = 0; yes = 1) correlated positively with self-efficacy ($r = .19, p < .01$), response efficacy ($r = .27, p < .01$), collective efficacy ($r = .19, p < .01$) and community participation ($r = .44, p < .01$). We also asked citizens who were not a member yet ($N = 128$), whether they would like to become a member ($N = 34$). This correlated with both forms of risk perception; crime consequences ($r = .18, p < .05$) and crime likelihood ($r = .21, p$

Chapter 5

< .05), response efficacy ($r = .47, p < .01$), and community participation ($r = .19, p < .05$). Negative emotions, sense of community and trust in the police did not correlate with membership or the willingness to become a member. Results also showed that the higher educated citizens are, the more likely it is that they are a member of a neighborhood-WhatsApp group. However, when someone is not a member yet, the level of education does not relate to the willingness to become a member. This suggests that lower education might constrain citizens from actually becoming a member.

Table 4.2. Means, Standard Deviations and correlations for membership of a neighborhood-WhatsApp group and independent variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Membership ^a	1.40	.49	-	-	-	-	-	-	-	-	-	-	-
2. Willingness to become a member	1.73	.44	-	-	-	-	-	-	-	-	-	-	-
3. Risk perception – Crime consequences	2.41	.60	-.02	.27**	-	-	-	-	-	-	-	-	-
4. Risk perception – Crime likelihood	3.15	.79	.05	.21*	.76**	-	-	-	-	-	-	-	-
5. Negative emotions	2.66	.85	-.05	.12	.18**	.07	-	-	-	-	-	-	-
6. Self-efficacy	3.60	.64	.19**	.02	.05	.08	-.11	-	-	-	-	-	-
7. Response efficacy	3.87	.49	.27**	.47**	.10	.21**	.09	.30**	-	-	-	-	-
8. Sense of community	4.14	.56	.02	.14	-.14*	.03	-.05	.11	.23**	-	-	-	-
9. Collective efficacy	3.67	.45	.19**	.15	-.10	-.03	-.04	.35**	.41**	.47**	-	-	-
10. Community participation	2.36	.78	.44**	.19*	.15*	.14*	.04	.36**	.37**	.26**	.51**	-	-
11. Trust in police	3.68	.63	.03	-.07	-.10	-.01	-.02	.20**	.19*	.18*	.31**	.14*	-
12. Age	56.91	12.87	-.00	-.04	-.02	.03	.05	-.33**	-.03	.10	-.09	-.04	-.12
13. Gender ^b	1.54	.50	.03	.04	.08	.05	.21**	-.05	-.10	-.08	-.08	-.12	-.00
14. Education ^c	n/a	n/a	.19**	.17	-.01	.03	-.15*	.20**	.19**	.14*	.12	.15*	.01
15. Years in neighborhood	20.01	10.25	-.12	-.03	-.01	-.01	.20**	-.20**	.04	.16**	.02	-.10	-.02

Note. * $p < .05$, ** $p < .01$, ^a 1 = not a member, 2 = member, ^b 1=men, 2= women. ^c Based on Dutch educational system from low educated (1) to highly educated (8).

Membership of neighborhood-WhatsApp groups

A logistic regression analysis was conducted to predict membership of a neighborhood-WhatsApp group, using the psychological drivers as predictors. A test of the full model against a constant model was statistically significant, indicating that the predictors as a set reliably distinguished between members and non-members (chi-square = 64.096, $p < .001$ with $df = 9$). Nagelkerke's R^2 of .350 indicated a moderately strong explained variance. As can be seen in Table 4.3, the Wald criterion demonstrated that risk-perception-crime consequences ($p = .004$), response efficacy ($p = .033$), sense of community ($p = .027$) and community participation ($p < .001$) made a significant contribution to predicting membership. Risk perception – crime likelihood was marginally significant ($p = .067$). The results show that citizens who have a low perception of crime consequences, high response efficacy, a lower sense of community, and have been more active in other forms of community participation already are more likely to be a member of a neighborhood-WhatsApp group.

Table 4.3. Logistic regression analysis predicting membership of a neighborhood-WhatsApp group

Variable	β	S.E. β	Wald	df	p	Exp (B)
Risk perception – Crime consequences	-.410	.488	8.353	1	.004	.244
Risk perception – Crime likelihood	.644	.351	3.363	1	.067	1.903
Negative emotions	-.176	.206	0.732	1	.392	.838
Self-efficacy	.117	.300	0.152	1	.697	1.124
Response efficacy	.907	.425	4.562	1	.033	2.477
Sense of community	-.793	.358	4.906	1	.027	.453
Collective efficacy	-.453	.501	0.817	1	.366	.636
Community participation	1.630	.303	28.913	1	.000	5.104
Trust in police	-.861	2.179	.156	1	.693	.423

Note. Model summary: -2 Log likelihood = 224.17, Cox & Snell $R^2 = .26$, Nagelkerke $R^2 = .35$.
 $N = 214$

Willingness to become a member of a neighborhood-WhatsApp groups

Among the citizens who were not a member yet (128), another logistic regression analysis was conducted to predict whether they would like to become a member based on the same psychological drivers. A test of the full model against a constant model was statistically significant, indicating that the predictors significantly predicted whether citizens were willing to become a member ($\chi^2 = 36.728$, $p < .001$ with $df = 9$). Nagelkerke's R^2 of .364 indicated

a moderately strong explained variance. As can be seen in Table 4.4, the Wald criterion demonstrated that only response efficacy ($p < .001$) made a significant contribution to the willingness to become a member. Risk perception - crime consequences was marginally significant ($p = .57$). This means that when citizens believe that becoming a member of a neighborhood-WhatsApp group to be an effective strategy in reducing crime and creating safer neighborhoods, they are more likely to be willing to become a member.

Table 4.4. Logistic regression analysis predicting whether citizens who are not a member of a neighborhood-WhatsApp group would like to become a member

Variable	β	S.E. β	Wald	df	p	Exp (B)
Risk perception – Crime consequences	.845	.445	3.609	1	.057	2.329
Risk perception – Crime likelihood	-.027	.367	0.005	1	.941	0.973
Negative emotions	-.261	.364	0.514	1	.474	0.770
Self efficacy	.524	.432	1.476	1	.224	1.690
Response efficacy	2.536	.717	12.494	1	.000	12.629
Sense of community	.077	.529	0.021	1	.885	1.080
Collective efficacy	-.403	.791	0.259	1	.611	0.668
Community participation	0.086	.419	.042	1	.837	1.090
Trust	-.347	.415	0.696	1	.404	0.707

Note. Model summary: -2 Log likelihood = 108.69, Cox & Snell $R^2 = .27$, Nagelkerke $R^2 = .39$.
 $N = 128$

Discussion

In this study, we examined which individual-, community- and institutional-related psychological drivers of the Community Engagement Theory (Paton, 2013) could predict membership of a neighborhood-WhatsApp group. Secondly, we were interested whether citizens who are not a member would like to become a member in the future.

Regarding individual-related drivers, membership of a neighborhood-WhatsApp group was influenced by perceived consequences of crime and response efficacy. Compared to non-members, members perceived the consequences of crime in their neighborhood as lower, and had higher beliefs that joining a neighborhood-WhatsApp group leads to a safer neighborhood. A possible explanation for the increase in response efficacy might be that citizens

also experience by being a member that their prevention strategies have an effect, which in turn could have decreased their risk perception.

Regarding community-related drivers, sense of community and previous experience with citizen participation in other domains affected membership. Members had more experience with participating in their neighborhood on other domains, such as organizing a street barbecue, and attending meetings concerning neighborhood issues, while they experienced their community as less involved and close to them compared to non-members. It could be that when citizens already have broad social network and have participated in the past, they can find each other more easily when looking for volunteers to participate in other areas such as neighborhood prevention (Gil de Zúñiga & Valenzuela, 2011). A possible explanation for the lower sense of community could be that the digital contact with neighbors via WhatsApp is experienced as more distant, or that they have negative experiences in these groups (such as arguments about what members share or stigmatization of specific groups) which leads them to feel less close. However, in order to understand this relation, future research regarding relations between neighbors and experiences with the online neighborhood watch is necessary.

Trust in the police, the institutional-related driver, did not appear to have any effect on membership. This result is in contrast with other studies (Jackson & Bradford, 2010; Sunshine & Tyler, 2003), which showed that trust in the police does encourage citizen participation in the police domain as well as secure cooperation from the public with the police. However, it could be that the current context differs from these studies in that citizens may not have seen the police as a relevant actor in these online neighborhood watches. Perhaps these citizen platforms are perceived as completely independent, and therefore trust in the police has no effect on membership and the willingness to become a member.

When asking non-members whether they were willing to become a member, results showed that this is only influenced by response efficacy. This means that when people feel that joining a neighborhood-WhatsApp group will actually lead to crime and disorder prevention, they are more willing to become a member. Community- and institutional-related psychological drivers did not predict whether people are willing to become a member. These results may suggest that the *intention* to become a member is more of an individual decision, whereas *actually* becoming a member of a group might also be

influenced by social aspects. Presumably, actually becoming a member is highly influenced by the social environment, for example by being asked by neighbors or because it is considered to be the social norm (Gil de Zúñiga & Valenzuela, 2011).

Since this was a correlational study, we do not know whether members already had other levels of risk perception, response efficacy, sense of community and community participation before joining these groups than non-members did. The result that only responsive efficacy influences the willingness to become a member, however, might imply that citizens' lower levels of risk perception, and sense of community, and higher levels of response efficacy, and community participation as a result of having become a member. This alternative interpretation would mean that instead of only being a driver, risk perception, sense of community and previous participation could also be explained by the social interactions citizens have with their neighbors while being a member, as has also been shown in research about "physical" neighborhood watches (Chavis & Wandersman, 1990; Ohmer & Beck, 2006). Since this study could not test causal relationships between psychological drivers and membership, it is therefore recommended that future research includes a longitudinal design measuring the psychological drivers before and after membership. As such, it can be established whether and to what extent membership effects the psychological drivers or vice versa.

Interactions with neighbors can also lead to positive experiences such that they realize that they are able to contribute to a safer neighborhood themselves (response efficacy) as well as collectively as a neighborhood (collective efficacy). However, we did not measure citizens' experiences with their neighborhood-WhatsApp groups. People also might have negative experiences, such as stigmatization towards certain population groups or an overload of irrelevant information (e.g., regarding missing cats or a lot of individual responses to a reported incident). In future research, it would be recommended to also take into account which experiences citizens have, and whether these affect the psychological drivers.

Overall, we did not find any effect of negative emotions on membership or the willingness to become a member. This result is in line the experiment reported in Chapter 2, where it was also shown that collaborative participation (e.g., collaborating with the police) and detection (e.g., joining amber alert or

an online neighborhood watch) were not affected by emotions. In a similar vein, becoming a member of a neighborhood-WhatsApp group can also be considered as a more preventive and long-term action (as was also found in Chapter 2). We would expect that emotions have a large influence in more reactive situations, such as the moment in which a perpetrator was stopped. This could also play a role in the context of an online neighborhood watch, when a specific crime is being discussed in the WhatsApp group. However, during this study participants were asked to indicate their emotions towards crime in their neighborhood at a time when they were not in the middle of reacting to a specific crime.

Partly due to the relatively short existence of online neighborhood watches, so far, little research has been conducted about their effects on crime reduction. There might be, for example, a waterbed-effect of the crime towards the neighborhoods without online neighborhood watches. This could, in turn, force other neighborhoods to start an online neighborhood watch, as to prevent the crime coming to their neighborhood. This might change citizens' drivers behind becoming a member as well. For example, the perceived risk of crime occurring in neighborhoods without an online neighborhood watch might increase and become more important in the decision to become a member. Relatedly, response efficacy might also become higher after seeing success in surrounding neighborhoods, which could increase the influence of response efficacy on the willingness to become a member even more. However, a first study on online neighborhood watches in the Netherlands, suggests that crime does not increase in surrounding neighborhoods without online neighborhood watches (Akkermans & Vollaard, 2015). At the same time, there is also the risk that these initiatives have negative side effects (such as vigilantism, stigmatization, exclusion of social groups, ethnic profiling (Lub, 2017)). So before deciding whether the government should stimulate or facilitate the rise of this phenomenon, further research is necessary.

A general limitation of this study was that our sample was locally collected in a relatively small village and in a region where looking out for your neighbors is historically important. Participants in this study generally had a high sense of community ($M = 4.14$) and lived relatively long in their neighborhood ($M = 20$ years). This makes it likely that the sample from this region influenced the sense of community and the frequency to which citizens already participated in other domains and their relationship with membership of an online neighborhood

watch. We do not know whether the results are representative for other cities (for example larger urban cities where citizens might be more individualistic) or to other countries. It would be recommended to study the psychological drivers of membership in larger cities as well as in rural areas. Nonetheless, we believe that the application of the Community Engagement Theory on the social safety domain and the results of this study can act as a starting point for future research on explaining citizen participation. The results of this study are also of importance to municipalities and police departments in other countries, since these online neighborhood watches might pop up or get implemented there as well in the future.

Taken together, this study provides some useful first insights in psychological drivers associated with membership of neighborhood-WhatsApp groups. When citizens have the feeling that joining a neighborhood-WhatsApp group will have positive effects on crime prevention, they are more likely to join. In addition, our study hints that social cohesion and citizen participation in other domains and membership influence each other. If municipalities or police departments want to promote neighborhood initiatives like neighborhood-WhatsApp groups it is important to focus on increasing response efficacy, by emphasizing that neighborhood-WhatsApp groups can contribute to a safer neighborhood. In order to emphasize this, more research is needed whether these group actually have positive effects on the reduction of crime. However, even if these groups do not actually reduce crime, but do have positive influences on the social relations between neighbors, that might be a goal as well. Therefore, municipalities could aim at increasing citizen participation in general, because people who are a member of these neighborhood-WhatsApp groups are also more likely to participate in their community as well.





6

Making citizens go that extra mile: The influence of crime television shows on willingness to report to the police

This chapter is based on:
Schreurs, W., Kerstholt, J.H., De Vries, P. W., Wessels, Z.C.M. & Giebels, E.
(Submitted for publication). Making citizens go that extra mile: the influence of
crime television shows on willingness to report to the police.

The authors would like to thank Sterre ten Berge from the police unit East-Netherlands, and "Onder de Loep" for their collaboration in data collection and for providing the videos.

"An 82-year-old woman gets a visit at her house from an unknown man. The man claims he is collecting money for charity, and the woman is friendly enough to invite him in while she is searching for change to donate. The woman even offers him something to drink because she would enjoy some company. But the man is not collecting for charity at all, instead he is looking for an easy prey and seizes the opportunity to steal money, jewelry and the lady's bank card."

This is an example of how a crime could be aired in an episode of crime television, where the public is asked for information regarding the offender. The crime, a distraction burglary, often leads to considerable public concern because of the predatory way in which specifically elderly or vulnerable people are targeted. Offenders manipulate their way into victims' houses with the aim to deceive them and steal their valuable items (Lister & Wall, 2006).

Citizens can be the eyes and ears of the police in their effort to solve crimes, but may not always be aware of crime in the neighborhood. One way to increase awareness and elicit citizens' help is by broadcasting television shows such as Crime Watch. By providing detailed information about major unsolved crimes, the police hope that members of the public will come forward with important bits of information, e.g., whether they know or have seen specific suspects, or will assist the police by looking out for them. Program such as these are aired in many countries, sometimes even with regional editions, and recent research has highlighted their importance: the nationally aired Dutch version of Crime Watch ("Opsporing Verzocht") was shown to increase the chance of solving a case from 25% to 40% (Van Erp, Webbink, & Van Gastel, 2012).

Exactly how these showcased crimes are communicated, however, varies between episodes and cases. For example, some cases prominently feature victim statements to convey the nature and impact of the crime, especially pertaining to the physical or psychological damage victims have suffered, while others do not. This variation might be based on pragmatic reasons, for instance that citizens may not be willing to appear on television for fear of repercussions by the offender. Research on donating behavior for charity showed that citizens

are likely to donate more when they are confronted with a single victim or person in need. Being confronted with a victim induced affective feelings such as compassion and positive emotions (Västfjäll et al., 2014). This suggests that victim statement can elicit emotions, and increase prosocial behavior.

Research on citizens' willingness to participate in general have been conducted (Kerley & Benson, 2000; Scott, Duffee, & Renauer, 2003; Wehrman & De Angelis, 2011), but as far as we know, the effects of witness statements in crime shows specifically and the relation with citizens' willingness to report have received strikingly little attention from researchers. Furthermore, in light of the fact that witnessing crime often invokes strong moral emotions, it is equally surprising that the extent to which the perceived moral wrongness associated with different types of crimes (e.g., a bike theft vs. a distraction burglary) influences the willingness to report have not been thoroughly studied either.

In this study, we are interested in whether the type of crime depicted in a crime show, and the inclusion of a victim statement influence citizens' case-specific reporting behavior, as well as their willingness to report crime to the police and intervene when witnessing a crime in the future. Furthermore, we will examine which psychological drivers, such as moral values, moral emotions, the perceived moral wrongness of the crime, and past participation behavior play a role as well.

Motivations to participate

A variety of psychological drivers may be able to explain why citizens collaborate with the police and participate in activities such as reporting crime or providing intelligence about a crime. One such driver is the perceived moral wrongness of the crime. The studies in Chapter 3 showed that citizens who experience a higher moral wrongness of a crime, are more willing to report to the police. When citizens do not see the crime as morally wrong (e.g., some might not consider stealing a bike as very wrong), they might not feel motivated to assist the police in catching the offender. Relatedly, studies on crime reporting by victims themselves show that the more serious a crime is, the more likely it is that victims report the crime to the police (Tarling & Morris, 2010). Thus, even though current research is scarce, there is some evidence that perceived moral wrongness affects crime reporting.

Another psychological driver that presumably affects crime reporting are moral values. Moral values are internal guidelines consisting of moral values about what is considered right or wrong in societies, steering future behavior (Harkness & Hitlin, 2014). These values can differ between persons and cultures (Haidt & Joseph, 2004). People can for example have different beliefs on how morally wrong a specific crime is: one might find it really wrong when someone steals a bike, while someone else can see it as just as a minor mistake. This difference in value beliefs also has an effect on behavior (Steg, Perlaviciute, van der Werff, & Lurvink, 2012). Multiple researchers have subdivided people's moral values into different categories. Two categories of values which are especially relevant to this domain are altruistic values and egoistic values. Where altruistic values are more self-transcending values, egoistic values are about self-enhancement. Examples of altruistic values are striving towards a world of peace, social justice, equality, and being helpful to others. Egoistic values are more about gaining personal wealth, having influence and power on other people and events, and being ambitious (Steg et al., 2014).

When a moral value is broken, moral emotions are elicited (Haidt, 2003a; Harkness & Hitlin, 2014; Steg et al., 2014); these emotions, in turn, can also play a role in how someone acts (Lerner & Keltner, 2000; Zeelenberg et al., 2008). When someone experiences anger or sympathy, this can lead to approaching behavior, while when someone is afraid of the consequences this can lead to a person avoiding the situation. So, for example when someone hears about a theft, the moral value of social justice might be broken, which could subsequently lead to the experience of anger. This anger may then motivate someone to do something about the situation and call the police. Victim statements arguably are factors that strengthen emotions, because they enable citizens to empathize better with the victim (Bandes, 2017). This may especially be the case when the victims include children or elderly people, because of people's tendency to want to care for the weak (Haidt, 2012).

Another driver that might influence whether citizens are willing to participate with the police is whether they have already participated in their community in the past (as was seen in Chapter 5 on membership of neighborhood-WhatsApp groups). One of the reasons for this is that when someone has reported something to the police before, it is likely that this person has gained knowledge about how to do this, and has therefore experience higher efficacy beliefs, meaning that they feel more capable to do so in the future (Paton, 2013).

Similarly, citizens who have already participated in a similar social context (e.g., joining a neighborhood watch, see Chapter 5) with their neighbors or already had contact with a neighborhood police officer may have established a relevant social network, which influences how they make decisions regarding how to mitigate and prevent crime. The already existing connection with neighbors and a police officer can also increase collective efficacy beliefs and make it more easy to collaborate with them in the prevention or detection of crime in the future (Paton, 2013; Paton et al., 2013).

The present study

In the present study we will examine whether a victim statement as well as the type of crime influence reporting behavior (after exposure to an offender just seen in an episode of crime watch) as well as the willingness to report and intervene in the future. We investigated this by manipulating a video of a program such as Crime Watch by varying whether a victim statement is shown or not and the type of crime (a bike theft vs. a distraction burglary in a home). After seeing the video, participants were exposed to the offender who committed the crime in the video. Furthermore, we will explore whether these behaviors are influenced by moral values, the perceived moral wrongness, moral emotions and past participation (whether participants have reported to the police and intervened after witnessing a crime before). It is expected that when people perceive the crime as more morally wrong (related to the type of crime) that they are more likely to report the offender, and are more willing to report and intervene in the future. When people see a victim statement elucidating the impact of the crime, we expect citizens to be more willing to report. Hence, we expect especially the combination of a present victim statement and a distraction burglary (instead of a bike theft) to increase the willingness to report.

Method

Design and participants

The study was a 2 (victim statement: absent vs. present) x 2 (type of crime: bike theft vs. distraction burglary) between-subjects design. The study was run during three separate days in three different cities in the Eastern part of the Netherlands, each time with a police mobile media lab facility located on the main square of the city. In total 100 ($M_{age} = 38.6$, $SD_{age} = 17.2$) participants participated in the online survey. If time permitted, they also took part in the second stage where they were -apparently coincidentally- exposed to

the offender; this was the case for 63 participants ($M_{age} = 40.6$, $SD_{age} = 18.4$). Participants were recruited by randomly addressing people who happened to be visiting the area surrounding the mobile lab.

Procedure

Participants were randomly assigned to one of the four experimental conditions. The research was approved by the universities' ethics committee. The police mobile media lab was a large truck (see appendix 1), which the police use to inform and interact with the public around the country. Police officers in uniform were also present at the location to talk to citizens and to help recruit participants for a study "examining people's eye movements when watching a crime watch video with new technology". It was explicitly mentioned that the study was conducted by the (technical) University of Twente, in order to stress independence of the research and the technological orientation of the research.

Approximately 1 out of four approached citizens agreed to participate, the most common reasons mentioned for not participating were a lack of time and not being interested to participate in research. When participants agreed to participate, they stepped into the truck and went to a small room in the back. Once more, we made clear that the research was conducted by the university and not by the police. First, participants were asked to put on a Tobii Pro 2 eye-tracking glasses. Participants were told that the aim of the research was to examine how citizens look at Crime Watch videos (the regional version) and that this was the aim of wearing the eye-tracking glasses. After this, citizens were asked to fill in some demographic questions (gender, age, and hometown), whether they had ever been a victim of a crime and a moral values questionnaire.

After this, citizens watched one of the four videos. For the sake of realism, these videos were recorded in the studio where the actual regional Crime Watch is recorded ("Onder de Loep"). Participants were told that this video was recorded in the past week, and that it was an actual crime. Half of the participants watched a video about a bike theft from an old lady's garden, the other half watched a video about a distraction burglary. Secondly, half of the participants saw a victim statement in the video, while the other half did not. Next to using the same person as a victim in the two videos, the videos were as much alike as possible, e.g., in terms of voice-over, length and type of filming and editing. In all four videos a still image was shown of the (same) offender

during the crime, in which clothing and face were clearly recognizable (e.g., a burgundy-red hoody with white strings). The complete script of the videos can be found in Appendix 2.

After watching the video, participants were asked how they experienced the eye-tracking glasses and to fill out a general questionnaire with their opinion of the video (including their moral emotions, their perceived moral wrongness of the crime) and some general information including their past participation behavior and their future willingness to report and intervene. They were also asked whether they had recommendations for the television show in order to increase viewers' rating and reporting. Finally, they were informed that the research had ended, and in order for the next participant to start the research, they were led to a second researcher who stood outside to give the debriefing.

While standing outside at a bar table, the second researcher small-talked with the participants about what they thought about the study and the video they just watched. During this conversation, the offender from the video which the participants just watched was standing behind the researcher. He was standing at approximately 7 meters (close enough to be recognized as was tested before starting the experiment) from the participants, wearing the same clothes (a well recognizable burgundy red hoodie with white strings) as in the video (see appendix 3). Care was taken to ensure that the offender was clearly visible from where the participant was standing. Participants' response to the offender's presence was registered whether they reported the offender to the researcher (yes or no). The researcher continued to talk to the participants for two minutes, to give the participants ample time to react. If they had not reported the offender by that time, the researcher ended the research, and debriefed the participants about the actual goal of the study.

Measures

All questions in the survey were measured on a seven-point Likert scale, unless otherwise mentioned.

Dependent variables

Reporting behavior. During the small talk with the second researcher and while participants were exposed to the offender from the video, it was observed whether participants reported the offender. This was noted with yes (1) or no (2).

General willingness to report and intervene. Participants were asked whether they were willing to participate in the future by reporting crime or engage in neighborhood prevention. Participants reported to what extent the following four items were applicable to them; "I would call the police when I witness crime", "I would discuss suspicious circumstances with a police officer", "If I were to witness a crime, I would be inclined to intervene to try to stop the offender" and "Together with my neighbors, I would take the initiative to prevent crime in my neighborhood" (1 = not at all applicable, 7 = very applicable, $\alpha = .81$).

Covariates

Moral values. Participants reported how important they felt that nine specific moral values served as guiding principles in their lives. The items were based on the altruistic and egoistic values of Steg et al. (2014). An example item is "Social justice: correcting injustice, care for the weak" and "Authority: the right to lead and command" (1 – not important, 7 = very important). A factor analysis showed the same two factors: altruistic values (social justice, helpful, a world at peace and equality; $\alpha = .85$, $EV = 3.84$, $R^2 = 42.6\%$), and egoistic values (wealth, social power, influential, ambitious, authority; $\alpha = .79$, $EV = 1.92$, $R^2 = 21.3\%$).

Moral emotions. Participants reported to what extent they experienced 12 different moral emotions after watching the Crime Watch video. These were based on Haidt (2003a) and Schreurs et al. (2018a). The three moral-emotions categories based on these studies were reliable. These are other-condemning emotions (anger, contempt, and disgust; $\alpha = .86$), self-conscious emotions (guilt, embarrassment, shame, fear, and sympathy; $\alpha = .84$) and other-concerning emotions (gratitude, awe, and pride; $\alpha = .76$).

Perceived moral wrongness. Participants reported how morally wrong they deemed the crime in the video (1 = not at all – 7 very much). In contrary to the expectations, means between the two types of crime were not significantly different (6.24 for bike theft and 6.59 for the distraction burglary on a seven-point scale, $p = .21$).

Finally, participants were asked whether they had ever been a victim of a crime (yes/no), and what their age, gender, and hometown were.

Past participation. Participants were asked whether they had conducted specific activities concerning crime issues in the past. Participants reported to

what extent the following four items were applicable to them: "I have called the police in the past to report crime", "I have discussed suspicious circumstances with the police in the past", "I am alert to suspicious signals to prevent crime", and "In the past I have intervened when I witnessed a crime" (1 = not at all applicable, 7 = very applicable, $\alpha = .86$). Participants were also able to indicate that they never encountered such a situation, which was coded as missing variable (N=?).

Eye tracking. The eye-tracking data was used as part of the cover story (that we were interested in knowing where participants looked at specifically during watching the videos), but was not used in the data analysis due to technical malfunction of the eye-tracking glasses.

Results

Means and correlations

Table 6.1 presents the Pearson correlations, means and standard deviations for reporting behavior and the willingness to report and intervene with the independent variables of this study. As can be seen in the table, actual reporting behavior and the general willingness to report and intervene did not correlate with each other ($R = -.13, p = .33$). Reporting behavior did correlate significantly with egoistic values only ($R = -.28, p < .05$). This means that when participants scored higher on egoistic values such as wealth and having influence, they were less likely to report the fact that they recognized the offender. Furthermore, the willingness to report and intervene in the future correlated with altruistic values ($R = .38, p < .01$), egoistic values ($R = .33, p < .01$), other-condemning emotions ($R = .29, p < .01$), self-conscious emotions ($R = .29, p < .01$), other-concerning emotions ($R = .33, p < .01$), perceived moral wrongness ($R = .45, p < .01$), and past participation behavior ($R = .54, p < .01$). This implies that when people score higher on all of the above factors, their general willingness to report and intervene increases. Gender did not have an effect, and age correlated with the willingness to report and intervene only: how older people are, the higher is the willingness to participate in the future ($R = .22, p < .05$).

Table 6.1. Means, standard deviations and correlations of the dependent, independent and demographic variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Reporting ^a	1.25	0.44	-										
2. General willingness to report and intervene	5.50	1.38	-.13	-									
3. Altruistic values	5.96	1.16	.19	.38**	-								
4. Egoistic values	4.01	1.21	-.28*	.33**	.23**	-							
5. Other-condemning emotions	4.39	1.73	-.04	.29**	.31*	.43**	-						
6. Self-conscious emotions	3.19	1.42	-.10	.29**	.20*	.42**	.63**	-					
7. Other-concerning emotions	2.42	1.45	-.15	.33**	.09	.30**	.28**	.59**	-				
8. Perceived moral wrongness	6.44	1.27	-.02	.45**	.57**	.24*	.44**	.24*	.01	-			
9. Past participation	4.43	2.11	.01	.54**	.19	.34**	.08	.13	.28**	.19	-		
10. Age	40.20	18.11	.05	.22*	.18	-.04	.04	.17	.29**	.12	.21*	-	
11. Gender ^b	1.33	0.47	.16	-.07	.10	-.13	-.03	-.11	-.12	-.05	-.08	-.09	-

Note. * $p < .05$, ** $p < .01$, ^a 1 = no, 2 = yes, ^b 1 = Male, 2 = female

Regression analyses

Reporting behavior. In total, 25.4% of the participants spontaneously indicated to recognize the offender from the video.

In order to examine whether a victim statement, type of crime and the psychological drivers affected actual reporting behavior (controlled for age and gender), a hierarchical logistic regression analysis with four steps was conducted (see Table 6.2).

There was no significant main effect of victim statement on reporting behavior ($b = 0.09, p = .19$); participants who watched the victim statement did not report recognizing the offender more often than participants who had not seen the victim statement.

There was a marginally significant main effect of type of crime ($b = 0.26, p = .09$), implying that bike theft and distraction burglary did marginally differ in the extent to which participants reported the offender.

There was also no interaction effect ($b = 0.36, p = .78$).

As can be seen in Table 6.2, the Wald criterion demonstrated that reporting behavior was only significantly predicted by egoistic values ($b = -1.15, p = .01$). This means that the more participants reported that they found egoistic values such as wealth and being ambitious important in their life, the less likely it was that they reported to have recognized the offender. Furthermore, other-concerning emotions ($b = -.09, p = .06$) was a marginally significant negative predictor.

Table 6.2. Logistic regression of the type of crime, victim statement and the psychological drivers on actual reporting behavior (1 = no, 2 = yes)

Steps and variables entered	β	S.E. β	Wald	df	p	Exp (B)
1. Gender ^a	0.79	0.60	1.77	1	.18	2.21
Age	0.01	0.02	0.28	1	.60	1.01
Victim statement ^b	0.91	0.63	1.71	1	.19	2.27
Type of crime ^c	1.10	0.66	1.81	1	.09	0.33
3. Crime * Victim statement	0.36	1.31	0.08	1	.78	1.44
4. Altruistic values	1.13	0.73	2.43	1	.12	3.11
Egoistic values	-1.15	0.46	6.34	1	.01	0.32
Other-condemning emotions	0.39	0.34	1.31	1	.25	1.47
Self-conscious emotions	0.22	0.50	0.19	1	.66	1.25
Other-concerning emotions	-0.79	0.45	3.05	1	.08	0.45
Perceived moral wrongness	-0.48	0.47	1.05	1	.31	0.62
Past participation	0.20	0.20	1.08	1	.30	1.23
Nagelkerke R ² step 1	.04					
Nagelkerke R ² step 2	.16					
Nagelkerke R ² step 3	.17					
Nagelkerke R ² step 4	.44					

Note. $N = 63$, ^a 1= Male, 2 = female, ^b 1= absent, 2= present, ^c 1= bike theft, 2 =distraction burglary

Willingness to report and intervene. In order to examine whether a victim statement, the type of crime and the psychological drivers affected future general willingness to report and intervene (controlled for age and gender), a hierarchical linear regression analysis with four steps was conducted (see Table 6.3).

There was a marginally significant main effect of victim statement ($b = -0.45$, $p = .09$), presence (as opposed to absence) of a victim statement decreased participants' willingness to participate in their safety in the future.

No significant main effect of type of crime on participants' willingness to report and intervene was found either ($b = .10$, $p = .70$); whether the crime

involved a bike theft or distraction burglary did not influence the willingness to participate in the future.

Finally, no significant interaction was found ($b = -0.48, p = .36$).

For the willingness to report and intervene, we saw that when participants perceived the crime as more morally wrong, their willingness to participate was also higher ($b = .31, p < .01$). Furthermore, the willingness to report and intervene is also higher when participants experienced more other-concerning emotions (such as awe and gratitude; $b = .20, p < .01$), as well as when they already had participated in the past by reporting to the police and intervening when witnessing a crime ($b = .26, p < .01$).

Table 6.3. Linear regression of the type of crime, victim statement and the psychological drivers on the general willingness to report and intervene

Steps and variables entered	b	p
1. Age ^a	.02	.06
Gender	-.24	.37
2. Victim statement ^b	-.45	.09
Type of crime ^c	.10	.70
3. Type of Crime * Victim statement	-.48	.36
4. Altruistic values	.13	.27
Egoistic values	-.02	.88
Other-condemning emotions	-.04	.67
Self-conscious emotions	.04	.72
Other-concerning emotions	.20	.05
Perceived moral wrongness	.31	<.01
Past participation	.26	<.01
R ² change step 1	.03	.09
R ² change step 2	.04	.22
R ² change step 2	.04	.36
R ² (step 4)	.40	<.01

Note. $N = 100$, ^a 1= Male, 2 = female, ^b 1= absent, 2= present, ^c 1= bike theft, 2 =distraction burglary

Discussion

In this study, we examined whether the type of a crime as well as showing a victim statement in a video of a television program such as "Crime Watch" influence actual reporting behavior and future willingness to report and intervene. Secondly, we were interested whether moral values, the perceived moral wrongness of the crime, the experience of moral emotions, and past participation behavior would increase actual reporting behavior and the willingness to report and intervene in the future.

Showing a victim statement did not affect actual reporting behavior, and only had a marginal negative effect on the willingness to report and intervene. In contrary to what would be expected, citizens had a lower willingness to report and intervene when they did see a victim statement in comparison to not seeing a victim statement. Since this effect is only marginally significant, we have to be careful to make firm conclusions. The fact that we did not find an effect (and even a negative trend), might be due to the high level of perceived moral wrongness of both crimes. Presumably, when moral wrongness exceeds a certain threshold, additional emotional appeals do not affect willingness to report. This is in contrast with previous studies which have showed that victim statements increase prosocial behavior (Västfjäll et al., 2014). While it is often assumed that showing victim statements would increase reporting behavior, our results do imply that it is not always necessary to show a victim statement in a crime show when a serious crime has occurred. It even shows a trend that showing a victim statement might have a negative effect on reporting behavior. Note however, that we only examined two specific crimes and do not know whether the same effects will be found for other crimes (for example crimes that are perceived as less morally wrong are shown such as white-collar crimes or with a less vulnerable victim). Therefore, it would be recommended for future research to test the effects of a victim statement on the willingness to report to the police with different types of crimes.

Results showed that type of crime (a bike theft vs. a distraction burglary) only had a marginal effect on whether participants actually reported the offender. These results showed a trend that the offender was reported more often after seeing the distraction burglary than the bike theft. No relation was found of the type of crime on participants' future willingness to report and intervene. A possible explanation for not finding significant effects is that there was a ceiling effect on how morally wrong participants perceived the crime,

as the mean scores of perceived moral wrongness for the bike theft and the distraction burglary were both very high and not significantly different. Maybe the scores were this high as the victim concerned an elderly woman which may be perceived as morally wrong independent on what exactly was being done.

In this study, only 25% reported the offender despite the fact that they saw the video just a few minutes previous to exposure to the offender. Additionally, the offender was wearing the same easily recognizable clothes and was standing only a few meters away. This would suggest that there was no memory distortion or noise in the perception. The researcher as well as the person acting as the offender made sure that the participant and offender were standing in such a position that the offender was always making eye contact with the participant. This would suggest that all participants did have a chance to see the offender.

Results did show that participants who experienced more egoistic values, such as being ambitious, influential and having social power, reported seeing the offender less often. It could be the case that people who find these egoistic self-enhancing values important in their life, are less likely to focus on their surroundings and more on the consequences and therefore less likely to report an offender to the police (which can be seen as a more prosocial and altruistic act). They for example could be less likely to spot the offender and, they might think more about the possible negative consequences (such as repercussions from the offender) which might not outweigh possible benefits (e.g., being seen as a hero for handing in a suspect to the police).

Finally, this study showed that the willingness to report and intervene was influenced by the perceived moral wrongness of the crime, past participation as well as other-concerning emotions. Although the type of crime did not influence the willingness to report and intervene, differences in how morally wrong people perceived the crime to be did increase the willingness to participate. The finding that past participation leads to a higher willingness to report and intervene, is in line with previous research. Paton (2013) showed that the more citizens already have participated in their community in the past, the more knowledge they have gained about how to do this and the higher their efficacy beliefs are, which makes it more likely they will report in the future again. Also, by reporting or intervening, citizens are likely to make connections with neighbors or neighborhood police officers. These established connections make it more

likely to participate again in the future. Additionally, when people experienced more other-concerning emotions (e.g., gratitude, pride and awe), they also had a higher willingness to report and intervene in the future. In line with previous research (Lerner & Keltner, 2000), these emotions have an approaching action tendency, which makes it likely that they increase prosocial behavior. The results from the present study suggest that only the more positive approaching emotions affected the willingness to report and intervene, while negative approaching emotions did not. Based on action tendencies, however, we would also expect other-condemning emotions to increase the willingness to report and intervene. This was also shown in the previous scenario-studies in Chapter 3 regarding reporting and intervening behavior towards crime, which showed that other-condemning emotions increased reporting behavior to the police, while other-concerning emotions increased intervening behavior. Again, we do not know whether citizens who are willing to report and intervene would also actually do this when they encounter such a situation.

Participants' average willingness to report and intervene was quite high, which indicates a discrepancy between actual reporting behavior and the intentional behavior. Furthermore, they do not significantly correlate to each other. This could for example be due to people's social desirability in the intentional behavior, which might have been amplified by the presence of police officers on the data collection site or it could be because the reporting behavior measured in this study concerned reporting to a researcher and not to a police officer while the intentional behavior did concern reporting to a police officer, which could have made a difference in behavioral outcomes.

Limitations

This study also comes with some obvious limitations. The study was conducted in collaboration with the police, which may have increased the risk of participant selection. Citizens who see the police as more positive, may also be the ones who are more likely to come to the Police Mobile Media Lab and participate in the study. Interestingly, quite a high percentage (40%) of respondents had been a victim of a crime some time in their life which might have biased the results. Since the data collection was time consuming and limited to only three days, the sample was quite modest. In order to draw more definitive conclusions, it is recommended to replicate the results with a larger sample.

Secondly, participants were engaged in a talk with a researcher while they were confronted with the offender in the video. This could well have distracted them, causing them to be less alert to their surroundings and thus to prevent them from spotting and recognizing the offender. We also do not know for sure whether all participants actually recognized the offender, although we made this as likely as possible. However, in real life it would probably be a lot harder to recognize an offender when they accidentally pass them on the street while not expecting it. As is the case with crimes shown in television crime shows, where citizens are supposed to recognize the suspect in a totally different and unexpected setting, probably wearing different clothes as well. This would suggest that the design of the study does approximate reality. A positive aspect of this measure is that by this we were able to measure actual behavior opposed to only measuring intentional behavior.

Practical implications

A question that arises is whether these shows can be effective if people do not recognize the offender very well. Maybe the aim of these television items is or should be on people who know the offender already which makes it easier to recognize them, instead of people recognizing strangers coincidentally. It would be interesting for future research to examine in how many of the cases, strangers have reported the offender as opposed to acquaintances or family members. If it is indeed the case that reporting to the police is mainly done by people who already know the offender, this would suggest spreading the program in a more appropriate way, for example in specific geographical areas, via social media, or in specific groups on social media (e.g., people who are a member of the Facebook page of the nightclub where the crime happened). However, it still might be interesting to share serious crimes nationally when the aim is to deploy Crime Watch for tactic reasons (e.g., police could have installed phone taps on the moment of airing, waiting for the suspected offender to call co-suspects or relatives to share incriminating information).

Furthermore, based on this study we do not know whether showing a victim statement is necessary in order to increase the willingness to report. Since both crimes in this study were perceived similar as quite morally wrong, we do not know which effects the victim statement would have on the willingness on less or more serious crimes. Since the perceived moral wrongness between individuals did increase the willingness to report and intervene in the future, it could be that this does matter for other crimes than a bike theft or crimes where

the victim is perceived as less vulnerable. However, more research has to be conducted in order to give good practical implications in this regard.

Appendix

1. Picture data collection site



2. Scenarios Crime Watch videos

Bike theft.

"It is Wednesday September 19 when at 11 o'clock in the morning at the Kolobriestraat. These are the camera images of a man who is suspected of a bike theft. An 82-year-old woman just left her house by foot to go to do her groceries at the supermarket. While she walks out, she came across her neighbor, and totally forgets to close her gate door. While she has a quick chat with her neighbor, she leaves her gate door wide open. The perpetrator sees this and takes this opportunity. He walks into the garden and he is filmed by a security camera. Eventually, he leaves with her expensive electric bike. We think that he was looking for valuable items

The suspect is a man between 20 and 30 years old and he has a white skin color. He has short dark hair, and was wearing a burgundy red sweater with a hoodie. Do you recognize the man? Please call the tip line immediately. If you want to stay anonymous, you can call the "report crime anonymously" line."

Distraction burglary.

"It is Wednesday September 19 when at 11 o'clock in the morning at the Kolobriestraat. These are the camera images of a man who is suspected of a distraction burglary. He is filmed by a security camera. An 82-year-old woman gets a visit at her house of an unknown man. The man claims he is collecting

money for charity, and the woman is so friendly to invite the man to come inside while she is searching for small change to donate. The woman even offers him something to drink because she would enjoy some company. But the man is not collecting for charity at all, instead he was looking for an easy prey and seizes the opportunity to steal money, jewelry and the lady's bank card.

The suspect is a man between 20 and 30 years old and he has a white skin color. He has short dark hair, and was wearing a burgundy red sweater with a hoodie. Do you recognize the man? Please call the tip line immediately. If you want to stay anonymous, you can call the "report crime anonymously" line."

Victim statement (same for the bike theft and distraction burglary).

"Well, I am very angry about what happened to me. Something like this has never happened to me before, and I don't think this has happened in the neighborhood before. A thief has been at near house and I am really angry about that. Because he has taken something is belongs to me, and it is not only about what I lost, but also that I totally lost the feeling of being safe. I find that very awful. I am afraid to open the door at night, and I am scared in my house. And all of that was caused by a person I do not even know."

3a. Still image from video of the offender in the bike theft condition

Signalement

leeftijd: 20-30 jaar
huidskleur: blank
haardracht: kort, donker
kleding: bordeauxrood vest met capuchon



ONDER de LOEP

The image shows a man in a burgundy red hoodie and grey pants walking in a residential area. He is standing next to a blue trash bin and a black trash bin. The background shows a house and some greenery.

3b. Still image from video of the offender in the distraction burglary condition

Signalement

leeftijd: 20-30 jaar
huidskleur: blank
haardracht: kort, donker
kleding: bordeauxrood vest met capuchon



ONDER de LOEP

The image shows the same man in a burgundy red hoodie and grey pants walking in a residential area. He is walking on a path that leads to a house. The background shows a house and some greenery.





7

General Discussion

In the past decades, citizens as well as police organizations are increasingly realizing the large potential of citizen capital in fighting crime and disorder (Bullock & Sindall, 2014; Gill et al., 2014). Citizen participation is an important element of the police strategy called community policing which generally focusses on building strong ties and working closely with members of the community (Gill et al., 2014; Kerstholt et al., 2015). For the scope of this thesis, citizen participation in the police domain was defined as *“citizens engaging in the police domain on a voluntary basis; individually, in collaboration with other citizens and/or with institutions with the aim to prevent and solve crime”*. When aiming to increase citizen participation in the police domain, a very crucial aspect is to know what drives citizens to participate, and whether this depends on the type of activities citizens engage in.

In my doctoral thesis, I have therefore taken the citizen perspective as a starting point with the aim to gain insight in drivers of citizen participation and collaboration with the police. This thesis consists of three main components. First, I focused on establishing a classification of participation behavior in the police domain based on actual past behavior. Secondly, I examined three types of underlying psychological drivers of participation behavior: individual-, community-, and institutional-related. Finally, I explored whether citizen participation in the police domain can be influenced by an intervention aimed at reinforcing moral wrongness and moral emotions. In this final chapter, I will summarize the main findings of the empirical chapters, suggest theoretical and practical implications of the findings, and reflect on the strengths and limitations of this thesis as well as directions for future research.

Summary of the main findings

How citizens participate in the police domain.

To date, citizens are mostly involved in policing activities as the 'eyes and ears' of the police by providing intelligence (Terpstra, 2010). This is not the only way citizens can be involved however. So far, classifications of participation behavior in the police domain are mainly based on a distinction between specific activities that citizens can perform. For example, a distinction could be made based on activities that involve physical action (e.g., intervening when witnessing a crime), and activities involving thinking along and having conversations with professionals (Van der Land et al., 2014). However, two activities belonging to two different categories in this classification as proposed by Van der Land et al. (2014), such as surveillance and conflict mediation, may

well be both instantiated by the same psychological drivers, for example a concern for others resulting in other-concerning emotions such as sympathy.

As choices whether to participate are arguably based on psychological drivers, these types of classifications do not necessarily depart from the perspective of citizens themselves. Additionally, as there is a broad range of activities citizens can do to participate in the police domain, from seeking information regarding crime to reporting to the police to joining a neighborhood watch, it is likely that the psychological drivers vary for different kind of activities. Together, this highlights the importance of gaining insight into which kind of activities citizens engage in, whether these can be classified in categories based on actual behavior of citizens and the specific drivers of participation activities.

In **Chapter 2**, I and my co-authors first examined whether we could establish an encompassing classification of the different types of actual participation behavior in the police domain. This classification was based on the citizen perspective in the form of co-occurrence of citizens' actual behavior. This means that citizens were asked to what extent they had been active in a large number of activities in the past, and subsequently categories were formed based on which activities citizens engaged in simultaneously. For example, citizens who had previously reported something to the police were also more likely to have mediated after a neighborhood quarrel, and were therefore both part of one behavior category (responsive participation) in the classification.

The results of our exploratory study show that four types of participation could be distinguished: social control, responsive participation, collaborative participation and detection. *Social control* includes behavior such as citizens correcting each other regarding anti-social behavior, and discussing associated problems with neighbors. *Responsive participation* involves behaviors as a response to crime or antisocial behavior. Examples are reporting something to the police or keeping track of neighborhood quarrels. *Collaborative participation* focuses on citizens collaborating and meeting with police officers, for example by answering questions from the police or attending a meeting with the neighborhood police officer. *Detection* focuses on citizens detecting crime and identifying offenders, for example by assisting the police to detect an offender after watching TV shows such as Crime Watch, or by joining a neighborhood watch.

In addition to the development of this classification, we examined to what extent different types of participation were influenced by three different but interconnected psychological drivers: general attitude, moral values and moral emotions. Results show that the general attitude towards citizen participation in the police domain is a strong positive predictor for all types of participation behavior. Also, the adherence to moral values has an effect on all four types of participation, but are mediated by attitude and other-concerning emotions. This is in line with our expectations based on previous research of Harkness and Hitlin (2014), which states that in order to determine what is right or wrong, people need to make a moral assessment of a situation or certain behavior based on their personal moral values. When these moral values are broken, this subsequently elicits moral emotions and influences behavioral decision-making (Haidt, 2003a).

Further, the results in this chapter also reveal that different types of participation behavior are affected differently by moral emotions. Moral emotions do not influence collaborative participation and detection directly, while they do influence social control and responsive participation. When citizens experience more other-condemning and less self-conscious emotions they are more likely to engage in both social control and responsive participation. Additionally, the experience of more other-concerning emotions also increases the likelihood that citizens will engage in social control. A possible interpretation of this difference in the influence of emotions is that the emotionally driven categories citizens engage in are more reactive and direct in nature (for example responding to a purse theft by stopping the offender from getting away), while others are more of a preventive and long-term nature (for example advising the municipality or police about where their priorities concerning safety in the neighborhood should lie or deciding to join a neighborhood watch).

Concluding, this chapter points at the importance of distinguishing between different types of participation in the police domain, as it appears that different types are influenced by different psychological drivers. Following this study, we zoomed in on two different types of participation behavior as they differed in the role of emotions in this behavior: responsive participation and detection.

Why citizens perform different types of participation behavior.

In addition to the classification of participation behavior, we were also interested to examine more in-depth what the psychological drivers for these two different types of participation (responsive participation and detection) are. The subsequent empirical studies (chapters 3-6) therefore focused on capturing a broad spectrum of psychological drivers of two types of participation behaviors in the police domain. As a first step, we only focused on the individual-related drivers of responsive participation, that is, participation behaviors as a response to crime or antisocial behavior such as reporting something to the police or keeping track of neighborhood quarrels.

Individual-related drivers of responsive participation

In police practice, a rational approach of citizens is often assumed. Police organizations aim to educate citizens by providing the public with actual crime figures, information about the criminal justice system and courses of action on how to participate (Wünsch & Hohl, 2009). However, this rational approach is not entirely aligned with citizens' behavioral decision-making. Besides rational considerations, more emotional and intuitive factors also play a large role in decision-making processes as well. That is, people often also rely on the intuitive decision processes such as their gut feeling and emotions (Evans & Stanovich, 2013; Slovic et al., 2005; Slovic & Västfjäll, 2010). The importance of intuitive factors has also been shown in adjacent domains to citizen participation. Volunteerism, for example, has shown to be related to altruistic motivations (Boss & Hetem, 2011; Clary & Snyder, 1999; Whittaker et al., 2015), and prosocial behavior has been shown to be driven by emotions such other-oriented emotions like empathy and sympathy (Eisenberg et al., 2010; Zaki & Mitchell, 2013).

Especially when the situation is too complex or when people do not have the time and ability to make a deliberate analytic decision, they are likely to adhere to fast and intuitive decision-making (Evans & Stanovich, 2013; Gigerenzer & Gaissmaier, 2011; Zeelenberg et al., 2008). This would also be the case when a crime is witnessed, and the decision whether or not to intervene needs to be made in a split second.

The focus of **Chapter 3** was to explore to what extent different intuitive decision processes influence three different reactions to witnessing a crime (not interfering, calling the police or intervening). This was examined by asking

two different samples of respondents (university students and citizens) about the likelihood of their intervening behavior across five different scenarios. These scenarios were designed to correspond with one of five moral foundations explicated in the Moral Foundations Questionnaire (Haidt, 2012). The topics of the scenarios were a child abduction, a bicycle theft, a bar fight involving a friend, a struggle between a police officer and an unknown suspect and a known convicted pedophile walking across a school playground. Participants were asked about how moral wrong they perceived the scenarios to be and to what extent they experienced 12 different types of the moral emotions, varying from anger to fear and pride.

Results show that individuals who experienced avoidance moral emotions (e.g., fear) were more inclined not to interfere, while we found a trend that approaching emotions (e.g., anger and gratitude) increased the intention to call the police as well as to intervene. Also, the perceived moral wrongness only had an effect on calling the police mediated by other-condemning emotions. This means that the more people perceive the behavior of the suspect as morally wrong, the more likely they are to experience other-condemning emotions and subsequently the more likely they are to call the police. However, this did not lead to an increase in reported intervening behavior.

These studies show that intuitive decision processes such as emotions and the perception of moral wrongness are indeed important in the decision citizens make to act when they witness a crime. Different emotions play a role leading to different types of behavioral outcomes. Additionally, as there are contradicting views on the generalizability of student samples to the general population (Kardes, 1996; Petty & Cacioppo, 1996), this study was performed both on a student and a general population sample. On the one hand, researchers have argued that the observed responses of student samples in social psychology research does not reflect responses of society at large (Petty & Cacioppo, 1996), while on the other hand Kardes (1996) argued that students do provide useful informative data about basic psychological processes and relations between psychological constructs. This chapter did show quite similar results across a sample of college students and of the general population, which suggests that -on this particular topic- findings from a student population are generalizable to the general population.

Individual-, community-, and institutional-related drivers

Although individual motives, such as moral values and emotions can be considered key to decisions to participate in the police domain, participation behavior is likely to be influenced by social (community) factors as well (Chavis & Wandersman, 2002; Perkins et al., 1990). In addition to the influence of the community, human behavior might be affected by their relationship with the police, as the police is still mainly responsible for the safety in their area despite of the increased cooperation with citizens.

Previous research by Paton and colleagues (2013) used a model called the Community Engagement Theory to predict citizens' preparatory behavior for natural hazards by taking into account individual-, community- and institutional-related psychological drivers. To date, most attention regarding the Community Engagement Theory has been directed towards risk preparedness for natural disasters. In the past decade, however, human-made safety hazards have gained notoriety in the public's eye. Scientists and practitioners have increasingly realized that crime risks can have severe negative and dislocating effects on the community, stressing the importance of making communities resilient to crime (Broekhuizen et al., 2018; Haridakis & Rubin, 2005; Lam et al., 2018; RIVM, 2016). In **Chapters 4 and 5**, we therefore explored whether the psychological drivers of the Community Engagement Theory influenced different types of participation behavior in the police domain. As morality has been shown to be a relevant driver in the police domain in the previous chapters, we added this to the Community Engagement Theory.

In chapter 4, we first examined whether these individual-, community- and institution-related drivers are relevant to responsive participation, reflecting independent, individual behavior. In Chapter 5, we focused on joining an online neighborhood watch, reflecting both a community-related behavior as well as detection, another form of participation behavior.

Drivers of responsive participation

In **Chapter 4**, the purpose was to examine whether the individual-, community-, and institutional-related psychological drivers of the Community Engagement Theory are also relevant in the context of social safety hazards such as crime. The focus of this chapter was specifically on actual information gathering about courses of action and on more individual reporting and intervening behavior after crime has occurred.

Results of this research reveal that only individual-related drivers (higher risk perception, altruistic values, negative emotions and a lower self-efficacy) influence actual information gathering. All three types of psychological drivers, individual-related (higher self-efficacy and response efficacy), community-related (a higher collective efficacy and previous community participation), and, albeit marginally, institutional-related drivers (higher trust and legitimacy) show to be relevant in explaining the willingness to act by reporting and intervening after a crime occurred.

These results show that not only individual, but also community and institutional considerations play a role in citizens' preparatory behavior for the risk of crime. This corresponds with the Community Engagement Theory (Paton, 2013), which shows the applicability of all three types of drivers to natural hazards, such as earthquakes and tsunamis. For the police domain, it is shown to be of added value to extend the Community Engagement Theory with moral drivers (moral values and emotions; Haidt, 2003a, 2012) as well as more police related concepts as police legitimacy and trust in the police (Stoutland, 2001; Tyler, 2004).

Drivers of detection

Aided by the growth of internet and social media, citizens increasingly organize themselves to communally increase safety in their own neighborhood (Fieseler & Fleck, 2013). A more social type of participation behavior gaining popularity by citizens is membership of an online neighborhood watch, for example organized via the application WhatsApp.

To study the psychological drivers of a more socially embedded type of participation, **Chapter 5** reports on an opportunity study allowing us to study the extent to which both actual membership of a WhatsApp neighborhood watch and membership orientation were influenced by individual-, community-, and institutional-related psychological drivers as previously identified in the Community Engagement Theory (Paton, 2013; Paton et al., 2013).

Results show that current membership was associated with individual- and community-related drivers, but not with institutional-related drivers (trust in the police). Regarding individual-related drivers, members have a lower risk perception regarding the consequences of crime and a higher response efficacy compared to non-members. Regarding community-related drivers, members

have a lower sense of community and have been more engaged in previous community participation than non-members. Furthermore, the willingness to become a member is only related to response efficacy on the individual level, i.e. the belief that joining such a group will be effective in protecting themselves or others.

This study shows that drivers for the willingness to become a member are different (only individual-related drivers) in comparison to differences between members and non-members (individual- and community-related drivers). In line with Chapter 2, the results of this study indicate that participation behavior of a detection nature -joining a neighborhood watch-, is not influenced by emotions.

Influencing participation behavior in the police domain.

The chapters discussed so far have revealed some interesting psychological drivers of citizen participation in the police domain. In the final empirical chapter, **Chapter 6**, we explored how and to what extent participation behavior can also be reinforced via a well-known intervention to increase citizens' help in solving crimes, i.e. by a Crime Watch broadcasting. Considering that behavioral decisions are heavily influenced by intuitive decision processes (Haidt, 2012; Kahneman, 2002). We explored whether participation behavior could be reinforced by tying different manifestations of the presented video to explore the driver morality (in the form of moral wrongness and moral emotions). We found this of particular interest as previous studies identified morality as a significant driver for participation behavior and it is not included in the Community Engagement Theory (yet).

Specifically, we focused on the effects of two key features of Crime Watch messages, which are the presence of a victim statement (present vs. absent) and the type of crime (a bike theft vs. distraction burglary) on actual and anticipated reporting behavior. Participants watched one of the four "Crime Watch" videos in the 2x2 design; a portion of them also took part in the second stage, where they were "coincidentally" exposed to the offender from the video and thus given the possibility to report this information. After watching the video, participants' actual reporting behavior and their willingness to report and intervene in the future were measured. In this study, we explored whether moral values, the perceived moral wrongness of the crime, the experience of moral

emotions, and past participation behavior would increase actual reporting behavior and the willingness to report and intervene in the future.

Results show that the inclusion of a victim statement has no effect on reporting the offender or the willingness to report and intervene in the future. The type of crime did have an effect, albeit marginally, on whether participants actually reported the offender, showing that the burglary offender was more often reported than the bike thief. After being exposed to the offender, only 25.4% of the participants reported the offender. This is a relatively low percentage considering that participants saw the video just a few minutes previous to exposure, the offender was wearing the same easily recognizable clothes and was standing only a few meters away (thus practically rules out the chance of memory distortion or noise in the perception). The results further show that actual reporting behavior decreases when citizens have a stronger adherence to egoistic moral values. The willingness to report and intervene in the future is positively influenced by the perceived moral wrongness of the crime, other-concerning emotions, and past behavior.

This study gives a first insight in the effects of a victim statement and the type of crime on reporting behavior. We found no indication that a victim statement has a (positive) effect on crime reporting, while the type of crime did. Furthermore, although no differences in the perceived moral wrongness between the two types of crime were found, the perceived moral wrongness, the adherence to moral values and moral emotions did affect the willingness to act in the future.

Overview theoretical and practical implications

Taken together, the findings of the combination of empirical chapters discussed in this thesis provide valuable theoretical as well as practical implications for citizen participation in the police domain.

Theoretical implications.

So far, the main focus in research on community resilience has been on preparing and mitigating the consequences of natural hazards such as floods and earthquakes, and far less on crime (Yetano et al., 2010). In the context of community policing, previous research has focused mainly on the police perspective (e.g., organizational transformation and the effects on crime figures), and less on the citizen perspective (Paton, 2013). The added value

of this doctoral thesis is that it combines both the citizen perspective in community policing and the application of community resilience to citizen participation in the police domain.

This thesis contributes to the field as it has first developed an encompassing classification of participation behavior from a citizens' perspective. Based on co-occurrences of actual past behavior, this classification distinguishes between four types of participation behavior in the police domain: collaborative participation, responsive participation, social control and detection. Additionally, this thesis provides some first indications of the meaningfulness to differentiate between categories of participation behavior when aiming to stimulate participation behavior as different types can be influenced by other psychological drivers.

Overall, this thesis has six main theoretical implications. First of all, the studies across empirical chapters show that individual-, community-, and (albeit marginally) institutional-related psychological drivers play a role in citizen participation in the police domain. Based on Chapters 4 and 5, it can be argued that the Community Engagement Theory does not only apply to physical safety but also to social safety issues such as the risk of crime.

Secondly, this thesis provides insight in the psychological drivers of different types of participation in the police domain. An important finding contributing to the field, is that the relevance of specific psychological drivers depends on the type of participation activity. Some activities, such as responsive participation (reporting and intervening) and social control appear to be more emotionally driven while other activities such as detection (e.g., joining an online neighborhood watch) and collaborative participation are more deliberate and rationally driven. Furthermore, some activities (e.g., the willingness to become a member of an online neighborhood watch) appear to be mainly driven by individual factors while other activities (e.g., the willingness to report and intervene) are also influenced by the community and institutional-related drivers.

Thirdly, the studies in this thesis have repeatedly shown the relevance of morality as a psychological driver for participation in the police domain. In line with previous research, morality plays an essential role in crime prevention (Cromby, John et al., 2010). In order for citizens to act on crime, citizens

first intuitively classify certain behavior they have witnessed, for instance someone stealing a bicycle, as right or wrong (Harkness & Hitlin, 2014). Morality influences participation behavior in the police domain by people's perception of the moral wrongness of a situation, their moral values and the moral emotions they subsequently experience. With regards to developments in society, norms of what citizens are allowed or feel empowered to do in the police domain are shifting. This can for instance be seen in examples from practice showing the increasing extent to which citizens feel that they can go after a perpetrator by themselves (NOS, 2017; Piersma, 2016) or start searching initiatives for missing persons by themselves (Bos, 2018, June 8). This suggests the additional value of morality to the Community Engagement Theory, and the importance of taking morality into account future research.

As moral values and norms can change over time, participation behavior could be just a step away from citizens starting to take the law into their own hands. This could for instance happen when citizens use disproportionate violence to stop a suspected offender or when retailers violate suspects' privacy by the unlawfully distribution of photo material of shoplifters (Lub & De Leeuw, 2019). There is also a risk of citizens (inadvertently) hindering police efforts by destroying evidence or interfering in police investigations (Haas, de Keijser, & Bruinsma, 2012). For example, when citizens help to search for a missing person, they could inadvertently also destroy evidence if they come across the crime scene. Although I did not measure vigilantism in my thesis, it is still an open question how the findings would translate to this specific domain. As it can be seen as a form of active participation (yet undesired), my thesis might provide an interesting starting point for follow-up research in this specific research area.

A fourth theoretical implication of this thesis is that it indicates a trend that police legitimacy can also explain participation behavior and can be a useful extension to the Community Engagement Theory. Although this was a marginally significant effect shown in only one study (Chapter 5), it is in line with previous research on citizen participation in crime prevention (Jackson et al., 2013; Tyler & Fagan, 2008). This could also be a starting point for future research, to examine whether morality and legitimacy (police or another relevant institutional organization) are also relevant drivers for other more natural hazards. This could for instance be the case when a flood occurs, where moral values and government legitimacy could play a role in taking

protective measures. For example, citizens' adherence to altruistic moral values such as social justice and being helpful could predict their preparatory and actual behavior after the flood occurred. Also, legitimacy could play a role here, citizens might for example be more inclined to take preparatory measures for a flood if they see the governmental organization inclining them to do so as legitimate, or on the other hand, when they perceive such high levels of government legitimacy to handle the matter they could also become far less inclined to act.

Although I stress the importance of distinguishing between different types of participation behavior, and not all psychological drivers were taken into account in all chapters, a fifth implication is that there were some drivers that repeatedly show to be related to participation behavior across empirical studies. Besides the important role morality plays, this concerns levels of self-efficacy, response efficacy and collective efficacy repeatedly. Another recurring finding was that past citizens participation in activities, such as organizing a street barbecue to joining a neighborhood watch, are more likely to participate in the future again.

Finally, this thesis explored whether participation behavior can be influenced by reinforcing specific psychological drivers. Specifically, Chapter 5 shows one of the first studies in which the relation between key elements in a Crime Watch fragment and actual reporting behavior. It was shown that watching a victim statement negatively influenced the willingness to act, albeit marginally, while varying the type of crime (a bike theft vs. a distraction burglary), albeit marginally, influenced actual reporting behavior. These results are a starting point for future research on the effects of police communication on citizens' willingness to participate.

Practical implications.

This thesis also comes with four main practical implications. The findings of this thesis can give practitioners in the field insight in the psychological drivers of citizen participation, and ways to reinforce them.

First of all, this thesis shows that the intuitive system has an important influence on citizens' decision to participate. Communication strategies currently used by the police often focus on the rational system by providing factual information and assuming that knowledge would immediately result

in action. Based on our results, it would be recommended to take into account intuitive decision processes such as moral values and, for some activities, on emotions in order to stimulate participation behavior. For instance, when the police want to stimulate responsive participation such as calling the police or reporting nuisances, they can focus on emotions. These strategies could focus on increasing feelings of disgust towards the perpetrator as well as decreasing feelings of fear and guilt people might experience in anticipation of making the report, although this might have ethical concerns. This could for example be done in the form of leaflets or commercials, or on a smaller scale in communication between neighborhood police officers and their neighborhood.

Secondly, when communicating with citizens, it is recommended to take into account that citizens need to feel capable to perform the expected type of behavior and have the feeling that it will have the anticipated effect. For example, when practitioners aim to increase reporting behavior to the police, it is important that they know via which channels and under which circumstances they can report to the police, and receive feedback about what has been done with their report and what the result was in terms of stopping the offender. This could in turn also affect citizens' trust and police legitimacy, which can in turn increase future participation.

A third recommendation would be to give attention to the community types of participation behavior. This thesis has shown that citizens are more likely to participate when they are already connected to their community. Citizens who have already participated with their neighbors in the past (e.g., by organizing a street barbecue or as a member of a neighborhood-WhatsApp group) or already had contact with a neighborhood police officer, can have established a relevant social network. This can influence how they make decisions regarding how to mitigate and prevent crime in the future as they already might have knowledge on how to participate, and have higher collective efficacy beliefs. This already existing connection with neighbors and a police officer can also make it easier to collaborate with neighbors in prevention or detection of crime in the future, as they could be asked to join initiatives more often by their neighbors because they already know each other.

Finally, when the police could use the help of citizens by providing information about a specific case, it is recommended to use ways to reach out to the public (such as crime television programs) in a tactical way. Based on

the study in Chapter 6 we do not know whether showing a victim statement is necessary in order to increase the willingness to report, as it even seems to have a negative effect. Since both crimes in this study were perceived similar as quite morally wrong, we do not know which effects the victim statement would have on the willingness on less or more serious crimes. Therefore, future research is recommended. Citizens have a hard time recognizing offenders they only have seen for a few minutes on a screen, especially when they encounter the offender while they are not expecting it (e.g., passing them while walking in a shopping mall). Therefore, it might be more effective to target specific groups of people, such as people who are likely to know the suspected offender because they live in the same neighborhood or go to the same sports club, although this has not been examined yet. In general, making sure there is a low threshold for citizens to report or participate, is likely to increase participation and collaboration with the police.

Strengths, limitations and future research

An important strength of this thesis is that not only intentional but also actual participation behavior was measured. In Chapter 2, for example, citizens were asked regarding their actual behavior in the past. Additionally, in order to overcome memorial deficits of past behavior, for example because a person can forget how often they participated or what drove them to participate, actual information gathering behavior was measured in Chapter 5, and actual reporting behavior was observed in Chapter 6.

Further, a variety of methods was used from online surveys and vignette studies to a field experiment. Samples consisted mainly of citizens, and also included relatively large samples. A variety of theoretical perspectives from different domains were used, which made it possible to have a comprehensive examination of the related psychological drivers to participation behavior in the police domain. A downside of this approach is that we were not able to take into account all the different perspectives and psychological drivers in all empirical studies. Although not all drivers were examined in all empirical studies, we did see a trend across studies of similar results regarding the influence of psychological drivers, such as morality, efficacy and past participation behavior on citizen participation in the police domain. Across results, we found that the experience of moral wrongness increased participation behavior, and that moral emotions such as anger, disgust and pride increase some types of participation behavior (as discussed before). Further, we saw in multiple studies that when

people feel capable as an individual or community, and see the actions as useful they are more likely to participate. Finally, we saw in several studies that citizens who already participated in their community before (e.g., in a very broad way, from organizing a street barbecue, to reporting to the police or being member of a neighborhood watch) were more likely to report and intervene in the future. We do note that the institutional-related drivers (such as trust in the police and legitimacy) were only taken into account in two empirical studies, and we are therefore not able to make general conclusions about these drivers.

Although this doctoral thesis reveals some first interesting findings regarding psychological drivers of citizen participation in the police domain, it also comes with some additional limitations. One such limitation is that across all empirical chapters, participants were recruited by asking them to participate voluntarily. Participants were for example collected by using citizen panels of municipalities already existing of volunteers, in collaboration with the police or by contacting a wide variety of groups already participating in the context of community policing. Since the research topic of this thesis was to examine participation behavior, this probably created a selection bias of citizens who were willing to participate in this research and therefore might be more willing to participate in society in general. Therefore, our sample might be skewed towards more active citizens. This could have influenced the relation between the psychological drivers and participation behavior. However, in Chapter 3 the results show a similar pattern in relations between psychological drivers and reporting and intervening behavior for a student sample (likely to also include less active citizens in the security domain) and a citizen sample. This suggests that the underlying psychological drivers operate similarly for less and more active citizens.

Another limitation of this thesis is that Chapters 2 to 5 were correlational studies and based on these results it is not possible to make firm conclusions regarding causal relations. Hence, it could also be the case that the psychological measures changed due to participation behavior instead of being actual drivers for the behavior. Therefore, it is recommended that future research include experiments or a longitudinal design measuring the psychological drivers before and after participation behavior. This could, for example, answer the question whether higher response efficacy of members of a neighborhood-WhatsApp group is the result of membership or already existed before becoming a member. As such, it can be established whether

and to what extent participation in the police domain effects the psychological drivers or vice versa.

In Chapter 6, an experiment was conducted in which it was possible to measure a causal relationship between certain aspects of a crime watch show and actual reporting behavior. Interestingly, the intentional measure and the actual behavioral measure did not correlate very well. The gap between intentions and actual behavior is well-known in social psychology (Sheeran & Webb, 2016), but especially in moral psychology because of the large role moral values and emotions play in moral decision-making. Someone might for example have clear moral intentions, but when it comes down to making the actual behavioral decision, they might not be able to follow through on them because of other considerations such as the experience of moral emotions (Graham, et al., 2015; Teper et al., 2015). This difference in outcomes of the intentional and actual behavior in our study could be explained by the inability of people to tap into emotions while making hypothetical decisions whether one is likely to perform certain behavior in the future (Teper et al., 2015). When this person subsequently makes the same decision in a real-life situation, these emotions do have a large influence in the actual behavior. For future research, it is therefore recommended, if possible, to measure actual participation behavior instead of intentional behavior.

This thesis mostly explored positive citizen participation and ways of stimulating participation behavior, however, it is important to keep taking into account the potential undesired effects of citizen involvement in the police domain. Vigilantism is one such undesired effect to be taken into account. Risks are for example that citizens can use disproportionate violence to stop a suspected offender or retailers who violate suspects' privacy by unlawfully distributing photo material of shoplifters (Lub & De Leeuw, 2019). Further, citizens can (inadvertently) destroy evidence or interfere in police investigations (Haas et al., 2012). The empirical chapters in this thesis mainly focused on positive types of participation behavior.

For future research, it would be recommended to gain more insight into whether the psychological drivers of citizen participation also apply to vigilant behavior. Considering that it can be difficult to measure actual behaviors of vigilantism, and as it seems unethical to reinforce such behaviors, virtual reality might be a good instrument for future research to examine psychological drivers

of vigilantism. Using virtual reality can increase physical and psychological realism, and might evoke specifically relevant intuitive drivers such as emotions more realistically as well (Bailenson, 2018; Bakker, 2018).

Final remarks

In current society, efforts to tackle crime depend not merely on police action but also on participation of citizens and cooperation between citizens and the police. Due to the rise of internet access, the use of social media and more access to information about crime from different sources, it is easier for citizens to communicate with neighbors and institutions. Citizens are more empowered to participate themselves and are less dependent on the police. These new possibilities have sparked an increase in citizen participation in the police domain. From a theoretical point of view, this thesis established a classification of participation behaviors based on co-occurrence of citizens' actual behavior. This means that the categories were based on activities citizens engaged in simultaneously, e.g., citizens who were a member of a neighborhood watch in the past were also more likely to have been a member of 'amber alert', which subsequently belonged to the same category, called detection. This thesis also shows the influence of individual-, community- and institutional-related psychological drivers on participation behavior in the police domain. The influence of these psychological drivers highly depends on the type of activity. Overall, morality considerations, efficacy beliefs and past participation with neighbors and police were shown to be prevalent drivers for citizens to participate.

From a practical point of view, these drivers could be reinforced in order to stimulate participation. Practitioners might feel the need to have guidelines on how to stimulate citizens to participate in the police domain without going too far and taking the law into their own hands. However, citizens are becoming more empowered and act more out of their own initiative. In these fast-changing times, I would argue that it is important to continue connecting with citizens and take their perspective into account. The discussion with citizens should be kept alive about what the roles of the police and citizens are and where the fading line between activities of police and citizens lies. Or in other words: "Crossing lines together".





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S

Summary

In the past decades, citizens as well as police organizations increasingly realize the large potential of citizen capital in fighting crime and disorder (Bullock & Sindall, 2014; Gill et al., 2014). Citizen participation and the relation with the community is a key element of the police strategy called community policing (Gill et al., 2014; Kerstholt et al., 2015). It is a very broad concept, consisting of a large range of activities. These activities can be performed individually, in collaboration with other citizens (e.g., neighbors or bystanders) and/or in collaboration with the police. Activities can for instance consist of reporting crime and providing intelligence to the police, intervening when witnessing a crime, and joining a (online) neighborhood watch. In order to examine how and why citizens participate and whether citizen participation can be reinforced, insight was needed in what kind of behaviors citizens can perform and whether there are different psychological drivers related to different participation activities.

This thesis consists of three main components: (1) to establish a classification of participation behavior in the police domain from a citizens' perspective and based on actual behavior, (2) to capture a broad spectrum of individual-, community-, and institutional-related psychological drivers of citizen participation behavior and (3) to explore whether these drivers can be reinforced in order to increase actual participation behavior.

In **Chapter 1**, an extensive literature review was provided on types of participation behavior and of psychological drivers for citizen participation in the police domain from different theoretical perspectives. In addition, an overview is given of the five empirical chapters in this doctoral thesis.

In **Chapter 2**, an empirical study (n= 217) is reported which aimed to provide insight in actual participation behavior in the police domain. Citizens can participate in different ways, for example by reporting crime and nuisances, joining a neighborhood watch, providing specific intelligence in criminal investigations or being involved in shaping police policy. This online survey study, it was examined whether multiple categories of participation behavior in the police domain could be distinguished and to what extent it could be predicted by three different but connected psychological determinants: general attitude towards citizen participation, moral values, and moral emotions.

Results showed that four types of participation could be distinguished: social control (for example discussing anti-social behavior with neighbors), responsive participation (for example reporting a criminal act to the police), collaborative participation (for example attending a meeting with police officers) and detection (for example joining a neighborhood watch).

Results further showed that general attitude towards citizen participation in the police domain is a strong positive predictor for all types of participation behavior. So, if citizens have a generally positive attitude towards citizen participation in the police domain, they are more likely to engage in all four types of participation. Citizens' attitude, in turn, was more positive when they adhered more to moral values and experienced more other-concerning emotions (such as sympathy). Further, the results in this chapter also reveal that different types of participation behavior are affected differently by moral emotions. Moral emotions do not influence collaborative participation and detection, while they did influence social control and responsive participation.

In **Chapter 3**, two similar studies are reported with two different samples (students; $n= 213$ and citizens; $n= 170$). In these exploratory online studies, we examined whether moral values, moral emotions and general attitude influence citizens' intervening behavior in five different scenarios (e.g., bike theft, bar fight). Here the focus was on three types of behaviors: not interfering at all, calling the police and intervening.

Both studies showed similar results. Overall, they showed that individuals who experienced more avoidance emotions (e.g., fear) were more inclined to not interfere, while we found a trend that approaching emotions (e.g., anger and gratitude) increased the intention to call the police as well as to intervene. Additionally, the higher moral wrongness of the crime a person perceived, was specifically related to an increased experience of other-condemning emotions (e.g., anger) which subsequently led to a higher likelihood that this person would call the police.

In **Chapter 4**, a study ($n= 1245$) was reported of which the purpose was to examine individual-, community-, and institutional-related psychological drivers. We used the Community Engagement Theory (Paton, 2013), designed to predict citizens' preparatory behavior for natural hazards (such as an earthquake or tsunami). We examined whether these drivers were also relevant

to the context of social safety hazards such as crime. Citizens who were already a member of their municipality's citizen panel at the time of data collection participated in an online study.

Results of this research revealed that actual information gathering was only influenced by individual-related drivers. Citizens who have a higher risk perception, experience more altruistic values, more negative emotions and who feel less capable to act on crime are more likely to gather information on crime prevention and how to act. In addition, the willingness to act, for example by reporting crime to the police or by intervening, was influenced by all three types of psychological drivers. Citizens who felt more capable to act on crime and perceived a higher effectiveness of acting on crime (individual-related), who felt more capable to act as a community against crime, and who already participated more in the community before (community-related) and who experienced a higher trust and police legitimacy (institutional-related, however marginally) were more willing to act after a crime occurred.

In **Chapter 5**, it was examined (n= 214) to what extent both actual membership and membership orientation of an online neighborhood watch were influenced by individual-, community-, and institutional-related psychological drivers that departed from the Community Engagement Theory (Paton, 2013). In a door-to-door survey, citizens of one neighborhood in a medium-sized city in the Netherlands were asked whether they currently were a member of an online neighborhood watch. Subsequently, non-members were asked whether or not they would consider becoming a member in the future.

Results showed that regarding individual-related drivers, members of a neighborhood-WhatsApp group had a lower risk perception regarding the consequences of crime and a higher belief that joining such a group would be effective (called response efficacy) than non-members. Regarding community-related drivers, members had a lower sense of community and more experience with previous community participation compared to non-members. No differences were found in trust in the police (institutional-related). Furthermore, citizens who were not a member yet, were more willing to become a member if they felt that joining such a group would be effective in protecting themselves or others (response efficacy).

In **Chapter 6**, it was explored whether participation behavior could be reinforced, by influencing some relevant psychological drivers. One way to increase citizens' help in solving crimes is by broadcasting television shows such as Crime Watch. In an experiment ($n= 100$), the effects of two key features of those messages (victim statement: present vs. absent) and the type of crime (bike theft vs. distraction burglary) on actual and anticipated reporting behavior were examined. In a between-subjects design, 100 participants watched one of the four "Crime Watch" videos; 63 participants also took part in the second stage, where they were "coincidentally" exposed to the offender from the video and thus given the possibility to report this information. Before watching the video, participants were asked about possible underlying psychological drivers, such as their adherence to moral values and whether they had participated in their community in the past. After watching the video, participants were asked how morally wrong they perceived the crime to be, and to which extent they experienced a number of moral emotions. Further, it was observed whether participants actually reported the offender, and participants were asked about their willingness to act in the future.

Results showed that the victim statement only had a marginal negative effect on actually reporting the offender, meaning that participants were less likely to report an offender when they had seen a victim statement compared to participants who did not see one. Only 25.4% of the participants actually reported the offender. When participants adhered to more egoistic moral values, they were less likely to report. Further, the type of crime only had a marginal effect on the willingness to report and intervene in the future, so participants who saw a distraction burglary were more willing to act again in the future than those who saw a bike theft. When participants perceive the crime as more morally wrong, experienced more other-concerning emotions and had already participated in the community in the past, they were more willing to report and intervene in the future.

In **Chapter 7**, a general conclusion and discussion across empirical chapters were presented. Furthermore, an overview of the limitations as well as the theoretical and practical implications of this thesis were given.

From a theoretical perspective, this thesis shows the relevance of distinguishing between types of actual participation behavior in the police domain. Across empirical chapters, the studies show that individual-

community-, and institutional-related psychological drivers play a role in citizen participation in the police domain. This thesis shows the relevance of the Community Engagement Theory to the police domain and the value of two additional drivers which could also be relevant to other domains, which are morality and police legitimacy.

From a practical perspective, this thesis gives practitioners insight in what drives citizens to participate in the police domain. When the police aim to stimulate participation behavior, it is important to distinguish between different types of participation behavior. Further, in the communication with citizens in general, it is recommended to take into account their intuitive decision processes such as moral values and emotions, as well as efficacy beliefs. Although this thesis mostly explored positive citizen participation and ways of stimulating participation behavior, it is important to take into account the undesired effects of citizen involvement in the police domain, such as vigilantism.

Concluding, this thesis highlights the importance of the citizen's perspective in citizen participation in the police domain. The rise of internet access, the use of social media and more access to information about crime from different sources, make it easier for citizens to communicate and collaborate with neighbors and institutions. Citizens are more empowered to participate themselves and are less dependent on the police. These new possibilities have sparked an increase in citizen participation in the police domain, and lines between the role of the police and citizens are shifting and fading. It is therefore important as police and citizens together to keep the discussion about this division of roles alive, or in other words: "Crossing lines together".





S

Samenvatting

Burgers en politieorganisaties zijn zich in de afgelopen decennia steeds meer het grote potentieel van burgerkapitaal in de strijd tegen criminaliteit en overlast gaan realiseren (Bullock & Sindall, 2014; Gill, Weisburd, Telep, Vitter & Bennett, 2014). Burgerparticipatie en de relatie met het publiek is een belangrijk onderdeel van de politiestrategie *community policing* (Gill et al., 2014; Kerstholt, De Vries, & Mente, 2015). Burgerparticipatie in het politiedomein is een zeer breed concept, dat bestaat uit een breed scala aan activiteiten. Deze activiteiten kunnen individueel worden uitgevoerd, in samenwerking met andere burgers (bijvoorbeeld met burens en omstanders), en/of in samenwerking met de politie. Activiteiten kunnen bijvoorbeeld bestaan uit het melden van criminaliteit, het verstrekken van informatie aan de politie, ingrijpen na getuige te zijn van een misdrijf en het deelnemen aan een (online) buurtwacht. Voordat onderzocht kan worden waarom burgers deelnemen en of burgerparticipatie kan worden gestimuleerd, is eerst inzicht nodig in wat voor soort gedrag burgers kunnen uitvoeren en of er verschillende psychologische drijfveren zijn die verband houden met deze verschillende soorten participatie-activiteiten.

Dit proefschrift bestaat uit drie hoofdcomponenten: (1) het classificeren van participatiegedrag in het politiedomein vanuit een burgerperspectief en op basis van feitelijk gedrag, (2) het onderzoeken van een uitgebreid spectrum van individueel-, sociaal- en institutioneel-gerelateerde psychologische drijfveren van burgerparticipatie en (3) het onderzoeken of specifieke drijfveren kunnen worden beïnvloed met als doel het feitelijke participatiegedrag te vergroten.

In **hoofdstuk 1** wordt een uitgebreide literatuurstudie weergegeven over typen participatiegedrag en psychologische drijfveren van burgerparticipatie in het politiedomein vanuit verschillende theoretische perspectieven. In dit hoofdstuk wordt een overzicht gegeven van de vijf empirische hoofdstukken in dit proefschrift.

In **hoofdstuk 2** wordt een empirisch onderzoek (n = 217) gerapporteerd met als doel inzicht te bieden in daadwerkelijk participatiegedrag in het politiedomein. Burgers kunnen op verschillende manieren deelnemen, bijvoorbeeld door aangifte te doen van criminaliteit en overlast, zich aan te sluiten bij een buurtwacht, specifieke informatie te verstrekken in politieonderzoeken of betrokken te zijn bij het vormgeven van het politiebeleid. In dit online-vragenlijstonderzoek werd onderzocht of er in het politiedomein meerdere categorieën van participatiegedrag konden worden onderscheiden.

Daarnaast is onderzocht in welke mate dit voorspeld kon worden door drie verschillende maar gerelateerde psychologische drijfveren: attitude ten opzichte van burgerparticipatie, morele waarden en morele emoties.

De resultaten laten zien dat er vier soorten participatie te onderscheiden zijn: sociale controle (bijv. het bespreken van asociaal gedrag met burens), responsieve participatie (bijv. het melden van een misdrijf aan de politie), collaboratieve participatie (bijv. het bijwonen van een vergadering met de wijkagent) en detectie (bijv. lid worden van een buurtwacht).

Met betrekking tot de psychologische drijfveren werd aangetoond dat de attitude ten opzichte van burgerparticipatie in het politiedomein een sterke positieve voorspeller is voor alle soorten participatiegedrag. Dit betekent dat als burgers een positieve attitude hebben ten opzichte van burgerparticipatie in het politiedomein, ze eerder geneigd zullen zijn om deel te nemen aan alle vier soorten participatie. De attitude van burgers was positiever wanneer zij meer waarde hechtten aan morele waarden, en meer 'ander-betrokken' (*other-concerning*) emoties ervoeren. Verder laten de resultaten in dit hoofdstuk ook zien dat verschillende soorten participatiegedrag op verschillende manieren wordt beïnvloed door morele emoties. Morele emoties bleken geen invloed te hebben op collaboratieve participatie en detectie, maar wel op sociale controle en responsieve participatie.

In **hoofdstuk 3** worden twee vergelijkbare studies gerapporteerd met twee verschillende steekproeven (studenten: $n = 213$ en burgers; $n = 170$). In deze verkennende online studie hebben we onderzocht of morele waarden, morele emoties en de algemene attitude het gedrag van burgers beïnvloeden. Hier lag de focus op drie soorten gedrag: helemaal niet ingrijpen, de politie bellen en ingrijpen.

Beide onderzoeken lieten vergelijkbare resultaten zien. Over het geheel genomen, blijkt dat personen die meer vermijdende (*avoidance*) morele emoties ervoeren (zoals angst) meer geneigd waren om zich niet met de situatie te bemoeien, terwijl we een trend vonden dat benaderende (*approaching*) emoties (zoals woede en dankbaarheid) de intentie verhoogden om zowel de politie te bellen als om in te grijpen. Ook bleek dat hoe moreel verwerpelijker participanten het misdrijf vonden, des te meer ander-veroordelende (*other-*

condemning) emoties ze ervaren, wat vervolgens leidde tot een hogere kans dat ze de politie zou bellen.

In **hoofdstuk 4** werd een studie gerapporteerd (n = 1245) waarvan het doel was om de individueel-, sociaal-, en institutioneel-gerelateerde psychologische drijfveren te onderzoeken, welke zijn gebaseerd op de *Community Engagement Theory* (Paton, 2013). Deze theorie is ontworpen om voorbereidend gedrag voor natuurlijke gevaren (zoals een aardbeving of tsunami) van burgers te voorspellen. We hebben onderzocht of deze drijfveren ook van toepassing zijn op sociale veiligheidsrisico's zoals criminaliteit. Burgers die op het moment van de dataverzameling al lid waren van het burgerpanel van hun gemeente, namen deel aan een online-onderzoek.

Resultaten van dit onderzoek hebben aangetoond dat feitelijke informatieverzameling alleen werd beïnvloed door individueel-gerelateerde drijfveren. Burgers die een hogere risicoperceptie, meer altruïstische waarden en negatieve emoties ervaren en zich minder in staat voelen om te handelen tegen criminaliteit, verzamelen eerder informatie over misdaadpreventie en hoe te handelen. De bereidheid om te handelen, bijvoorbeeld door het doen van aangifte of in te grijpen wanneer een delict plaatsvindt, werd beïnvloed door alle drie soorten psychologische drijfveren. Burgers die zich beter in staat voelden tegen criminaliteit te handelen, en dit als effectiever zagen (individueel-gerelateerd), die de buurt beter in staat achtten iets tegen criminaliteit te doen, al vaker geparticipeerd hadden in hun buurt (sociaal-gerelateerd), en die een hoger gevoel van vertrouwen in de politie en legitimiteit (institutioneel-gerelateerd) ervoeren waren meer bereid om in de toekomst te handelen tegen criminaliteit.

In **hoofdstuk 5** werd onderzocht (n = 214) in hoeverre zowel lidmaatschaps- als lidmaatschapsoriëntatie van een online buurtwacht werd beïnvloed door individueel-, sociaal-, en institutioneel-gerelateerde psychologische factoren die waren afgeleid van de al eerdergenoemde *Community Engagement Theory* (Paton, 2013). In een huis-aan-huisonderzoek werd aan burgers van één buurt in een middelgrote stad in Nederland gevraagd of zij op dit moment lid waren van een online buurtwacht. Vervolgens werden niet-leden gevraagd of ze al dan niet zouden overwegen om in de toekomst lid te worden.

Met betrekking tot de individueel-gerelateerde drijfveren, blijkt uit de resultaten dat leden van een buurt WhatsApp-groep een lagere risicoperceptie met betrekking tot de gevolgen van criminaliteit hebben en een grotere overtuiging ervaren dat deelname aan zo'n groep effectief is (*response efficacy*) dan niet-leden. Met betrekking tot sociaal-gerelateerde drijfveren bleken leden minder buurtgevoel te hebben en hadden zij al vaker geparticipeerd in de buurt in vergelijking met niet-leden. Er zijn geen verschillen gevonden in het vertrouwen in de politie en legitimiteit (institutioneel-gerelateerd). De bereidheid om in de toekomst lid te worden werd alleen beïnvloed door *response efficacy* (individueel-gerelateerd), oftewel, wanneer burgers meer overtuigd zijn dat deelname aan een dergelijke groep effectief zal zijn, zijn ze meer bereid om lid te worden.

In **hoofdstuk 6** werd onderzocht of participatiegedrag versterkt kan worden door een aantal relevante psychologische drijfveren te beïnvloeden. Eén manier waarop de hulp van burgers bij het oplossen van misdaden vergroot kan worden, is het uitzenden van televisieprogramma's zoals "Opsporing Verzocht". In een experiment ($n = 100$) werden de effecten van twee hoofdkenmerken van zulke berichten (slachtofferverklaring: aanwezig versus afwezig) en het type misdrijf (fietsendiefstal versus babbeltruc) onderzocht op daadwerkelijk en intentioneel meldgedrag. In een *between-subjects design* keken 100 deelnemers naar één van vier video's van "Onder de Loep" (een regionale versie van Opsporing Verzocht); 63 deelnemers namen ook deel aan de tweede fase, waarbij ze "toevallig" werden blootgesteld aan de dader uit de video en zo de mogelijkheid kregen om deze informatie te melden. Voordat de video werd bekeken, werd de participanten gevraagd naar mogelijke onderliggende psychologische drijfveren, zoals hoe belangrijk ze morele waarden vonden en of ze in het verleden al geparticipeerd hadden in hun buurt. Na het bekijken van de video werd gevraagd hoe moreel verwerpelijk participanten het misdrijf vonden en in welke mate ze een aantal emoties ervaarden bij het kijken van de video. Verder werd geobserveerd of participanten de dader daadwerkelijk meldden, en gevraagd naar hun intentie om in de toekomst te melden en in te grijpen.

Uit de resultaten blijkt dat de slachtofferverklaring een marginaal significant negatief effect had op het daadwerkelijk melden van de dader. Dit betekent dat participanten minder snel een dader zouden melden wanneer ze een slachtofferverklaring hebben gezien in vergelijking met participanten die deze niet hebben gezien. Slechts 25,4% van de participanten meldde de dader.

Deelnemers die egoïstische morele waarden belangrijker vonden meldden de dader minder vaak. Daarnaast had het type criminaliteit slechts een marginaal effect op de bereidheid om in de toekomst te rapporteren en in te grijpen. Dit betekent dat participanten die een babbeltruc te zien kregen eerder geneigd waren in de toekomst te melden dan participanten die een fietsendiefstal te zien kregen. Wanneer participanten het misdrijf als moreel verwerpelijker zagen, meer ander-betrokken (*other-concerning*) emoties ervoeren en in het verleden al vaker hadden geparticipeerd, dan waren ze meer bereid om in de toekomst te melden en in te grijpen.

In **hoofdstuk 7** werd een algemene conclusie en discussie over de empirische hoofdstukken gepresenteerd. Verder werd een overzicht gegeven van de sterke punten, beperkingen en de theoretische en praktische implicaties van dit proefschrift.

Vanuit een theoretisch perspectief toont dit proefschrift aan dat het belangrijk is om onderscheid te maken tussen soorten participatiegedrag in het politiedomein. De studies in de empirische hoofdstukken laten zien dat, afhankelijk van het type participatiegedrag, verschillende individueel-, sociaal-, en institutioneel-gerelateerde psychologische drijfveren een rol spelen. De Community Engagement Theory is dus ook relevant in het politiedomein. Wel is aangetoond dat twee aanvullende drijfveren toegevoegde waarde hebben: moraliteit en legitimiteit. Mogelijk zijn deze drijfveren ook relevant in andere domeinen.

Vanuit een praktisch perspectief geeft dit proefschrift inzicht in wat burgers drijft om deel te nemen aan het politiedomein. Wanneer de politie het participatiegedrag wil stimuleren, is het belangrijk om onderscheid te maken tussen verschillende soorten participatiegedrag. Verder wordt in de communicatie met de burgers in het algemeen aanbevolen om rekening te houden met intuïtieve beslissingsprocessen, zoals morele waarden en emoties, en met overtuigingen van mensen over eigen en collectieve mogelijkheden en het nut van de gedragingen (*efficacy*). Hoewel dit proefschrift zich vooral focust op positieve vormen van burgerparticipatie en manieren om dit gedrag te stimuleren, is het in de praktijk belangrijk om ook rekening te houden met de ongewenste effecten van burgerbetrokkenheid in het politiedomein, bijvoorbeeld eigenrichting.

Concluderend belicht dit proefschrift het belang van het bestuderen van burgerparticipatie in het politiedomein vanuit burgerperspectief. Door de opkomst van internet, het gebruik van sociale media en de grotere toegankelijkheid van informatie over criminaliteit is het voor burgers makkelijker geworden om met andere burgers en instanties te communiceren en samen te werken. Burgers hebben meer mogelijkheden om zelf te participeren en zijn minder afhankelijk van de politie. Deze nieuwe mogelijkheden hebben geleid tot een toename van burgerparticipatie in het politiedomein en het verschuiven en vervagen van de scheidslijnen tussen de rol en verantwoordelijkheden van politie en van burgers. Het is daarom belangrijk om als politie en burgers samen de discussie over deze rolverdeling gaande te houden, of met andere woorden: *"Crossing lines together"*.





D



Dankwoord

Terwijl ik nog met mijn masterscripties van psychologie en bestuurskunde bezig was, was ik al druk aan het nadenken wat ik na mijn studie zou willen gaan doen. Ik had tijdens het afstuderen ontdekt dat ik het heel leuk vind om onderzoek te doen, en dat mijn interesse (nog steeds) uitging naar onderwerpen in het politiedomein. Toen ik een vacature voorbij zag komen om te promoveren op het onderwerp community policing zag ik hierin de perfecte combinatie. Vol spanning reed ik na het sollicitatiegesprek naar huis want nu wist ik echt wat ik wilde, en terwijl ik nog op de terugweg naar huis was werd ik tot mijn grote verbazing al gebeld dat ik was aangenomen. Nu, 4,5 jaar later, ben ik trots dat dit proefschrift hier ligt als eindresultaat van een hele mooie periode. Dit is uiteraard met pieken en dalen gegaan, maar ik kijk terug op een hele mooie, leuke en inspirerende tijd!

Ik had het schrijven van dit proefschrift natuurlijk niet alleen gekund, en wil daarom alle mensen die daarbij op welke manier dan ook hebben geholpen bedanken. Ik wil graag een aantal personen in het bijzonder noemen. Allereerst wil ik mijn promotoren José Kerstholt en Ellen Giebels, en mijn co-promotor Peter de Vries bedanken.

Jose, ik vond het heel fijn met je samen te werken. Je hebt me altijd het gevoel gegeven dat je vertrouwen in me had. Ik vond het indrukwekkend om te zien hoe jij studenten kan begeleiden en op een enorm positieve manier feedback geeft. Ik denk dat ik daar heel veel van geleerd hebt. Ook ik kon je altijd bellen met vragen en ik heb het erg gewaardeerd dat je niet alleen feedback op onderzoek gaf maar dat er ook altijd alle ruimte voor persoonlijke kwesties. Bedankt hiervoor!

Ellen, waar ik soms helemaal in de details van mijn onderzoek zat, had jij tijdens onze gesprekken altijd oog voor de helikopter-view, wat op die momenten vaak heel verhelderend werkten. Ook was het erg fijn om je hulp te krijgen met het brainstormen over creatieve methodes van nieuwe onderzoeken. Zelfs op het vliegveld op de terugweg van de Summer School werd er nog gebrainstormd over hoe we meldgedrag nou in het echt konden meten. Dat laat denk ik goed zien hoe betrokken je bij mijn project was!

Peter, jij werd halverwege aan mijn commissie toegevoegd en ik vond het heel fijn om elke vrijdagmiddag bij te praten, en iemand te hebben om even bij

binnen te kunnen lopen met kleine vragen. Ook had je altijd weer nieuwe ideeën over statistiek en betere analyses waar ik veel van geleerd heb.

Daarnaast wil ik ook een aantal studenten bedanken die mij hebben geholpen met het opzetten van de studies en de dataverzameling, Sabrina Perick, Nina Frankjic en Maurice Wessels, heel erg bedankt voor jullie hulp!

Ook heeft een aantal mensen een indirecte, maar onmisbare bijdrage geleverd aan dit proefschrift.

Ik wil graag de vakgroep PCRV bedanken voor de gezellige tijd, die ik zeker ga missen. Ik heb jullie als een hele prettige groep collega's ervaren, waar de deur bij iedereen altijd open stond voor een praatje of een vraag. Er hing daardoor altijd een hele prettige sfeer en de lunch(wandelingen), pubquizzes, Summer Schools en vakgroepuitjes waren altijd heel leuk!

Mijn dank gaat ook uit naar mijn mede -PhD-studenten tijdens de afgelopen 4,5 jaar : Sabine, Marian, Femke, Marije, Miriam, Miriam, Stijn, Lennart, Lisanne, Iris, Florian, Jiska, Jeanette, Ben & Peter. De sinterklaasfeestjes, escaperooms, het brainstormen voor promotiespeeches en het samen volgen van KLI-cursussen hebben mijn lachspieren goed getraind. Maar ook het helpen en het geven van feedback op elkaars stukken heb ik als zeer waardevol ervaren. En specifiek, Marije en Femke, Lisanne en later Jiska & Anouk, bedankt dat jullie mijn kamergenootjes waren!

Femke, Marije, Miriam en Miriam, heel erg bedankt voor de leuke weekendjes weg en de vriendschap die tijdens onze promoties is ontstaan. Ik vond en vind het heel erg fijn om met elkaar in hetzelfde schuitje te zitten en het kunnen delen van alle leuke momenten maar ook de minder leuke momenten! Sorry, dat de planning van ons weekendje weg dit jaar een beetje in de soep is gelopen door mijn promotie, maar ik weet zeker dat er nog meer gaan volgen!

Marije en Miriam, mijn paranimfen, jullie zijn hierboven al een aantal keer genoemd, wat wel laat zien hoe belangrijk jullie voor mij zijn geweest de afgelopen jaren, zowel op het werk als daarnaast. Op de universiteit kon ik altijd bij jullie terecht om te lachen, maar ook zeker om lekker te zeuren over onderzoek, maar ook over privé-dingen. Ik bewaar goede herinneringen aan de weekendjes naar Napels en Marrakesh (en Indonesië met Marije), die waren

'very particulare!'. Bedankt dat jullie mijn paranimfen hebben willen zijn en ik hoop dat we de komende jaren nog vaak samen op stap zullen gaan!

Lieve papa en mama, bedankt dat jullie me altijd hebben gestimuleerd om te gaan studeren maar ook vooral om te doen wat ik leuk vind! Jullie hebben me altijd het gevoel gegeven dat ik op jullie kan terugvallen. Bedankt voor de interesse in en het lezen van mijn artikelen, voor de afleiding en ontspanning tussen het onderzoek zoals de leuke wintersportvakanties, winkelsessies en boswandelingen.

Lieve Sem, ik ben heel blij dat ik je tijdens mijn promotie heb leren kennen. Bedankt dat je altijd alle vertrouwen in me hebt, maar ook al aan één blik aan me kan zien hoe ik me voel. Dat ik alles met je kan delen, je precies weet hoe het is om te promoveren, en dat we de meest 'nerdy' discussies maar ook de meest domme gesprekken kunnen voeren. Ik heb enorm veel zin om na mijn promotie samen te kunnen genieten van Zuid-Afrika, en de vele mooie andere momenten die we samen gaan beleven!





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