# Hiding in Plain Sight -

# Detecting Subversive Crime and Reporting it to Police

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**Abstract**

Citizen engagement in the police domain becomes more and more important and simultaneously, citizens are offered new options to interact with and support the police. In fighting a hidden form of criminality, called subversive crime, citizens can help by recognising the correct signs for subversive crime and reporting them. The main goal of this study was to assess the extent to which individuals are able to recognise signs of subversive crime. Subsequently, it was investigated whether recognition of signs and other psychological mechanisms predict the intention to report signs of subversive crime to the police.

Participants' recognition of subversive crime and its effect on reporting intention was assessed, as well as the clues that participants used to declare a place as criminal. Further, it was investigated whether the willingness to report criminal signs increased with scoring higher on drivers on the individual, institutional and community level of the Community Engagement Theory. In total, 181 German citizens participated in the online study. Results indicate that recognising signs of subversive crime was a positive predictor for reporting intentions. This means that citizens' willingness to report might be increased by improving their knowledge of relevant signs. The finding that most participants were not able to recognise subversive signs highlights a need for promotional approaches to counteract this lack of knowledge.

*Keywords*: Community Engagement Theory, subversive crime, willingness to report, crime recognition

**Hiding in Plain Sight - Detecting Subversive Crime and Reporting it to Police**

Citizens are more and more involved in police activities and simultaneously, are offered more opportunities for interacting with the police. Increasingly, citizens are the 'eyes and ears' of the police on the streets (Terpstra, 2010) and the police has long since recognised their large potential in fighting crime (Gill et al., 2014). However, the police are far from exploiting the public's full potential. To date, citizens mostly participate by calling the police after an incident and by meeting with a community officer, or as a response to a request for help by the police (Schreurs et al., 2018). In the stages after a crime has occurred, citizens are seen as very useful to the police, for instance when offering information or helping in the search for missing victims (Terpstra, 2010).

Less attention has been given to proactive citizen participation in the form of contacting the police when seeing signs of organised crime. A reason for this is that the average citizen does not undergo the same training as police officers or other security staff do. This training makes officers more sensitive to behaviour deviating from the norm in a suspicious and potentially negative way. As citizens usually do not receive such training, they might not be able to recognise deviations because they do not know what to look for and fail to identify relevant clues. Further, this entails the risk of gathering wrong information or making biased assumptions (Kerstholt & Vries, 2018). Often, citizens have no access to a necessary knowledge base to accurately estimate the risk of a situation or event (Schütz & Wiedemann, 2003). In short, citizens might not be aware of crime even if they encounter signs of it.

If citizens are able to detect suspicious signs, it is also crucial that they report them to the police. Already, citizens can use certain platforms to report crime to the police. However, the German options are limited to more reactive forms. For instance, AMBER alert notifies citizens via applications, social media or public "info screens" (AMBER Alert Deutschland, n.d.) in case a child has gone missing. The notifications should increase citizen's awareness of their surroundings by keeping their eyes open for the missing child. Regarding a more proactive approach, the Netherlands, for instance, have numerous neighbourhood WhatsApp groups or the Dutch 'Crime Watch' program "Opsporing Verzocht", both of which can benefit police work (Akkermans & Vollaard, 2015; Van Erp et al., 2012). As of now, no programs similar in magnitude are known to be used in Germany. Some German cities published apps that citizens can use to report complaints (e.g., Melde-App Stadt Recklinghausen). But with a focus on road damages, street lighting and the like, these apps are not designed for reporting suspicions about crime.

But it is also desirable that citizens become more aware of criminal signs in their own environment and report them to the police proactively. This means that reporting behaviour should not merely be a response to what the police asks citizens to do. One of the areas in which this proactive reporting behaviour is desirable is in an area of organised crime, called subversive crime. The difficult aspect of detecting subversive crime is that one rarely sees this form of crime in action, or for what it is, namely criminal. The Dutch Government describes subversive crime as the attempt to "gain influence in lawful society" by "taking root in residential neighbourhoods" (Government of the Netherlands, 2018). The hidden illegality of these machinations can further decrease the likelihood that citizens are able to distinguish between legal and illegal businesses. Another point of concern is that citizens might become overly attentive, resulting in reports about suspicious behaviour that is, in fact, not criminal at all. Considering this, knowledge about signs of crime is important, but so is a healthy reflection on the situation.

Hence, it is of interest to assess the level of knowledge about subversive crime. Derived from that, the main research question is: *In how far are citizens able to recognise signs of subversive crime and what do they know about signs of subversive crime?* A second research question arises: *What is the contribution of knowledge of subversive crime to understand the intention to report signs to the police?*

## Theoretical Background

### Subversive Crime

Organised crime is subversive, also referred to as undermining, when it compromises the foundation and integrity of society by becoming entwined with society on a legal level. Further, this phenomenon is described as a less visible form of crime (City of Amsterdam, n.d.). Examples of subversive criminality are money laundering, real-estate crime or illegal hemp farms (Port Security Center, 2017), all of which are illegal activities conducted in legal environments. Money laundering, for instance, has the sole purpose of integrating money generated by criminal activities into the legal system to make it appear legitimate. For that, criminals make use of "large sums of dirty money, violence, and intimidation" (Government of the Netherlands, 2018). Undermining crime is not limited to organised criminality. The term is also used to refer to corruption in the government or rule violations in business management (Spapens, 2019).

Human-made risks in general can have disorderly effects for individuals, communities, and economy (Broekhuizen et al. 2018) and evoke more fear in humans than natural risks (Ropeik, 2004). Synthetic-drug laboratories or hemp plantations increase the risk of fire and

chemical spillage (Lam et al. 2018) which then affect the neighbouring houses or influence the quality of the water. This can disturb the sense of community or lead to relocations that minimise the community altogether. Economically speaking, unfair competition leading to the extinction of legal businesses and the evasion of governmental taxes are typical consequences of subversive crime. It is therefore not only in the interest of the community, but also in the interest of every resident to detect subversive crime, report it to the police and as a result, preserve the community they live in.

## Reporting Behaviour of Citizens

As the reporting of crime falls under the broader category of community policing, a short overview is given first, followed by the discussion of relevant theories of factors that predict citizen participation.

### *Community Policing*

The implementation of community-oriented policing has gained a widespread popularity over the last decades. Although empirical support for the effect of community policing on reducing crime is ambivalent, if not finding that it is largely unrelated (Gill et al., 2014), often a positive effect on citizens' feelings of security (Skogan & Frydl, 2004; Weisburd & Eck, 2004) and perceptions of the police (Gill et al., 2014; Peyton et al., 2019) has been substantiated. Generally, community policing aims at increasing police and community interactions to create a type of policing that helps the police as well as residents. Wilson and Kelling (1982) defined the objective of community policing as identifying criminal issues that affect the residents' quality of life by applying a preventive and proactive role and at the same time receiving support by citizens.

According to Terpstra (2010), community policing ambitions are separated into five factors. Important relating to this research are "prevention", "cooperation with other agencies", and the "promotion of citizen involvement". Further, "proximity", and "a focus on a wide range of problems in the neighbourhood" play a central role in community policing. Preventive strategies include the development of personal relations with citizens and information gathering "about the neighbourhood to detect new problems" (p. 68). By increasing citizen participation, community policing goals are a step closer to being achieved.

### *Citizen Participation*

Participation behaviour of citizens in the police domain is separated into different types of behaviour. According to Schreurs et al. (2018), those are social control, responsive participation, collaborative participation, and detection. *Responsive participation* includes

calling the police to report criminal behaviour. *Detection* as a form of participation behaviour entails assistance in offender identification or the detection of crime. A combination of the two types is applied here, as it will be researched in how far the recognition of criminal signs predicts reporting, which is one of the ways in which citizens can participate in the police domain.

In a comparative study of community policing in the UK and South Korea, Choi and Lee (2016) indicate that two key factors influence participation in community policing: the relative importance of individual concerns (e.g., benefits of personal gain, receiving pay) and the relative importance they attach to their community and community safety, which might be referred to as their sense of community. Their results however do not relate to citizens calling the police or being part of a neighbourhood watch, but citizens that go a step further by becoming community officers. Therefore, they need to be applied to this context with caution. Using a different approach, Pattavina et al. (2006) argued that especially the relationship between community police and community members is decisive for citizen participation. This only increases the relative importance of trust in the police as part of this study, as explained in detail below.

It can be concluded that citizen participation cannot be explained by only a few factors and that it might be a challenge to integrate all relevant predictors into one model. However, psychological mechanisms on three levels, the individual, institutional and community level, become prominent as main variables to predict citizen participation in the community.

**Psychological Mechanisms Underlying Reporting**

For practical reasons, the intention to report will be measured instead of reporting behaviour. Research identified the intention to act as a main determinant of actual behaviour (Ajzen, 1991; Ajzen & Fishbein, 1980; Milne et al., 2000; Norman et al., 2005; Orbell et al., 1997). In the context of participation behaviour in the police domain, people's intention to act can be influenced by who they see as responsible for safety and whether they believe they are able to reduce the crime themselves (Schreurs et al., 2018). Therefore, trust in the police, who are responsible for safety, and individual factors regarding participants' beliefs about their crime preventive abilities are included in the study. As mentioned above, the interaction between residents and their community was also found to influence participation and will hence be measured as well. The Community Engagement Theory (CET) offers a possible solution by including predictors on all three levels and is therefore used to assess whether it predicts reporting intentions.

The Community Engagement Theory, a hazard preparedness model by Paton (2013), has recently been applied to the context of preparedness for social safety hazards such as crime (Schreurs, 2019; Schreurs, Franjkić, et al., 2020; Schreurs, Kerstholt, et al., 2020). It covers individual beliefs, community characteristics and the relationship with institutions (Paton, 2013). When including some of the characteristics, a better understanding of citizen's decision to report signs of subversive crime to the police can be gained.

### *Drivers at the Individual Level: Awareness and Knowledge of Crime, Self-Efficacy, Response Efficacy, and Risk Perception*

The individual-related psychological drivers derived from Schreurs and Franjkić et al. (2020) include self-efficacy, the belief in one's own abilities to deal with a task or situation successfully (Bandura, 1997), as well as response efficacy, in how far citizens think their actions will be effective to reduce the risk (Prior & Paton, 2008). Further, risk perception is measured, consisting of beliefs and attitudes about the risk of a hazard (McIvor & Paton, 2007; Paton et al., 2006). Additionally, awareness and knowledge of subversive crime will be incorporated on an individual level.

**Awareness and Knowledge of Crime.** Perceiving elements of the environment and making sense of them are two distinct, but connected elements, which are combined in the term situational awareness. By enhancing the public's situational awareness of crime, a starting point in combating this same crime can be made (Shin & Lee, 2005). For instance, the South Korean government developed the Public Notification Act and the United States introduced Megan's Law to provide communities with information about sexual offenders.

Public notification policies have shown to enhance safety consciousness and increase awareness of sexual offenses in the average citizen (Zevitz & Farkas, 2000). The same might apply when local governments provide citizens with information about the location of a crime or other crime-related information the citizens can know. It can increase residents' awareness of their surroundings and knowledge of criminal signs, which in the long-term enables them to be accurate detectors of crime, and therefore valuable sources for the police (Bullock & Sindall, 2014). This is also due to residents' profound knowledge of their neighbourhood, which can make them more sensitive to activities departing from the norm. As Bullock and Sindall (2014) and Meško et al. (2013) pointed out, awareness is a precondition for citizen participation. Awareness is also a predictor for risk perception, as a higher awareness also leads to higher concern about a risk (Ropeik, 2004).

There are, however, also some potential risks when increasing citizen's awareness and knowledge of crime. When being confronted with criminal activities, residents might take the

law into their own hands instead of contacting the police, perhaps because they feel responsible for maintaining safety in the neighbourhood. This could become dangerous if the citizen is taken too far in his fight against crime and further increase the risk of vigilantism and violence to stop a perpetrator (Haas et al., 2014). Another reason to take the law into one's own hands could be when citizens do not trust the police to solve the incident. On the contrary, trusting the police increases the likelihood of citizens reporting crime to them, as will later be expanded on (Stoutland, 2001).

Subversive crime knowledge is a substantial prerequisite for further action in protecting oneself against this form of crime. Hence, the current study examines whether being able to recognise signs increases the likelihood that participants would report those signs to the police.

**Self-Efficacy.** Since being introduced by Bandura (1982), the personality construct self-efficacy has been researched extensively, and as a result has found application in Social Cognitive Theory (SCT), Protection Motivation Theory (PMT), and the Framework for Risk Information Seeking (FRIS), all of which were applied to a risk and safety context (Bandura, 1986; Kievik et al., 2009; Rogers, 1983; Ter Huurne, 2008). Self-efficacy has also been used in the Community Engagement Theory (Paton, 2013), as well as in its adapted form for a social safety context (Schreurs, Franjkić, et al., 2020; Schreurs, Kerstholt, et al., 2020).

Self-efficacy is here referred to as citizens' beliefs about their ability to deal with a threatening situation by reporting it to the police (Bandura, 1997). It is not only about dealing with a situation, but rather to take measures of control over one's own behaviour or environmental situations (Bandura, 2001). Believing that one is able to execute a task increases the likelihood of performing this task, as self-efficacy has been found to have a strong effect on people's decision-making process in general (Bandura, 1997) and on the intention to execute self-protective behaviour (Bandura, 1977; Brewer et al., 2007). One's self-efficacy beliefs, according to Bandura, have a central role in influencing the outcome of an individual's performance (1997, 2001). Conclusively, without believing that one can produce the desired outcome, there is little motivation or intention to exercise some measure of control (Bandura, 2001).

In the area of incident reporting, there are mixed results for self-efficacy. Self-efficacy has been linked to the intention to engage in incident-reporting behaviour among nursing staff (Lee et al., 2016), while in a study by Harsul et al. (2020), no significant correlation between self-efficacy and patient safety incident reporting was found. This might however be related to the field of study. Self-efficacy was found to be a positive predictor for citizens' willingness to report and intervene when witnessing a crime in their neighbourhood (Schreurs, Kerstholt, et

al., 2020). At the time of data collection, those citizens were, however, already active in the citizen panel of their municipality, which must be kept in mind when interpreting the results of this study.

**Response Efficacy.** Response efficacy is defined as people's beliefs that a response effectively helps to reach an anticipated goal. In this case, citizens consider whether reporting a suspicious place would lead to a reduction of the risk associated with it (Prior & Paton, 2008). This includes that the police take care of it and residents regain a sense of safety in the neighbourhood. A high level of response efficacy is likely leading to an increase in preparatory actions (Paton, 2013). Earlier research found a strong relationship between response efficacy and the intention to execute self-protective behaviour (Brewer et al., 2007; Rosenstock, 1974)

Regarding health risk messages, the Extended Parallel Process Model offers insights into people's reaction to a message based on several factors (Witte, 1992; Witte & Allen, 2000). If both self-efficacy and response efficacy are perceived as high, people would accept the message and engage in danger control processes, that is finding a way to deal with the threat (Gore & Bracken, 2005). Similarly, low levels of the two efficacy beliefs led to people's rejection of the risk message, resulting in fear control processes and maladaptive coping mechanisms. As a precondition to gain any kind of response, the receiver of the message needs to perceive a threat associated with the risk, known as risk perception. Although participants in this study did not receive a risk message, a similar relation of efficacy beliefs and risk perception on the intention to report a crime is expected. The interplay of risk perception, self-efficacy and response efficacy has been applied in numerous models in the safety domain, of which the CET (Paton, 2013; Schreurs, Franjkić, et al., 2020) is no exception, and as a result also finds application in this thesis.

**Risk Perception.** Another individual driver that explains why citizens take self-protective actions is how they perceive the risk. Risk perception, in the scope of this thesis, is the assessment of how likely a crime is to occur, and how the individual assesses the consequences of that crime. According to Paton et al. (2008), people perceiving a risk as high are more likely to take protective measures. This also highlights the question of which problems the person experiences, to understand their perception of and respective actions against a threat.

In the bigger picture, threats that humans must face have made a change. While at the beginning of the last century, an early death or infant mortality were the major concerns, humans now perceive by-products of the modern lifestyle as posing the highest risk, for instance pesticides, bioweapons, or pollution (Ropeik, 2004). Ropeik (2004) summarises twelve characteristics of fear that directly influence people's perceptions of a risk. According to the

author, low levels of trust in the responsible person or institution, of control of the risk, or of choice of being exposed to the risk will lead to higher levels of fear and risk perception. More fear is also evoked when the risk is man-made, kills in a dreadful way, or is more likely to affect a person one cares about, next to other factors (see Ropeik, 2004).

Next to the obvious risks that natural and social hazards pose, there is also a risk of misperceiving the situation. A misperception of risk, meaning an either too low level of worry for large risks or too high level of fear for relatively small risk, can lead to reckless behaviour or injuries in the prior case and mental health issues in the latter case (Adler, 2004; Ropeik, 2004). The assessment of whether a situation poses a risk to oneself is included in several risk and crisis management models that illustrate how people respond to threats. For example, the Protective Action Decision Model (Lindell & Perry, 2004; 2012) identified three core perceptions, including threat perception, that directly influence protective action decision making, and in turn, a behavioural response. In a study about flood risk, it was found that risk perception, next to self- and response efficacy, is a strong predictor for the intention to take self-protective action (Kievik & Gutteling, 2012). Similarly, Witte and Allen (2000) proposed that high levels of risk perception and efficacy beliefs enhance self-protective behaviour.

In two studies, Schreurs, Franjkić, et al. (2020) and Schreurs, Kerstholt, et al. (2020) included two risk perception variables, crime likelihood and crime consequences, to predict different forms of self-protective behaviour. The results are mixed. For instance, when participants perceived consequences of crime to be high, they were more inclined to become a member of a neighbourhood WhatsApp group. However, already being a member was accompanied by a lower perception of the consequences of risk (Schreurs, Franjkić, et al., 2020). Perceiving a high likelihood of crime increased participants' willingness to receive information on the organisation of a neighbourhood WhatsApp group and on how to report crime (Schreurs, Kerstholt, et al., 2020). From those results, it can be argued that crime likelihood and crime consequences can predict different actions. Both perceptions of crime likelihood and consequences will be used to operationalise risk perception.

***Driver at the Institutional Level: Trust in the Police***

Citizen trust in the police falls under the broader category of social trust. Before defining social trust, the dimensionality of trust will be elaborated upon. The Trust, Confidence and Cooperation Model (TCC) proposes that either trust or confidence, or a combination of both, leads to cooperation (Earle et al., 2010). It distinguishes between trust as relational and confidence as calculative. The former is based on value similarity between trust giver and receiver, while the latter is based on the past performance of and confidence in the receiver.

High values on both dimensions increase the likelihood that citizens cooperate. 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).

Social trust is defined as individuals' willingness to rely on the responsible person or institution to take actions that protect them from a risk regarding their health and safety (Siegrist et al., 2000). In this case it means that citizens rely on the police to protect them against different forms of crime, for instance organised crime, that pose a risk to their safety. According to Siegrist et al. (2000), being able to trust is important in situations "where the individual lacks the interest, time, abilities, knowledge, or other resources to personally make decisions and take actions" (p. 354). All five can be relevant for decision making processes in crime situations, especially when they do not pose an imminent threat to the individual.

Trust in the police is also a factor of the institutional level from the above-mentioned CET, originating in institutional trust (Paton, 2013). The institutional level is especially important in the crime domain, as citizens are not free to act on the law as they want by taking it into their own hands. This means that sometimes citizens cannot fight against crime without becoming liable to prosecution themselves. Instead, the police's task is to exercise the law and to keep in contact with the citizens to help them and to ensure they adhere to the rules. Trust in the police and confidence in their abilities facilitates this work. While the institutional level for natural hazards comprises several organisations, the police is the main organisation in regulating criminality (Schreurs, Franjkić, et al., 2020). The police might not often be dependent on information from citizens, but cooperation of the people is important in making police work easier and even more effective.

Cooperation with the police can be achieved by enhancing citizens' trust in them or by promoting approachability, next to other elements that are fundamental to community policing (Community Policing Consortium, 1994; Terpstra, 2010). Further, Avdi (2010) found that police behaviour is strongly associated with citizens' attitudes towards the police. Having had negative experiences with the police therefore leads to negative attitudes about them and less trust. As Slovic (1999) concluded, a lack of trust increases citizens' perceptions of a risk. This means that an already positive appearance in the neighbourhood, for instance through community policing, can increase the likelihood that citizens proactively report suspicious incidents to the police. Having a positive attitude towards the police is therefore fundamental for reporting behaviour, as police are the central contact for reporting crime. Stoutland (2001) breaks down trust in the police into four categories. Residents felt they could trust police more

if they thought police officers were competent, dependable, respectful, and had shared priorities.

On the one hand, trusting the police might increase the likelihood of citizens reporting signs of crime. However, on the other hand, it could also decrease the likelihood of this action. Trusting an institution that is responsible for managing a risk can reduce risk perception (Earle, 2010; Siegrist et al., 2000). If citizens have high trust in the police, a possible conclusion when seeing signs of subversive crime could be that the police already know of them and therefore conclude that their input is not necessary. Madero-Hernandez et al. (2020) stress that findings have been inconsistent regarding the effect of police perceptions and self-protective measures. From their study, the authors conclude that having favourable perceptions of the traditional policing approach leads to a lower likelihood of counter-crime measures. Interestingly, people that have favourable perceptions of the police when applying a community policing or procedural justice approach are more likely to take counter-crime measures (Madero-Hernandez et al., 2020).

Concluding, trust can be said to be a main variable in predicting citizen's cooperative actions with police (Stoutland, 2001) and reporting intentions and behaviour (Jackson & Bradford, 2010, Schreurs, Kerstholt, et al., 2020). As Stoutland (2001) points out, for police tactics to be effective, the local citizens must be willing to cooperate with and call the police, which is based on attitudes towards police and the trust residents put in them.

***Driver at the Community Level: Sense of Community***

Next to the above-mentioned individual and institutional factors, the CET in the context of social safety hazards entails sense of community as one of the community-related psychological drivers (Schreurs, Franjkić, et al., 2020). One might argue that a motivation for citizens to report crime to the police could be to preserve or obtain a feeling of safety in one's environment. Schreurs and Franjkić et al. (2020) found that participating in one's community increases residents' willingness to report and intervene. As argued by Gil de Zúñiga and Valenzuela (2011), stronger social ties within one's neighbourhood can increase involvement. And as such involvement might be in the form of reporting suspicious incidents like signs of subversive crime to the police, sense of community is used in this study. Next to involvement, cohesion and mutual trust among neighbours influence whether residents act in support for the neighbourhood (Sampson & Raudenbush, 1999). Pattavina et al. (2006) and Ren et al. (2006) note that involvement in collective crime prevention actions is significantly higher among those residents that feel attached to their neighbourhood.

Also notable are the results of a meta-analysis by Talò et al. (2014). They found a significant relationship between having a sense of community and participating in the community. Both factors help communities to solve problems or drive community development. Further, sense of community has been associated with forms of civic (Brodsky et al., 1999) and political (Anderson, 2009; Xu et al., 2010) community engagement behaviours.

Here, it is argued that sense of community, on the one hand, can increase reporting intentions based on the arguments above. On the other hand, it could have the opposite effect because strong social ties can diminish public trust in responsible representatives (Carr, 1998), which, as discussed earlier, would be important for citizen cooperation. Residents might expect that matters are not dealt with because of their close relationship with representatives. Because most of the literature (see Talò et al., 2014) supports a positive relation between sense of community and reporting crime to the police, the same line of reasoning is applied in this research.

**The Current Study**

The aim of this study is to gain better insight into the role of knowledge in reporting signs of crime to the police. This study contributes to the existing literature about citizens' reporting behaviour by giving an overview of what citizens know about signs of subversive crime and by examining to what extent *knowledge* of subversive crime is connected to the *intention to report signs* of crime to the police. Further, it is researched in how far knowledge of subversive crime can be integrated into a selected set of variables from the Community Engagement Theory. Therefore, five factors from all three levels, the individual, institutional and community level were included. Based on the outlined theoretical considerations, the following hypotheses were formulated:

H1: Participants who score higher on *recognition* of subversive crime show a higher *intention to report* signs of subversive crime to police.

H2: Participants who score higher on *self-efficacy* show a higher *intention to report* signs of subversive crime to police.

H3: Participants who score higher on *response efficacy* show a higher *intention to report* signs of subversive crime to police.

H4: Participants who score higher on *risk perception* show a higher *intention to report* signs of subversive crime to police.

H5: Participants who score higher on *trust in police* show a higher *intention to report* signs of subversive crime to police.

H6: Participants who score higher on *sense of community* show a higher *intention to report* signs of subversive crime to police.

## Method

### Design

An online questionnaire and recognition task were employed. The respective psychological factors were risk perception (crime likelihood and crime consequences), self-efficacy, response efficacy, sense of community, and trust in the police. Additionally, the percentage of correct recognition per picture and the type of clues that participants used to rate a place as being a potential subversive crime spot were used for measuring their subversive crime knowledge. Selection of pictures was based on assessments for signs of crime by the law enforcement agency in Enschede, which resulted in five pictures showing signs of subversive crime and seven pictures not displaying subversive crime signs.

### Participants

The online study was completed by 181 participants. Participants who did not complete the survey (n=26), took part in the pilot study (n=1) or did not agree to the informed consent (n=1) were excluded from further analyses. Hence, 153 participants (110 women and 43 men) were used for data analysis. The mean age was 31.39 (SD=13.96) and ranged from 18 to 74. With 99.3%, the majority of participants were German citizens and 97.4% of participants lived in Germany at the time of data gathering. The group of participants had a relatively high level of education (20.9% very high level of formal education, 49% high level, 22.2% intermediate level, and 7.8% reported a lower level).

The study was distributed via social media (e.g., Facebook, Instagram, or WhatsApp) and participants were recruited through Survey Circle and SONA systems, an online platform for undergraduate Psychology Students of the University of Twente. If eligible, participants received 1.4 points on Survey Circle or .25 SONA credit for taking part. As participation criteria, participants had to be at least 18 years old and have good German language skills.

### Procedure

The study was approved by the BMS Ethics Committee of the University of Twente. All participants were presented with the same introductory text (see Appendix A). In the course thereof, the background, purpose and length of the study have been explained as well as the precautionary measures taken to ensure anonymity. Here, subversive crime was introduced as

a form of organised crime, which "is less visible and obvious, as it often takes place in a legal environment". This was done to give participants a rough overview of the form of crime this study is interested in, while on the other hand not specifying what it includes as to not influence their decision-making process for the recognition task. After agreeing to the informed consent (see Appendix B) to ensure that participants took the study voluntarily, a randomised presentation of pictures (see Appendix C) followed, below which the participants had to rate whether they saw suspicious signs of organised crime. In case they answered with "yes", participants were prompted to write on the basis of which signs they chose "yes". Further, below every picture they were asked to estimate their intention to report the displayed place to the police. Following the picture recognition task, questions concerning the psychological drivers were asked. The questionnaire ended with 6 questions on the demographics.

The online survey tool Qualtrics was used for gathering data and the statistical package IBM SPSS version 26 was used to analyse the data.

## Measures

### *Dependent Variable*

**Intention to Report to the Police.** Below every picture, the participants could indicate their intention to report by asking how likely they thought it that they reported the place to the police (five-point Likert scale ranging from 1 = "Very unlikely" to 5 = "Very likely").

### *Independent Variables*

**Subversive crime recognition.** Crime recognition was measured by asking participants to rate 12 pictures. Five pictures showed signs of crime and seven did not. The answer categories included "*Yes*" and "*No*". To measure the independent variable, the sum of correct recognition of the 5 sign-displaying pictures was used, resulting in a scoring system from 0 to 5.

**Clues**. If participants recognised signs of crime, they were prompted to indicate the clues on which this assessment was based.

All of the variables outlined below were measured on a five-point Likert scale and based on Schreurs and Franjkić et al.'s survey (2020). They were adapted to fit the context of crime.

**Risk Perception.** This variable was measured by asking participants how likely they think it is that crime would take place in their neighbourhood and that it would lead to certain consequences. This included five statements on the *Crime Likelihood* scale, e.g. "How likely do you think it is that you become a victim of criminal activity in your neighbourhood?" ($\alpha$ =

.79) and four statements on the *Crime Consequences* scale, e.g. “How likely do you think it is that you don’t feel safe in the neighbourhood anymore?” (α = .86).

**Self-Efficacy.** This variable was measured by asking participants how much they perceived themselves to be capable of keeping themselves out of crime and whether they feel capable to act against crime. The six statements include “I know in what situations I can report something to the police” and “I consider myself able to defend myself against criminal activity in my neighbourhood” (α = .71).

**Response Efficacy.** By asking participants to what extent they thought specific measures and preparations they could take would be helpful against organised crime, response efficacy was measured. Therefore, four items were used, e.g., “reporting crime to the police promotes safety in my neighbourhood” (α = .78).

**Sense of Community.** Participants responded to eight statements regarding their connectedness to the neighbourhood. The statements included, for instance, “I feel at home in this neighbourhood” and “I want to live here forever” (α = .91).

**Trust in the Police.** This scale addressed citizen’s trust in the police by using nine statements (α = .92), for example “The police can be trusted when you need them” and “Generally speaking, I have faith in the police to fight crime”.

## Results

### Identification of Signs of Crime

To answer the first part of the main research question in how far participants are able to recognise signs, a scoring system was developed. With 85.6%, the majority of participants scored below the scale average of 2.5 pictures rated as criminal ($M$ = 1.12, $SD$ = 1.12). In detail, 37.9% recognised no signs of subversive crime in any picture, 29.4% recognised signs in one picture, 18.3% recognised signs in two pictures. Further, 11.8% correctly recognised signs in 3 pictures, 2.6% of participants were able to recognise signs in 4 pictures and none of the participants correctly recognised signs in all 5 pictures.

The five target pictures can be found in Figures C1-C5 of Appendix C, which also displays the pictures that have no signs of subversive crime (Figures C6-C12). Further, the clues that participants used to identify a photograph as displaying signs of subversive crime were counted to answer the second part of the main research question; what citizens know about signs of subversive crime. The full list of all clues disclosed by participants can be found in Appendix D. A summary of them is given here, and the most prominent clues are listed in Table 1. Among the five target pictures, on average less than one fourth of participants (22.36%) recognised signs.

***Picture 1: Dreamlounge***

"Dreamlounge" was most often found to be suspicious because of what people associated with shisha bars. Some of those associations were reported to come from what participants heard in the media and certain prejudices. Common words were police raids and organised criminality, but with more than one third of participants referring to a connection between shisha bars and money laundering, this was the form of organised criminality most mentioned. Further, participants referred to the windows as being a sign, as they, for example, hindered the view into the place. Next to that, it was mentioned that the place itself was suspicious, for instance by appearing unappealing, remote, or closed. A few participants argued that this might be a venue for criminals, and that the name was suspicious.

***Picture 2: Het Poolman***

Most often, participants referred to the place as being run-down and using that as a clue for organised criminality. Followed by that, the door and its broken window was mentioned. Also, participants rated the picture as potentially displaying signs because of the shutters and how they hindered a look inside. Lastly, the number on the wall was said to be suspicious, as well as the garage.

***Picture 3: Espoortterrein***

About half of the participants explicitly referred to drugs, with a possible connection to the sale of drugs or other illegal commodities. Some participants referred to the place as a coffeeshop, and the design of the windows was stressed. A few times the obscured windows as well as the lettering "seeds" was used as a clue. Lastly, participants referred to money laundering and a generally dubious appearance.

***Picture 4: Car Sell***

As clues, participants referred to it being a warehouse and to the cars outside. Also, it was mentioned that both the purpose and owner of the business are not visible from the outside. The remoteness of the place and that it is not possible to look inside was mentioned by participants as a possible clue, as well as a dubious appearance.

***Picture 5: Binnenhaven***

Most often, the abandoned appearance of the building was used as an indication of subversive crime. Other statements referred to the unclear purpose of the building and that it might be a potential place for illegal activities (e.g., venue, handling warehouse). Further, the run-down appearance was mentioned, and one participant wrote that it is an "unheimlicher Ort" [eerie place].

**Table 1**

*Percentage of participants that correctly identified the picture, the three clues mentioned most often, and willingness to report per picture*

| Picture | Correctly recognised | Clues | Reporting *M*(SD) |
|---|---|---|---|
| 1. Dreamlounge | 32.7% | 1. Shisha bar<br>2. Money laundering<br>3. Obscured windows | *1.95*(0.98) |
| 2. Het Poolman | 22.9% | 1. Run-down appearance<br>2. Door with broken windows<br>3. Shutters hinder view | *2.10*(1.08) |
| 3. Espoortterrein | 26.1% | 1. Drug and illegal wares sale<br>2. Coffee shop<br>3. Design of the windows | *1.95*(1.01) |
| 4. Car Sale | 14.4% | 1. Warehouse<br>2. Cars outside<br>3. Unclear purpose and owner | *1.79*(0.92) |
| 5. Binnenhaven | 15.7% | 1. Abandoned appearance<br>2. Unclear purpose<br>3. Potential venue and exchange place | *1.86*(0.99) |
| Total | 22.36% | - | *1.93*(0.78) |

**Correlation Analysis**

To analyse the relation between all variables, a correlation matrix was made. Means, standard deviations and correlations for the dependent and independent variables are displayed in Table 2. The intention to report the place on a picture to the police positively correlated with the accuracy score of recognising signs in the five pictures ($r = .40$, $p < .01$). None of the other independent variables correlated with the intention to report. The recognition of signs negatively correlated with age ($r = -.18$, $p < .05$), meaning that younger participants were slightly more likely to recognise signs of subversive crime in the pictures.

**Intention to Report**

The average score on intention to report was 1.93 (SD = .78). As intention to report was measured on a 5-point Likert scale, the probability of reporting was low. The same applies to

the perception of crime likelihood and crime consequences. With 2.26 and 2.57, respectively, participants scored below the scale midpoint. Scores on the other psychological mechanisms were slightly above the scale midpoint (see Table 2).

***Regression Analysis***

A multilevel linear regression analysis was conducted to investigate which variables were predictive of the intention to report to the police. Intention to report was used as the dependent variable and all independent variables as predictors. The regression model was significant with $F(7, 145) = 4.66$, $p = .000$ and explained 18% of the variance in the intention to report to the police (*adjusted* $R^2 = .18$). The results (see Table 3) reveal that sign recognition (ß = .40, $p < .01$) is a significant positive predictor of the intention to report. None of the other psychological drivers had significant predictive value.

**Table 2**

*Means, standard deviations and correlations for intention to report (N = 153).*

| Variables | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Reporting intentions[a] | 1.93 | 0.78 | - | | | | | | | | | |
| 2. Sign recognition[b] | 1.12 | 1.12 | .40** | - | | | | | | | | |
| 3. Risk perception – Crime likelihood | 2.26 | 0.71 | -.13 | .01 | - | | | | | | | |
| 4. Risk perception – Crime consequences | 2.57 | 0.97 | -.02 | .01 | .37** | - | | | | | | |
| 5. Self-efficacy | 3.56 | 0.66 | .01 | -.01 | -.00 | -.11 | - | | | | | |
| 6. Response efficacy | 3.87 | 0.72 | .05 | .02 | -.10 | .01 | .25** | - | | | | |
| 7. Sense of community | 3.40 | 0.95 | .11 | -.05 | -.39** | -.29** | .28** | .13 | - | | | |
| 8. Trust in the police | 3.56 | 0.76 | .03 | -.01 | -.16 | -.13 | .26** | .63** | .21** | - | | |
| 9. Age | 31.39 | 13.96 | -.02 | -.18* | .01 | .04 | .06 | .19* | .30** | .16 | - | |
| 10. Gender[c] | 1.28 | 0.45 | -.13 | .08 | -.11 | -.08 | .28** | -.08 | .16 | -.05 | .02 | - |

[a] average for the five pictures displaying signs. [b] ranging from 0 = none to 5 = all. [c] 1=female, 2=male.

*p<.05. **p<.01, two-tailed.

**Table 3**

*Multilevel linear regression analysis predicting the intention to report to the police*

| Variable | B | S.E. ß | T | *P* |
|---|---|---|---|---|
| 1. Sign Recognition | 0.28 | .40 | 5.33 | .000 |
| 2. Risk perception – Crime likelihood | -0.12 | -.11 | -1.22 | .226 |
| 3. Risk perception – Crime consequences | 0.03 | .04 | 0.50 | .620 |
| 4. Self-efficacy | -0.02 | -.02 | -0.24 | .808 |
| 5. Response efficacy | 0.04 | .04 | 0.38 | .708 |
| 6. Sense of community | 0.09 | .10 | 1.21 | .230 |
| 7. Trust in the police | -0.02 | -.02 | -0.19 | .848 |

*Note*. $R^2$=.18

## Discussion

In this study it was examined what participants know about signs of subversive crime. The study also aimed to investigate whether recognising signs of subversive crime increases the intention to report those signs to the police. Moreover, it was researched in how far sign recognition skills would add to selected variables from the Community Engagement Theory. Psychological mechanisms on the individual, institutional and community level were included to predict reporting behaviour. The results indicate that recognising signs of subversive crime, which on average less than one fourth of participants did, positively correlated with the intention to report those signs to the police compared to participants who did not recognise signs of crime. No effect of the other psychological mechanisms on reporting intentions has been substantiated. Although individual discussions for each hypothesis will be made below, a general explanation could be that some of the psychological mechanisms have a mediating effect rather than a main effect on the intention to report. For instance, trust in the police or sense of community could mediate the relationship between sign recognition and intending to report signs to the police.

The findings reveal that participants had a low level of knowledge of subversive crime, which could be observed in the low recognition rates per picture. Averaged among the five pictures, less than one fourth of participants was able to recognise signs. This result was to be expected for two reasons. With other forms of crime, the criminal aspect is often more visible and evident (e.g., armed robbery, violence). As subversive crime takes place in legal environments (Spapens, 2019) and can be hidden by the legality of this environment, the

chances of finding evidence for illegal activities are reduced, even further so for the average citizen, who does not receive the same training as police officers of the organised crime department do. Based on that, citizens cannot access the knowledge required to accurately estimate the risk that a certain situation poses (Schütz & Wiedemann, 2003).

Additionally, the picture most often recognised was based on the signs ‘shisha bar’, ‘money laundering’ and ‘obscured windows’, whereby ‘shisha bar’ was the most popular sign in total. Some participants explained this clue with how the media convey shisha bars, e.g., that they are subjects of police raids. Other participants referred to prejudices they have of shisha bars. As the participants themselves already hinted at, a certain extent of biased judgments against shisha bars cannot be neglected.

**Hypothesis Testing**

Sign recognition was found to be a positive predictor for the intention to report. Correlation and regression analyses were carried out to assess this relationship. It can be concluded that participants who were able to recognise signs of crime had a higher intention to report them to the police. Another interpretation is that participants who are more inclined to report signs of subversive crime to the police are also more likely to detect and recognise those signs. The first interpretation of results is in line with the theoretical considerations of this research. Meško et al. (2013) stressed that successful community policing requires the public’s awareness, and a goal should be to increase the public’s safety awareness. This is also in line with Bullock and Sindall (2014), who point out that awareness is a precondition for citizen participation. Being an accurate detector of crime was considered to make citizens into valuable sources for the police, and this is to some extent supported by the results of this research. The finding that high scores on knowledge of subversive crime positively correlate with the intention to report those signs is in line with the first hypothesis. Hence, hypothesis 1 was accepted.

An implication of this finding is that incident reporting by citizens might be increased by improving their recognition of relevant clues. It can also be argued that increasing citizens’ intention to report may lead to more citizens looking out for criminal signs. However, no unambiguous interpretation can be made for the direction of the knowledge-reporting relationship. Also, not all alternative predictors for the intention to report could be excluded. For instance, the extent to which participants think that they were good at detecting criminal signs and how sure they are that their assessment was correct could be a strong predictor of their reporting intentions.

No evidence was found to support a predictive effect of efficacy beliefs. Neither self-efficacy (H2) nor response efficacy (H3) had a statistically significant effect on participants' reporting intention. This contrasts with previous research, where it was found that those individual drivers predict risk preparedness (Kerstholt et al., 2017; Kievik & Gutteling, 2012; Paton et al., 2008). Even more important for the present research, self-efficacy and response efficacy were predictive of the willingness to act in crime situations (Schreurs, Kerstholt, et al., 2020). The deviation from Schreurs and Kerstholt et al.'s (2020) results could be explained by the differing dependent variables. While the willingness to act was predicted in the previous study, this study focused on the intention to report. Also, their scale consists of four items, while in the current study one item was used, albeit repeatedly for 12 pictures. While this does not pose a limitation for the current study, it needs to be considered when comparing the results of both studies. The intention to report was measured in direct connection to the places displayed on pictures, which is also different from the prior study. As argued below, this is a strength of the study design, although far-reaching conclusions need to be drawn in future studies. Eventually, hypotheses 2 and 3 were rejected.

In contrast to what was expected, risk perception had no effect on the intention to report, and thus hypothesis 4 was rejected. The perceived threat of a situation was found to be a precondition in studies about natural hazards (Kievik & Gutteling, 2011; Paton, 2013) and fear appeal messages (for an overview, see Witte & Allen, 2000). It was also found to be a predictor of self-protective actions related to crime, for instance regarding the willingness to become a member of a neighbourhood WhatsApp group and to receive information about the organisation of such a group and how to report crime (Schreurs, Franjkić, et al., 2020; Schreurs, Kerstholt, et al., 2020). In the same studies, risk perception was however not predictive of other self-protective actions. Derived from this, it can be said that although risk perception seems to precede risk-reducing actions, its role in crime-mitigating actions is still obscure.

No correlation between the institutional driver trust in the police and the intention to report signs to the police was found, which led to the rejection of hypothesis 5. This is contrary to what was expected based on literature by Jackson and Bradford (2010) and Schreurs and Kerstholt et al. (2020). There, trust in police had, respectively, a positive effect on active citizen participation and self-protective actions. It needs to be acknowledged that the relation of trust in the police and self-protective actions is ambiguous in the literature (Madero-Hernandez et al., 2020). Still, as neither a significant positive nor negative effect has been substantiated, this raises questions with regards to the internal validity of the scale.

Hypothesis 6 was rejected because no significant effect of sense of community on reporting intentions was found. Although the theoretical considerations concluded with a positive relation between sense of community and participation behaviour, this research does not offer any support for it. The findings contradict the literature (Pattavina et al., 2006; Ren et al., 2006; Schreurs, Kerstholt, et al., 2020; Talò et al., 2014). A possible negative effect (Carr, 1998) was considered, which was however not found.

**Limitations and Strengths**

When reviewing the current study, limitations as well as strengths become apparent. An asset of this research is its conduction in the field of subversive crime, which has rarely been studied. This also comes with a limitation. The results are based on a specific form of organised crime, called subversive or undermining crime, and on a specific form of participation behaviour, the intention to report to the police. No information about the existence of those forms of crime in the common parlance of Germany was found. A short explanation about the meaning of subversive crime has been given to the participants, but the extent to which they were able to rate pictures based on a prior unknown term is complex to assess. Results may be different when another form of crime is shown to participants. Also, the results are likely to differ when another form of participation behaviour is examined (Schreurs, Franjkić, et al., 2020; Schreurs, Kerstholt, et al., 2020). It also needs to be considered that the intention to report was measured instead of actual behaviour, which further increases the gap between the research scenario and actual crime situations. For those reasons, the results cannot be generalised to crime detection abilities and participation behaviour in general.

Another concern regarding the generalisability is the nature of pictures. They did not involve any personal risk to the participants, neither at the moment of seeing them nor potentially in the future, which may have reduced the likelihood of perceiving any threat. The results support this claim. The below average scores of risk perception - crime consequences (2.57) and of risk perception - crime likelihood (2.26) could indicate that participants did not perceive criminality in their neighbourhood as a potential risk to them. Witte and Allen (2000) stated that high levels of risk perception and efficacy beliefs were needed to take self-protective actions, and this condition was not met. As Kievik and Gutteling's (2011) results showed, presenting participants with messages containing both high risk and high efficacy led to significantly higher willingness to engage in self-protective actions. Even when self-efficacy and response efficacy beliefs are high, if no risk is perceived, then it can also not be expected that participants would report to the police. This might explain why no correlation between self-

efficacy, response efficacy, risk perception and reporting intentions was found. To gain more insight into what motivates citizens to report signs of subversive crime to the police, future research should focus on presenting a stimulus that poses a more realistic concern to participants.

Lastly, this study focused on the intention, or willingness, to report and not on actual behaviour. Although this was a deliberate choice for the feasibility of the questionnaire, it may pose a limitation. In several models, the intention to act has been found to be the most relevant predictor of actual behaviour (Ajzen, 1991; Ajzen & Fishbein, 1980; Rogers, 1983), but it does not necessarily lead to behaviour (Sheeran & Webb, 2016). Nevertheless, implementation intentions (Gollwitzer, 1993; Gollwitzer & Brandstätter, 1997), which link the intention of action X to the situation Y (e.g., calling the police when seeing signs of subversive crime), were found to be significantly more effective in predicting behaviour than 'regular' intentions (Sheeran, 2002). As this has also been found for self-report measures (Orbell et al., 1997), the design of combining the pictures and intention query is a main strength of this study.

**Practical implications**

In the greater scope of community policing, this thesis aimed to add to the development of useful tactics in implementing policing that is more proactive on the one side, and less reactive and authoritarian on the other side. The view that there is a need for change towards this approach for policing is shared by researchers (Skogan, 2005; Skogan & Hartnett, 1997; Williers, 2009), who argue that the traditionally reactive policing style is not in line with the criminal problems that the 21st century faces. By conducting this research, insights into what motivates citizens to proactively report signs of subversive crime to the police were explored in more depth. Furthermore, it presents the signs of crime that participants used to identify a place as potentially criminal. Gaining an understanding of citizens' knowledge can help the police and citizens both.

Although participants' reporting intentions were low, it increased when participants were aware of signs of crime. The reporting process itself could be a major concern for police and future studies. The Netherlands, for instance, have thousands of neighbourhood WhatsApp groups or the 'Opsporing Verzocht' program that can help the police solve a criminal case (Van Erp et al., 2012) or help to lower crime rates in the neighbourhood (Akkermans & Vollaard, 2015). As of now, no programs similar in magnitude are known to be used in Germany. Some German cities published apps that citizens can use to report complaints (e.g., Melde-App Stadt Recklinghausen). But with a focus on road damages, street lightings and the like, these apps

seem not suitable for reporting suspicions about crime yet. To conclude, calling the emergency hotline to report signs of crime is not feasible and if the German police want to increase reports by citizens, they might lower the threshold at which citizens can approach such a task.

Participants were asked about the reason for why they rated a place as criminal. Their descriptions are subjective and can only be used as guidance rather than be used for analysis. Still, some implications can be drawn. As this study found out, although it needs to be treated cautiously, improving citizens' crime recognition skills will likely lead to an increase in reporting them to the police. It does not distinguish between relevant and irrelevant clues. As a matter of course, it is in the best interest for the police if the content of reports were useful. The risk of biased assumptions or wrong interpretation of the situation (Kerstholt & Vries, 2018) can be reduced by teaching citizens the right signs to look out for. By increasing citizens' knowledge of subversive crime, their crime awareness can become much more effective and the results more valuable (Bullock & Sindall, 2014). As pointed out earlier, increasing citizens' awareness of crime can be the initiator for fighting them (Shin & Lee, 2005). Future research might investigate the quality of signs used by citizens and study approaches to increase participants' knowledge effectively.

From the answers of participants, as already mentioned, a certain level of biased judgments related to shisha bars can be conjectured. If future studies would also substantiate a difference in detection of pictures displaying a shisha bar and pictures that do not display a shisha bar, more research into the nature of that difference might be of interest. Whether those are based on media, personal experience, or something else would need to be investigated.

## Conclusion

The current study offers insights into what can motivate citizens to report signs of crime to the police. The ability to detect signs of subversive crime was found to be a positive predictor for participants' willingness to report them. Participants' decisions to rate a place as suspicious were often based on signs like a run-down appearance or that a view inside was hindered. These findings can be used as foundation for further research on (1) what makes citizens declare a place as criminal, (2) increasing the quality of citizen reports, and (3) strategies to encourage citizen participation in the police domain, in particular in Germany.

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