

Criminal investigations by citizens - *can guidelines support decision making in crisis situations?*

Tim Bussmann

S1709798

18-5-2018

University of Twente

Faculty of Behavioural, Management & Social Sciences (BMS)

BSc PSY

Supervisors:

prof. dr. José Kerstholt

dr. ir. Peter de Vries

Abstract

Background: In recent years, the number of citizen investigations has been growing exponentially. Citizen investigations potentially have a lot to offer for society as a whole. However, there are also numerous instances of vigilantism and unwanted consequences. The goal of this research was to find out if adequate guidelines could contain this vigilantism and if the emotional load of a situation influences it as well.

Method: Participants were recruited on an online recruitment panel and the personal network of the researcher. After signing up for the study, participants would fill in a survey based on two situations they were shown before answering the questions. Participants were randomly assigned to two conditions; in guidelines condition participants received guidelines before answering the questions and in no guidelines condition they would not receive guidelines.

Results: It was found that there were indeed differences in the way in which people approached the citizen investigation, when it comes to a more emotional situation. There were main effects of the attitude, vigilantism and trust in public professionals constructs. There was however no significant effect of the guidelines on these results.

Conclusion: Although citizen investigations have come a long way, there is still much that is unknown when it comes to efficiently tackling vigilantism. Emotionally loaded situations need to be handled with a different approach, since citizens react in a more vigilant way to them. Guidelines in their current form do not fully prevent vigilantism, however there are enough possibilities to devise new and better countermeasures against vigilantism.

Introduction

Citizen participation and its consequences

Over the past few decades, citizens have taken more and more initiatives to make their neighbourhood and city livable (Land & Stokkom, 2015). For instance in the Netherlands, citizens help organizing community projects such as litter-clearing campaigns, engage in voluntary services (e.g. helping senior citizens with their daily activities) and have influence in decision-making at a local level (Dutch Government, n.d.). Apart from the social domain, citizen participation has gradually been expanded to the domain of safety as well. Whereas in the past the government was the sole responsible authority for public safety, citizens are increasingly involved in public safety projects (Steden et al., 2011). Examples of such projects are WhatsApp groups where inhabitants of a certain neighbourhood keep each

other updated about alarming situations and individuals (Lub, 2016; Van der Land et al., 2014), Sms-alerts which provide citizens with information regarding risky situations (Van der Land et al., 2014) and police officers who use twitter to stay in contact with locals (Roodenburg & Boutellier, 2013).

Certain citizen initiatives can also potentially contribute to the process of crime investigation. Due to the rise of social media, it has become relatively simple for citizens to share information with each other in a short amount of time (Meijer, 2014). As shown in 2013 when a Dutch twin suddenly disappeared, a nationwide network was set up by citizens to support the police in this case (Volkskrant, 2013). In the end this proved to be an example of a relatively successful citizen initiative, as the bodies of the two boys were eventually found on account of the information of a passerby (Rtlnieuws, 2013). In the case of the twins, citizen participation had a positive effect on the outcome of the investigation. Other than a solved crime case, it also showed that citizen participation can potentially have other positive side effects. Citizen participation in the safety domain has the power to increase feelings of belongingness, social empowerment and protection among citizens (Hope, 2005). Research by Eijk and Steen (2013) has also shown that a sense of 'community' among citizens potentially results in more efforts to keep their neighbourhoods safe.

However, a fundamental part of citizen participation is that citizens abide by the law and keep faith in public professionals (Scheider et al., 2009). Strong feelings of justice and crime prevention can also lead to the fact that some citizens do resort to setting up more drastic initiatives (Johnston, 1996). In the case of Dark Justice, for example, two British individuals posed as young teenagers in order to bait and identify child molesters (International Business Times, 2015). Mobilized citizen groups potentially have the power to bring about a worrying state of citizen participation. As the example of Dark Justice shows, citizens might take unauthorized actions against suspected culprits and make rash unwanted decisions that could damage the outcome of citizen participation projects in the safety domain. Furthermore, vigilantism could lead to conflicts of interest between citizens and public professionals (Haas et al., 2014). This could lead to the view that citizens are merely troublemakers and not problem solvers they were initially supposed to be (Terpstra, 2008). As a consequence, the legitimacy of citizen participation is questioned. This testifies to the importance of understanding how people search for information and make decisions in a safety context.

A key issue in citizen participation is therefore how to keep citizen initiatives from derailing into unwanted situations. Collaboration between citizens and public professionals

allows citizens to become more organized, connect more efficiently with state institutions and exploit more state resources (Lelieveldt, 2004). The emphasis of this study will be put on how to combat vigilantism and how it can be contained through efficient countermeasures.

Citizen decision-making

The emotions that arise in people when dealing with crisis situations, might almost fully determine the outcome of citizen investigations. Such as in the case of Dark Justice, research by Dvoryanchikov and Gutnik (2012) shows that the perception of pedophilia tends to provoke strong negative emotions among both men and women. Such reactions might have a great influence on the future of citizen investigation. Citizen investigation could quickly take the wrong direction when a case or risk situation causes strong emotional reactions among citizens, eventually leading to undesirable decisions or initiatives. The Evans model of Dual-Processing states that decision-making happens on the basis of two different modes of thinking (Evans, 2008). The first mode typically reflects a rational-analytical model, whereas the second mode entails a more intuitive and experiential way of thinking which is influenced by emotions. The influence of emotions on decision-making is further explained by Lerner et al. (2015) in the model of emotion-imbued choice. The model of emotion-imbued choice consists of several factors, including the characteristics of the decision maker, characteristics of possible options, current emotions, incidental influences, conscious and/or nonconscious evaluation. These factors are generally speaking mutually connected to each other and in turn lead to a decision which explains the expected outcome of certain behavior. Another model which explains decision processes among emotionally aroused individuals is the General Aggression Model (Allen et al., 2018). Just as in the model of emotion-imbued choice, environmental modifiers and personality seem to play a distal role in decision-making. Subsequently, these distal factors have an influence on both the situation and person in question. This leads to an interaction between a person's internal state, which consists of their cognition, affect and arousal. Eventually, the outcome of all the relevant factors leads to either a thoughtful or a more impulsive action.

Another element that seems to play a role in decision-making, emotionally-imbued choice and human information seeking behavior, is the context of a given situation. Whether or not a situation contained some sort of emotional load, had influence on the outcome of decision-making (Allen et al., 2018). This could indicate that the way in which citizen investigation ensues could be dependent on the situation itself. Situational context has major implications for citizen investigations as a whole, since it is difficult to take that into account

when developing interventions to combat problems such as vigilantism and misinformation. Especially when these situations differ in terms of emotional load, it is rather difficult to develop resilient countermeasures. Citizens involved in a citizen investigation with a high emotional load might come up with a completely different plan of action, compared to a citizen investigation or initiative that is not necessarily emotionally-triggering. The variety of crime investigations that can be supported by citizen initiatives could possibly benefit from certain guidelines that contain information necessary for their local undertakings (Roberts, 2004). It has been shown that citizen participation heavily relies on the support of public professionals (Carr, 2003), therefore guidelines could prove to be a necessary asset in ensuring a successful collaboration between citizens and public professionals.

Advice taking & guidelines

Something particularly interesting for public professionals is the way in which people take advice from others. Especially since advice taking has no one-size-fits-all explanation, it is necessary to take the different types of advice taking into account when developing vigilantism countermeasures, such as egocentric discounting. Egocentric discounting is defined as the tendency to favour one's own opinion over the opinions of other individuals (Yaniv & Kleinberger, 2000). Research by Mannes (2009) has shown that even when a form of advice represents the average of a group, people still value their initial judgement. People tend to shift more towards the average as the group of people grows larger, but still 'discount' the value of the general opinion by putting weight on their own. This could possibly mean that even though guidelines provide behavioural norms in risk situations, people still rely on their own judgement. However, when taking advice there are also several factors that moderate the way in which the advisor plays a role. People tend to take more advice from advisors who seem confident, trustworthy, experienced and accomplished (Rader, Larrick & Soll, 2017). Furthermore, people tend to take less advice from others when they are more confident themselves (Gino & Moore, 2007).

On the basis of the Dual-Processing model (Evans, 2008), adequate guidelines could possibly contain vigilantism in early stages or even prevent it altogether. Even though citizens still might feel strong emotions connected to an investigation, impulsive and undesirable decisions might be reduced when confronted with guidelines due to the rational mode of thinking. To support the effectiveness of these guidelines, public professionals also need to make sure that they come across as a trustworthy source of information.

Current Research

Right now there is a gap in the known literature regarding the influence of information prior to citizen investigations and therefore there needs to be research on how citizens stick to the provided guidelines and if this is being influenced by the type of situation. Research on this topic is also necessary information for public professionals, since it could support them in providing efficient guidelines that are resilient in any given context. This study is unique in the sense that it focuses on both the emotional and rational context in citizen participation. What could citizens possibly do and why would they behave differently when they have guidelines? In order to find out how the emotional context of a situation will influence the decision making of citizens, two situations with each a different emotional load were constructed and presented to the participants. It was hypothesized that a situation with a high emotional load will lead to a different plan of action among citizens, in comparison to when a situation does not contain such an emotional load. More specifically, a situation with a high emotional load will lead to more vigilant behavior, stronger feelings and connection with the situation and less trust in public professionals.

In order to find out how guidelines are able to support citizens in these contexts, it was also hypothesized that having guidelines beforehand will make a difference in how citizens approach emotionally loaded situations compared to not having guidelines available beforehand. More specifically, having guidelines beforehand will lead to less vigilant behavior, a more positive attitude and connection with the situation and more trust in public professionals.

Methods

Design

A 2(Guidelines: present/absent) x 2(Situation: neutral/emotional) design was used with guidelines as a between and situation as a within participants variable. Participants were randomly divided over the conditions.

Participants

The group of participants consisted of 34 participants with a mean age of 21.5 ($SD = 1.94$, range 19-28). 20 were male, the other 14 were female. Most participants were recruited through the personal network of the researcher. Next to the personal network of the researcher, other participants were recruited on the online research-recruitment platform of the University of Twente. This platform called SONA allows students to register for participation in the research of other students, in order to receive participation credits. Through randomisation, 18 participants were put in the guidelines condition and the other 16 were put in the control condition.

The two inclusion criteria to participate in the study consisted of being able to read and understand the English language and not having any physical deficiencies that would obstruct eventual participation (e.g. problems with vision).

Materials

The survey (Appendix 4) was constructed on qualtrics.com. The demographic questions of the survey were directly taken from the Questionnaire Twente Model Binge Drinking (TMBD). This includes questions such as *What is your age?* and *What is currently your primary occupation?*. The rest of the survey consisted of attitude, vigilantism and trust in public professionals parts. There were also a few leftover questions which were not deemed fit for analysis (e.g. *To what extent would you involve other people in order to help the victim?*). The construct attitude measured the attitude and feelings of participants towards the situation in general (e.g. *I feel empathy for the victim*). Per situation there were 10 attitude questions, which means that there were 20 attitude items in total on a scale from 1 to 5.

A cronbach's alpha analysis was conducted in order to measure the reliability of the 20 attitude-based items ($\alpha = .86$). This indicates that the reliability of these items is good. Therefore, the mean value on each questionnaire was taken as an indication for attitude. The construct vigilantism measured the willingness among participants to show signs of vigilantism (e.g. *To what extent would you be willing to break the law to help the victim?*) Per situation there were 3 vigilantism questions, which means that there were 6 vigilantism items in total on a scale from 1 to 100. A cronbach's alpha analysis was conducted in order to measure the reliability of the 6 vigilantism-based items ($\alpha = .80$). This indicates that the reliability of these items is good. Therefore, the mean value on each questionnaire was taken as an indication for vigilantism. The construct trust in public professionals measured the trust in public professionals among the participants (eg. *To what extent would you trust the*

expertise of public professionals in such a situation?). Per situation there were 3 trust in public professionals questions, which means that there were 6 trust in public professionals items in total on a scale from 1 to 100. A cronbach's alpha analysis was conducted in order to measure the reliability of the 6 trust-based items ($\alpha = .86$). This indicates that the reliability of these items is good. Therefore, the mean value on each questionnaire was taken as an indication for trust in public professionals.

The situations that were coupled with the survey were based on two real messages on facebook and nu.nl. They were designed in a manner that they would seem as realistic as possible to the participants, which is why the design of a facebook and nu.nl message was chosen. The intention was to have one neutral situation, which was the situation of the moped, and one situation that would be emotionally provoking, which was the situation of the missing girl Melanie. In both situations, only the names and locations were anonymized and changed in order to be compatible with the survey.

Situation 1

Pieter-Jan Willemsen

Yesterday, 20:13 - Waspik

Moped stolen during test drive

Yesterday around 20.00, we were visited by a potential buyer of our moped

We had put our Derbi Senda, combined with the licence plate "13VPL3", for sale on the internet and had set up a meeting with the potential buyer.

However, when the buyer in question made a test drive on the moped, he did not come back. He drove off without a helmet in the direction of the Leidenseweg, Waspik.

The man could be described as:

- 1.76m tall
- between 25-30 years old
- bad dental health
- red jacket with a fur collar
- green beanie
- jeans (with a damaged part around the right knee)
- red/white nikes
- the man called himself Tom

If you have seen the moped after last night, or do you recognize somebody according to the description? Please do something! We would really like to see our moped back.



Situation 2



The disappearance of Melanie Kermans

Borne - In the area of Borne, police are searching for a 14-year-old girl who has been missing since Saturday.

Melanie Kermans, was last seen at around 8 a.m. Jan. 27 near the Bornse Pracht Winkelcentrum at 91 Hoofdstraat, where she ran away from family members, according to police officer Robert Lijnzaat. She also goes by “Kelanie,” and sometimes uses the names “Melanie Melgers and “Mella Mel,” on her social media accounts, he said.

Kermans, a student at Twickel college in Borne, has not shown up to school or been in touch with her friends, family, or classmates since she went missing, Lijnzaat said.

She is white, 1.57m tall and weighs about 53 kg, with long blonde hair and green eyes, he said. She was reportedly last seen wearing a black hooded jacket and blue jeans, and may be carrying a small pink wallet.

The guidelines were constructed on the basis of what several news and scientific articles reported to be harmful behaviour in citizen participation. A police layout was added to make it seem like the guidelines were official.

Guidelines



General guidelines for citizen initiatives

Dear citizens,

In the past few years we have seen an increase in citizen participation in the safety domain. We are grateful and especially honoured to see that there is more and more interest for our work and also that civilians feel more compelled to help us doing our work correctly. However, we have also come to notice that sometimes the good intentions of the many are prone to derail into unwanted situations. In order to prevent that from happening in the future, we have devised the following guidelines to support future citizen initiatives.

Thank you in advance,

Politie Nederland

0900-8844

Guidelines

- When encountering a risky situation where you are not sure what to do, make sure to involve the local police department in the matter. They are trained to deal with these situations and can keep you safe.
- Be wary of who you take with you during certain investigations. Especially children are prone to react in unpredictable ways to risky situations and therefore their wellbeing can not be guaranteed.
- If police officers tell you to stay out of something, please listen to them. Civilian interference can in some cases be harmful to the investigation and you might do more harm than good, even if your intentions are meant to be harmless.

- Do not, in any given circumstance, break the law. Laws exist to maintain rule and order, especially in crime scene investigations. We are doing our best to make sure everything goes smooth and safely, even if it sometimes does not look like it to the outer world.
- If you see something or someone acting suspiciously, please notify us right away.
- Do not trespass private properties immediately. This is against the law and you could face punishment.
- In case of a stolen object, do not immediately steal it back yourself if you have the opportunity. Even though this might seem logical at first, make sure the police is involved to confirm that it really is your stolen/lost object
- If you encounter the suspect of a crime investigation, do not approach them. Call the police and support us in tracing them.
- Social media can be harmful to the investigation. If you have possibly identified the suspect, do not go all over social media to announce this. Please rely on the police expertise instead.

Procedure

When signing up for the study, participants were randomly divided over the conditions (guidelines/no guidelines). Participants were informed that they would get to see two situations and after each situation they would fill in the respective questionnaire. The participants would first fill in the part of the survey where their demographic data is recorded. Then, the researcher would, depending on their condition, present them with guidelines or not. Afterwards they would get to see the situation of the stolen moped. When the participants were done reading this situation, they could proceed with the survey. Once they were done with the relevant questions for the first situation, there would be a short break again where the researcher would give them the situation of the missing girl named Melanie. Then, they would proceed with the final part of the survey and fill in the questions relevant for the second situation. Finally after the participants were done filling in the survey, they would get their participation credits if they had signed up through SONA. The study itself took place in a room at the University of Twente campus.

Results

Descriptives

In order to analyze the descriptives of the survey, the means and the standard deviations of the different constructs were taken. First, participants scored higher on the attitude construct in the situation of Melanie ($M = 3.5$, $SD = .69$) than in the situation of the moped ($M = 2.92$, $SD = .65$). Second, participants also scored higher on the vigilantism construct in the situation of Melanie ($M = 51.86$, $SD = 22.33$) than in the situation of the moped ($M = 37.33$, $SD = 23.12$). Finally, participants scored higher on the trust in public professionals construct in the situation of Melanie ($M = 80.58$, $SD = 14.60$) than in the situation on the moped ($M = 66.77$, $SD = 22.28$).

The analysis (Table 1) demonstrates that there is only one significant correlation. The Pearson's correlation analysis shows that there was no significant correlation between vigilantism and trust in public professionals ($r = -.07$, $p = .69$), but there was a significant correlation between trust in public professionals and attitude ($r = .47$, $p = .005$). Finally, there was no significant correlation between vigilantism and attitude ($r = .32$, $p = .060$).

Table 1

Means (M), standard deviations (SD), and Pearson's rank correlations between the variables

		<i>M</i>	<i>SD</i>	1	2	3
1.	Vigilantism	44.60	21.03			
2.	Trust in public professionals	73.63	17.49	-.07		
3.	Attitude	64.18	64.18	.32	.47**	

Note. $N = 34$. * $p < .05$; ** $p < .01$

Effects

In order to measure the effects of guidelines(present/absent) and the situation(neutral/emotional), three repeated measures ANOVA analyses were conducted.

Attitude

There was a statistically significant effect of attitude on the type of situation, $F(1,32) = 21.351$, $p = <.001$, indicating a difference between the neutral ($M = 2.92$, $SD = .65$). and the emotional ($M = 3.5$, $SD = .69$) situation. This means that participants had a stronger attitude

in the emotional situation, compared to the neutral situation. There was not a statistically significant interaction effect $F(1,32) = .02, p = .900$, indicating that guidelines did not influence the attitude of participants.

Vigilantism

There was a statistically significant effect of vigilantism on the type of situation, $F(1,32) = 23.263, p = <.001$, indicating a significant difference between the neutral ($M = 37.33, SD = 23.12$). and the emotional ($M = 51.86, SD = 22.33$) situation. This means that participants were more willing to turn vigilant in the emotional situation, compared to the neutral situation. There was not a statistically significant interaction effect $F(1,32) = .354, p = .560$, indicating that guidelines did not influence the level of vigilantism among participants.

Trust in public professionals

There was a statistically significant effect of trust in public professionals on the type of situation, $F(1,32) = 31.757, p = <.001$, indicating a significant difference between the neutral ($M = 66.77, SD = 22.28$). and the emotional ($M = 80.58, SD = 14.60$) situation. This means that participants were more willing to put trust in public professionals in the emotional situation than in the neutral situation. There was not a statistically significant interaction effect $F(1,32) = .06, p = .816$, indicating that guidelines did not influence the degree of trust in public professionals among participants.

Discussion

The goal of this study was to find out whether providing guidelines before citizens engage in a citizen investigation would result in a different plan of action compared to when they did not receive guidelines. This was done by randomly dividing participants over conditions (guidelines/no guidelines). The results of the experiment showed that having guidelines beforehand did not lead to a significantly different plan of action. Thus, the hypothesis that having guidelines beforehand would lead to less vigilant behavior, a more positive attitude and connection with the situation and more trust in public professionals was rejected.

Furthermore, it was also hypothesized that the emotional load of a situation would lead to a difference in the way citizens approach a citizen investigation. By having two types of situations, one neutral and one emotional, it was measured how the participants responded to the difference in emotional load. The results of the experiment showed that there was

indeed a significant difference between the two situations. It was shown that in the case of the emotional situation, participants were more willing to show vigilant behaviour, had stronger feelings regarding the situation and also seemed to have more trust in public professionals. Thus, the hypothesis is only partially rejected since the fact that participants would show more vigilant behaviour and have stronger feelings regarding the situation were predicted. The fact that participants would have more trust in public professionals, was not. An interesting find was that the trust in public professionals seemed to be positively correlated with the attitude construct.

There could be several reasons as to why the guidelines did not influence the outcome of the experiments as much as predicted. First, it could be that participants did not fully see the point of fully acting upon the guidelines due to the fact that the situations were fictitious. It is possible that this ultimately led to a less serious approach in answering the questions. Albeit the fact that the situations were as realistic as possible and to some degree even real cases since they were based on actual newspapers and facebook posts, it did not lead to the expected outcome.

Second, since every participant was a university student it could mean that compared to other demographic groups, students are less likely to show vigilant and reckless behaviour regardless of having guidelines. In a study by Bruine de Bruin et al. (2007) it was shown that participants with a higher cognitive ability and a background of high education performed better and more conscious on decision-making tasks. This could indicate that students are simply more proficient at estimating the consequences of their decisions and therefore less likely to resort to drastic measures such as vigilantism.

Finally, it could be that even though participants accepted the guidelines as a reliable source of information on how to deal with citizen investigations, they still relied on their own instincts in some cases. It was shown that once people are more confident about their own abilities and knowledge, they tend to rely less on the help of others (Gino & Moore, 2007). Because the sample consisted solely out of highly educated people, it could also be that they were more confident about themselves and thus did not always find the guidelines appealing to their own judgement.

The most surprising find was that the participants had more trust in public professionals in the emotional situation than in the neutral situation. The reason for this could then again be that the sample consisted of higher educated people. Due to the fact that higher educated people generally make better decisions (Bruine de Bruin et al., 2007) they could possibly be more aware of the necessity of having faith in public professionals in such a

situation. Moreover, it could also be the case that due to a lot of positive media exposure on the work of public professionals in citizen investigations in a situation like Melanie's, people could be more willing to have faith in their expertise. There are not many cases of a citizens setting up an investigation to trace back a stolen moped. Most of the times only a message is posted on Facebook where the victim tells other people to look out for their stolen vehicle and report it to them if they might have seen it or its license plate. This could indicate that citizens simply are not aware of the expertise of the police in such cases and thus have more faith in public professionals when it comes to a more common situation, such as Melanie's.

The concept of combining both a rational and an emotional point of view has not been done similarly in the context of citizen investigations before. Dividing participants over the conditions of guidelines, being either present or absent, was a distinctive way of comparing the scores of participants on two situations with a different emotional load. This made it a unique opportunity to analyze the possible results and effects of these two factors. Furthermore, the situations were realistic in the sense that they were in fact based on real events with only the names and locations of the crimes and victims changed. Due to its realism it was possible to completely tailor the content of the guidelines towards the events and the possible ways of vigilantism that could happen. Creating such specific guidelines was also possible because there were several instances of similar situations in the past, for example in the case of the Dutch twins (Rtlnieuws, 2013), so it was possible to make up realistic guidelines that fit with the possible vigilant actions of citizens. Needless to say, the high alpha's coefficients of the constructs are also a testament of the survey's reliability. All in all, the study is easily replicable and can be used as a point of reference in the future.

There were however some flaws in the study. The lack of participants could probably have been solved if there was a possibility to randomly divide participants over the two conditions in an online environment. Right now, the researcher had to do this manually in a way that the study could only take place physically. Participants had to show up in a room in real life, whereas in principle they could have done the same study online. If this was possible, this would most likely have lead to a bigger and more diverse sample. A counter argument to this flaw is the fact that the ethics committee of the faculty did not initially approve of merely having the experiment online. According to their reasoning, in an online environment it could not be ensured that participants would not experience strong negative feelings in the situation of Melanie. With the presence of a researcher to explain that the situations were fictitious and not real, these negative feelings would be less likely to appear.

Another thing that could have been done differently is having multiple training

sessions on for example an application, instead of one sheet of paper with guidelines. For many participants the guidelines on the paper sheet were the first encounter with citizen participation guidelines they had ever had. If a training application would be devised where participants would receive guidelines for different types of situations and afterwards would get questions about a situation based on these guidelines, they could possibly be primed to show good behaviour. Based on an educational model, participants would see if they gave the right answer to a question (for example in the case of a question such as 'If you would find the stolen moped, would you report this to the police?' the right answer would be 'Yes' instead of 'No'). This could possibly further influence the way in which citizens are able to make the right decisions in a citizen investigation, due to the fact that they have simply more exposure. Such an approach has already been proven to be very effective in multiple settings and is more commonly known as the spacing effect (Pyc & Rawson, 2009).

Regardless of several insignificant findings, this study has several implications for citizen participation and investigations in general. The fact that even students respond differently to situations with different emotional load provides great insights for public professionals and others who are involved in supporting citizen participation initiatives. Now that this is known, public professionals can tailor the guidelines and other types of support more towards the type of situation the citizens are dealing with. More specifically, in citizen investigations that deal with an emotional situation, public professionals can expect citizens to possibly show more vigilant intentions and deal with this more quickly and efficiently. Moreover, if this knowledge leads to more efficient and proven methods of dealing with citizen investigations, it can only positively influence all future citizen investigations due to the fact that the knowledge on how to successfully set up such an investigation, and what one should absolutely should not do in such an investigation, will only grow over time. Finally, the fact that it was shown that guidelines did not significantly influence the plan of action of citizens in both situations, is not a flaw but an opportunity.

Future research should primarily focus on different methods of providing guidelines or ways of training citizens in leading these investigations. Because citizen investigations are a upcoming phenomenon in many countries, there should be adequate and diverse facilities available. Future studies could potentially incorporate training, consultancy or priming components to see how that would influence the citizens' plan of action. Future research should also take other demographic groups into account and make sure to get a very diverse sample so guidelines or other measures could not only be tailored more specifically, but also to get a more general idea of how behave during citizen investigations. Finally, follow-up

studies should also focus on more and different types of situations. The current study only had two distinctive situations, but there could possibly be more factors at play in which citizens are influenced to behave in a certain way.

Citizen investigations have come a long way and the way in which they develop certainly have a lot of room for improvement. It is evident that emotionally loaded situations require a different and more serious approach than neutral situations. Although guidelines in their current form are not effective enough, there are enough possibilities and ways to make sure they will be in the near future. The first step in devising countermeasures against vigilantism has been made, so now it is necessary to explore the rest of the possible countermeasures.

References

- Allen, J. J., Anderson, C. A., & Bushman, B. J. (2018). The General Aggression Model. *Current Opinion in Psychology*, 19, 75–80.
<https://doi.org/10.1016/j.copsyc.2017.03.034>
- Bruine de Bruin, W., Parker, A. M., & Fischhoff, B. (2007). Individual differences in adult decision-making competence. *Journal of personality and social psychology*, 92(5), 938.
- Carr, P. J. (2003). The new parochialism: The implications of the Beltway case for arguments concerning informal social control. *American Journal of Sociology*, 108(6), 1249-1291.
- Dutch Government. (n.d.). Citizen participation. Retrieved from:
<https://www.government.nl/topics/active-citizens/citizen-participation>
- Dvoryanchikov, N. V., & Gutnik, A. D. (2012). Social perception of sexual violence against children. *Psychology and Law*, 2012(2).
- van Eijk, C., & Steen, T. (2013). Waarom burgers coproducent willen zijn. *Een theoretisch model om de motivaties van coproducerende burgers te verklaren, Bestuurskunde*, 22(4), 72-81.
- Evans, J. S. B. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annu. Rev. Psychol.*, 59, 255-278.
- Gino, F., & Moore, D. A. (2007). Effects of task difficulty on use of advice. *Journal of Behavioral Decision Making*, 20(1), 21–35
- Haas, N. E., de Keijser, J. W., & Bruinsma, G. J. (2014). Public support for vigilantism,

- confidence in police and police responsiveness. *Policing and society*, 24(2), 224-241.
- Hope, T. (2005). The new local governance of community safety in England and Wales. *Canadian Journal of Criminology and Criminal Justice*, 47(2): 369–388.
- International Business Times. (2015). Dark Justice: The vigilante paedophile hunters who revel in 'football factory' stings. Retrieved from: <http://www.ibtimes.co.uk/dark-justice-vigilante-paedophile-hunters-who-revel-football-factory-stings-1487244>
- Johnston, L. (1996). What is vigilantism?. *The British Journal of Criminology*, 36(2), 220-236.
- van der Land, M., & van Stokkom, B. (2015). Burgerparticipatie en “crafting” in het lokale veiligheidsbeleid. *Tijdschrift voor Veiligheid*, 1, 3-21.
- van der Land, M. van der, Stokkom, B. van & Boutellier, H. (2014). *Burgers in veiligheid: een inventarisatie van burgerparticipatie op het domein van de sociale veiligheid*. Den Haag: WODC.
- Lelieveldt, H. (2004). Helping citizens help themselves: Neighborhood improvement programs and the impact of social networks, trust, and norms on neighborhood-oriented forms of participation. *Urban Affairs Review*, 39(5), 531-551.
- Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and decision making. *Annual Review of Psychology*, 66. doi.org/10.1146/annurev-psych-010213-115043
- Lub, V. (2016). *De burger op wacht: het fenomeen 'buurtpreventie' onderzocht*. Rotterdam: Bureau voor Sociale Argumentatie.
- Mannes, A. E. (2009). Are we wise about the wisdom of crowds? The use of group judgments in belief revision. *ManagementScience*, 55(8), 1267–1279. <https://doi.org/10.1287/mnsc.1090.1031>
- Meijer, A. J. (2014). New media and the coproduction of safety: An empirical analysis of Dutch practices. *The American Review of Public Administration*, 44(1), 17-34.
- Pyc, M. A., & Rawson, K. A. (2009). Testing the retrieval effort hypothesis: Does greater difficulty correctly recalling information lead to higher levels of memory?. *Journal of Memory and Language*, 60(4), 437-447.
- Rader, C. A., Larrick, R. P., & Soll, J. B. (2017). Advice as a form of social influence: Informational motives and the consequences for accuracy. *Social and Personality Psychology Compass*, 11(8).
- Roodenburg, D. & Boutellier, H. (2013). ‘Weet wat je tweet: het gebruik van Twitter door de wijkagent en het vertrouwen in de politie’. *Tijdschrift voor Veiligheid*, 13 (3), 35-53
- Roberts, N. (2004). Public deliberation in an age of direct citizen participation. *The American*

review of public administration, 34(4), 315-353.

Rtlnieuws. (2013). Broertjes Ruben en Julian dood gevonden. Retrieved from:

<https://www.rtlnews.nl/nieuws/binnenland/broertjes-ruben-en-julian-dood-gevonden>

Scheider, M. C., Chapman, R., & Schapiro, A. (2009). Towards the unification of policing innovations under community policing. *Policing: An international journal of police strategies & management*, 32(4), 694-718.

Steden, R. van, Caem, B. van & Boutellier, H. (2011). The 'hidden strength' of active citizenship: The involvement of local residents in public safety projects. *Criminology and Criminal Justice*, 11, 433-450.

Terpstra, J. (2008). Police, local government, and citizens as participants in local security networks. *Police Practice and Research: An International Journal*, 9(3), 213-225.

Volkskrant. (2013). Burgerzoekers zetten landelijk netwerk op. Retrieved from:

<https://www.volkskrant.nl/binnenland/burgerzoekers-zetten-landelijk-netwerk-op~a3444846/>

Yaniv, I., & Kleinberger, E. (2000). Advice taking in decision making: Egocentric discounting and reputation formation. *Organizational Behavior and Human Decision Processes*, 83(2), 260-281. <https://doi.org/10.1006/obhd.2000.2909>

Appendix 4: The survey

UNIVERSITY OF TWENTE.

Thank you very much for participating in our research!
The following survey is the first in a series of experiments and surveys. First, you will have to fill in this survey regarding your demographics. Then you will participate in a short experiment which records what kind of action you would potentially take in a risk situation.

Criminal investigations by citizens; Do guidelines have an influence on the plan of action?

Researcher: Tim Bussmann

Thank you for agreeing to take part in this research. In agreeing to participate you have the following rights and protections as laid down in the British Psychological Society's ethical guidelines.

- Your participation is entirely voluntary
- Under no circumstances will your real names or identifying information be included in the reporting of this research.
- You may withdraw your data from this research at any point until one week after the submitting the survey.
- Nobody, except the four researchers and the research supervisor will have access to this anonymised material in its entirety.

In agreeing to the terms of this consent form, participants should be aware that any anonymised material is solely for use in the current research project.

Please tick the following boxes if you agree to take part in this research.

- ☐ I confirm that I have read and understood the participant information sheet dated 31-3-2018 version 1 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- ☐ I understand that my participation is voluntary and that I am free to withdraw at any time up until one week after submitting the questionnaire, without giving any reason. To withdraw your data please contact t.bussmann@student.utwente.nl
- ☐ I agree to take part in the above study.

0% 100%

>>

UNIVERSITY OF TWENTE.

Please fill in your participant ID you received in the notification mail from "Test subject pool BMS" (5 numbers) - If you haven't registered via SONA ignore this question

0% 100%

>>

Survey Powered By [Qualtrics](#)

A few instructions before you proceed:

There are no right or wrong answers. Your personal opinion is what matters in this research. Try to be honest while answering the questions. All data will be treated confidentially and will only be seen by the researcher.

What is your sex?

- ☐ Male
- ☐ Female
- ☐ Other

What is your age?

What is currently your primary occupation?

- ☐ Pupil
- ☐ Student
- ☐ Special needs pupil
- ☐ Paid work
- ☐ In search of employment
- ☐ Other (please specify)

What is your highest current or completed educational level?

- ☐ Primary school
- ☐ Special needs education
- ☐ Highschool
- ☐ Trade School (MBO/Berufsfachschule)

What is your highest current or completed educational level?

- ☐ Primary school
- ☐ Special needs education
- ☐ Highschool
- ☐ Trade School (MBO/Berufsfachschule)
- ☐ University of Applied Sciences BSc
- ☐ University BSc/BA
- ☐ University MSc/MA
- ☐ University PhD
- ☐ Other (please specify)

What is your nationality?

- ☐ Dutch
- ☐ German
- ☐ Other (please specify):

0%  100%


>>



The following part of the survey will be regarding the experiment. The researcher will explain the purpose of the situations to you.

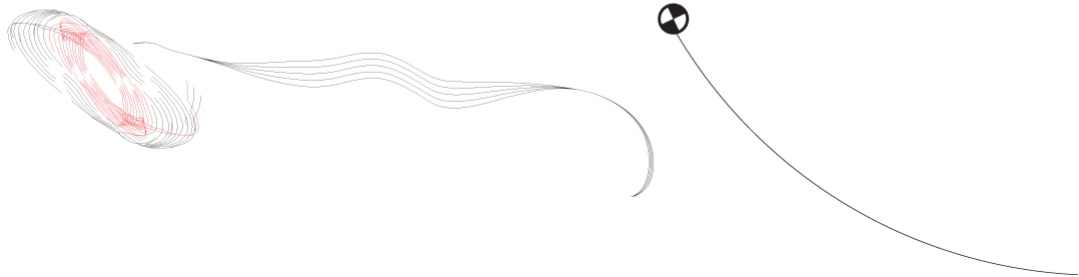
Please click the following box if you are ready to proceed.

☐ Ready

0%  100%



Survey Powered By [Qualtrics](#)



Situation 1 - Moped stolen during test drive

Please tick the boxes that best represent your feelings after witnessing the situation (on a scale from 1 to 5)

	1	2	3	4	5
I feel empathy for the victim	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel angry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel sad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I care about this situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want this situation to end well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please tick the boxes that best represent your opinion after witnessing the situation (on a scale from 1 to 5)

	1	2	3	4	5
This situation seems serious enough to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This situation drives me to take action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would know what to do in such a situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would take action in such a situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trust in the expertise of the police in this situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

0% 100%

>>

Survey Powered By [Qualtrics](#)

In the following part you will see a few actions that civilians generally undertake when confronted with similar situations. Please indicate to what extent you would do something similar

To what extent would you be willing to break the law to help the victim?

0 10 20 30 40 50 60 70 80 90 100

How likely would you be willing to team up with other people in the investigation?

0 10 20 30 40 50 60 70 80 90 100

To what extent would you involve other people in order to help the victim?

0 10 20 30 40 50 60 70 80 90 100

How likely would you speak up to others if they break the law during the investigation?

0 10 20 30 40 50 60 70 80 90 100

How likely would you speak up to others if they break the law during the investigation?

0 10 20 30 40 50 60 70 80 90 100



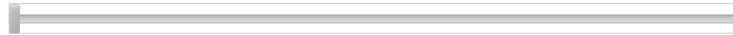
To what extent would you pay attention to what public professionals, such as police officers, have to say about such a situation?

0 10 20 30 40 50 60 70 80 90 100



To what extent would you seek help from public professionals in such a situation?

0 10 20 30 40 50 60 70 80 90 100



To what extent would you trust the expertise of public professionals in such a situation?

0 10 20 30 40 50 60 70 80 90 100



To what extent would you search for the missing moped on a private territory, if it was likely that it could be found there?

0 10 20 30 40 50 60 70 80 90 100



If you had the opportunity to steal back your moped, how likely would it be that you would do so?

0 10 20 30 40 50 60 70 80 90 100



How likely would you be to report the status of your investigation of this situation on social media?

0 10 20 30 40 50 60 70 80 90 100



0% 100%

>>

This was the first part of the survey. The researcher will now show you the second situation.

Please tick the box when you are ready to continue.

☐ Ready

0% 100%

>>

Survey Powered By [Qualtrics](#)

Situation 2 - The disappearance of Melanie Kermans

Please tick the boxes that best represent your feelings after witnessing the situation (on a scale from 1 to 5)

	1	2	3	4	5
I feel empathy for the victim	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel angry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel sad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I care about this situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want this situation to end well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please tick the boxes that best represent your opinion after witnessing the situation (on a scale from 1 to 5)

	1	2	3	4	5
This situation seems serious enough to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This situation drives me to take action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would know what to do in such a situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would take action in such a situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trust in the expertise of the police in this situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

0% 100%

>>

Survey Powered By [Qualtrics](#)

In the following part you will see a few actions that civilians generally undertake when confronted with similar situations. Please indicate to what extent you would do something similar

To what extent would you be willing to break the law to help the victim?

0 10 20 30 40 50 60 70 80 90 100

How likely would you be willing to team up with other people in the investigation?

0 10 20 30 40 50 60 70 80 90 100

To what extent would you involve other people in order to help the victim?

0 10 20 30 40 50 60 70 80 90 100

How likely would you speak up to others if they break the law during the investigation?

0 10 20 30 40 50 60 70 80 90 100

How likely would you speak up to others if they break the law during the investigation?

0 10 20 30 40 50 60 70 80 90 100

To what extent would you pay attention to what public professionals, such as police officers, have to say about such a situation?

0 10 20 30 40 50 60 70 80 90 100

To what extent would you seek help from public professionals in such a situation?

0 10 20 30 40 50 60 70 80 90 100

To what extent would you trust the expertise of public professionals in such a situation?

0 10 20 30 40 50 60 70 80 90 100

To what extent would you search for the missing girl on a private territory, if it was likely that she could be found there?

0 10 20 30 40 50 60 70 80 90 100



If you had the chance to approach the person who had most likely abducted the girl, how likely would it be that you would do so?

0 10 20 30 40 50 60 70 80 90 100



How likely would you be to report the status of your investigation of this situation on social media?

0 10 20 30 40 50 60 70 80 90 100



0% 100%

>>

Survey Powered By [Qualtrics](#)

UNIVERSITY OF TWENTE

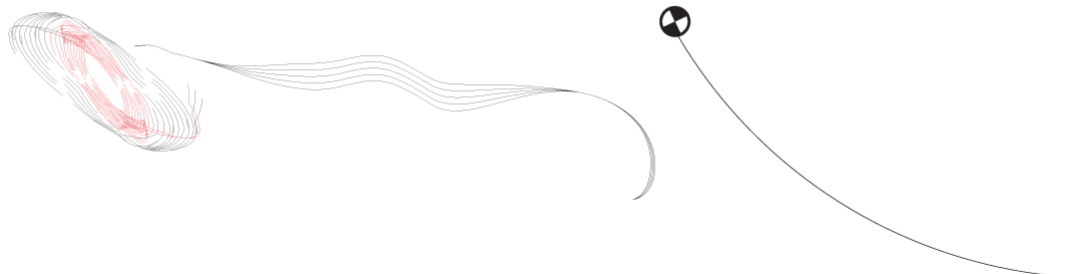
(Ask your researcher) Before answering the questions I was provided with:


- ☒ Guidelines
- ☐ No guidelines

0% 100%

>>

Survey Powered By [Qualtrics](#)





UNIVERSITY OF TWENTE.

Thank you for participating in this study! If you have any questions left, please send an email
t.bussmann@student.utwente.nl

0%  100%



Survey Powered By [Qualtrics](#)

