

Witnessing fraud: reporting or intervening

Moral emotions, moral values, self-efficacy, and threat to social identity on reporting behavior and intervening behavior.

Bachelor thesis

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Abstract

In the past, police were mainly responsible for the public's safety. Nowadays, local residents are increasingly responsible for a safe environment as well. It is important to know why people participate with the police so that these factors can be influenced and citizen participation in the police domain increases. This is important because maintaining safety will increasingly be a collaboration between the police and the citizens. From previous studies there were some factors that influence behavior. But these factors were never taken all together in the same study. This means that this research was a first exploration of the influence from moral values, moral emotions, self-efficacy and threat to the social identity on reporting behavior and intervening behavior.

The study was a between-subjects design with 51 university students that participated. The study consisted a lab experiment and two surveys. In the experiment the participant was confronted with fraudulent behavior of a confederate (the participant thought it was another participant). After that the participant makes a survey about self-efficacy, moral emotions and threat to the social identity to investigate to what extent these factors had influenced the reporting behavior and intervening behavior.

Results showed that reporting was done more often than intervening. Correlations show that negative emotions (e.g. fear) have a positive relationship with feeling able to report. This means that someone that feels able to make a report also experiences more emotions like fear. Positive emotions (e.g. pride) correlate positively with feeling able to intervene. This means that participants that feel able to intervene also experiences more emotions like pride. Logistic regression showed a significant negative relationship between self-efficacy and reporting behavior. This means that someone that feels able to report is less likely to report.

Further research is needed to see what the relationship will be when the subject pool is larger. Possibly the effects that were found were disturbed due to multicollinearity. Also, the experiment can be repeated with a different procedure because not all participants found the experiment realistic. But it was a first exploration and it gave some insights in the influence of emotions, moral values, self-efficacy and threat to the social identity on reporting behavior.

Keywords: reporting behavior, intervening behavior, moral emotions, moral values, self-efficacy, threat to the social identity

In het verleden was de politie voornamelijk verantwoordelijk voor de veiligheid van de burgers. Tegenwoordig zijn buurtbewoners ook steeds meer verantwoordelijk voor een veilige omgeving. Het is belangrijk om te weten waarom mensen samenwerken met de politie, zodat deze factoren kunnen worden beïnvloed en de burgerparticipatie in het politiedomein toeneemt. Dit is belangrijk omdat handhaving van de veiligheid in toenemende mate een samenwerking tussen de politie en de burgers is. Uit eerdere studies waren er factoren bekend die het gedrag beïnvloeden. Maar deze factoren werden nooit allemaal bij elkaar genomen in dezelfde studie. Dit betekent dat dit onderzoek een eerste exploratie was van de invloed van morele waarden, morele emoties, self-efficacy en bedreiging van de sociale identiteit op rapporterend gedrag en interveniërend gedrag.

Het onderzoek was een between-subjects ontwerp met 51 universitaire studenten die hebben deelgenomen. De studie bestond uit een laboratoriumexperiment en twee enquêtes. In het experiment werd de participant geconfronteerd met frauduleus gedrag van een acteur (de deelnemer dacht dat het een andere participant was). Daarna maakt de deelnemer een enquête over self-efficacy, morele emoties en bedreiging van de sociale identiteit om te onderzoeken in welke mate deze factoren het rapporterend gedrag en interveniërend gedrag hadden beïnvloed.

Uit de resultaten bleek dat er vaker werd gerapporteerd dan dat er werd ingegrepen. Correlaties tonen aan dat negatieve emoties (bijvoorbeeld angst) een positieve relatie hebben met het in staat voelen om te melden. Dit betekent dat iemand die zich in staat voelt om te melden ook meer emoties ervaart zoals angst. Positieve emoties (bijvoorbeeld trots) correleren positief met het gevoel in staat te zijn om in te kunnen grijpen. Dit betekent dat participanten die zich in staat voelen om in te grijpen ook vaker emoties ervaren zoals trots. Logistische regressie toonde een significant negatief verband tussen self-efficacy en rapporterend gedrag. Dit betekent dat iemand die zich in staat voelt om te melden, minder geneigd is om daadwerkelijk te melden.

Verder onderzoek is nodig om te zien wat de relatie zal zijn wanneer de steekproef groter is. Mogelijk zijn de gevonden effecten verstoord door multicollineariteit. Het experiment kan ook worden herhaald met een andere procedure omdat niet alle deelnemers het experiment realistisch vonden. Maar het was een eerste verkenning en het gaf een aantal inzichten in de invloed van emoties, morele waarden, self-efficacy en bedreiging van de sociale identiteit op rapporterend gedrag.

Witnessing fraud: reporting or intervening

In recent years there has been increasing citizen participation in the police domain. Examples include reporting suspicious circumstances and intervening when a theft takes place. In the past, police were mainly responsible for the public's safety (Van der Land, 2014). Nowadays, local residents are increasingly responsible for a safe environment as well. Citizen participation is necessary because more and more budget cuts are being made (Schreurs, in press.). These cuts have the consequence that the police need more help from the citizens to ensure a safe environment. In addition, social media enables citizen participation in the police domain (Roodenburg & Boutellier, 2014). Information can be shared more quickly, and problems can therefore be resolved faster. Furthermore, citizen participation provides more satisfaction with the police and a safer neighborhood (Kerstholt, De Vries, Mente & Huis in 't veld, 2015; Gill, Weisburd, Telep, Vitter & Bennett, 2014).

It is important to know why people participate so that these factors can be influenced in order to increase citizen participation in the police domain. This is important because maintaining safety will increasingly be reached by a collaboration between the police and the citizens. For example, when witnessing a crime, moral values (such as fairness) are addressed and in turn can cause certain emotions e.g. disgust to be experienced. Moral values are addressed because of conflicting values in the situation (witness thinks that stealing is wrong, and the thief does not think that way). The witness may have had the feeling of being able to report about that situation. But in the end, the witness decided not to report, because the thief is someone with whom the witness felt strongly connected. These factors seem to influence the decision whether to intervene or whether a report is made regarding criminal behavior. Previous studies (e.g. Schreurs, in press.; Schein & Gray, 2017; Haidt, 2003) showed that these factors can influence behavior. The question is to what extent these factors influence behavior that concerns witnessing a crime. During this research an exploration of the relation between moral values, moral emotions, self-efficacy and threat to the social identity with reporting behavior and intervening behavior is done.

In the scope of this research, intervening behavior is defined as "directly addressing the person in question to the fraudulent behavior that this person performs." Reporting behavior in the scope of this research is defined as "telling an authority (in this study the researcher) that the other person has conducted fraudulent behavior."

In order to improve cooperation between citizens and the police, it is important to know

which factors influence the decision to report criminal behavior or to intervene when seeing a crime and how they influence the behavior. A concrete model with influencing factors does not yet exist and therefore further research is necessary. That is why this research investigates to what extent the factors moral emotions, moral values, threat to the social identity and self-efficacy influence the reporting behavior and/or intervening behavior in a situation where fraudulent behavior takes place.

Influencing factors on reporting a crime or intervening during a crime

The research by Zeelenberg, Nellissen, Breugelmans, and Pieters (2008) has already shown that people in a situation where a crime takes place base the behavior on the intuitive system. This is because there is only a split second to decide which behavior to carry out. In the deliberated system, decisions are taken by weighing all advantages and disadvantages to make an informed decision (Kahneman, 2002). In the case of witnessing a theft, there is not much time to make an informed decision. In addition, not all information is available to weigh up all the advantages and disadvantages (Schreurs, in press.; Gigerenzer & Gaissmaier, 2011). Rules of thumb can even outperform more expensive processing when time is limited e.g. in the case of witnessing a theft, because decisions must be made in a short period of time (Payne, Bettman & Johnson, 1993).

Moral values play an important role in decisions made via the intuitive system. Moral values are a personal assessment about what is right or wrong (Harkness & Hitlin, 2014). What someone thinks is right or wrong depends on the values, norms, and rules that someone thinks is important. Moral values are deeper beliefs that motivate behavior and that can connect social groups (Schein & Gray, 2017). When witnessing a theft this situation can be conflicting with the moral values of the witness. This means that the witness thinks that something like stealing is perceived as morally wrong by that person, and the thief does not think stealing is morally wrong. Moral values consist of norms and feelings (Schein & Gray, 2017). In the situation of the theft, there are conflicting values and in turn emotions e.g. anger or disgust can be experienced.

According to Slovic and Västfjäll (2010) intuitive decisions are influenced by emotions. Emotions are strong motives for behavior and for that it is possible that certain emotions cause intervening or reporting behavior (Haidt, 2003). When something is seen that is perceived as morally wrong by that person, it could evoke feelings of anger, for example. These feelings can

then initiate certain behavior, such as addressing the other person regarding the behavior. Haidt (2003) distinguishes four categories of moral emotions. The first category consists of the other-condemning emotions: contempt, anger, and disgust. Anger involves a motivation for attack or revenge (Haidt, 2003). As argued by Schreurs (in press.), people who experience anger are more likely to take action. In case of witnessing a crime, it is likely that intervention takes place when someone experiences anger. Disgust results in a motivation to avoid the situation or a person (Haidt, 2003). This means that no intervention will take place and probably no reporting behavior as well, because there is total avoidance of the situation. The second category consists of self-conscious emotions: shame, embarrassment, and guilt (Haidt, 2003). These emotions seem designed to help people fit into groups without provoking contempt, anger and disgust from others (Haidt, 2003). Shame and embarrassment cause people to hide or remove from a situation. This makes movement and speech less likely (Haidt, 2003). In case of a crime, it is likely that no intervening behavior or reporting behavior would occur when someone feels embarrassed. The third category consists of other suffering emotions (Haidt, 2003). The most important one is sympathy, this causes compassion for someone else. The last category consists of other praising emotions (Haidt, 2003). An example of this is gratitude that functions as a moral motive to behave more prosocially. In particular, the moral emotions that cause approaching behavior e.g. anger or receding behavior e.g. fear seem to be important when a criminal act is observed (Schreurs, in press.).

When a crime takes place, the desirable behavior in the situation is to do something to help the police. In order to ensure that action is taken or that a report is made, there must be a feeling of being able to do something in the situation. This feeling of being able to carry out certain behavior is known as self-efficacy. Self-efficacy refers to an ability to change the surrounding social environment (Gecas & Schwalbe, 1983; Maddux & Gosselin, 2003; Owens, 1993; Rosenberg, Schooler, Schoenbach & Rosenberg, 1995). Someone with high self-efficacy is more likely to believe of being able to carry out certain behavior than those with low self-efficacy. In the case of a crime, someone with high self-efficacy is more likely to take action or take protective measures than someone with low self-efficacy. In that case intervening behavior or reporting behavior is more likely to occur when someone has a high feeling of self-efficacy.

Intervening and reporting are possibly influenced by someone's social identity. Identification with a social group is an important factor for identity. Everyone believes that their

own group (e.g. nation or religion) are better than others (so called outgroup). The social identity theory (Tajfel & Turner, 2004) states that this so called ingroup favoritism strengthens the self-esteem. Threats to the self-esteem (e.g. when an ingroup football team loses a game) heightens the need for ingroup favoritism (Kassin, Fein & Markus, 2014). Achievements of the group (e.g. when an ingroup football team wins a game) makes the identity stronger. When an ingroup member does something that the group sees as morally reprehensible the judgement is more extreme than when the same situation would occur with an outgroup member (Marques, Yzerbyt & Leyens, 1988). This black sheep effect is due to the relevance that ingroup members behavior has, as compared to the behavior of an outgroup member for someone's social identity (Zubieta & Liporace, 2015). When someone sees an ingroup member stealing something, that person is likely to be punished more heavily by the ingroup than when an outgroup member steals something. Previous studies (Scheepers & Ellemers, 2005; Ethier & Deaux, 1994) show that when an ingroup member does something that is seen as morally wrong (e.g. stealing something), this person is avoided because identification with this member no longer occurs. This person is no longer member of the ingroup. The behavior is being ignored so that there is no damage to the self-esteem. It is likely that in the case of a theft no intervening or reporting behavior occurs.

Present study

This research aims to examine the relation between witnessing a fraud and reporting/intervening behavior, and to what extent this is influenced by moral emotions, moral values, self-efficacy and threat to the social identity. This is an explorative research with factors known to be influential on reporting and intervening behavior. The expectation is that approaching moral emotions (e.g. anger) cause intervening behavior or reporting behavior. Moral emotions such as shame provide for avoiding behavior and make intervention or reporting less likely. If something goes against the moral values, it is expected that intervening or reporting behavior will take place. Someone with low self-efficacy will probably not intervene or report in the case of witnessing a crime. On the other hand, someone with a high self-efficacy will probably intervene or report because of the feeling of being able to do something in the situation. Threats to social identity ensure that identification with the ingroup member no longer takes place when someone was highly

identified with the other person e.g. thief. The behavior of this member is ignored so that person is no longer an ingroup member and therefore it is expected that no intervening or reporting behavior occurs when someone feels strongly socially identified with the other person.

Method

Participants and design

The study was a between-subjects design. Participants were collected via convenience sampling. A total of 51 university students participated in a lab experiment that also consisted a survey. The experiment and survey were in English. Some of the questions were translated from Dutch survey's. Mean ages was 20 years (range 17-26), 46.9% of the participants was male and 53.1% female. 48.9% had a Dutch nationality, 22.4% had a German nationality and 28.7% had a different nationality. Participants could win a camera and all participants where 0.5 sona credits granted. The study was approved by the institutional ethical committee and all participants gave informed consent before the study.

Procedure

The participants were asked to participate in an experiment about social identity. The experiment was staged and after the experiment was done this is communicated with the participants. Three people were involved in the study. The researcher, a participant and a confederate (who pretended to be a participant but in reality, was an actor). The participant entered a control room with a computer (where the participant could see that the experiment room was being filmed) and a box. The participant then received the explanation that the experimenter was doing two experiments at the same time but for this experiment the two parts are done at the same day and for the other experiment the second part is the next day. The participant then made the first online questionnaire about identity in the experiment room and after finishing the questionnaire, a crossword puzzle should be made in order to get a chance on winning an underwater action camera. The person who fills in the puzzle the best across the two experiments would win the camera. Participants were told that using a mobile phone was forbidden and when the participant was done the puzzle should be put in the box in the control room. When the participant was done

and comes back in the control room to put the puzzle in the box a confederate (as the next participant) comes in the control room, gets the same explanation and makes the puzzle in the experiment room. The experimenter then explained the participant that she will explain the second part of the experiment but first must go to the bathroom really bad. The experimenter asked the participant if he/she could keep an eye on the monitor to see if the other participant (confederate) does not use a mobile phone. Next there were two conditions. Every participant was randomly assigned to one of the two conditions. In the first condition the confederate used the mobile phone for ten seconds and in the second condition the confederate used the mobile phone for three minutes. After a few minutes the confederate returned to the control room and again there were two conditions. In the first condition the confederate explained that it was really hard, so she needed to look up one word and puts a half filled in puzzle in the box. In the second condition the confederate explained that it was really hard, so she looked it all up on google and puts a fully filled in puzzle in the box. After that the confederate left the room because her second part is tomorrow. Next the experimenter came back and thanked the participant for watching the monitor and asked if everything went well when she was away. Here the participants had the opportunity to inform the researcher about the fraudulent behavior of the confederate. After that the experimenter told that the experiment was staged but explanation of the actual goal was told after the second questionnaire. The participant then made the second questionnaire about moral emotions, self-efficacy etc. regarding the situation of the confederate using the mobile phone. After that, a complete explanation was provided and a debrief form was handed to the participant. Finally, the participant was thanked for participation.

Measures

Questionnaire were submitted in the appendices. Some questions were used as distraction and therefore not further analyzed. There were two behavioral checks to make sure that the participant saw the confederate using the mobile phone. These were: ‘Did you see the other participant using a mobile phone while filling in the puzzle?’ and ‘How long did you see the participant using the mobile phone?’.

The moral values were measured with the questionnaire of Steg, Perlaviciute, Van der Werff and Lurvink (2014). Only the egoistic values (e.g. authority) and altruistic values (e.g. equality) have been measured by indicating on a seven-point Likert scale to what extent the value

was important to the participant (1= totally not important, 7= really important). A factor analysis was conducted to see if there were two factors just as the literature indicated (Steg, Perlaviute, Van der Werff & Lurvink, 2014). Analysis showed four factors with an eigenvalue above 1. The first factor consisted of social power and authority. This factor was labelled as egoistic values ($\alpha = .64$, $\lambda^2 = .64$, $EV = 1.60$, $h^2 = 17,8\%$). The second factor consisted of equality, the world at peace, social justice and helpful. This factor was labelled as altruistic values ($\alpha = .78$, $\lambda^2 = .78$, $EV = 2.50$, $h^2 = 27,8\%$). Two of the other three values loaded on their own factor and the last value loaded on none of the factors. These three values were omitted.

Moral emotions that were measured are anger, disgust, contempt, shame, embarrassment, guilt, compassion, gratitude, awe, fear, pride and schadenfreude (Haidt, 2003). Participants were asked to what extent they felt these emotions during the experiment on a seven-point Likert scale (1= not at all during the experiment, 7 = all the time during the experiment). Factor analysis with moral emotions showed a different outcome than the classification of Haidt (2003). It showed four factors with an eigenvalue above 1. Varimax rotation gave two factors that consisted of multiple items and two factors that were self-contained. The first factor was labeled as Negative emotions (anger, disgust, shame, embarrassment, guilt and fear, ($\alpha = .88$, $\lambda^2 = .89$, $EV = 3.96$, $h^2 = 33,0\%$)). Second factor was labeled as positive emotions (compassion, gratitude, awe and pride, ($\alpha = .79$, $\lambda^2 = .79$, $EV = 2.50$, $h^2 = 20,8\%$)). Remaining factors contempt and schadenfreude were omitted in analysis.

Self-efficacy was measured by asking participants to what extent they agreed with the statements on a seven-point Likert scale (1= totally disagree, 7= totally agree). The statements were about feeling able to intervene or report to the researcher about the behavior of the confederate. E.g. "I thought I was able to inform the researcher that the other participant was using a mobile phone". Factor analysis showed that self-efficacy consisted of two separate factors that can be labeled as self-efficacy reporting ($\alpha = .82$, $\lambda^2 = .82$, $EV = 1.81$, $h^2 = 36,2\%$) and self-efficacy intervening ($\alpha = .76$, $\lambda^2 = .76$, $EV = 1.98$, $h^2 = 39,6\%$).

Threat to the social identity was measured by asking participants to what extent they agreed with the statements e.g. "I cared about how the participant would react to what I said to her" on a seven-point Likert scale (1= totally disagree, 7= totally agree). Factor analysis showed that it consisted out of one overall factor ($\alpha = .74$, $\lambda^2 = .74$, $EV = 2.34$, $h^2 = 58,4\%$).

Results

Descriptive statistics

Two participants were excluded from analysis because their experiment had failed. These two experiments failed because the participants already realized that it was staged and left the control room to find the experimenter. Because of that condition one was assigned more 53.1% than condition two 46.9%. Data from 49 participants was analyzed and 89.8% of the participants has seen the confederate using the mobile phone. Condition and how long the participants had seen the mobile phone use are shown in table 1. 73.1% from the participants in condition one saw the confederate using the mobile phone for half a minute or less. In condition two, 60.1% of the participants saw the confederate using the mobile phone for the duration of three or more minutes. 12.2% of the participants intervened during the experiment and 38.8% made a report to the experimenter during the experiment about the mobile phone use. Further analyzes were only done with reporting behavior and not with intervening behavior because of the limited number of participants that intervened during the experiment. 69.4% disproves the behavior of the confederate and 22.4% is neutral about it. Not all participants considered the experiment realistic. 36.7% found the experiment not very realistic, 22.4% were neutral about it and 38.8% found the experiment realistic. Analysis were conducted with and without the participants that found the experiment not realistic. G*Power analysis showed 17.5% power because of the low number of participants compared to the measured constructs. According to the literature (Lenth, 2001) a power of 80% or more was needed to find a mean effect. 80% power would mean 170 participants in this study.

Table 1. Time that the participants saw the mobile phone use per condition

Time	Condition 1	Condition 2
Few seconds	5	4
Half a minute	14	4
3 minutes	2	5
5 minutes	1	8
10 minutes	0	1
Did not see the mobile phone use	4	1

Correlations

Correlations, means and standard deviations between all variables are shown on the next page in table 2. The Pearson R correlation showed a negative relation between reporting and self-efficacy reporting ($r = -.42, p < .01$) and between intervening and self-efficacy intervening ($r = -.57, p < .01$). Negative relationships mean that higher values on one variable (reporting or intervening) go together with lower values on the other (self-efficacy). Furthermore, there was a positive relation between self-efficacy reporting and self-efficacy intervening ($r = .33, p < .05$), this means that a higher score on feeling able to report, means a higher score on feeling able to intervene. There was a positive relationship between negative emotions and self-efficacy reporting ($r = .29, p < .05$), this means that a higher score on feeling able to report also means a higher score on negative emotions. Positive emotions showed a positive relationship with self-efficacy intervening ($r = .32, p < .05$), this means that a higher score on feeling able to intervene also means a higher score on positive emotions. Positive and negative emotions showed a positive relationship ($r = .43, p < .01$), this means that a higher score on positive emotions means a higher score on negative emotions.

Table 2. Correlations between all variables

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Reporting	1.61	0.49	-								
2. Intervening	1.88	0.33	.21	-							
3. Self-efficacy reporting	8.53	4.34	-.42**	.00	-						
4. Self-efficacy intervening	10.35	5.54	-.09	-.57**	.33*	-					
5. Negative emotions	11.27	7.08	.05	.01	.29*	.25	-				
6. Positive emotions	7.82	4.24	.02	-.22	.11	.32*	.43**	-			
7. Egoistic	6.57	2.15	-.20	-.08	.15	-.04	.17	.26	-		
8. Altruistic	23.57	3.56	.13	-.05	-.08	-.10	.08	.04	-.27	-	
9. Threat to the social identity	11.98	5.72	.15	.32	-.07	.06	.05	.03	.11	.09	-

Note. * $p < .05$, ** $p < .01$

Regression analysis

Before conducting regression analysis, the Kolmogorov-Smirnov and the Shapiro-Wilk test for normality were done to explore the distribution of the data. Tests showed that the data was not normally distributed. The Mann-Whitney U-test was conducted to compare the two groups (half-filled in puzzle condition dan the full filled in puzzle condition) on the parameters self-efficacy reporting, self-efficacy intervening, negative emotions, positive emotions, threat to the social identity, egoistic values, altruistic values, reporting behavior and intervening behavior. Tests showed no significant differences between the two conditions on the parameters (table 3 for results).

A logistic regression was performed with reporting as dependent variable. Factors were self-efficacy reporting, negative emotions, positive emotions, threat to the social identity. Self-efficacy intervening was not included because reporting was the dependent variable. In table 4 is shown that self-efficacy reporting has a negative influence on reporting behavior. This suggests that feeling able to report does not mean people report more often. The same relationship was found in the correlations. In table 5 is shown the same logistic regression, but participants that found the experiment not realistic or not realistic at all were excluded. No significant differences were found. No regression analysis was conducted with intervening as dependent variable, because of the limited participants that intervened during the experiment.

Table 3. Comparison of condition one and condition two

Variable	Mann-Whitney U	Wilcoxon W	Z	Sig
Negative emotions	212.00	563.00	-0.77	.08
Positive emotions	277.00	628.00	-0.45	.66
Self-efficacy reporting	274.00	550.00	-0.51	.61
Self-efficacy intervening	250.50	601.50	-0.98	.33
Threat to the social identity	287.50	563.50	-0.23	.82
Egoistic	208.00	559.00	-1.85	.06
Altruistic	296.50	647.50	-0.50	.96
Reporting	248.00	524.00	-1.21	.23
Intervening	270.00	546.00	-1.02	.31

Table 4. Factors that predict reporting behavior

Variable	B	S.E.	Wald	Df	Sig	Exp (B)
Self-efficacy reporting	-.29	.10	8.61	1	.00	0.75
Negative emotions	.08	.06	1.95	1	.16	1.08
Positive emotions	-.03	.09	0.14	1	.71	0.97
Threat to the social identity	.07	.05	2.09	1	.15	1.07

Table 5. Factors that predict reporting behavior (select cases)

Variable	B	S.E.	Wald	Df	Sig	Exp (B)
Self-efficacy reporting	-.27	.09	8.23	1	.00	0.77
Negative emotions	.07	.06	1.47	1	.23	1.07
Positive emotions	-.01	.09	0.01	1	.94	0.99
Threat to the social identity	.05	.06	0.62	1	.43	1.05

Discussion

This research was a first exploration to get more insight in the influencing factors that possibly predict reporting behavior and intervening behavior. There is no research done before, that used the same factors all together, so this is a new exploration of reporting and intervening behavior. The factors were selected because of the possible influence on behavior that was mentioned in existing literature. The research question was to what extent the factors; moral values, moral emotions, self-efficacy and threat to the social identity, influence reporting behavior and intervening behavior. Results show a significant negative relationship between self-efficacy reporting and reporting behavior. This means that feeling able to report to the experimenter about the fraudulent behavior from the confederate does mean that participants are less likely to actually report to the experimenter. Furthermore, no significant relationships have been found.

Only reporting behavior is discussed here because of the limited participants that intervened during the experiment.

Moral values are addressed in the situation with the confederate but show no significant relationship with another variable. This means that the moral values in this study have not caused the moral emotions. This is not in line with the expectations. Schein and Gray (2017) argued that moral values motivate behavior and activate emotions. Behavior could still be motivated but possibly the participant could not actually perform the behavior or only makes a moral assessment of the wrongness of the behavior of the confederate. Also, is it possible that moral values do not directly influence behavior and therefore show no significant relationship with reporting behavior. Support for this suggestion is given by Bardi and Schwartz (2003) that argue that the relationship between moral values and behavior is influenced by other things (e.g. surroundings and other values that conflict with each other) and therefore there is not a direct relationship.

Participants can feel different emotions at the same time (Haidt, 2003). Results show that participants that experience more negative emotions (e.g. anger), also experience more positive emotions (e.g. compassion). Negative emotions show a significant positive relationship with self-efficacy reporting. This means that participants that have a higher score on feeling able to report also experience more negative emotions than participants with a lower score on self-efficacy reporting. Positive emotions show a significant positive relationship with self-efficacy intervening. This means that participants that have a higher score on feeling able to intervene also experience more positive emotions than participants with a lower score on self-efficacy intervening. So that would mean that positive emotions are more often experienced with intervening and negative emotions more often with reporting. An argument that would support this would be that when reporting something, that person already experienced negative emotions (e.g. fear) and because of the experienced fear did not feel able to intervene, but making a report seems less dangerous to that person. An argument for the positive emotions could be that when intervening, it is more likely that someone experiences emotions like pride because that person would be proud of actually intervening. Therefore, it could be that certain emotions have a relation with certain behavior or feeling able to carry out certain behavior (Haidt, 2003).

When looking at feeling able to report about the fraudulent behavior of the confederate, it is interesting to see that there is a negative relationship between the efficacy and the dependent

variable. This suggests that when feeling able to report it is less likely that this person makes a report to the experimenter. This is the opposite of what was expected. The literature argues that feeling able to carry out certain behavior can initiate that behavior (Gecas & Schwalbe, 1983; Maddux & Gosselin, 2003; Owens, 1993; Rosenberg, Schooler, Schoenbach & Rosenberg, 1995). But that is in contrast with the results that were found in this study. Possibly participants felt able to report but did not because it took too much effort (Sherer & Maddux, 1982). Another possible explanation is that the effect is disturbed by multicollinearity. Strong relationships between variables can cause a less significant influence on the dependent variable (Grewal, Cote & Baumgartner, 2004). This means that the real effect can be weaker than the current results have shown. A third possible reason could be that because the efficacy was measured after the situation with the confederate, the actual act could have had an impact on the questions about efficacy. This would mean that participants that did not report thought they could have made a report and participants that did report still thought that they are not able to make a report but have done it in the situation.

Threat to the social identity seems to have no significant influence on any of the other factors. This could possibly be because the participants did not feel socially connected with the confederate since the confederate is somewhat different in status (e.g. older, master student).

Limitations

This study had some limitations. First of all, the experiment set-up could have been better because almost half of the participant found the experiment not realistic. This had no impact on the results but maybe the effects could be stronger if the experiment was more convincing. A better set-up can be for example by not moving the participant around and by starting with the puzzle and after the confederate left one questionnaire that contains everything that was measured in the two separate questionnaires.

Next, the questions were not all from existing literature and some factors were measured with only a few items. Possibly this could mean that the factor was not measured right, and the effect is not what it could have been. In the future this can be resolved by adding more items that measure the same construct and finding existing items or scales in the literature.

Not all the participants actually saw the confederate using the mobile phone. Most of te

participants that indicated not seeing the mobile phone use, were in the small fraudulent condition. This could be resolved by making the fraudulent behavior last longer so that even if the participant does not look on the monitor the whole time, it is more likely that the behavior is seen.

In this study there were only a few participants that intervened. Therefore, no conclusions can be drawn on this data. In future research, intervening can be made more likely by letting the doors between the rooms open. In this study the participant would have to go through two doors in order to intervene in the situation, and possibly this has prevented participants from intervening.

Besides methodological issues, power analysis showed that there were too few participants to measure all the constructs. Because of limited time, it was not possible to collect more data from more participants. This means that a possible effect could remain hidden. Despite the low power, relations between factors were found. These findings are helpful for further research about the influence of these factors on reporting behavior. To gain a higher power it is possible to add more participants.

Another problem that was mentioned above was multicollinearity. The relationship between the independent variables and the dependent variable can be disrupted due to strong relationship between the independent variables. This is possible because the independent variables have no significant relationship with the dependent variable when analyzed separately. This can be overcome by using tests that are appropriate for data with multicollinearity.

Conclusion and implications

This study showed the influence of self-efficacy, moral values, moral emotions and threat to the social identity on reporting behavior and intervening behavior. Due to the limited participants that intervened there is no hard evidence for relationships between the independent variables and intervening.

A significant negative effect was found between self-efficacy and reporting behavior. Possibly this could be caused by multicollinearity, and that would mean that the real effect is possibly much weaker but still negative or it is caused because the questions about the self-efficacy were measured afterwards.

Negative emotions were found to be more experienced when participants felt able to make a report and positive emotions were found to be more experienced when participants felt able to intervene. This seems logical because emotions like pride make it more likely that someone actually does something in that situation comparing to someone that experiences fear. A person that experiences fear would be more likely to make a report than intervening.

In further research there could be a relation between reporting and intervening with emotions, it is not significant in this study but close to be significant. The relationship between self-efficacy and reporting behavior can be investigated more to see if the same effect would be found in other studies, with a different procedure. It can be said that reporting a crime is done more often than intervening in a crime situation in this study.

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Appendix A: questionnaire pre-test

Q1: informed consent

Q2: In the statements below, we ask you to indicate to what extent are the following values important in your life on a 7-point scale. One means it is not important to you at all and seven means that it is really important to you.

- Equality: equal opportunity for all
- Social power: control over others, dominance
- A world at peace: free of war and conflict
- Wealth: material possessions, money
- Authority: the right to lead or command
- Social justice: correcting injustice, care for the weak
- Influential: having an impact on people and events
- Helpful: working for the welfare of others
- Ambitious: hard-working, aspiring

Q3: In the statements below, we ask you to indicate how important these values are for you on a 7-point scale. One means that it means nothing at all to you and seven means that it means everything to you.

- My popularity with other people
- The ways in which other people react to what I say and do
- My physical appearance: my height, my weight and the shape of my body
- My reputation, what others think of me
- My attractiveness to other people
- My gestures and mannerisms, the impression I make on others
- My social behavior, such as the way I act when meeting people

Q4: In the statements below, indicate the extent to which you agree with the statement on a 7-point scale. One means completely disagree and seven means completely agree.

- I wouldn't use flattery to get a raise or promotion at my job, even if I thought it would succeed.
- If I knew that I could never get caught, I would be willing to steal a million dollars
- Having a lot of money is not especially important to me
- If I want something from someone, I will laugh at that person's worst jokes
- I would never accept a bribe, even if it were very large
- I would get a lot of pleasure from owning expensive luxury goods
- I want people to know that I am an important person of high status
- I wouldn't pretend to like someone just to get that person to do favors for me
- I'd be tempted to use counterfeit money, if I were sure I could get away with it

Demographical questions:

- What is your highest level of education?
- What is your nationality?
- What is your age?
- What is your gender?
- How would you rate your English reading skills?
- What is your sona number?

Appendix B: questionnaire post-test

Q1: Did you see the other participant using a mobile phone while filling in the puzzle? (yes/no)

Q2: How long did you see the participant using the mobile phone?

- About a few seconds
- About halve a minute
- About 3 minutes
- About 5 minutes
- About 10 minutes
- I have not seen that the participant used his mobile phone while filling in the puzzle

Q3: How good or wrong do you think the behavior (using the mobile phone) of the other participant was? (1 = very wrong, 7 = very good)

Q4: You will now see a number of words that reflect different emotions and feelings. For each word, indicate how often you have felt these emotions **during the experiment**. (1= not at all during the experiment, 7 = all the time during the experiment)

- Anger
- Disgust
- Contempt
- Shame
- Embarrassment
- Guilt
- Compassion
- Gratitude
- Awe
- Fear
- Pride
- Schadenfreude

Q5: Indicate the extent to which you agree with the following statements on a 7-point scale.

- I thought I was able to inform the researcher that the other participant was using a mobile phone
- I considered myself able to tell the participant that he was using his mobile
- I considered myself able to stop the participant from using her mobile
- I felt I had the opportunity to inform the researcher
- I felt I had the opportunity to stop the participant from using her mobile

Q6: indicate the extent which you agree with the following statements on a 7-point scale.

- I thought it would take a lot of effort to inform the researcher that the other person used his mobile phone
- I thought it took a lot of effort to say something to the other person about using the mobile phone
- I was hesitant to actually stop the participant from using her mobile
- I was hesitant to actually inform the researcher

Q7: indicate the extent which you agree with the following statements on a 7-point scale.

- I felt socially connected with the other participant
- I cared about how the participant would react to what I said to her
- I was afraid what the other participant would think of me if I said something about using the mobile phone
- I thought about my reputation when deciding whether or not to say something to the participant about using the mobile phone

Q8: did you say something to the other participant about using the mobile phone?

Q9: did you say something to the experimenter about the participant using the mobile phone?

Q10: How realistic did you find the whole situation with the other participant using the phone?

(1= not realistic at all, 5= very realistic)