

THE INFLUENCE OF BYSTANDERS ON FRAUDULENT BEHAVIOR IN PRO-SOCIAL AND
PRO-SELF SITUATIONS

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The Influence of Bystanders on Fraudulent Behavior
in Pro-Social and Pro-Self Situations

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Abstract

Lying is a common problem all over the world and chances are that almost everyone at some point in their life has told a lie. According to the Routine Activity Theory, the presence of a bystander can prevent fraudulent behavior, such as lying, from taking place. This study will examine the effects of bystanders on fraudulent behavior in the form of lying in the form of a 2x2 experimental design; bystanders could either be present or absent and participants could earn a certain amount of money for themselves or a charity, based on their score. Participants were asked to perform a visual cue search task and had the opportunity to lie about their score when the researcher was not in the room. The score on the constructs of the Dark Triad (Machiavellianism, narcissism and psychopathy) and the different conditions were taken as the independent variables, with fraudulent behavior as the dependent variable. Based on the bystander effect, the RAT and the personality dispositions of the Dark Triad, it was expected that participants would not lie in the presence of bystanders (H1). However, when participants scored high on Machiavellianism it was expected that they would lie when it regards an self-interested lie (H2a), while for a high score on narcissism it was expected that they would lie in the presence of bystanders and when it concerns an other-oriented lie (H2b), and with a high score on psychoticism (H2c) they would lie regardless of how many bystanders were present, as long as they could earn money for themselves. Next to this, it was expected that participants with a high score on the Dark Triad would not experience as much shame and guilt when bystanders are present (H3). Unlike the expectations displayed, no significant results have been found. This study has displayed a few trends, but additional research has to be conducted to further investigate these.

Keywords: Bystander effect, Routine Activity Theory, Dark Triad, fraudulent behavior

The Influence of Bystanders on Fraudulent Behavior
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Picture a situation where you find yourself in the middle of a candy shop. You see all of the sweet, tasty, colorful candy around you, and amongst one of the shelves, there lays your very favorite type of candy. It is so popular, it is almost sold out. They do not sell this type of candy anywhere in your area and you are not hesitating to buy it right here, right now. You want to reach for your wallet when you realize you forgot to bring it with you. You think to yourself, if I do not buy the candy right now, someone else definitely will. And you have been longing for that piece of candy for so long. You take a quick look around you; there are three other people in the room with you, including the cashier. Will you put the candy under your coat, taking it with you without paying for it? Or will you leave it there and walk away empty-handed?

This internal dilemma may not be too unfamiliar; in 2015, in the Netherlands alone, 544.100 theft-related crimes were committed, 40.685 of which were shoplifting crimes (Centraal Bureau Statistiek, 2016). The Netherlands take the cake when it comes to shoplifters; it is ranked second on the Global Retail Theft Thermometer (2015) and this costs billions of euros per year (Van Der Ploeg, 2015). There is a striking absence of empirical research conducted on the different aspects of what causes criminal behavior, such as stealing or committing fraud. While there is a notable theory (Routine Activity Theory) on the influence of guardians (or bystanders) that suggests that they impede criminal behavior to take place, further empirical research has to be conducted to find out if other factors might influence the deterring of criminal behavior. That is why this study will try to take a look at the behavior of possible perpetrators, whether they are more or less likely to commit fraud in

the form of lying, in the absence or presence of bystanders, in combination with different types of rewards: for themselves or others.

Fraudulent behavior in the form of lying - which is an act of making an intentionally false statement with the intention to deceive (Azizli et al., 2016), can be categorized in two types of lies. First, low-stakes lies do not involve risk and are common in social interactions and conversations that take place every day. Contrastingly, high-stakes lies involve risk in which the liar can substantially gain or lose something (Azizli et al., 2016). In the latter, the liar has to take the risk with the possibility of loss of reputation. Furthermore, lies can be categorized in self-interested and other-oriented lies. With the former, the egoistic nature of the lie is at its core. People want to get something out of these kinds of lies for themselves, such as personal monetary gain, to protect one's status or position or to gain approval (Burgoon & Buller, 1994). With other-oriented lies, the altruistic side is central to the lie; people tell these lies with the best interest of another in mind. They want to prevent others from feeling hurt or embarrassed (DePaulo et al., 1996), or to benefit others (Erat & Geenzy, 2012). In this study, the focus lies on the social aspect of the environment where the lie takes place. If the person at hand is presented an opportunity where they can lie, the social aspects and consequences of the lie could possibly influence this, based on the nature of the lie.

People behave differently accordingly to how many bystanders are present. There is evidence for this notion to be found in what is called the bystander effect. This effect, as researched by Darley & Latane (1968), plays a vital role in situations of violence, emergency or crime. It states that the more bystanders are present in such a situation, the less likely it is that intervention takes place (Darley & Latane, 1968). Research in the 20th century on the topic of the bystander effect has shown that the presence of passive bystanders reduces the likelihood that individuals will intervene and help a victim in a critical situation (Fischer et al., 2011). Several factors, such as diffusion of responsibility (not taking responsibility for an

action or inaction when others are present), evaluation apprehension (performance that is enhanced or impaired in the presence of others who can approve or disapprove of your actions) and a few others are responsible for this phenomenon. In this study, the focus is shifted to the other side of this phenomenon: the side of the perpetrator. Previous research was mostly focused on why bystanders do not intervene, but there has been little research conducted from the perspective of the perpetrator. The presence or absence of bystanders has been known to have an effect on the behavior of people, but relatively few studies have examined the interaction between the presence of a bystander and the criminal behavior of a possible perpetrator in settings where the profit of a lie is dependent of its nature (do you benefit yourself or someone else of your lie).

Routine Activity Theory

A theory that is of importance when considering crime, bystanders and perpetrators, is the Routine Activity Theory (RAT) of Cohen & Felson (1979) as mentioned above. According to the RAT, three elements need to be present that facilitate a routine activity for criminal behavior to take place. These elements are (1) motivated offenders, (2) suitable targets and (3) the absence of capable guardians against a violation (Cohen & Felson, 1979). An offender should be motivated in order to commit a crime. If this is the case, then there should be a suitable target that is vulnerable and attractive to the offender. The next requirement for criminal behavior to take place is whether the offender is capable of committing a crime (Cohen & Felson, 1979). Lastly, when a capable guardian is absent, crime could take place. The mere presence of a capable guardian can be enough to prevent a crime from taking place; this is called preventive guardianship. The absence of capable guardians, whether these guardians are formal ones, such as police officers, or informal guardians, such as citizens- who are called bystanders- has substantial influence in the behavior of a perpetrator. They could prevent a crime from happening; however, crime is still taking place

every day, even though there may be a guardian present. With any one of these three factors stated above missing, Cohen & Felson (1979) reasoned that the situation suffices enough for a perpetrator to show criminal behavior. Capability is one of the key ingredients, so the mere presence of bystanders who could intervene can reduce the capability of the offender. In this study, the focus of criminal behavior will lie on lying in a setting where people can cheat or commit fraud on a simple task for themselves or for others. Based on the information above, it can be assumed that:

Hypothesis 1: 'People are more likely to show fraudulent behavior, such as lying, in the absence of bystanders, compared to those in the presence of bystanders'

Dark Triad

When considering the first element of the RAT, motivation of an offender is a key element that influences the possibility of crime taking place. Personality traits could be the underlying factors for an offender to be motivated to commit a crime. The personality traits of the Dark Triad (Paulhus & Williams, 2002), which consists of sub-clinical psychopathy, narcissism and Machiavellianism, can be linked to criminal behavior and deception, and can be described as dysfunctional (Paulhus & Williams, 2002). Psychopathy is defined by impulsive behavior, indifference, low anxiety and empathy (Hare, 1985). Machiavellianism is characterized by emotional coldness and manipulateness (Christie & Geis, 1970). Lastly, narcissism is epitomized by feelings of grandiosity, vanity and a sense of entitlement (Raskin & Hall, 1979). Showing criminal behavior, such as fraudulent behavior, can invoke an inner conflict: with lying, there is the possibility to profit off of your lies. But in order to obtain this profit, you will have to behave in a socially non-conforming way. Most people will want to avoid being non-conforming, and will thus evade the inner conflict by not lying (Leung, 1988). According to Steele (1988), they also want congruency between their personal moral values and their behavior. Lack of this accordance will result in feelings of inauthenticity. When

people experience a contravention to their moral standards or personal identity, they are highly motivated to behave in such ways that reaffirm their beliefs that they are authentically good and moral beings (Skitka & Houston, 2001). Constructs of the Dark Triad may have a counteractive influence on these phenomena; individuals who score high on the three constructs may not be too inclined to have this avoidance of conflict and the need for personal and public affirmation of their morality. The bad-natured tendencies of the traits of the Dark Triad have been linked to lying and deception (Azizli et al., 2016). Individuals that score high on Machiavellianism are not only skilled at telling lies, these were often lies that were in benefit of the liar: self-serving lies (Azizli et al., 2016), or self-interested lies. The manipulative nature of someone who scores high on the trait Machiavellianism is naturally associated with deception and lies, whether those lies are at high or low stakes. Based on this, the following hypothesis is formulated:

Hypothesis 2a: 'A three-way interaction effect is expected to take place between fraudulent behavior in the form of lying, a high score on Machiavellianism and the presence of bystanders in the following way:

When it concerns a self-interested lie, bystanders are present, and Machiavellianism is high: fraudulent behavior goes up. When bystanders are present and Machiavellianism is low, fraudulent behavior goes down.

When it concerns an other-oriented lie, bystanders are present and Machiavellianism is high, fraudulent behavior goes down'

Narcissism can be linked to lying in such a way that the lie increases the image of the liar regarding others. Individuals with a high need for impression and self-enhancement are more likely to tell lies in general than individuals who don't have these needs (Azizli et al., 2016). Research by Hardy and Van Vught (2006) has shown that individuals are more inclined to show a certain behavior when this is visible to others. Altruistic individuals receive more

status, are viewed in the most positive light by their peers and gain a better reputation (Hardy & Van Vught, 2006). Based on this, the following hypothesis is formulated:

Hypothesis 2b: 'A three-way interaction effect is expected to take place between fraudulent behavior in the form of lying, a high score on narcissism and the presence of bystanders in the following way:

When it concerns an other-oriented lie, bystanders are present, and narcissism is high: fraudulent behavior goes up. When bystanders are present and narcissism is low, fraudulent behavior goes down.

When it concerns an self-interested lie, bystanders are present and narcissism is high, fraudulent behavior goes down'

Those who score high on psychopathy tend to cheat, lie and deceive for personal gain, both in low and high stake lying (Azizli et al., 2016) because of their impulsive behavior, indifference, low anxiety and empathy (Hare, 1985). Based on this, the following hypothesis is formulated:

Hypothesis 2c: 'A three-way interaction effect is expected to take place between fraudulent behavior in the form of lying, a high score on psychopathy and the presence of bystanders in the following way:

When it concerns a self-interested lie, bystanders are present, and psychopathy is high: fraudulent behavior goes up. When bystanders are absent and psychopathy is high, fraudulent behavior goes up. When bystanders are present and psychopathy is low, fraudulent behavior goes down.

When it concerns an other-oriented lie, bystanders are present and psychopathy is high, fraudulent behavior goes down'

Taken together, the personality traits of the Dark Triad could have substantial influence on possible perpetrators and their behavior, especially in settings where bystanders are either

absent or present. The motivation to lie, based on the nature of the lies, whether they are self-interested or other-oriented, can also be influenced by these character traits.

Guilt and Shame

After doing something that you are not supposed to do (such as committing fraud), guilt and shame are emotions that can be present, especially when social norms are violated. They are both emotions that are self-conscious, and the difference between them lies in their object of evaluation. Shame is more focused on the self, whereas guilt is more focused on the behavior shown in a social context and the evaluation of others. When people experience shame, they feel exposed, diminished and worthless; while with guilt people experience remorse, regret and want to reverse the action (Tangney & Dearing, 2003). According to Montebanocci, Surcinelli, Baldaro, Trombini & Rossi (2004), the unmistakable type of narcissistic person is immune to feelings of guilt, and can be characterized by an absence of feeling ashamed. According to Paulhus and Williams (2002), the personality constructs of the Dark Triad are overlapping, yet distinct constructs. That's why it's likely to assume that:

Hypothesis 3: 'People who score higher than average on all constructs of the Dark Triad will not experience as much shame and guilt when bystanders are present in comparison to those who score lower or average on the Dark Triad.'

Current study

The research question central to this study is: 'To what extent do narcissism, psychoticism and Machiavellianism (constructs of the Dark Triad) influence the tendency (or behavior) of perpetrators to commit fraud in the form of lying, in the presence or absence of bystanders in situations where lies could be beneficial to the self or to others?' This will be tested through an experiment where participants are given a task where money can be earned for themselves or for a charity, representing the self-interested or other-oriented lies. The

optimal environment will be created where participants can easily lie if they want to, and where they have to make the decision themselves whether they want to commit fraud or not.

Method

Participants

A total of one hundred and nineteen individuals (68 female, 51 male; mean age = 22 $SD = 2.80$) voluntarily participated, and were randomly assigned to one of the four conditions of this 2 (bystanders: zero versus three) x 2 (type of lying: self-interested vs. other-oriented) study. The ethical review board (EC) of the faculty of Behavioral, Management and Social Sciences (BMS) of the University of Twente approved of this design, research and study. Prior to completing any questionnaires, participants agreed with an informed consent form, which can be found in the appendix. Participants could decide to withdraw their consent at any moment. At the end of the study, participants were fully debriefed and thanked for their participation. Participants were eligible to win €2.50,- and earn 1 SONA credit.

Procedure

First and second-year students of the Behavioral, Management and Social Sciences faculty of the University of Twente are obliged to participate in research to gain points per study they participated in to pass the first year. The current study was presented on this website where participants could enroll in exchange for SONA credits. Other participants were friends and acquaintances of the researchers and were recruited via social media or face-to-face.

The study took place in three different rented rooms of the university of Twente. In two of the three rooms were windows present; the one remaining room was fully closed off. The participants were asked to come to the indicated room on the time they signed up for, or were invited to. They were told about the aim of this study and the procedure they will face.

They were then seated in front of a laptop and asked to follow the instructions on the screen. The entire study took place in Qualtrics, an online site where questionnaires can be administered. At the very beginning, an informed consent form was presented to them and they were asked to press the 'Next' button if they understood and agreed to all the listed details. Before starting with the experiment, the respondents were furthermore asked to fill in the following surveys: Dark Triad, Self-Efficacy, HEXACO, Social Value Orientation and Locus of Control. When these were filled in, the visual cue search task started. A total of 15 pictures with an irregularity in it were presented to the participant for a couple of seconds. In the beginning, the pictures were respectively shown for five, four, and three seconds. The participants were hereby asked to find the exception and select the answer out of five options that they considered to be the right one.

The visual cue search task was initially tested on 10 participants in a short pilot study, to find the mean score of participants: namely 7 right out of 15 answers. This acted as a baseline for the participants of the current study: they could earn money and double it when they got a score of 8. Finding the exception to the rule in the picture and subsequently, giving the right answer was increasingly demanding. It was deliberately intended to make the participants score low on this task, and as a result increase their motivation to lie about their score when they were asked afterwards what their score was. The researcher told the participants that the program may not work properly yet and therefore may not save their score. They were therefore asked to keep track of their score. At the end of the task, a self-made 'error' was included in the task. It was tried to make the respondent feel as if the program does not properly save the score to further facilitate the respondent to lie.

When the participant was almost done with filling in the first questionnaires, the researcher left the room on the pretext of picking something up. Meanwhile, another person entered the room that is also part of the research team, pretending to just have participated in

the same study. They explained to come and pick up a forgotten item, which was left in the room. Moreover, they stated that the researcher has not been present in his round as well and that it would have therefore been easy to lie about the achieved score. They then leave with their item, and the participant continues their task. Nearing the end of the experiment, the researcher came back and asked them about their score. The respondents then got the chance to perform fraudulent behavior by lying about their score. There were, however, very few participants who showed the target behavior (8 out of 119). The aspect of fraudulent behavior is being investigated next to the other part of the actual research that is being conducted, namely the influence of bystanders on the behavior of the participants in the different settings of self-interested or other-oriented lies. The respondent is not aware of the real aim of this research to prevent a bias in the results. The fraudulent behavior was being investigated through the task; the participant gave up the score they believed to have had, but at the end of the study, the real score would be shown, thus displaying if the participant had lied or not. Then the researchers would ask the participant if they were honest or if they cheated, which could also be done by going back to a previous exercise. Afterwards, the participant was requested to fill in other questionnaires, which aimed to measure the following constructs: guilt, shame, specific power affordances, pluralistic ignorance and diffusion of responsibility. At completion of these questionnaires, participants were thoroughly debriefed, paid, and thanked for their participation.

Materials

Dark Triad. The constructs of the Dark Triad were measured through a questionnaire consisting of 12 statements. Three constructs were measured, namely Machiavellianism (“I tend to manipulate others to get my way”), psychopathy (“I tend to lack remorse”) and narcissism (“I tend to seek prestige or status”). Participants could indicate agreement on each

statement through a seven-point Likert-type scale (1 = *strongly agree*, 7 = *strongly disagree*) ($M = 4.5$; $SD = 0.79$; Cronbach's Alpha $[\alpha] = .79$).

Additional analysis. Next to the Dark triad, the other researchers measured a few other variables, as part of a research group. The current study will not treat these variables.

Social Value Orientation. The Social Value Orientation Scale (SVO) was administered to the participant, which consists of nine questions where the participant was asked about certain situations that correspond to how much weight a person attaches to the welfare of others in relation to their own. Their choice influences both the number of points they receive and the number of points the other receives. The more points the participant receives for themselves, the better for them, and the more points the other receives, the better for them.

Honesty-Humility of HEXACO-60. After the Dark Triad, the following questionnaire consisting of 10 statements that was measured was the Honesty-Humility ("I think that I am entitled to more respect than the average person is") section of the HEXACO-60 on a seven-point Likert-type scale (1 = *strongly agree*, 7 = *strongly disagree*) ($M = 4.4$; $SD = 0.55$; Cronbach's Alpha $[\alpha] = .57$).

Locus of Control. Then, the locus of control of the participant was measured through a questionnaire consisting of six items, where three items measured the internal locus of control ("What happens to me is my own doing"), and the remaining three measured the external locus of control ("Sometimes I feel that I don't have enough control over the direction my life is taking"). This was appointed on a seven-point Likert-type scale (1 = *strongly agree*, 7 = *strongly disagree*) ($M = 3.8$; $SD = 0.84$; Cronbach's Alpha $[\alpha] = .19$).

Self-Efficacy. Subsequently, the self-efficacy of the participant was measured through a questionnaire consisting of 10 items on a six-point Likert-type scale (1 = *strongly agree*, 6 = *strongly disagree*). An example of an item measured is the following: "I am confident that I

could deal efficiently with unexpected events” ($M = 2.58$; $SD = 0.59$; Cronbach’s Alpha [α] = .87).

Shame, Guilt and Specific Power Affordances. After the visual cue search task was completed, the questionnaire on guilt (“At this moment I have a clean conscience”) ($M = 5.36$; $SD = 1.30$; Cronbach’s Alpha [α] = .79), shame (“At this moment I feel humiliated”) ($M = 5.1$; $SD = 1.05$; Cronbach’s Alpha [α] = .62) and specific power affordances (“Do you think you influence the outcome of things?”) ($M = 3.3$; $SD = 0.85$; Cronbach’s Alpha [α] = .73) was administered through 10 items on a seven-point Likert-type scale.

Diffusion of Responsibility and Pluralistic Ignorance. After the experiment was completed and the questionnaire on guilt and shame was measured, the reveal took place. The participant was shown the following statement: “You may or may not have lied about your score on the previous task. If you have not lied about it, please imagine that you did while answering the following questions.” Then, a short questionnaire consisting of 3 items on diffusion of responsibility and 5 items on pluralistic ignorance was administered to the participant, appointed on a seven-point Likert-type scale (1 = *strongly agree*, 7 = *strongly disagree*). The participant was asked on their opinion of their influence on the university, the supervisor and the researcher; this measures the diffusion of responsibility. An example of an item on pluralistic ignorance was the following: “I think this behavior is acceptable”. (Cronbach’s Alpha [α] = .79). At completion of these questionnaires, participants were thoroughly debriefed, paid, and thanked for their participation.

Results

Bystanders

The expectation was that possible perpetrators would lie in the absence of bystanders. We used binary logistic regression to put this to the test and coded bystander presence [coded

0 for absent and 1 for bystanders present] and the target behavior [0 = not lying, 1= lying]. The model (Table 1) did not prove to contain statistically significant predictive value for lying, X^2 ([7, $N = 119$] $p = .53$) = 0.40. Furthermore, there was no statistically significant effect of bystanders on the possible criminal behavior of the participants, $W(1) = 0.39$, $p = .53$.

Dark Triad

The expectation was that participants who scored higher than average on Machiavellianism would be more likely to lie, in the presence of bystanders, especially when it regards a self-interested lie (H2a). The type of lie was coded into [self-interested lies = 1, other-oriented lies = 0]. A binary logistic regression analysis (Table 2) showed that there was no statistically significant effect of the score on Machiavellianism and the target behavior to occur in the presence of bystanders, X^2 ([7, $N = 120$] $p = .95$) = 2.20. Further, there was no statistically significant effect of the score on Machiavellianism on the tendency to lie in the presence of bystanders when it concerns a self-interested lie, $W(1) = 0.86$, $p = .35$.

Next to this, it was expected that participants who scored higher than average on narcissism would be more likely to lie in the presence of bystanders, when it concerns an other-oriented lie (H2b). A binary logistic regression analysis showed that there was no statistically significant effect of the score on narcissism and the target behavior to occur in the presence of bystanders, X^2 ([7, $N = 120$] $p = .09$) = 12.18. Furthermore, there was no statistically significant effect of the score on narcissism on the tendency to lie in the presence of bystanders when it concerns an other-oriented lie.

Lastly, it was expected that participants who scored higher than average on psychopathy would be more likely to lie, in both absence and presence of bystanders, and especially when it concerns a self-interested lie (H2c). The interaction term on the binary logistic regression showed that there was no statistically significant effect of the score on

psychopathy and the target behavior to occur in the presence of bystanders, $X^2 ([7, N = 120] p = .88) = 3.06$. Furthermore, there was no statistically significant effect of the score of psychopathy on the possible criminal behavior of the participants to take place in either absence or presence of bystanders when it regards a self-interested lie, $W(1) = 0.00, p = .96$.

Shame and Guilt

It was expected that participants who scored higher than average on all constructs of the Dark Triad would not experience as much shame and guilt when bystanders were present in comparison with those who score lower or average on the Dark Triad scale. An ordinary least squares regression was performed for the six permutations for the three quantitative predictors (Machiavellianism, narcissism, psychoticism) with the dependent variables (shame and guilt) (Table 3). There was no statistically significant effect to be found for the Dark Triad on guilt ($p > .20$). For shame, there was no effect found for Machiavellianism and narcissism ($p > .43$), while for psychopathy the effect was marginally significant ($F_{[7/104]} = 1.86, p = .08$). The interaction term between the type of lie and psychopathy was marginally significant ($B = -0.47, SE_B = 0.26, t = -1.81, p = .07$). The direction of the trend (Figure 2) suggests that participants experience fewer feelings of shame in the presence of bystanders, but this effect is stronger for participants who score high on psychopathy when it concerns a self-interested lie.

Additional Analysis

To provide for additional insight in the results, it is valuable to state the portion of participants who had a high score on the various constructs of the Dark Triad. Only 9,2% of the participants had a high mean score (3 or lower out of a possible 7 of the Likert-scale, with 1 being high and 7 being low) on Machiavellianism, and even fewer actually lied. There was a rather large group in comparison with the other constructs of participants who scored high on narcissism: 24% scored 3 or lower out of a possible 7. Only one person scored high on

psychopathy (3 out of a possible 7. When it is shifted to a moderately high-to-high score (4 or lower), then 15.1% of the bystanders have a score between 1 and 4. This is still a very small part of the sample to have a moderately high score, and even then very few participants performed the fraudulent behavior.

Discussion

The aim of this study was to provide additional information to the effect of bystanders on perpetrators: whether they were more or less likely to perform criminal behavior, such as committing fraud in the form of lying, in the absence or presence of bystanders in situations where their lies benefit themselves or others.

It was expected that possible perpetrators would lie in the absence of bystanders, but the results showed that there was no difference to be found between the conditions where there were none versus three bystanders present. This could be explained by the lack of participants who showed the target behavior of lying: only 8 out of 119 participants lied. This can be explained by the sample of participants: most were friends or acquaintances of the researcher: only 36 of 120 were not. This could be a bias, as participants who are befriended, would not want to jeopardize a study of someone they know through lying. During the debriefing, some participants acknowledged this: the thought of cheating did not occur to them, as they wanted to contribute to the study as well as they could to support the researcher. When looking back at the Routine Activity Theory, three elements need to be present that facilitate a routine activity for criminal behavior to take place. These elements are (1) motivated offenders, (2) suitable targets and (3) the absence of capable guardians against a violation (Cohen & Felson, 1979). It could be argued that the befriended participants may not have lied because they might not have considered the researchers as a possible victim, as they were their friends. Next to this phenomenon, the sample was not representative of the society;

almost all of the participants were highly educated and studying at the university of Twente or at the school of applied sciences, Saxion, while in the Netherlands, only 30% of people between ages 15 and 75 have this type of higher education. People with a higher education could be less inclined toward risk and could be more patient (Hjalmarsson & Lochner, 2012), which could influence their decision-making towards this situation where they could easily commit fraud.

Next to this, it was expected that participants who scored higher than average on Machiavellianism would be more likely to lie, in the presence of bystanders, especially when they would get something out of it, but the results showed that there was no effect. Again, there were very few people who lied and simultaneously scored high on Machiavellianism. This could explain why there was no effect to be found on the construct and whether those who scored high on Machiavellianism actually lied.

Next to this, it was expected that participants who scored higher than average on narcissism would be more likely to lie in the presence of bystanders, when it concerns an other-oriented lie, but the results showed no effects. There was a rather large group in comparison with the other constructs of participants who scored high on narcissism, but it is not clear why they were not interested in lying and possibly improving their status amongst their peers, which is what was expected based on Azizli et al. (2016). A possible explanation for this could be the earlier mentioned high ratio of participants who were friends with the researcher, and valued their status towards their friend higher than the status of themselves towards the bystanders, with whom they do not have any important connections. Next to this, it is also possible that the participants who scored high on narcissism would already feel at the center of attention so a lie that would result in a spectacular score and the appraisal of their peers would be redundant to them. Next to this, the participants were possibly more extrinsically motivated than intrinsically because of the reward they could earn for themselves

or for the charity. The reward may have been too low, as some participants argued. They might not put their reputation on the line for such a small amount of money. Research by Lammers, Stapel & Galinsky (2010) showed that participants were in fact motivated to lie for a ticket in a lottery with other participants for prizes of €100,-, €50,- or €25,-. This might argue that a smaller chance for a bigger amount of money might motivate people more than a direct chance for a small amount of money.

Furthermore, it was expected that participants who scored higher than average on psychopathy would be more likely to lie, in both absence and presence of bystanders, and especially when it concerns a self-interested lie. The results showed that there was no effect to be found, which could be explained by the fact that only one person scored high on psychopathy.

Finally, it was expected that participants who scored higher than average on all constructs of the Dark Triad would not experience as much shame and guilt when bystanders were present. The results showed that there was no effect to be found for all of the constructs on guilt. For shame, however, there was a trend to be found that could argue that based on this trend, participants experience fewer feelings of shame in the presence of bystanders, but this effect is stronger for participants who score high on psychoticism when it concerns a self-interested lie. This could be traced back to the impulsive behavior, indifference, low anxiety and empathy that are typical for someone with psychopathic traits (Hare, 1985). Because of these traits, the psychopath would not feel ashamed, as shame is a feeling that people will get in a social setting; when they are unmasked as a liar, for example. Participants who scored high on psychopathy would not experience this as much because of their indifference and low anxiety and empathy. This trend could possibly appear more clearly with a different data set where more participants would have lied and the set would be more representative to society.

Based on this study, it can not be stated whether bystanders have any influence on possible perpetrators or if any of the constructs of the Dark Triad have influence on the possible fraudulent behavior in the form of lying, or if the nature of the lie (whether you lie for yourself or for someone else) influences the behavior of people. It is still not clear whether this is because of the lack of participants who lied, the lack of the right high scores on the different constructs of the Dark Triad, or the improper representation of the sample to the population, or even that there is no effect of bystanders on possible perpetrators, in combination with the constructs of the Dark Triad and the type of lie. However, there were some strong points of this study. This study is the first one to view the bystander effect from the perspective of the perpetrator in combination with the constructs of the Dark Triad and the social situation in which the lie takes place. It provides a new perspective and approach to the already existing literature on the effect of bystanders. Next to this, this study was conducted through an experiment based on true behavior of participants, which is stronger than a vignette study, because the participants have to immerse themselves in a true situation, as opposed to a vignette study. Finally, the number of participants were sufficient for a small study as this one; the participants were all motivated to participate in this study, and every time the research was conducted, it was done meticulously by four people who were all very much involved and knew what to do in what role they were assigned to.

For future research, the sample needs to be more representative of the population. Next to this, there have to be fewer participants who are already familiar with the researchers or with psychological experiments in general. This could help with the diminishing of a bias that is now present within this study. When the bias would be as small as possible with a better sample, the results could be a lot more meaningful. Fraudulent behavior, such as lying, is relevant in all parts of the world, and for the foreseeable future it will stay this way. That is why it is of importance that more research will be conducted on the bystander effect from the

perspective of possible perpetrators and that more knowledge about these effects will become apparent.

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References

- Azizli, N., Atkinson, B. E., Baughman, H. M., Chin, K., Vernon, P. A., Harris, E., & Veselka, L. (2016). Lies and crimes: Dark Triad, misconduct, and high-stakes deception. *Personality and Individual Differences*, 89, 34-39.
- Burgoon, J. K., & Buller, D. B. (1994). Interpersonal deception: III. Effects of deceit on perceived communication and nonverbal behavior dynamics. *Journal of Nonverbal Behavior*, 18, 155–184. <http://dx.doi.org/10.1007/BF02170076>
- Centraal Bureau Statistiek (2016). *Geregistreerde diefstallen; regio indeling 2016 (2005-2015)*. [Supplemental material]. Retrieved from <http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLNL&PA=83362NED&LA=NL>
- Christie, R., & Geis, F. (1970). Scale construction. *Studies in machiavellianism*, 10-34.
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American sociological review*, 588-608.
- Darley, J. M., & Latane, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of personality and social psychology*, 8(4), 377-383.
- Fischer, P., Krueger, J. I., Greitemeyer, T., Vogrincic, C., Kastenmüller, A., Frey, D., ... &

- Kainbacher, M. (2011). The bystander-effect: a meta-analytic review on bystander intervention in dangerous and non-dangerous emergencies. *Psychological bulletin*, 137(4), 517.
- Forsyth, D.R. (2013). *Group dynamics* (6th ed.). Belmont, CA: Cengage Learning.
- Groot, C. M. E., De Hoop, T., Houkes, A., & Sikkel, D. (2007). De kosten van criminaliteit: Een onderzoek naar de kosten van criminaliteit voor tien verschillende delicttypen. *SEO-rapport*.
- Hardy, C. & Van Vugt, M. (2006). Nice guys finish first: The competitive altruism hypothesis. *Personality and Social Psychology Bulletin*, 32,1402-1413
- Hare, R. D. (1985). Comparison of procedures for the assessment of psychopathy. *Journal of Consulting and Clinical Psychology*, 53(1), 7.
- Hjalmarsson, R., & Lochner, L. (2012). The impact of education on crime: international evidence. *DICE Report*, 10(2), 49.
- Lammers, J., Stapel, D. A., & Galinsky, A. D. (2010). Power increases hypocrisy: Moralizing in reasoning, immorality in behavior. *Psychological Science*, 21(5), 737-744.
- Leung, K. (1988). Some determinants of conflict avoidance. *Journal of Cross-Cultural Psychology*, 19(1), 125-136.
- Lupoli, M. J., Jampol, L., & Oveis, C. (2017, May 11). Lying Because We Care: Compassion Increases Prosocial Lying. *Journal of Experimental Psychology: General*. Advance online publication. <http://dx.doi.org/10.1037/xge0000315>
- Montebarocci, O., Surcinelli, P., Baldaro, B., Trombini, E., & Rossi, N. (2004). Narcissism versus proneness to shame and guilt. *Psychological reports*, 94(3), 883-887.
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of research in personality*, 36(6), 556-563.

- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological reports*.
- Skitka, L. J., & Houston, D. A. (2001). When due process is of no consequence: Moral mandates and presumed defendant guilt or innocence. *Social Justice Research*, 14(3), 305-326.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. *Advances in experimental social psychology*, 21, 261-302.
- Tangney, J. P., & Dearing, R. L. (2003). Shame and guilt. *Guilford Press*.
- Van der Ploeg, J. (2015, November 5). Nergens ter wereld stelen winkeldieven meer dan in Nederland. *Volkskrant*. Retrieved from <http://www.volkskrant.nl/economie/nergens-ter-wereld-stelen-winkeldieven-meer-dan-in-nederland~a4178498>

Appendices



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Dear participant,
Before starting the study, we would like you to read the following form, and if you agree, please continue.

I declare in a manner obvious to me, to be informed about the nature, method, target and [if present] the risks and load of the investigation.

I know that the data and results of the study will only be published anonymously and confidentially to third parties. My questions have been answered satisfactorily.

I voluntarily agree to take part in this study. While I reserve the right to terminate my participation in this study without giving a reason at any time.

☐ I have read the text above and I agree

<< >>


Survey Powered By  Qualtrics

Figure 1. The informed consent form participants filled in

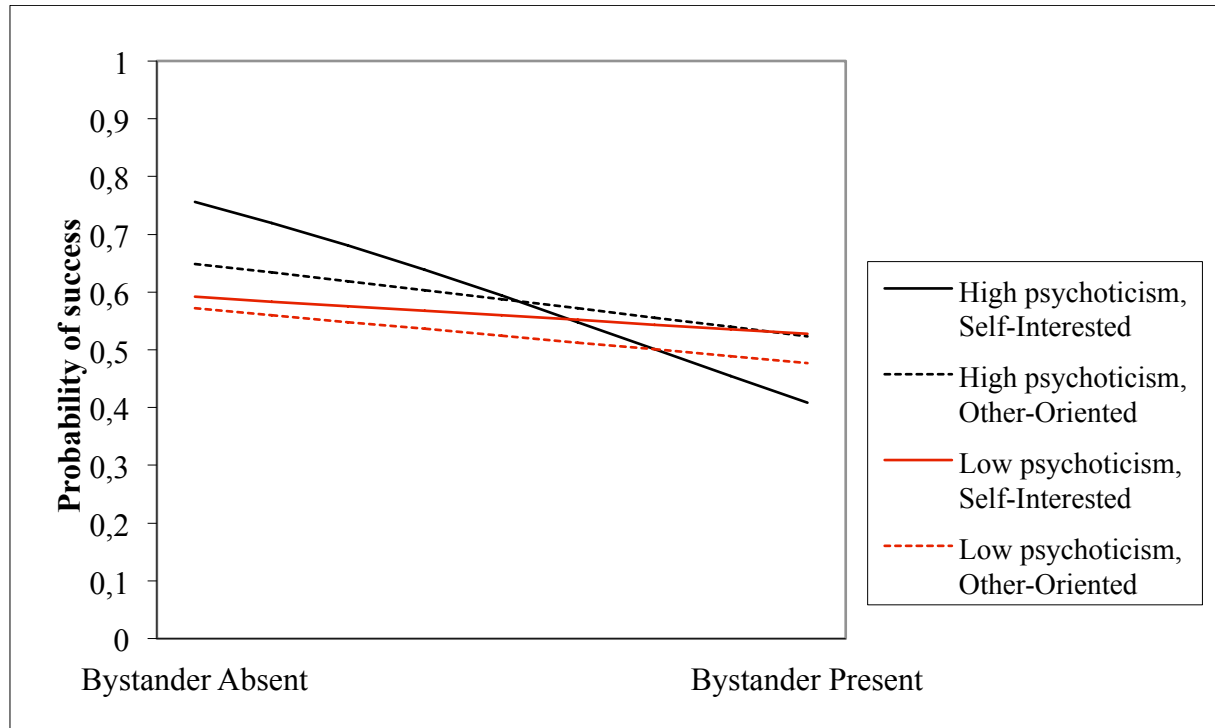


Figure 2. Three-way interaction visualized on the dependent variable of shame

Table 1

Main effects of presence of bystanders on possible perpetrators

	B	SE _B	W	df	p	Odds ratio
Bystanders	-0.47	0.76	0.39	1	.53	0.62
	X ²	df	p	NK R ²		
	0.40	1	.53	.01		

Table 2*The effects of scores of the Dark Triad on lying (self-interested or other-oriented lies) in absence of presence of bystanders*

	Dark Triad: Machiavellianism						Dark Triad: Narcissism						Dark Triad: Psychoticism					
	B	SE _B	W	df	p	Odds ratio	B	SE _B	W	df	p	Odds ratio	B	SE _B	W	df	p	Odds ratio
Bystanders	0.19	1.09	0.03	1	.86	1.21	-2.10	3.12	0.45	1	.50	0.12	-0.33	1.36	0.06	1	.81	0.72
Type of lie (self vs. other)	0.52	1.03	0.25	1	.61	1.68	0.49	0.97	0.25	1	.61	1.63	0.56	1.01	0.31	1	.58	1.76
Dark Triad	0.24	0.73	0.11	1	.74	1.27	-0.24	0.67	0.13	1	.72	0.79	0.28	0.87	0.10	1	.75	1.32
Bystanders X Type	-1.44	1.77	0.66	1	.42	0.24	-105.78	11460.85	0.00	1	.99	0.00	-0.80	1.84	0.19	1	.66	0.45
Bystanders X Dark Triad	-0.25	1.04	0.06	1	.81	0.77	4.00	3.20	1.56	1	.21	54.64	0.74	1.30	0.32	1	.57	2.09
Type X Dark Triad	-0.52	0.94	0.30	1	.58	0.60	-0.01	0.96	0.00	1	.99	0.99	-0.54	1.03	0.28	1	.60	0.58
Bystanders X Type X Dark Triad	1.65	1.79	0.86	1	.35	5.23	-64.77	6356.02	0.00	1	.99	0.00	0.09	1.86	0.00	1	.96	1.10
	X ²	df	p	NK R ²			X ²	df	p	NK R ²			X ²	df	p	NK R ²		
	2.20	7	.95	.05			12.18	7	.09	.26			3.06	7	.88	.26		

Table 3*Guilt explained by scores of the Dark Triad in conditions of the self-interested or other-oriented lies*

Guilt	Dark Triad: Machiavellianism				Dark Triad: Narcissism				Dark Triad: Psychoticism			
	B	SE _B	t	p	B	SE _B	t	p	B	SE _B	t	P
Bystanders	0.07	0.34	0.22	.83	0.03	0.34	0.08	.94	0.14	0.34	0.42	.68
Type of lie (self vs. other)	0.32	0.34	0.94	.35	0.18	0.34	0.54	.59	0.27	0.33	0.81	.42
Dark Triad	0.25	0.22	1.12	.26	-0.09	0.27	-0.35	.73	0.34	0.20	1.74	.09
Bystanders X Type	0.24	0.49	0.49	.63	0.38	0.49	0.77	.44	0.24	0.48	0.50	.62
Bystanders X Dark Triad	-0.10	0.33	-0.29	.77	0.20	0.36	0.55	.58	-0.16	0.34	-0.47	.64

Table 4*Shame explained by scores of the Dark Triad in conditions of the self-interested or other-oriented lies*

Shame	Dark Triad: Machiavellianism				Dark Triad: Narcissism				Dark Triad: Psychoticism			
	B	SE _B	t	p	B	SE _B	t	p	B	SE _B	t	P
Bystanders	-0.15	0.28	-0.53	.60	-0.19	0.28	-0.67	.51	-0.13	0.27	-0.47	.64
Type of lie (self vs. other)	0.30	0.28	1.06	.29	0.29	0.27	1.04	.30	0.29	0.27	1.08	.28
Dark Triad	0.18	0.19	0.96	.34	0.11	0.22	0.51	.61	0.15	0.16	0.94	.35
Bystanders X Type	-0.10	0.40	-0.25	.80	-0.07	0.40	-0.18	.85	-0.08	0.38	-0.20	.84
Bystanders X Dark Triad	-0.20	0.28	-0.71	.48	0.06	0.29	0.19	.85	0.08	0.27	0.28	.78
Type X Dark Triad	-0.22	0.27	-0.83	.41	0.16	0.28	0.57	.57	-0.47	0.26	-1.81	.07
Bystanders X Type X Dark Triad	0.06	0.41	0.13	.89	-0.55	0.41	-1.34	.18	0.73	0.40	1.85	.07
	R ²	F	Dfs	p	R ²	F	Dfs	p	R ²	F	Dfs	p
	0.04	0.60	7/104	.75	0.06	1.01	7/104	.43	0.11	1.86	7/104	.08