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An experimental study of the association between bystanders, motivation and deceptive behavior

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Abstract

The classic bystander research is focused on the bystander effect, the tendency of people to be less likely to help in the presence of others. In this study, we propose to investigate the association between bystanders and deceptive behavior in addition to two types of motivation and underlying personality traits. We conducted an experiment with a 2x2 design, in which participants could lie about the score of a visual cue search task, whereupon the amount of money they could gain was dependent. They could either earn money for themselves or for a good cause, in the presence or absence of bystanders. Prior to the task certain selected personality traits have been measured. Based on earlier literature we postulated that: First, people are less likely to lie about their score when bystanders are present, than when they are absent (H1). Second, people in the bystander condition are more likely to lie if they are motivated in terms of benefitting others through lying, than for their own enrichment (H2). Third, people who score low on the personality subscales Greed Avoidance and Modesty of the Honesty-Humility dimension of the HEXACO, are more likely to lie if they get motivated to lie for themselves (vs. for others), than people who score high on these subscales (H3). Additionally, we investigated the differences in bystanders and type of motivation for experienced shame, guilt and the performance on the visual cue search task. The results were not statistically significant, which kept us from drawing an accurate conclusion.

Introduction

An experimental study on the association between bystanders, motivation and deceptive behavior

In this study, we want to investigate if bystanders, the type of motivation, in terms of benefitting oneself or the society through the criminal act, and certain personality traits might be associated with criminal behavior. Imagine a person in the following situation: an individual (person A) is shopping with his or her friend (person B). Person B buys expensive items which person A cannot afford. While person B is busy with checking some items, a special item catches person A's attention. What would influence the decision of Person A to break the law and steal the item in this situation? In our study, we will tempt participants to steal by deception (i.e. fraud; deliberately alter information to obtain something valuable without payment) instead of actual theft (i.e. stealing property of a victim), since there is no ethical way for us to initiate them to break the law by stealing something, in an attempt to answer the following questions: If the situational context (e.g. no cameras) enables a person to act deceptively would it be crucial for him or her if other people (i.e. bystanders) are present or absent? Would it make any difference if the person would behave deceptively for somebody else instead of acting deceptively for its own gain? And are particular underlying personality traits associated with the decision to act deceptively? With understanding how the involved concepts explain deceptive behavior, one could possibly prevent some crimes.

Crime, bystanders, motivation, and personality traits

One important theory that has already included the role of bystanders in the attempt to explain criminal behavior is the *Routine Activity Theory* (RAT; Cohen & Felson, 1979). RAT concentrates on the circumstances which facilitate criminal behavior. These circumstances include three key elements; a motivated delinquent (eager to engage in an illegal activity to

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reach a certain goal), a suitable target (object or victim) and the absence of capable guardians (persons or alarm systems, which could possibly thwart the intended crime). If one of the three circumstances is not given, the chance for criminal behavior is reduced. The presence of a suitable target and the absence of capable guardians improves the perceived opportunity to behave criminal, which can lead to an increased motivation of the potential delinquent (Cohen & Felson, 1979; Bratt, 2004).

Bystanders

There is not much empirical knowledge about the link between bystanders and delinquents so far, but the influence that bystanders have on each other is well-investigated and we assume that one of the corresponding theoretical models might also apply to the bystander-delinquent relation. The initial bystander research examined the Bystander Effect, which describes the diminishing tendency of people to help the more people are around and applies to situations where bystanders are real and imagined, as well as to emergency and non-emergency situations where help is needed (Darley & Latané, 1968; Garcia, Weaver, Moskowitz & Darley, 2002; Latané & Darley, 1968; Rendsvig, 2014). Three of the examined underlying psychological processes of the Bystander effect, are *pluralistic ignorance*, *diffusion of responsibility* and *audience inhibition or evaluation apprehension*. (Darley & Latané, 1968; Fischer et al., 2011; Latané & Darley, 1969; Latané & Nida, 1981; Rendsvig, 2014; Thomas, De Freitas, DeScioli, & Pinker, 2016). *Audience inhibition or evaluation apprehension*, implies that even if the bystander feels responsible to intervene, the fear of having misinterpreted the situation or making a mistake during the action, which in turn can lead to a negative judgment of other bystanders, can inhibit the helping behavior (Darley & Latané, 1968; Fischer et al., 2011; Latané & Nida, 1981; Thomas et al., 2016).

Instead of investigating how bystanders influence each other and their helping behavior, we would like to get more information about how they might affect deceptive

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behavior: Referred to the delinquent, there could be a similar effect; the fear of getting caught through misinterpreting the situation or making a mistake during the criminal act could also lead to negative consequences, including as well the judgment from the bystanders as from the society in general and inhibit the criminal behavior. Therefore, one could expect that from the perspective of the potential delinquent, the absence of certain devices, such as cameras, and the presence of less bystanders implies a decreased possibility of negative consequences (i.e. to make a bad impression) if getting caught and an increased chance of getting away with it. The deterrence seems to be relevant for people, who are inclined to act criminal and seems also to inhibit delinquents to confess crimes that already have taken place (Exline, & Baumeister, 2000; Wikström, Tseloni, & Karlis, 2011).

Motivation

However, the presence of bystanders does not imply a certain prevention of criminal acts. Therefore, we want to investigate, additionally to the association between bystanders and potential deceptive behavior, if the motivation to behave deceptive is higher when the results benefit somebody else (e.g. a charitable organization) rather than the individual self.

If the deceptive behavior would be intended to benefit someone other than the delinquent he or she could also be willing to make a good impression by for example donating the stolen goods or surprising someone special to him at the victims (e.g. shop owner) expense. When bystanders influence each other, increased public self-awareness by means of cameras, can reverse the Bystander effect (van Bommel, van Prooijen, Elffers, & Van Lange, 2012). This is attributable to the wish to make a good impression and the more bystanders are present, the greater can be the honor for acting responsive in an emergency situation. We expect this motivation to apply for possible delinquents as well.

People tend to act more altruistic if their behavior affects their reputation, whereby the costs of altruism in terms of time, energy and money are taken to signal the social

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environment one's noble personality (i.e. unselfishness), as well as their access to resources (Costly Signaling Theory; Zahavi, 1975; Zahavi & Zahavi, 1997). The tendency to advertise oneself through altruistic acts can create a competition between people in representing themselves as generous (Competitive Altruism Theory; Hardy & Van Vugt, 2006). Thus, a potential delinquent will be more motivated to behave criminal if the behavior could increase his reputation (e.g. by donating the stolen money). Additionally, prosocial norm violations seem to lead to power affordances (e.g. if the individual breaks the rules to benefit others, it is afforded more power than individuals who follow the rules; van Kleef, Homan, Finkenauer, Blaker & Heerdink, 2012). This assumption is also in accordance with the *Cost-Reward Theory*, which states that an individual acts always in a way that one's benefits exceed the costs (Penner, Dovidio, Piliavin, & Schroeder, 2005).

However, there are also findings that suggest that deceptive behavior can be based on less self-orientated motivations (Gino & Pierce, 2010; van Kleef et al., 2012). The *Robin Hood effect*, the tendency to help individuals from lower-income groups, is based on the feeling of empathy for people with a lower or similar economic status and the feeling of envy towards individuals with a higher economic status, which motivates the deceptive behavior of individuals (Gino & Pierce, 2010). A potential delinquent could, for example, be tempted to commit fraud to help the *poor* in form of earning money for a good cause at the cost of an institution (e.g. private university), which could be perceived as the *rich* party. This effect could be explained by the norm of social responsibility, which can be defined as a general rule of conduct representing the moral standard that one should help others who need the aid, unlike justice and fairness based aid, where others deserve assistance (Berkowitz, & Daniels, 1964).

Personality traits humility and honesty

Related to the question if people are more likely to act deceptive for egoistic reasons or for promoting their social environment, we are interested in personality traits. Certain personality traits are associated with criminal behavior and the HEXACO personality inventory is stated to have the potential in making an important contribution to the prediction of unethical behaviors in different circumstances (Hilbig & Zettler, 2015), including academical fraud and damaging behavior of students (e.g., de Vries, de Vries, & Born, 2011). Low scores on the Honesty-Humility dimension of the HEXACO are related to materialism and a higher probability of illegal, corrupt and damaging activities (Ashton & Lee, 2008; Hilbig & Zettler, 2015; Schwager et al., 2014). We would like to investigate if the Honesty-Humility dimension and the facets Greed-Avoidance and Modesty in particular could be significant in predicting if the underlying motivation for acting criminal is rather egoistic than altruistic.

Present study

Primarily, we are interested in the association between bystanders and a potential delinquent and in how far they affect the decision to either or not behave in an unethical way.

Additionally, we would like to know if the delinquents are more motivated if the deceptive behavior results in benefits for themselves or for others and if personality traits associated with unethical behavior are able to predict the underlying motivation of the potential delinquents.

Consequentially, we came to the following hypotheses; (1) Based on the RAT and the process of audience inhibition we expect the proportion of fraud to be higher if the potential delinquent is unobserved (vs. if bystanders are present), (2) Based on the results of earlier research that people tend to act more altruistic to enhance their reputation, we expect the proportion of fraud in the presence of bystanders to be significant higher in individuals who can benefit others compared to individuals who can benefit themselves, (3) We expect the

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individuals who score low on the facets Greed Avoidance and Modesty of the Honesty-Humility dimension, to engage significantly more in deceptive behavior in the pro-self (vs. prosocial) condition compared to those who score high on those scales.

Method

Participants

A total of 119 individuals, 68 (57.1%) females and 51 (42.9%) males with a mean age of 21.5 ($SD = 2.8$), voluntarily participated and were randomly assigned to one of the four conditions of this 2 (presence vs. absence of bystanders) x 2 (pro-self vs. pro-social type of motivation) study. Requirements for the participation were a minimum age of 18 and the proficiency in English, since the questionnaires were provided in English. The ethical review board (EC) of the faculty of Behavioral, Management and Social Sciences (BMS) of the University of Twente approved of this study. At the end of the study, participants were fully debriefed and thanked for their participation. Participants were eligible to win €2.50 (roughly \$2.70; in American currency) and to earn 1 credit within the online application Sona Systems, which is used to manage test subjects' hours. First and second-year students of the Behavior, Management and Social Science faculty of the University of Twente are obliged to participate in research to gain points per study they participated in to pass. The current study was presented on the website in question. We thereby already recruited a substantial part of the participants. Other participants were friends and acquaintances of the researchers and have been recruited via social media or face-to-face

Procedure and Materials

The study took place in three different rented rooms of the university of Twente. Two of the three rooms had windows, while the remaining room was fully closed off. First, participants

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were told about the aim of this study and the procedure they will face. Subsequently, they were 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. An informed consent form was presented to them and they were asked to press the 'Next' button if they understood and agreed to all of the listed details (Appendix A). Then, the respondents received the Honesty-Humility dimension of the HEXACO and a questionnaire to measure the Locus of Control. The following questionnaires were also administered: Dark Triad, Self-Efficacy and Social Values Orientation.

Afterwards, the participants were asked to complete a visual cue search task. The participants received a total of 15 pictures containing multiples of letters, symbols and numbers (Appendix B) with 1 up to 3 irregularities in them for a few seconds each (1-4: 5 seconds; 5: 4 seconds; 6-15: 3 seconds) and 5 answer options afterwards on a separate page. For each of the 15 pictures, the participants were asked to find the irregularities and to indicate how many irregularities they found and in which row they were located. The visual cue search task was initially tested on 10 participants in a short pilot study, to find the mean score that participants get, namely 7 right out of 15 answers. This acted as a baseline for the true participants: when they score above the baseline score, they can earn money (score 8-10 = 1€; score 10-12 = 2€, score 12-15 = 2.50€) either for themselves or for a charity. Finding the irregularities in the picture and subsequently, giving the right answer was increasingly demanding in terms of time, symbol similarity and number of the symbols. This task was deliberately made difficult so that the participants will 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. Then, at the end of the task, a self-made 'error' was included in the task. It was tried to make

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the respondent feel as if the program does actually not 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. Moments later, another person entered the room that was also part of the research team, pretending to just have participated in the same study. The individual who turned up pretended to be sorry for interrupting and explained that they had to pick up a forgotten item, which was left in the room. Moreover, it stated that the researcher has not been present during their participation as well and that it would have therefore been easy to lie about the achieved score. Then it left with its item, and the participant continued with the task. Nearing the end of the experiment, the researcher came back and asked about the score. The respondents then got the chance to perform deceptive behavior by lying about their score. This is being investigated next to the other part of the actual research that is being conducted, namely the influence of bystanders on the potential deceptive behavior of the participants. The subject is not aware of the real aim of this research to prevent a bias in the results.

Afterwards, the participant received additional questionnaires, which aimed to measure the following constructs: guilt, shame, specific power affordances, pluralistic ignorance and diffusion of responsibility. After the completion of these questionnaires, participants were thoroughly debriefed, paid, and thanked for their participation.

Measurements

Independent

Bystanders

To investigate if the absence or presence of additional individuals in the close proximity of the subject has any influence on the outcome of *deception*, the presence / absence of *bystanders* has been manipulated in the form of the subject being alone in the room during the

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experiment or sitting among two other apparent participants, bystanders respectively. In the bystander condition were 60 (50.4%) participants, whereas in the no bystander condition have been 59 (49.6%) participants.

Type of motivation

To examine if the participants are more prone to lie about their score if they can benefit themselves or if they can benefit others, the beneficiary got manipulated. In other words: the motivation of the subject got manipulated in terms of *pro-self* or *prosocial* to investigate if there is a different outcome for *deception* in the two conditions. In total, 61 (51.3%) of the participants were in the prosocial condition, while 58 (48%) could lie for themselves.

Honesty: HEXACO

The HEXACO measures six major personality dimensions. With the included Honesty-Humility scale, the HEXACO personality inventory provides an improved mean to capture facets of antisocial personality traits (e.g. Sincerity) compared to the well-known BIG 5 personality test and exceeds also its validity (e.g., Ashton & Lee, 2008). In our experimental study, we want to include the Honesty-Humility scale of the shorter version, the HEXACO-60, to get an overview in how far this personality trait, which is known to be related with criminal behavior, is involved (Ashton & Lee, 2009). From the HEXACO-60 personality inventory, the Honesty-Humility scale was received by the subjects in form of a questionnaire consisting of 10 items ($\alpha = .56$) that measured Honesty and Humility on a seven-point Likert-type scale. The four facets Sincerity (3 items, $\alpha = .28$), Fairness (3 items, $\alpha = .58$), Greed Avoidance (2 items, $r = .32, p < .01$) and Modesty (2 items, $r = .35, p < .01$) were included. An example of a Fairness item measured is the following: "If I knew that I could never get caught, I would be willing to steal a million dollars."

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Dependent

Performance

The Performance of the participants on the visual cue search task was measured by the total score of the task. The total score of the participants ranged from 2 to 12 ($M = 7.45$, $SD = 2.41$), with a maximum possible score of 15.

Deception

During the experiment, the subjects face the possibility to lie about their score. In total 9 (7.6%) of the participants did lie about their score, while 110 (92.4%) participants did not lie. In our study, we want to investigate if decision to lie, or to engage in *deception*, is dependent on the presence/ absence of *bystanders* and/or the *type of motivation* (i.e. type of lie). Furthermore, we want to check if there can be found a correlation with the results of the Honesty-Humility dimension of the HEXACO-60.

Shame, guilt and specific power affordances

After the visual cue search task was completed, the questionnaire on guilt and shame was administered through 10 items on a seven-point Likert-type scale: 3 items ($\alpha = .79$) to measure Guilt, e.g. “At this moment, I have a clean conscience”, 3 items ($\alpha = .624$) to measure Shame, e.g. “At this moment, I feel humiliated” and 4 items ($\alpha = .728$) to measure Specific Power Affordance, e.g. “Do you think you influence the outcome of things?”.

Additional constructs within the overall project

In the context of the total project six other questionnaires have been used. By means of the Social Value Orientation Scale (SVO) participants were divided into the three categories *Altruist*, *Egoist*, and *Competitor*. The Dark Triad personality test was used to measure the three personality traits *Machiavellianism* (i.e. a manipulative attitude), *Psychopathy* (i.e. lack of empathy) and *Narcissism* (i.e. excessive self-love). The *Self-efficacy* and the *Locus of Control* have been measured as well. Furthermore, they were given questionnaires to measure

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the psychological processes of *Diffusion of responsibility* and *pluralistic ignorance*. For further information see Appendix C.

Results

The Kolmogorov-Smirnov and Shapiro-Wilko tests were used to determine whether quantitative variables were normally distributed and the categorical demographical data was checked for equal distribution of categories via frequencies.

A binominal logistic regression was conducted to test the first two hypotheses, with *deception (lying, being truthful)* as dependent variable. *Bystanders (presence / absence)* and *type of motivation (social-orientated, self-orientated)* were the independent variables. To test if the proportion of fraud is higher if no bystanders are present (H1) and if the proportion of fraud in the presence of bystanders is significant higher in participants who can benefit others compared to those who can benefit themselves (H2), the associated binary scales of the dependent variable deception (0 = no lie, 1 = lie) as well as the independent variables bystanders (0 = no bystanders, 1 = bystanders) and type of motivation (0 = prosocial, 1 = pro-self) have been coded. Results showed that the model is not statistically significant, $\chi^2(3, N = 119) = 2.28, p = .516, NKR^2 = .046$. Within the model is no main effect found for bystanders, $b = 0.04, SE_b = 1.04, p = .973, CI_{95\%} = [0.14; 7.87]$. Therefore, H1 can be rejected, in other words, having no bystanders does not increase the chance of deception.

Within the model is no main effect found for the type of motivation, $b = 0.84, SE_b = 0.91, p = .354, CI_{95\%} = [0.39; 13.75]$ and no interaction effect for bystanders and type of motivation, $b = -1.54, SE_b = 1.55, p = .321, CI_{95\%} = [0.01; 4.48]$. No interaction effect means that the difference in chance of deception between having bystanders and having no bystanders is not different for personal or society gain focus. Therefore, H2 can be rejected, in

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other words, the presence of bystanders does not increase the chance of deception if the type of motivation is benefitting others.

To test if the proportion of fraud in the pro-self-condition is significantly higher in participants who score lower on Modesty and Greed Avoidance (H3), additional binary logistic regressions were conducted. The total models showed no statistical significance for as well the type of motivation and Modesty as predictors for deception, $\chi^2(2, N = 119) = 0.30, p = .861, NKR^2 = .006$, as for the type of motivation and Greed Avoidance as predictors for deception, $\chi^2(2, N = 119) = 0.29, p = .867, NKR^2 = .006$. Within the models is neither a main effect found for the type of motivation, $b = -0.30, SE_b = 0.60, p = .664; b = -0.33, SE_b = 0.71, p = .642$, nor for Modesty, $b = -0.10, SE_b = 0.29, p = .733$, nor for Greed Avoidance, $b = -0.92, SE_b = 0.29, p = .748$. Additionally, none of the facets did correlate with the type of motivation or deception. Therefore, H3 can be rejected, in other words, the proportion of fraud in the pro-self-condition is not significantly higher in participants who score lower on Modesty and Greed Avoidance. For the facets Fairness and Sincerity the correlation with deception showed similar results (see Table 1).

Table 1
Correlations Among and Descriptive Statistics for the Honesty-Humility facets and Deception in H3

	<i>M (SD)</i>	Dec.	Modest.	Greed Avoid.	Fair.	Sin.
Deception			-.10	-.92	-.32	-.29
Modesty	3.02 (1.22)			.41**	-	.23*
Greed Avoid.	3.44 (1.25)				.08	.18*
Fairness	3.41 (1.20)					.15
Sincerity	3.63 (1.00)					

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

Additional Analyses

For each, guilt and shame, a multivariate two-way ANOVA was used to explore if there were differences in bystanders and type of motivation. The multivariate test hints at a possible difference for bystanders, $F(2,114) = 2.80, p = .065, \eta^2_p = .047$, whereby the presence / absence of bystanders seems to display no statistically significant difference in guilt, $F(1,115) = 0.39, p = .531, \eta^2_p = .003$, though the presence/ absence of bystanders seems to display a trend towards a statistical significant difference in shame, $F(1,115) = 2.78, p = .098, \eta^2_p = .024$. When bystanders were absent the experienced shame was higher ($M = 5.25, SD = .14$) than when bystanders were present ($M = 4.93, SD = .14$).

A univariate ANOVA was conducted for the performance on the visual cue search task to investigate if there were differences in bystanders and type of motivation. The test hints at a possible difference for type of motivation, $F(1, 114) = 3.19, p = .077, \eta^2_p = .027$. When the type of motivation was pro-self, the performance was better ($M = 7.88, SD = 0.31$) than when the type of motivation was pro-social ($M = 7.09, SD = .31$).

Discussion and Conclusion

The present study was aimed to gain insight in the influences of bystanders, the type of motivation and personality traits on deceptive behavior: Based on the RAT and the process of audience inhibition, we expected the proportion of fraud to be significant higher when no bystanders were present (H1). Referring to earlier research about peoples' tendency to act altruistically to enhance the own reputation, we expected the proportion of fraud in the presence of bystanders to be significant higher in individuals who can benefit others compared to individuals who can benefit themselves through lying (H2). Built upon earlier findings, we expected the individuals who score low on the subscales Greed Avoidance and Modesty of the Honesty-Humility dimension, to engage significantly more in unethical

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behavior in the pro-self (vs. prosocial) condition compared to those who score high on those scales (H3). All hypotheses have been rejected.

According to the RAT there should have been decreased lying in the condition, where capable guardians (i.e. bystanders) were present, compared to the condition, in which bystanders were absent (Cohen & Felson, 1979). Although, we had a small overall rate of liars that did not differ in the two bystander conditions. This could be due to the fact, that participants in both conditions felt observed. Since, we used electronic devices for the experiment, participants could even without the presence of real bystanders, have perceived that we did inspect and save their information, including their performance, which they were expected to lie about. Research of the bystander effect shows that imagined bystanders influence people in a similar way than real bystanders and that electronic devices can as well function as guardian (e.g. camera) as lead to public-self-awareness (Choo, & Dehghantaha, 2017; Corcoran, Zahnow, & Higgs, 2016; Garcia et al., 2002; van Bommel et al., 2012).

With regard to the Costly Signaling Theory and the Competitive Altruism Theory we expected people to lie in order to enhance their reputation among the bystanders through spending more money to the good cause. These theories apply only under the premise that others can easily observe the altruistic action (Hardy & Van Vugt, 2006; Zahavi, 1975; Zahavi & Zahavi, 1997). People could have felt observed in both bystander conditions through the experimenter and devices, but could contemporaneously have perceived that none of the bystanders would have knowledge about the costs (i.e. take the risk and lie) the participant would have to donate the money. Additionally, the number of bystanders could have been perceived as too small, to convince the participants that the benefit of an enhanced reputation among the two others exceeds the costs.

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The statistical significance of the results regarding the Honesty-Humility facets, Greed Avoidance and Modesty, in relation to deception in the pro-self-condition could have been insufficient because of methodological limitations, which we will discuss later.

Additional Findings

Beyond the initial hypotheses, we investigated if there were significant differences between the condition means of the bystanders (absent vs. present) and type of motivation (pro-self vs. prosocial) regarding shame, guilt and the performance on the visual cue search task. The results displayed two trends towards statistical significance: First, the experienced shame was higher, when bystanders were absent than when bystanders were present. Second, participants obtained better results on the visual cue search task, when the type of motivation was pro-self than when the type of motivation was pro-social.

The former trend could may be explained by the false consensus effect (i.e. the tendency to overestimate the degree to which others agree with oneself). The presence of bystanders, who did not contradict, could have led to a kind of perceived confirmation, which in turn decreased the painful feeling of having done something dishonorable (Berkowitz, 2003). In other words: people did experience a decreased feeling of shame, because they had the perception of adapting themselves to a given social norm. Furthermore, people tend to overestimate the degree to which others engage in unethical behavior, which they (mis)perceive as normative and makes it easier for them to deny or justify the own unethical behavior (Cooter, Feldman, & Feldman, 2008). Therefore, when no bystanders were present, people had to admit to themselves that their behavior was based on their own decision and independent from others and the experienced shame was higher. Though, we found no similar trend of statistical significance for a difference of bystander presence in guilt. Also, the type of motivation seemed to have no influence on neither shame nor guilt.

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The latter trend, namely that the performance on the visual cue search task seemed to be better when the type of motivation was pro-self, could be explained by the *Cost-Reward Theory* (Penner et al., 2005). The participants could have spent more energy and concentration (i.e. costs), to maximize the amount of money they could earn for themselves (i.e. benefits). The presence of bystanders seemed to have neither a positive effect (i.e. social facilitation) nor a negative effect (i.e. social inhibition) on the participants' performance on the task.

Limitations and Strengths

The lack of significant results could partly be explained by the general small proportion of people (7.6%) who did lie: The provided incentive of 2.50€, to lie either for oneself or others, could have been not great enough to take the risk of being caught in a lie. According to the Cost-Reward theory ones' benefits have to exceed the costs and the expected amount of money could have been perceived as too small for as well the own enrichment as to enhance the reputation or power affordances by benefitting a charity organization (Hardy & Van Vugt, 2006; van Kleef, et al., 2012; Penner et al., 2005). From a more altruistic point of view, the Robin Hood effect may also have not arisen, since the amount of money could have been perceived as too small to make a difference for others in need (Gino and Pierce, 2010).

Related to the third hypothesis the lack of significant results could have several reasons: First, we used only one (10 items) out of the six personality dimensions (60 items) measured by the HEXACO-60, whereby the ten items are in turn distributed into four subscales with a small number of items, which decreased the reliability. Second, the items were received by the participants consecutively and were not embedded in other questions. Thus, the purpose of the questionnaire could have been too obvious and therefore, have led to an enhanced social desirability bias; the tendency to under-report social not desirable characteristics. Third, the participants received the dark triad questionnaire right before the

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Honesty-Humility dimension of the HEXACO, which additionally could have as well enhanced the bias as aroused skepticism towards the following experiment, which in turn could have led to less lying.

Beyond these limitations, the restricted availability of rooms resulted in the usage of five different rooms for the experiment, which differed in their properties. That two of the rooms had windows in the direction of the corridors where people passed by, could have led to a higher perceived number of bystanders. Participants could have an increased feeling of being observed in both cases; when bystanders were present and absent. Therefore, the results could have been biased.

The participants were partly recruited by convenience sampling, where acquaintances and friends of the experimenters were asked to participate. This could have reinforced the social desirability bias and inhibited the participants to lie. Additionally, most of the participants were students, which mean a low disparity rate (i.e. low representativeness) for deceptive behavior. Criminal action is associated with low education and in the United states had about 68% of the state prison inmates no high school diploma (Bureau of Justice Statistics, 2013; Chiras & Crea, 2004). That the majority of the participants was students of the University of Twente could also have contributed to the low proportion of liars, since they participated at a study of their own university: The feeling of responsibility towards the University and the perception to risk their study could have been deterrent. Furthermore, did the great proportion of psychology students lead to an increased suspiciousness regarding the experiment, since they have knowledge about common procedures.

However, apart from the limitations regarding the set-up and the participants, the study had also its strength: First, the controlled environment and the process description makes it simplifies a replication of the study. Second, the experiment in the laboratory environment allowed to adjust certain aspects of the experiment and the planning parameters in the initial

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period to reduce the duration and environmental factors. Furthermore, the four experimenters were able to play each of the three roles and changed between experimenter, bystanders and the former participant, who enters the room when the experimenter leaves it to mention the possibility to lie. The experimenters could shift their roles, dependent on the participants. This alteration could have maintained the trust between participants and the experimenter, especially if the participant was an acquaintance or friend of the experimenter in question. Some of the methodological limitations have led to positive observations: students of the University of Twente seem not to be inclined to deceive their University independent from the type of motivation and even though we have assumed that the incentive was too small for the participants to take the risks of being caught in a lie, it could also be true that they would not be prone to act deceptive, independent from the amount of money they could gain.

Future Research

The underlying concepts are still not investigated enough and deeper insight in the factors that affect the decision of a potential delinquent to behave deceptive could contribute to a better prediction and prevention of deceptive behavior: It would be interesting to investigate how large the amount of money should be in the respective situation to encourage the maximum number of people to behave deceptive. The role of bystanders as deterrence for deceptive behavior, could be examined in terms of gradually decreasing observation or different conditions, whereby the environmental factors should be taken into consideration to prevent biases. Additionally, the differences between the absence and presence of electronic devices should be taken into account, since they could give rise to the perception of being observed. Furthermore, the personality traits Greed Avoidance and Modesty could be measured with the full number of items of the original HEXACO and could be inserted in an unobtrusive questionnaire to get a better chance to analyze the predictive value for prosocial deceptive behavior.

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Appendix A



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



Appendix B



Visual cue search task: find the exception to the rule.

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Find the exception to the rule.

Timing
These page timer metrics will not be displayed to the recipient.
First Click: 0 seconds
Last Click: 0 seconds
Page Submit: 0 seconds
Click Count: 0 clicks



What was the exception to the rule?

- There is a 5 in the first row
- There are two 5 among the 2s
- There is a 5 in the third row
- There is a 2 among the 5s
- There is a 5 in the last row

Appendix C

Social Value Orientation

After the informed consent and the demographic information is the first questionnaire received by the participant was the Social Value Orientation Scale (SVO). This questionnaire consists of 9 questions where the participant is asked about certain situations. The participant has to imagine that they have been randomly paired with another person, whom will be referred to as the “other”. Both the participant and the “Other” will be making choices by selecting either the letter A, B, or C. The choices of the participant will generate points for themselves and Other. Likewise, Other’s choice will produce points for him/her and for the participant. Every point has a value: The more points the participant receives for himself, the better for them, and the more points Other receives, the better for him/her. An example of a question can be found in the appendix. In this example, if the participant chooses A, they would receive 500 points and Other would receive 100 points; if they chose B, they would receive 500 points and Other 500; and if they chose C, they would receive 550 points and Other 300. This illustrates that their choice influences both the number of points they receive and the number of points the other receives.

Dark Triad

The Dark Triad was measured through a questionnaire consisting of 12 items. There are three constructs being measured, namely Machiavellianism, psychopathy and narcissism. Participants could indicate agreement with each item on a 7-point Likert-type scale (from completely disagree to completely agree). An example of an item measured was the following: “I tend to seek prestige or status”.

Self-efficacy

The self-efficacy of the participant was measured by means of a questionnaire consisting of 10 items on a six-point Likert-type scale. An example of an item measured is the following: “I am confident that I could deal efficiently with unexpected events”. After the participant was done with filling in this questionnaire, the visual cue search task took place, as mentioned above.

Locus of Control

The locus of control of the participant was measured through a questionnaire consisting of 6 items ($\alpha = .19$), where 3 items measured the internal locus of control, and the remaining 3 items measured the external locus of control. This was appointed on a seven-point Likert-type scale. An example of an item of external locus of control measured is the following: “Sometimes I feel that I don't have enough control over the direction my life is taking”. An example of one item of internal locus of control is: “What happens to me is my own doing”.

Diffusion of responsibility and pluralistic ignorance

After the experiment was completed and the questionnaire on guilt and shame was measured, the reveal takes place. The participant is 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. The participant was asked on its opinion of its 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”.

Appendix D

A look at performance: Visual cue search tasks

Q61 Participantnummer:

Q152 Sona nummer:

Q153 Conditie:

Q35 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

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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 (1)

Q6 What is your age?

Q7 What is your gender?

- Male (1)
- Female (2)

Q8 What is your nationality?

- Dutch (1)
- German (2)
- Other (3)

Q20 In this set of questions, we ask you to imagine that you have been randomly paired with another person, whom we will refer to simply as the “other”. Other is someone you do not know and that you will not meet in the future. Both you and Other will be making choices by choosing either the letter A, B, or C. Your own choices will produce points for yourself and Other. Likewise, Other’s choice will produce points for him/her and for you. Every point has value: The more points you receive, the better for you, and the more points Other receives, the better for him/her. Here’s an example of how this task works. In this example, if you chose A you would receive 500 points and Other would receive 100 points; if you chose B, you would receive 500 points and Other 500; and if you chose C, you would receive 550 points and Other 300. So, you see that your choice influences both the number of points you receive and the number of points the other receives. Before you begin making choices, keep in mind that there are no right or wrong answers - choose the option that you, for whatever reason, prefer most. Also, remember that the points have no value: The more of them you accumulate, the better for you. Likewise, from the Other’s point of view, the more points s/he accumulates the better for him/her.

- A (1)
- B (2)
- C (3)

Q21

- A (4)
- B (5)
- C (6)

Q22

- A (1)
- B (2)
- C (3)

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Q23

- A (1)
- B (2)
- C (3)

Q24

- A (1)
- B (2)
- C (3)

Q25

- A (1)
- B (2)
- C (3)

Q26

- A (1)
- B (2)
- C (3)

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Q27

- A (1)
- B (2)
- C (3)

Q28

- A (1)
- B (2)
- C (3)

Q29

- A (1)
- B (2)
- C (3)

Q9 Below are a few questions we would like you to answer. Select what answer applies to you the most. Remember, there are no right or wrong answers.

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	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
I tend to manipulate others to get my way (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have used deceit or lied to get my way (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have use flattery to get my way (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to exploit others towards my own end (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to lack remorse (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to not be too concerned with morality or the morality of my actions (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to be callous or insensitive (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to be cynical (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to want others to admire me (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to want others to pay attention to me (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tend to seek prestige or status (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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I tend to expect special favors from others (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Q3 Below are a few questions we would like you to answer. Select what answer applies to you the most. Remember, there are no right or wrong answers.

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	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I knew that I could never get caught, I would be willing to steal a million dollars. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a lot of money is not especially important to me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that I am entitled to more respect than the average person is. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I want something from someone, I will laugh at that person's worst jokes. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would never accept a bribe, even if it were very large. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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<p>I would get a lot of pleasure from owning expensive luxury goods. (7)</p>	○	○	○	○	○	○	○
<p>I want people to know that I am an important person of high status. (8)</p>	○	○	○	○	○	○	○
<p>I wouldn't pretend to like someone just to get that person to do favors for me. (9)</p>	○	○	○	○	○	○	○
<p>I'd be tempted to use counterfeit money, if I were sure I could get away with it. (10)</p>	○	○	○	○	○	○	○

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Q10 Below are a few questions we would like you to answer. Select what answer applies to you the most. Remember, there are no right or wrong answers.

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
In the long run people get the respect they deserve in this world (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfortunately, an individuals worth often passes unrecognized no matter how hard he tries (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What happens to me is my own doing (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes I feel that I don't have enough control over the direction my life is taking (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most misfortunes are the result of lack of ability, ignorance, laziness, or all three (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the long run the bad things that happen to us are balanced by the good ones (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Below are a few questions we would like you to answer. Select what answer applies to you the most. Remember, there are no right or wrong answers.

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	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Somewhat disagree (4)	Disagree (5)	Strongly Disagree (6)
I can always manage to solve difficult problems if I try hard enough (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If someone opposes me, I can find the means and ways to get what I want (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to stick to my aims and accomplish my goals (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I could deal efficiently with unexpected events (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thanks to my resourcefulness, I know how to handle unforeseen situations (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can solve most problems if I invest the necessary effort (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can remain calm when facing difficulties because I can rely on my coping abilities (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am confronted with a problem, I can usually find several solutions (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I am in trouble, I can usually think of a solution (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can usually handle whatever comes my way (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Q157 Visual cue search task: find the exception to the rule.



Q36 Find the exception to the rule.

Q54 What was the exception to the rule?

- There is a 5 in the first row (1)
- There are two 5 among the 2s (2)
- There is a 5 in the third row (3)
- There is a 2 among the 5s (4)
- There is a 5 in the last row (5)

Q5 Find the exception to the rule.

Q36 What was the exception to the rule?

- There is a 5 in the second, third and fourths row (1)
- There is a 5 in the second and the third row and a 7 in the fifths row (2)
- There is a 5 in the second, third and the last row (3)
- There are two 5 among the 2s (4)
- There is a 5 in the second, third and fifths row (5)

Q21 Find the exception to the rule.

Q37 What was the exception to the rule?

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- There is a 5 in the first, third and fifth row (1)
- The 5 occurs four times (2)
- There is a 5 in the fifth row (3)
- The 5 occurs three times (4)
- There is a 5 in the third, fifth and sixth row (5)

Q22 Find the exception to the rule.

Q43 What was the exception to the rule?

- There are two 5s in the seventh row and a seven in the first row (1)
- There is a 5 in the seventh row and a 7 in the second row (2)
- There is a 5 in the seventh row and a 7 in the fourth row (3)
- There is a 7 in the third row and a 6 in the first row (4)
- There is a 7 in the third row and a 5 in the seventh row (5)

Q51 Find the exception to the rule.

Q47 What was the exception to the rule?

- There is one 'S' in the third row and another in the seventh row (1)
- There are three 'S' between the 2's (2)
- There is an 'S' in the third row and another in the sixth row (3)
- There are four 'S' between the 2's (4)
- There is one 'S' in the third row and another in the fifth row (5)

Q54 Find the exception to the rule.

Q53 What was the exception to the rule?

- There are two 5's and one 7 among the 2's (1)
- There is a 5 in the second row and a 7 in the seventh row (2)
- There are two 5s under the 2s (3)
- There is a 5 in the second row and a 7 in the eighth row (4)
- There is a 5 in the second row and a 7 in the ninth row (5)

Q25 Find the exception to the rule.

Q58 What was the exception to the rule?

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- There is a 7 in the third row and in the fourth (1)
- There is a 7 in the fourth row and a 5 in the last row (2)
- There is no exception (3)
- There is a 7 in the fourth row (4)
- There is a 7 in the fourth row and a 5 in the seventh row (5)

Q26 Find the exception to the rule.

Q63 What was the exception to the rule?

- There is a 7 in the second row and a 7 in the ninth row (1)
- There is a 7 in the second row and a 7 in the seventh row (2)
- There is a 7 in the second row and a 5 in the eighth row (3)
- There is a 7 in the second row and a 7 in the eighth row (4)
- There is no exception (5)

Q27 Find the exception to the rule.

Q55 What was the exception to the rule?

- There is a 7 in the fourth row and a 7 in the ninth row (1)
- There is a 7 in the fourth row and a 7 in the seventh row (2)
- There is a 7 in the fourth row and a 7 in the eighth row (3)
- There is a 7 in the third row and a 7 in the eighth row (4)
- There are three 7s among the 2s (5)

Q28 Find the exception to the rule.

Q68 What was the exception to the rule?

- There are a 5 and a 7 in the third row, a 7 in the sixth row and a 7 in the eighth row (1)
- There are a 5 and four 7s among the 2s (2)
- There are a 5 and a 7 in the third row, a 7 in the sixth row and a 7 in the ninth row (3)
- There are one 5 and three 7s among the 2s (4)
- There are a 5 and a 7 in the third row, a 7 in the ninth row and a 7 in the last row (5)

Q70 Find the exceptions to the rule

Q75 What was the exception to the rule?

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- There is a Z in the last row (1)
- There are Z's in the fourth and eleventh row (2)
- There are Z's in the fourth, sixth and 12th row (3)
- There are three Z's among the 2s (4)
- There is a Z in the fourth and the last row (5)

Q72 Find the exceptions to the rule

Q77 What was the exception to the rule?

- There is a z in the 3rd row and in the 12th row (1)
- There is a z in the 3rd row and in the 4th row (2)
- There is a z in the 4th row and in the 2th, 7th and 12th row (3)
- There is a z in the 2th row and a z in the 7th and 9th row (4)
- There is a z in the 4th row and in the 6th, 7th and 12th row (5)

Q73 Find the exceptions to the rule

Q91 What was the exception to the rule?

- There is a 'z' in the second row and the sixth row and a 9 in the third row (1)
- There is a 'z' in the second and the seventh row, a 9 in the third row (2)
- There is a 'z' in the second and the fifth row, a 9 in the third row (3)
- There is a 'z' in the third and the seventh row, a 9 in the third row (4)
- There is a 'z' in the fourth and the seventh row, a 9 in the third row (5)

Q11 Below are a few questions we would like you to answer. Select what answer applies to you the most. Remember, there are no right or wrong answers

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	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
At this moment, I feel guilty about something (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this moment I have a clean conscience (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this moment I feel sorry about something (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this moment I feel ashamed (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this moment I feel proud (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this moment i feel humiliated (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you think you have influence on other people? (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you think you have power over other people? (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you think you have control over things? (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Do you think you influence the outcome of things? (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Q30 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.

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
I think this behavior is acceptable (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even though I lied about my score I have a clear conscience (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At this moment I feel ashamed for having lied about my score (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel remorseful that I have lied about my score (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel ashamed about lying about my score (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Q31 Do you think your lying has influence on ...

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (8)
...the university (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...the supervisor (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...the researcher (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31 Besides you and the experimenter, how many people were in the room with you during the experiment?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- 7 (7)
- 8 (8)
- 9 (9)
- 10 (10)

Q156 This scale consists of a number of words that describe different feelings and emotions. Indicate to what extent you feel this way right now.

	Not at all (1)	A little (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
Distressed (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scared (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hostile (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proud (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determined (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxious (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Afraid (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upset (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>