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Why would you not call the police?

**A research on the role of social and individual factors in the
choice of citizens to not report a crime to the police.**

Bachelor Thesis Sociology

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Abstract

Various studies have explored factors that influence the choice of citizens to report a crime to the police. However, research into factors that influence non-reporting is limited. This study therefore explores the role of social and individual factors in the choice of citizens to not report a crime to the police. The factors included in this study are social economic disadvantage and social cohesion on the social level and gender, age and fear of reprisal on the individual level. This study examines the previous factors by using data from the Longitudinal Internet Studies for Social Sciences (LISS), with as main questionnaire the Guardianship Survey (N = 1721). A binary logistic regression was used to estimate the log odds of the different factors on the dichotomous dependent variable non-reporting. The results show that the social factor social cohesion is an explanatory factor in the choice of citizens to not report a criminal offense to the police. People living in a neighbourhood with a high degree of social cohesion show a higher probability of non-reporting than people who live in a neighbourhood with a low degree of social cohesion.

Keywords

Non-reporting, social economic disadvantage, social cohesion, gender, age, fear of reprisal

Introduction

It is 3:00 a.m. in New York and you hear a girl shouting in panic outside your window. Would you call the police? 38 witnesses did not in the Kitty Genovese murder case (Cook, 2014). Even though they saw a woman being stabbed and asking for help, they did not report it to the police. From all the by citizens encountered criminal offenses in the Netherlands, 34.4% was reported to the police in 2017. In 2012 this percentage was still 38.4% (Kalidien, 2018). First of all, these percentages show that the majority of the criminal offenses is not reported to the police at all, therefore this majority remains 'hidden' crime. Furthermore, it can be concluded from these percentages that the number of people reporting criminal offenses to the police has declined in recent years. A report is made when a victim or his or her representative informs the police about the crime that took place (Van der Weijer & Bernasco, 2016). Willingness to report differs from the willingness to make a statement, because with making a statement an official report must be written. A large difference is found to the extent that criminal offenses are reported to the police between various forms of crime. For example, 87.1% of all bicycle thefts were reported to the police in 2017, while 55.2% of all assault offenses and only 14.5% of all cyberbullying offenses were reported to the police (Kalidien, 2018). This research will focus specifically on the subject of refusing or ignoring to call the police when witnessing a crime, or in other words: non-reporting.

Non-reporting has a considerable impact on the social as well as the individual level. There are several consequences for the decision to not report a witnessed crime to the police (Carcach, 1997). On the individual level, compensation for the victims of the criminal offense will be accepted unless the offense is reported to the police. Furthermore, by not reporting a criminal offense, people in a vulnerable position, such as victims, could become even more vulnerable. Reporting a criminal offense also plays a vital role in the control of crime in the whole society. One of the main tasks of any government is to control crime within a society (Goudriaan, 2006). However, crime must be known by the criminal justice system to do so. More than 90% of all the arrests in the Netherlands take place on the reporting of a witness (Inspectie Veiligheid en Justitie, 2012). By not reporting a criminal offense, an underestimated picture of the total crime and safety in a society is outlined (Goudriaan, Nieuwbeerta & Wittebrood, 2005; Carcach, 1997). Next to this, non-reporting restricts our information of offenders, which we need to solve criminal offense (Carcach, 1997).

Previous research has shown that different categories of factors influence non-reporting. The most common categories used in previous research are offense characteristics, victim or individual characteristics, and social characteristics. Various studies focus on these

characteristics, whether specifically on one characteristic or on different characteristics. However, researchers differ in their explanation of social cohesion in relation to the willingness to report a crime. According to Goudriaan, Wittebrood & Nieuwebeerta (2005), on the one hand, social cohesion is positively related to the willingness to report a crime to the police. On the other hand, Warner (2007) states that higher levels of social cohesion in a neighbourhood reduce the willingness of people living in that neighbourhood to report offenses to the formal authorities. Furthermore, previous research was conducted in various countries. This means that different factors have been investigated in different countries. By re-examining these factors in a new context, such as the Netherlands, theoretical progress will be made in non-reporting studies. Finally, the items from the dataset that will be used from LISS panel, allow to measure the absolute response of non-reporting. Previous studies particularly focus on reporting instead of non-reporting. This study is about the absolute response of non-reporting when witnessing a crime, instead of the relative willingness to report. By examining the disagreement of previous authors and by conducting research in a new context, this study will be innovative in the field of reporting studies. In addition, because of the specific focus on non-reporting, this study will be unique in the field of reporting studies.

In order to create the abilities to support the vulnerable individual and in order to control crime within the society, it is important to find out what the motivational factors are for not reporting criminal offenses to the police. Knowledge of factors affecting reporting is instrumental for preventing and controlling crime (Carcach, 1997). For this reason, it is important to dedicate a study to the motivating factors of not reporting a crime to the police. To explore the factors in the choice of citizens to not report a criminal offense to the police when witnessing one, the following research question will be central in this research: *“What social or individual factors can explain why people ignore or refuse to call the police when they witness a criminal offense?”*.

In this research reporting or non-reporting will be discussed. Many studies talk about reporting crime to the police, but it is often not clear whether it is just a report by for example calling the police or an official report to sue the perpetrator. In this investigation, the concept (non-)reporting will be used, which means indirect intervening, or reporting a crime to the police, for example by calling the police.

Theory

There are several theories in previous literature that explore factors that explain why people do not call the police when they witness a crime. These theories can be divided into three models,

which are: the economic model, the psychological model, and the sociological model. First of all, the economic model assumes that a cost-benefit analysis is made by the victim or witness when a crime took place. Based on this cost-benefit analysis, one decides whether or not to report the crime to the police (Spelman & Brown, 1981; Skogan, 1984). According to Skogan (1984) the severity of the crime determines the outcome of the cost-benefit analysis. Crimes that did not involve a lot of material or physical damage are less likely to be reported to the police (Goudriaan & Nieuwebeerta, 2005). This is supported by figures from 2015 that show that 88,1% of all burglary was reported from the crimes encountered, while 55,2% of all abuse was reported and only 35,7% of all bicycle thefts (Akkermans, 2016). This economic model could be taken as a starting point for investigating non-reporting. However, this economic model lacks a complete picture, since only factors that are related to the crime are taken into account. Factors related to the victim or the witness, and factors related to the social environment are ignored.

This brings us to the second model: the psychological model. The psychological model assumes that individual factors of the victim or the witness himself play a role in the decision making of reporting as well (Singer, 1988; Greenberg & Ruback, 1992; Felson et al., 2002; Ménard, 2003). Greenberg & Ruback (1992) created a model of Crime-Victim Decision Making. This model states that victims first need to label the event as a crime. It is about the subjective view of the victim to describe something as a crime. This personal definition can differ from the legal definition of crime. Secondly, victims need to determine the seriousness of the crime. This is again dependent on the personal experience of the victim. For example, whereas one person experiences a burglary as serious, another person can experience it as not serious and will therefore not report the burglary. Finally, the victim will decide what to do. There are various options for this last stage. One could call the police, but also choose not to report or to look for a private solution. The decision made in this last stage depends on individual factors according to the psychological model. Several studies show that men are less likely to report a crime than women (Blackman & Helwig, 1979; Felson et al., 2002; Ménard, 2003; Goudriaan, 2006; Slocum et al, 2010), and that juveniles are less likely to report a crime than elderly (Bickman & Helwig, 1979; Skogan, 1984; Goudriaan, 2006). Common individual factors are gender, age and fear of reprisals.

In addition to individual factors, social factors could also play a role in the decision of non-reporting. This is where the sociological model focusses on. The sociological model assumes that the probability that an incident will be reported to the police depends on social structures in the society in which the crime took place and in which the victim lives (Baumer,

2002; Goudriaan & Nieuwebeerta, 2005; Goudriaan, Wittebrood & Nieuwebeerta, 2005; Goudriaan, 2006; Warner, 2007; Black, 2010). Many factors have been investigated in previous literature regarding social structures. However, the most common social factors are social-economic disadvantage and social cohesion.

In addition to being used on its own, the psychological and sociological models are regularly combined into one model. An example of this is the Social Ecology Framework of Ménard (2003). Because the economic model cannot be measured with the secondary data, it will not be included in the analysis. Since both the psychological model and the sociological model could explain non-reporting, this research will focus on the three most common individual factors: gender, age and fear of reprisal, and the two most common social factors: social-economic disadvantage and social cohesion. As there is still a disagreement about the effect of both models in previous research, this research is needed to clarify the effect of individual and social factors on non-reporting. However, the models do not have to exclude each other. They could also complement each other, because explanations could be found in both models (Goudriaan, Nieuwebeerta & Wittebrood, 2005).

Social factors

1. Social-economic disadvantage

A common explanatory factor in the field of non-reporting is the socio-economic disadvantage in a neighbourhood. Socio-economic disadvantage in a neighbourhood is described as high-poverty communities with reduced accessibility to jobs, public and private services and informal social supports (McLoyd, 1998). Although Fishman (1979) argues that there are no differences in reporting between socio-economic areas, various studies show that a stronger socio-economic disadvantage in a neighbourhood is related to a lower probability that victims or witnesses report the crime to the police (Baumer, 2002; Goudriaan, Wittebrood & Nieuwebeerta, 2005; Goudriaan, 2006; Slocum et al., 2010). So, where Fishman (1979) argues that rich and poor neighbourhoods show the same intentions for non-reporting, others argue that there is a difference between rich and poor neighbourhoods in intentions for non-reporting.

Black's stratification hypothesis (2010) is applicable to the relationship between socio-economic disadvantage and non-reporting. Stratification is “the vertical distance between the people of a social setting” (Black, 2010, p. 13). When an area is characterized by stratification, each group in this area is higher or lower in relation to others. According to Black (2010) the wealth of a society determines the quantity of the law. The term quantity of law is broadly measured with among other things “a call to the police, a visit to a regulatory agency, or a

lawsuit” (Black, 2010, p. 3). Wealth is positively related to the quantity of law. This means that a wealthier part of the society has more access to laws than a less wealthy part of the society. In other words, people in social economic disadvantaged neighbourhoods will have less access to the law than people in wealthy neighbourhoods. Therefore, people in social economic disadvantaged neighbourhoods will vary in their reporting behaviour from people in social economic advantaged neighbourhoods. (Black 1970, cited in Roberson & Garrido, 2015).

Studies show that poverty causes a decrease in the chance of reporting a crime to the police (Ménard, 2003; Slocum, et al. 2010). This relationship has been tested more specifically in other research. Goudriaan, Wittebrood and Nieuwebeerta (2005) found a negative effect of social economic disadvantage in a neighbourhood on the willingness to report of victims and witnesses. Baumer (2002) found the same relationship for assault victims.

With the stratification hypothesis of Black (2010) in combination with findings of previous studies, it can thus be hypothesized that: *People from social economic disadvantaged neighbourhoods show a higher probability of non-reporting when they witness a crime than people from wealthy neighbourhoods (H1).*

2. Social cohesion

Next to social economic disadvantage, a common explanatory factor in the field of non-reporting is social cohesion in a neighbourhood. The OECD (2011) comes up with three components of social cohesion, which are: social inclusion, social capital and social mobility. According to the OECD (2011) “A cohesive society works towards the well-being of all its members, fights exclusion and marginalisation, creates a sense of belonging, promotes trust, and offers its members the opportunity of upward mobility” (p. 17). Social cohesion is about the connectedness among groups in the society or in this case among individuals or groups in a neighbourhood.

The theoretical framework of collective efficacy, introduced by Sampson, Raudenbush and Earls (1997), merges the concepts trust, social ties and social cohesion. Since it appears that these items are taken together in earlier research (Sampson et al., 1997), this study will also investigate the factors trust, social ties and social cohesion together as one factor called social cohesion. The theoretical framework of collective efficacy can be used to clarify the social factor social cohesion. Collective efficacy is described as “the linkage of mutual trust and the willingness to intervene for the common good” (Sampson et al, 1997, p. 919). This combination of trust and shared willingness will influence the extent of informal social control (Morenoff, Sampson & Raudenbush, 2001), where reporting to the police is also a part of. When there is a

dense network in a neighborhood, people trust each other and they are willing to intervene by calling the police when witnessing a crime. Vice versa, people from a neighborhood with no dense networks will not trust each other and are not willing to intervene by calling the police when witnessing a crime.

According to Goudriaan, Wittebrood & Nieuwbeerta (2005) social cohesion is an important context for the realization of informal social control, such as reporting a crime to the police. An explanatory theory in the field of social control is the social disorganization theory. The concept of social disorganization refers to a situation in which there is almost no sense of community feeling, relationships are not strong, there is little surveillance from the community itself and institutions of informal control are weak (Lanier, Henry & Anastasia, 2015). Where a socially organized neighbourhood works together to prevent joint problems, this will be less the case in socially disorganized neighbourhoods due to conflicting norms and values (Lanier, Henry & Anastasia, 2015). A social disorganized neighbourhood could be seen as a neighbourhood with low social cohesion since a low connectedness among groups and a low sense of community feeling apply to both. Because the social disorganization theory assumes that there is little surveillance from the community itself and institutions of informal control are weak in a neighbourhood with low social cohesion, the resulting hypothesis is: *People from a neighbourhood with a low degree of social cohesion show a higher probability of non-reporting when they witness a crime than people from a neighbourhood with a high degree of social cohesion (H2a).*

Although several studies found a positive effect of social cohesion on the willingness to report a crime, Warner (2007) found a negative effect of social cohesion on the willingness to report a crime. According to Warner (2007) social cohesion in a neighbourhood resulted in a lower probability of indirectly intervening. Reporting a crime to the police could be seen as indirectly intervening. One reason for the difference in this argumentation is that Warner (2007) tested social cohesion on the basis of neighbourhood disputes. Neighbourhood disputes are somewhat more sensitive in a neighbourhood because people might know each other and possibly also know what the dispute is about. According to Black's theory on the behaviour of law, the willingness to report a crime to the police decreases if the personal distance between offender and victim is small (Black, 2010). Therefore, social cohesion could increase non-reporting, because there is a small distance between people in a neighbourhood with high social cohesion. It could be that the effect for offenses other than neighbourhood disputes could be different. The following hypothesis has been derived to test this: *People from a neighbourhood*

with a high degree of social cohesion show a higher probability of non-reporting when they witness a crime than people from a neighbourhood with a low degree of social cohesion (H2b).

3. Moderator

As stated in the first hypothesis, victims or witnesses from a social economic disadvantaged neighbourhood are expected to show a high probability of non-reporting when witnessing a crime. According to Goudriaan (2006) this relation will be strengthened when social cohesion in that neighbourhood is weak as well. So, when in a social economic disadvantaged neighbourhood, the social cohesion is also weak, this will lead to an even higher probability of non-reporting when witnessing a crime. This leads to the following hypothesis: *The effect of social economic disadvantaged neighbourhoods on the probability of non-reporting will be stronger for neighbourhoods with a low degree of social cohesion (H3).*

Individual factors

1. Gender

In previous research, gender plays a role in explaining non-reporting (Bickman & Helwig, 1979; Singer, 1988; Felson, 2002; Ménard, 2003; Watkins, 2005; Goudriaan, 2006; Slocum et al., 2010; van der Weijer & Bernasco, 2016). While Singer (1988) concludes that women are more likely not to report because of the fear of reprisal, most of the other studies conclude exactly the opposite: women are more likely to report a crime to the police (Blackman & Helwig, 1979; Felson et al., 2002; Goudriaan, 2006; Slocum et al., 2010). This leads to the assumption that men are more likely not to report a crime to the police (Ménard, 2003).

Felson (2002) comes up with three arguments why women are more likely than men to call the police. First of all, women desire more protection than men. Secondly, women think that their partner's violence is not a private matter. Finally, women see crime more often as a deviation of normal than men. However, Felson's research (2002) is based on domestic violence. To find a more general explanation for gender differences in non-reporting, the study by Ménard (2003) and the model of crime-victim decision making by Greenberg & Ruback (1992) could be looked at.

According to Ménard (2003) gender affects the labelling of a crime and thus the extent to which one would be likely to report to the police. This is related to the model of crime-victim decision making of Greenberg & Ruback (1992) discussed at the beginning of the theory section. The model of crime-victim decision making gives three explanations for non-reporting. First of all, the event could have been labelled as something else than a crime. Secondly, the

crime could have been perceived as not serious enough. Finally, the crime could have been dealt with in a different way than reporting it to the police. According to Ménard (2003) men thus fail in the first stage by not labelling the event as a crime. This could be an explanation for the statement that men are more likely to not report a crime to the police than women. With keeping in mind that men often don't label a crime as such, it is expected that: *Men show a higher probability of non-reporting when they witness a crime than women (H4).*

2. Age

Another factor that plays a role in explaining non-reporting in previous research is the age of the victim or witness (Bickman & Helwig, 1979; Skogan, 1984; Watkins, 2005; Goudriaan, 2006; Bosick, et al., 2012; Tolsma, Blaauw & Grotenhuis, 2012; Gutierrez & Kirk, 2017; Torrente, Gallo & Oltra, 2017).

Almost all studies find the same relationship between age and non-reporting. Only Tolsma, Blaauw and Grotenhuis (2012) state that elderly are less likely to report a crime than juveniles. However, this study has some limitations because they only focussed on reporting via the internet. Elderly might have less access to the internet than juveniles. Other studies find the opposite relationship between age and non-reporting. The older someone gets, the more likely he or she is to report a crime to the police. These studies do not see age only in cohorts, but as an ongoing factor, assuming that reporting increases throughout the life course (Bosick et al., 2012; Gutierrez & Kirk, 2017; Torrente, Gallo & Oltra, 2017). Some studies have not studied the life course, but only age cohorts with juveniles and with elderly. According to these studies, elderly are more likely to report a crime to the police than juveniles (Bickman & Helwig, 1979; Skogan, 1984; Goudriaan, 2006). With this, the opposite could be assumed for non-reporting: Juveniles are more likely to not report a crime to the police than elderly. This direction of the relationship between age and non-reporting was specifically found by Watkins (2005). Therefore, it is expected that: *Juveniles show a higher probability of non-reporting when they witness a crime than elderly (H5).*

3. Fear of reprisal

Fear of reprisal is a common individual explanatory factor of non-reporting in previous literature. Although some authors state that emotions play no role in non-reporting (Bickman & Green, 1975), many authors are convinced that emotions do play a role in non-reporting (Hawkins, 1972; Singer, 1988; Felson, 2002; Goudriaan, Nieuwebeerta & Wittebrood, 2005; Slocum et al., 2010; Holvast & van der Meij, 2011; Vynckier & Hardyns, 2012). In addition to

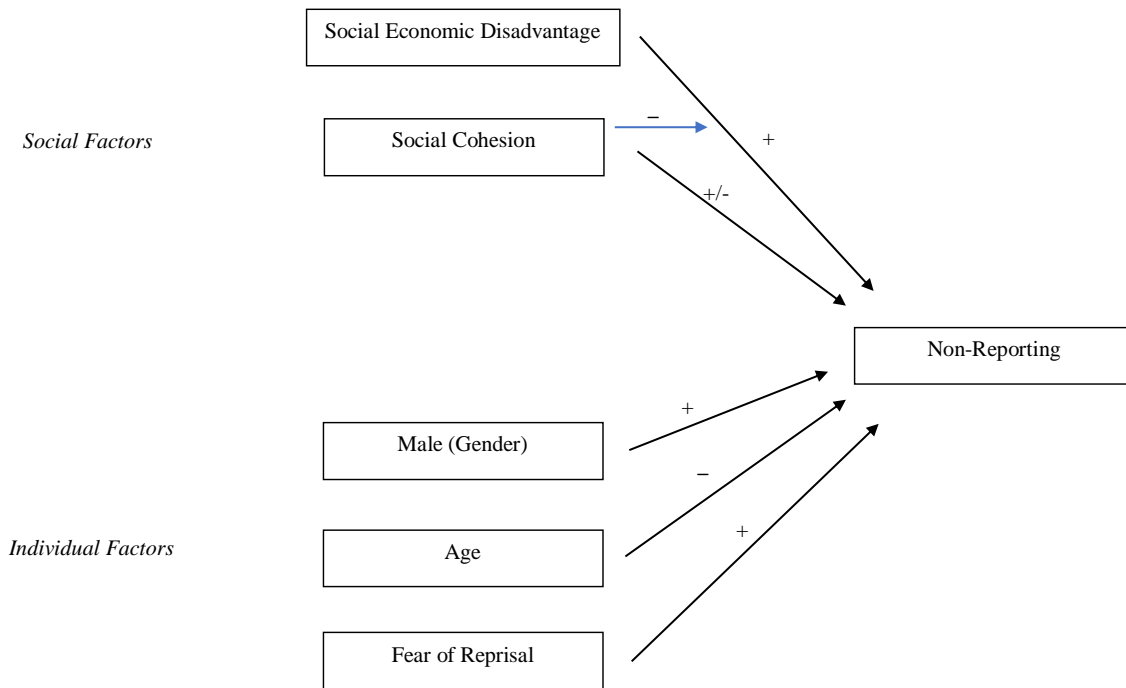
emotions such as guilt and shame (van der Weijer & Bernasco, 2016), the emotion of fear plays a major role in explaining non-reporting, and specifically the fear of reprisal (Singer, 1988; Felson, 2002; Holvast & van der Meij, 2011; Vynckier & Hardyns, 2012).

To understand the relationship between fear of reprisal and non-reporting, the relationship between victimization and fear should first be discussed. This could be explained by neutralization techniques, which are not applied to the offender, but to the victim in the study of Agnew (1985). It depends on the extent to which the victim uses neutralization techniques, if the victim experiences fear (Agnew, 1985). There are several neutralization techniques one could use. First of all, there is denial of injury, which means that victims argue that they were not hurt. Secondly, there is denial of vulnerability, which means that victims argue that they are not likely to be victimized again in the future because they have control over this. Thirdly, there is denial of responsibility, which means that victims argue that they are not responsible themselves for the victimization. This leads to less vulnerability and fear. Next to this, there is the belief in a just world, which means that the victim fosters the idea of a good world over a bad world. This, again, reduces fear. Finally, there is appeal to higher loyalties, which means that the victim argues that he or she was victimized, because he or she volunteered in the dangerous situation to help someone in need. Weiss (2011) adds another neutralization technique to the previous ones from Agnew (1985), which is the denial of criminal intent. This means that victims argue that their offender did not have the intention to harm them. If victims use one of these neutralization techniques, they could have less fear and they could also think that reporting to the police is thus unnecessary. However, if victims are not able to use these neutralization techniques, the crime will cause fear.

Some authors argue that fear leads to reporting the crime to the police (Hawkins, 1972; Slocum et al., 2010). However, the vast majority of authors state the opposite. Fear, and specifically fear of reprisal, inhibits victims from calling the police (Singer, 1988; Felson, 2002; Holvast & van der Meij, 2011; Vynckier & Hardyns, 2012). The relationship between fear of reprisal and non-reporting could be explained by the connection or distance between the offender and the victim. When there is a connection between the offender and victim, there could be more fear of reprisal than when there is no connection between the offender and victim (Ménard, 2003; Goudriaan & Nieuwbeerta, 2005; Goudriaan, Nieuwbeerta & Wittebrood, 2005). As noted before, Black's theory on the behaviour of law states that the willingness to report a crime to the police decreases if the personal distance between offender and victim is small (Black, 2010). So, when the victim has a certain connection with the offender, there will be fear of reprisal because the offender might want to punish the victim when the crime is

reported. Therefore, fear of reprisal leads to refraining from reporting the crime to the police. It can thus also be hypothesized that: *People who experience fear of reprisal show a higher probability of non-reporting when they witness a crime than people who do not experience fear of reprisal (H6).*

Figure 1: Predicted relationships between dependent and independent variables



Data and Methodology

The LISS Panel

The data used in this thesis is from the LISS (Longitudinal Internet Studies for Social sciences) panel, administered by the research institute CentERdata (Tilburg University, The Netherlands). The LISS Panel is in operation since 2007 and consists of 4500 households in the Netherlands, which contain 7000 individuals. This panel is based on a true probability sample drawn from the population register of Statistics Netherlands (CBS). Online questionnaires are sent to the panel members monthly. Households that could not otherwise participate are provided with a computer and Internet connection. The panel members get a reward for each completed questionnaire. There is one LISS Core Study, which is a longitudinal study that is conducted annually to observe changes over the life course. Next to the LISS Core Study, there are several other research purposes. One of these research purposes is the Guardianship Survey, which is the main questionnaire for this thesis.

Questionnaires and Sample Selection

Five different questionnaires are used and merged in this thesis. The main questionnaire is the Guardianship Survey. The Guardianship Survey, conducted in 2011, is a single wave study on guardianship, or the ability of citizens to prevent the occurrence of crime. The data collection consisted of a questionnaire conducted in Dutch via the internet. A 71.2% response rate from panel members aged 16 years and older selected from 6778 household members resulted in the sample of 4824 panel members. The final number of respondents who had completed the questionnaire was 4793. Furthermore, the 'Background Variables' questionnaire was used. It was decided to use the questionnaire from August 2011, since this corresponds the most with the Guardianship Survey.

To operationalize social cohesion, wave two of the 'Conventional and Computer Crime Victimization' questionnaire was used. This questionnaire, conducted in 2010, is a longitudinal study on computer crime and victimization. A 86.1% response rate from panel members aged 16 years and older selected from 6693 household members resulted in the sample of 5764 panel members. The final number of respondents who had completed the questionnaire was 5751. To operationalize social economic disadvantage, wave four of the 'Economic Situation: Income' questionnaire was used. This questionnaire, conducted in 2011, is also a longitudinal study. For the 'Economic Situation: Income' questionnaire, which focuses on income, a 75.5% response rate from panel members aged 16 years and older selected from 6942 household members resulted in the sample of 5240 panel members. The final number of respondents who had completed the questionnaire was 4976. Finally, the 'Personal responsibility' questionnaire was used to operationalize fear of reprisal. This questionnaire, conducted in 2012, is a single wave study about the responsibility of citizens. A 85.2% response rate from panel members aged 16 years and older selected from 4015 household members resulted in the sample of 3410 panel members. The final number of respondents who had completed the questionnaire was 3359. All of the mentioned questionnaires have been merged to be able to operationalize the various variables and ultimately to execute analyses. Merging the datasets resulted in the final sample of 1721 respondents (N = 1721). This total number of respondents is the result of merging different datasets and of missing data. More insight into the outcome of this final number of respondents and the loss of respondents can be found in table 3.

Dependent Variable

Non-reporting. Non-reporting is measured using three questions from the Guardianship Survey: If I see a crime in progress, I would call the police; In the past, I have seen a crime happening

and ignored it; I will not call the police if I see a crime in my neighbourhood. Respondents could answer these questions on a scale of 1 to 5 whether they completely disagreed (1) or completely agreed (5). Non-reporting is constructed as a dummy variable, because with this one can measure absolute non-reporting. If respondents answered ‘completely disagree’ on the question: ‘If I see a crime in progress, I would call the police’, or answered ‘completely agree’ on the questions: ‘In the past, I have seen a crime happening and ignored it’ and ‘I will not call the police if I see a crime in my neighbourhood’, respondents were assigned to the value 1, which means they will not report a crime when witnessing one. All the other 3855 respondents were assigned to the value 0. It was decided to use ‘or’ and not ‘and’ because otherwise a limited number of respondents would remain (see table 1 in the appendix).

Independent Variables

Social economic disadvantage. This variable is on the level of households. However, lower-income households and higher-income households tend to live separate from each other (Taylor & Fry, 2012). This is called residential segregation by income. This assumption allows social economic disadvantage to be included as a social factor in the analysis. Since social economic disadvantage in a neighbourhood is described as a high-poverty community (McLoyd, 1998), the following question is used to measure social economic disadvantage: ‘How would you describe the financial situation of your household at this moment?’. This variable has been recoded so that higher values mean higher social economic disadvantage. As a result the answer categories now consist of the following: we have a lot of money to spare (1), we have a little bit of money to spare (2), we are just managing to make ends meet (3), we are somewhat eating into savings (4), we are accumulating debts (5).

Social cohesion. To measure the level of social cohesion, respondents were asked to indicate the extent to which they agree with the following statements: (a) people in this neighbourhood are willing to help each other, (b) I live in a closely-knit neighbourhood, (c) you can trust people in this neighbourhood, (d) people in this neighbourhood generally don’t get along so well, and (e) people in this neighbourhood do not subscribe to the same norms and values. Since the last two statements differ in the direction from the first three statements, these last two statements have been recoded so that a higher score on the scale means a higher social cohesion. For statement a to c, the answer categories are: disagree entirely (1) to agree entirely (5). For statement d and e, the answer categories are: agree entirely (1) to disagree entirely (5). The previous statements have been used to measure social cohesion, because these statements correspond to those in the study of Sampson, Raudenbush and Earls (1997). The validity of the

scale is tested with a factor analysis (table 2). Prior to conducting the factor analysis, with data collected from 4774 respondents, examination of the data indicated that the variables were not perfectly normally distributed (Shapiro-Wilk Test Significant value < 0.05). However, this is not problematic because of the robust nature of the factor analysis. Furthermore, there were roughly linear relationships between the variables. Two factors were identified as underlying the five questions with their eigenvalues exceeding 1. These factors accounted for 78% of the variance in the data. It appears that the statements are loaded on two factors. This would assume that they cannot be merged into one scale. However, in the study of Sampsons, Raudenbush and Earls (1997) exactly these five statements were merged into one scale. Since this scale has been used in earlier research, it has been decided to merge the five statements into one variable called social cohesion. Although the statements load on two factors, the Cronbach's alpha for the five items was .800, which is adequate for research purposes (Nunnally, 1978).

Table 2: Principal Component Factor Analysis for social cohesion

Question	Factor loading 1	Factor loading 2
(b) I live in a closely-knit neighbourhood	,903	
(a) people in this neighbourhood are willing to help each other	,893	
(c) you can trust people in this neighbourhood	,839	
(e) people in this neighbourhood do subscribe to the same norms and values		,931
(d) people in this neighbourhood generally get along well		,811

Factor loadings < .3 have been suppressed.

Rotation method: Promax with Kaiser.

Gender. To determine the gender of respondents, respondents were asked whether they were male (1) or female (2). This was recoded into female (0) and male (1).

Age. To determine the age of respondents, the age of the household member was asked. Age 0 to 15 are indicated as missing values, since the questionnaire should have been filled out by respondents of 16 years and older.

Fear of Reprisal. To measure fear of reprisal, the question 'What would most encourage you to make a more active effort for a safer society? – If I were less afraid to fall victim to crime myself' was asked. Respondents could answer with: no (0) or yes (1).

Control Variables

In research on neighbourhood effects it is important to disconnect the influence of individual or household characteristics from neighbourhood characteristics. A common strategy used to achieve this is to include control variables on the individual level (Baumer & Lauritsen, 2010).

Often, also offender characteristics and crime characteristics are used as control variables (Baumer, 2002; Kaukinen, 2002; Goudriaan, Wittebrood & Nieuwbeerta, 2005). However, these characteristics cannot be measured with the LISS data. Therefore, this study will only take individual characteristics and household characteristics into account to control for in the analysis. This study controls for three sociodemographic characteristics. Since education could have an influence on social cohesion (Kantzara, 2011), fear (Liska, Sanchirico & Reed, 1988) and non-reporting (Kaukinen, 2002; Baumer & Lauritsen, 2010), education is controlled for. Furthermore, marital status could have an influence on social cohesion (Robinson & Wilkinson, 1995), fear (Liska, et al., 1988) and non-reporting (Kaukinen, 2002; Baumer & Lauritsen, 2010). Therefore, also marital status is controlled for. Furthermore, the routine activity approach of Cohen and Felson (1979) hypothesizes that victimization tends to vary directly with household size. When there is a decrease in the density of population in physical locations, this increases the risk of crimes. So, single-adult households are more likely to experience crime than larger households. Therefore, it is important to also control for household size (Cohen, 1984; Baumer & Lauritsen, 2010).

Education. To determine the educational level of the respondent, a variable is created that measures which education the respondent has finished with a diploma. The categories are: no education (0), primary school (1), intermediate secondary education (2), higher secondary education (3), intermediate vocational education (4), higher vocational education (5), and university (6). The category: other (7) has been set to missing. The categories: not (yet) completed any education (8) and not yet started any education (9) are coded into no education (0).

Marital status. The original variable consisted of five categories: married (1), separated (2), divorced (3), widow or widower (4), and never been married (5). Marital status has been recoded into a dichotomous variable with the categories: married (1) or otherwise (0).

Household size. Household size is a continuous variable that consist of the total number of household members, varying from 1 household member (1) to 9 household members (9).

Table 3: Total valid N for each variable after recoding and before filtering

	N
Guardianship Survey	
Non-reporting	4493
<i>Non-reporting1 (Fa11a067)</i>	4802
<i>Non-reporting2 (Fa11a070)</i>	4802
<i>Non-reporting3 (Fa11a081)</i>	4493
Background Variables Survey	
Gender	10453
Age	8611
Education	10121
Marital status	10453
Household size	10453
Conventional and Computer Crime Victimization Survey	
Social cohesion	4774
<i>Socialcohesion1 (Ac10b015)</i>	5381
<i>Socialcohesion2 (Ac10b016)</i>	5477
<i>Socialcohesion3 (Ac10b017)</i>	5297
<i>Socialcohesion4 (Ac10b018_new)</i>	5290
<i>Socialcohesion5 (Ac10b019_new)</i>	5060
Economic Situation: Income Survey	
Social economic disadvantage	4373
Personal Responsibility Survey	
Fear of reprisal	3366

Table 3 is provided to gain more insight into the loss of respondents for the final sample. As can be seen in table 3, a striking number of respondents completed the background variables survey, of which gender, age, education, marital status, and household size are part of, in comparison with the other surveys. Because a number of categories from the variable age had to be assigned as missing, there is clearly a loss of respondents. Furthermore, it was decided to create a scale of social cohesion where respondents must have answered all five items to be included. After creating a scale with a minimum of four items, it turned out that this made no big difference to the results and that only a few respondents would be added. Therefore, a scale with a minimum of five items has been included into the analysis. There is also a loss of respondents because the other surveys were completed by fewer respondents. As can be seen in table 3, there are differences in the number of respondents who answered the question per variable. Because this relates to different respondents per questionnaire, the merging of questionnaires caused that a number of respondents were lost, which led to a final valid N of

1721. The results of the multiple imputation are shown in figure 2 (appendix 2). These results show that there is no missing value pattern. From this, it can be concluded that the missings were at random (MAR).

Table 4: Descriptive Statistics (N=1721)

	N	Minimum	Maximum	Mean	Std. Deviation
Non-reporting	1721	0,00	1,00	0,15	0,36
Social economic disadvantage	1721	1,00	5,00	2,56	0,97
Social cohesion	1721	1,00	5,00	3,67	0,73
Gender	1721	0,00	1,00	0,49	0,50
Age	1721	16,00	89,00	46,02	21,56
Fear of reprisal	1721	0,00	1,00	0,29	0,45
Education	1721	0,00	6,00	3,46	1,51
Marital status	1721	0,00	1,00	0,55	0,50
Household size	1721	1,00	9,00	2,93	1,40

Analysis Method

To estimate the effects of social economic disadvantage, social cohesion, gender, age, and fear on non-reporting, a regression should be performed. However, a linear regression analysis can only be used when a dependent variable is continuous. Since the dependent variable in this thesis is dichotomous, a logistic regression analysis will be used to test the hypotheses. The questionnaires of the LISS data are filled out by multiple people in a household. This means that respondents are partly clustered within a household which creates a layered structure in the data. Therefore, multilevel modelling could be necessary to test the hypotheses. To see if multilevel modelling is needed, the Intraclass Correlation Coefficient (ICC) was calculated. The ICC is calculated by dividing the amount of between-group variation by the total amount of variation (Muthén, 1997). About 5.21% of the variability in non-reporting lies between households (ICC = 0.0521). With this percentage of variability between households, a multilevel analysis could be necessary to account for non-independence. However, an ICC value of 5,21% indicates that individual differences are only to a limited extent due to variation at the household level. Since the percentage of variability is limited (Hardyns & Pauwels, 2012), a binary logistic regression without multilevel modelling will be performed. It must be taken into account that the assumption of independence could be violated by performing a binary logistic regression without a multilevel model. Furthermore, the risk of a Type I error increases when using a single-level model even though there are only a few observations on the household

level (Clarke, 2008). Prior to interpreting the results of the binary logistic regression, several assumptions were evaluated. First of all, the assumption of a binary dependent variable is met by creating non-reporting as a dichotomous variable. Second, since a multilevel model will not be used, the observations might not be independent. However, since the Intraclass Correlation Coefficient is just above 5% this might not be a problem for the analysis. Third, the Variance Inflation Factor scores indicate that the assumption of no multicollinearity is met. All the Variance Inflation Factor scores (VIF scores) are below 5 (table 5), so it can be assumed that there is no multicollinearity. Finally, the linearity of independent variables and log odds is met by looking at the Hosmer and Lemeshow Test, which shows if the model fits the data. This test suggests the model is a good fit to the data as the test is not statistically significant ($p = 0.205$).

For the analysis separate models will be used for the social factors separately, the individual factors separately and the social and individual factors taken together. This will address to what extent these factors vary in the effect on non-reporting. To test whether there is a moderation effect of social cohesion on the relationship between social economic disadvantage and non-reporting, an interaction term has been created. The interaction term will be added in a separate model to test the effect of the moderator. A significance level (alpha) of 0.05 will be used to test the significance of the variables. The results of performing a Spearman Correlation are shown in table 6 (appendix 3).

Table 5: Variance Inflation Factor scores

	VIF
Social economic disadvantage	1,003
Social cohesion	1,006
Age	1,008
Gender	1,787
Fear of reprisal	1,005
Education	1,024
Marital status	1,422
Household size	1,469

Results

Unstandardized regression coefficients (B), Odds Ratios (Exp (B)), and p-values for each predictor in the binary logistic regression models are reported in table 7. Each model adds variables that show the earlier outlined theories about social factors and individual factors. Social factors were added first (model 1), and individual factors were added second (model 2).

Next, social factors and individual factors were added together (model 3). Finally, the moderator was added as an interaction term (model 4).

Model 1 only looks at the influence of social factors on non-reporting. These social factors are social economic disadvantage and social cohesion. Surprisingly, the effect of social economic disadvantage is not in the expected direction. The odds ratio is below 1, which means the higher the social economic disadvantage in a neighbourhood, the smaller the chance that a crime will not be reported. However, social economic disadvantage has no significant effect on the probability of non-reporting ($B = -0.04$, $p = 0.572$). On the contrary, controlled for education, marital status and household size, the variable social cohesion appears to be a positive predictor of non-reporting ($B = 0.20$, $p = 0.034$). The higher the social cohesion in a neighbourhood, the higher the chance that a crime will not be reported.

Model 2 only looks at the influence of individual factors on non-reporting. These factors are gender, age, and fear of reprisal. Surprisingly, males are predicted to be 0.87 times less likely to non-report relative to females. However, the effect of gender on non-reporting is not significant ($B = -0.14$, $p = 0.316$). Furthermore, the effect of age on non-reporting also turns out not to be significant ($B = -0.001$, $p = 0.903$). The sign of fear of reprisal is also not in the expected direction. People who experience more fear are 0.99 times less likely to non-report than people who experience less fear. The effect of fear of reprisal on non-reporting is not significant ($B = -0.01$, $p = 0.966$). Controlled for education, marital status and household size, no effect was found for the individual factors gender, age, or fear of reprisal.

Model 3 is the most complete model, in which 0.6 percent of the variance of non-reporting was explained by the variables 'social economic disadvantage', 'social cohesion', 'gender', 'age', 'fear of reprisal' (Nagelkerke pseudo $R^2 = 0.006$). Even this R^2 is small, it still means that a small amount of the variance is explained by the predictors. Furthermore, conclusions can still be drawn from the data. In this third model, both the social factors and the individual factors are combined. When the individual factors were added to model 1 in model 3, still no significant effect of social economic disadvantage on non-reporting was found ($B = -0.04$, $p = 0.579$). The sign is still in the other direction. Hypothesis 1, in which was expected that people from social economic disadvantaged neighbourhoods show a higher probability of non-reporting when they witness a crime than people from wealthy neighbourhoods, can therefore not be confirmed. A significant effect of social cohesion on non-reporting is still found when the individual factors have been added to the social factors. People from a neighborhood with high social cohesion are 1.22 times more likely to non-report than people from a neighborhood with low social cohesion ($B = 0.20$, $p = 0.036$).

Table 7: Results of binary logistic regression analysis for social factors and individual factors predicting non-reporting

Variables	Model 1		Model 2		Model 3		Model 4	
	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio
Constant	-2.33***	0.10	-1.55***	0.21	-2.20***	0.11	-2.24***	0.11
Social factors								
Social economic disadvantage	-0.04	0.96			-0.04	0.96	-0.06	0.94
Social cohesion	0.20*	1.22			0.20*	1.22	0.22*	1.24
Social economic disadvantage*social cohesion							0.13	1.12
Individual factors								
Gender ^a			-0.14	0.87	-0.13	0.88	-0.12	0.89
Age			-0.001	0.99	0.000	1.00	0.000	1.00
Fear of reprisal ^b			-0.01	0.99	-0.01	0.99	-0.01	0.99
Control Variables								
Education	-0.02	0.98	-0.02	0.98	-0.02	0.98	-0.03	0.98
Marital status ^c	0.04	1.04	0.02	1.02	0.03	1.03	0.03	1.03
Household size	0.003	1.00	-0.01	0.99	-0.003	0.99	-0.004	0.99
Nagelkerke R ²	0.005		0.001		0.006		0.009	

*p < .05. **p < .01. ***p < .001.

^aThe comparison category = female.

^bThe comparison category = no fear.

^cThe comparison category = otherwise.

First of all, from this can be concluded that hypothesis 2a, in which was expected that people from a neighbourhood with a low degree of social cohesion show a higher probability of non-reporting when they witness a crime than people from a neighbourhood with a high degree of social cohesion, cannot be confirmed. Second, it can be concluded that hypothesis 2b, in which was expected that people from a neighbourhood with a high degree of social cohesion show a higher probability of non-reporting when they witness a crime than people from a neighbourhood with a low degree of social cohesion, can be confirmed. Model 3 shows that men are still 0.88 times less likely to non-report than women ($B = -0.13$, $p = 0.344$). However, gender still has no significant effect on non-reporting in the complete model. Hypothesis 4, in which was expected that men show a higher probability of non-reporting when they witness a crime than women, thus has to be rejected. The same applies to the variable age. In the complete model, no effect of age is found on non-reporting ($B = 0.000$, $p = 0.939$). Hypothesis 5, in which was expected that juveniles show a higher probability of non-reporting when they witness a crime than elderly, has to be rejected as well. Finally, there is the effect of fear of reprisal on non-reporting, which is still in another direction than expected. People who experience fear are 0.99 times less likely to non-report than people who do not experience fear. The effect of fear of reprisal on non-reporting is not significant in the complete model ($B = -0.01$, $p = 0.949$). Hypothesis 6, in which was expected that people who experience fear of reprisal show a higher probability of non-reporting when they witness a crime than people who do not experience fear of reprisal, can therefore not be confirmed.

Model 4 shows the results when the interaction term of social cohesion and social economic disadvantage for testing the moderator effect has been added to the full model. When adding an interaction term, the main effects of social economic disadvantage and social cohesion should be interpreted differently. In this model, the effect of social economic disadvantage applies only to the respondents who scored 0 on social cohesion. Since, the variables for the interaction term have been standardized, 0 is the average of social cohesion and of social economic disadvantage. So, taken into account that people have an average level of social cohesion, people from social economic disadvantaged neighbourhoods are 0.94 less likely to non-report than people from wealthy neighbourhoods. However, social economic disadvantage appears not to be a positive predictor of non-reporting in this model ($B = -0.06$, $p = 0.395$). Model 4 also shows the effect of social cohesion when people have an average level of social economic disadvantage. In this model, the effect of social cohesion applies only to the respondents who scored 0 on social economic disadvantage. So, taken into account that people have an average level of social economic disadvantage, people from a neighbourhood with high

social cohesion are 1.24 more likely to non-report than people in a neighbourhood with low social cohesion. This effect turns out to be significant ($B = 0.22$, $p = 0.022$). To investigate whether the relationship between a social disadvantaged neighbourhood and non-reporting is strengthened by social cohesion in a neighbourhood, an interaction has been conducted and added to the final model. This interaction between social economic disadvantage and social cohesion was not significant ($B = 0.13$, $p = 0.078$). This means that social cohesion does not strengthen the relationship between a social disadvantaged neighbourhood and non-reporting. This means that the relationship between socio-economic disadvantage and non-reporting is the same for both neighbourhoods with high and low social cohesion. So, there is no moderation effect. Hypothesis 3, the effect of social economic disadvantaged neighbourhoods on the probability of non-reporting will be stronger for neighbourhoods with a low degree of social cohesion, is therefore rejected. By adding the interaction term to the full model in model 4, the effects of gender ($B = -0.12$, $p = 0.379$), age ($B = 0.000$, $p = 0.969$) and fear of reprisal ($B = -0.01$, $p = 0.974$) are not significant.

Since the directions of the expected effects, even though they are not significant, deviate from the existing literature, a number of robustness checks have been carried out to ensure the reliability of the data and results. First of all, it was checked whether all variables were coded correctly and whether the missing values were coded correctly. In addition, it was examined whether it makes a difference to use the variable non-reporting as an ordinal variable and to perform a linear regression. However, this proved to make no difference in the results. Creating non-reporting as a dichotomous variable turned out to be correct. Finally, the consideration has been made to add more response categories to the non-reporting variable. This means that not only 'totally agree' or 'totally disagree' would be included, but also 'agree' or 'disagree'. However, the results also remained considerably the same after analysing this in a binary logistic regression. By carrying out previous robustness checks and seeing that the results remain the same, it can be concluded that the results are reliable.

Conclusion

The purpose of this research was to explore the role of social and individual factors in the choice of citizens to not report a crime to the police. This research focused specifically on non-reporting, because non-reporting has a major impact on both individuals and society as a whole. For victims it is important to report a crime to the police, because this way victims can get compensation and can process it. Furthermore, it is important for the creation of a safe society to report criminal offenses to the police, so that crime remains under the control of the judicial

services. Even though research has been done several times on factors that influence reporting a crime to the police, research about specifically non-reporting is very limited. Therefore, focussing specifically on non-reporting makes this research unique in the field of reporting studies.

Based on previous literature, various theoretical models have been elaborated to distinguish factors at different levels. The theories were divided into three main models: the economic model, the psychological model, and the sociological model. Since the economic model could not be measured with the available secondary data, this model was omitted. The focus in this study was on the one hand on the sociological model with the social factors social economic disadvantage and social cohesion, and on the other hand on the psychological model with the factors gender, age and fear of reprisal.

By performing a binary logistic regression, the following research question could be answered: “*What social or individual factors can explain why people ignore or refuse to call the police when they witness a criminal offense?*”. The results of this research show that the social factor social cohesion is an explanatory factor in the choice of citizens to not report a criminal offense to the police. When people live in a neighbourhood with a high degree of social cohesion, they show a higher probability of non-reporting than people who live in a neighbourhood with a low degree of social cohesion. Therefore, the factor social cohesion can explain why people ignore or refuse to call the police when they witness a criminal offense.

More specifically, the findings of this research clarify five specific relations between the factors social economic disadvantage, social cohesion, gender, age, and fear of reprisal on non-reporting. These findings will now be outlined. First of all, the findings are not in line with the stratification hypothesis of Black (2010), which states that a wealthier part of the society has more access to laws than a less wealthy part of the society. With law, Black (2010) refers to several phenomena like calling the police, visiting a regulatory agency, or a lawsuit. It was expected that people from social economic disadvantaged neighbourhoods show a higher probability of non-reporting than people from wealthy neighbourhoods. However, this was not statistically significant in the analysis. Therefore, the findings are not in line with the stratification hypothesis of Black (2010) and other studies who investigated this relationship (Baumer, 2002; Goudriaan, Wittebrood & Nieuwbeerta, 2005).

The findings of this study are not in line with the social disorganization theory (Lanier, Henry & Anastasia, 2015) which states that there is little surveillance from the community itself and that institutions of informal control are weak in a neighbourhood with low social cohesion. However, findings do support the results of Warner (2007), which state that social cohesion in

a neighbourhood results in a lower probability of directly intervening. In the analysis, an effect was found of social cohesion on non-reporting. This was in the same direction as Warner (2007) found it. People from a neighbourhood with a high degree of social cohesion show a higher probability of non-reporting when they witness a crime than people from a neighbourhood with a low degree of social cohesion. This finding is in line with Black's theory on the behaviour of law (2010) and could also be explained by this theory. According to the theory on the behaviour of law, the willingness to report a crime decreases if the personal distance between offender and victim is small. Therefore, there is a higher probability of non-reporting in neighbourhood with high social cohesion, because there will be a small distance between people.

No moderation effect was found in the analysis. The relation between social economic disadvantage and non-reporting will thus not be strengthened when social cohesion in that neighbourhood is weak as well. This finding is not in line with the results of Goudriaan (2006).

It was not found that men are more likely than women to not report a crime to the police. So, the findings are not in line with the results of Ménard (2003). This could be an indication that the results of Singer (1988) are correct. However, that should be elaborated in future research. It was expected that juveniles show a higher probability of non-reporting than elderly. However, since the findings for this hypothesis were not statistically significant, the hypothesis had to be rejected. This finding is not in line with the results of Watkins (2005). From this finding little can be said about the results of Bickman and Helwig (1979), Skogan (1984), and Goudriaan (2006), since age was not measured in cohorts in this thesis. This could be an idea for future research. No effect of fear of reprisal on non-reporting was found. This is not in line with the results of previous studies (Singer, 1988; Felson, 2002; Holvast & van der Meij, 2011; Vynckier & Hardyns, 2012). From the findings no conclusion can be drawn from the influence of neutralization techniques (Agnew, 1985; Weiss, 2011), and distance between the offender and victim (Black, 2010), since this was not specifically tested in the analysis.

Discussion

The strength of this study is that it focuses specifically on non-reporting. Since many studies focus on the level of reporting, this study is innovative in the field of reporting studies with its focus on non-reporting. However, this study also has some limitations.

One of the main limitations of this study is the use of secondary data. This led to the fact that crime factors could not be included in the theoretical model and to variables that could sometimes not be operationalized perfectly. Theories and earlier research show that crime factors such as crime type and the degree of damage caused by the crime play a role in

explaining non-reporting. However, the LISS data did not contain any data on crime factors, which meant that these factors could not be included in this study. Future research could include these factors and place them alongside the psychological and sociological model. Next to this, some variables could not be operationalized perfectly because the questions and answers from the secondary data questionnaires did not exactly match the variables that were used in this study. This was especially the case with the variables social economic disadvantage and fear of reprisal. Social economic disadvantage captures more than the financial situation of households. However, in this study only financial situation was used because of the limited options from the secondary data. Future research could take into account more concepts to operationalize social economic disadvantage. Concepts that are suitable for operationalizing social economic disadvantage and that are used in earlier research are: the percentage of households below the poverty level, the percentage of household with an unemployed parent, and the percentage of households receiving benefits from the welfare department (Goudriaan, Wittebrood & Nieuwbeerta, 2005). Furthermore, this variable was measured on the household level instead of the neighbourhood level. In future research, this could also be measured at the neighbourhood level. Next to the variable social economic disadvantage, the variable fear of reprisal could not be operationalized perfectly. This was specifically the case for the part of reprisal. In this study the anxiety to fall victim to crime was used to measure this. Future research could not only use fear, but also take into account reprisal. Concepts that are suitable for operationalizing fear of reprisal are: the relationship between victim and offender (Singer, 1988; Felson, 2002), the type of the offense, and the place where the offence occurred (Singer, 1988). These concepts could influence the degree of fear of reprisal according to previous research.

The dependent variable non-reporting was operationalized clearly. However, only a small number of respondents scored 1 on this variable, which means they will not report a crime to the police when witnessing one. There could be several explanations why only few people declare that they will not report a crime to the police. First of all, merging secondary data sets resulted in a loss of respondents. This may have caused a loss in the number of respondents who scored 1 on the variable non-reporting. Second, the phrasing of the questionnaires could have led to a measurement error. There were reverse worded items in the questionnaire. This could have led to incorrect responses of people that were not paying attention and responded to every question with the same answer (for example totally agree). This may have caused a higher number of people that state that they will report a crime to the police and to a lower number of people that state that they will not report a crime to the police. Finally, there is a chance that respondents gave socially desirable answers. Some people will not declare that they will not

call the police because they think it is socially desirable to call the police when witnessing a crime. This social desirability could also be an explanation for the small number of respondents that declared that they will not report a crime to the police when witnessing one. This small number of respondents that scored 1 on the variable non-reporting made performing the analysis rather difficult, because of the possibility of a type II error. Future research could conduct its own questionnaire and recruit a larger number of respondents.

Another limitation that should be taken into account is the difference in context. A lot of research used in this study has been conducted in the United States. This is a different context than the Netherlands where the LISS questionnaires were conducted. The differences in context could be an explanation for the difference in outcomes between previous studies and this study. Cultural norms and values differ per country. This could ensure that the outcomes of a quite similar study will be different in one country from another country.

The final limitation that must be discussed is the omission of a multilevel model while the data has a layered structure. Since the questionnaire of the LISS data are filled out by multiple people in a household, respondents are clustered within a household. This created a layered structure in the data that was used in this study. Because participants nested in the same cluster are more likely to function in the same way than participants nested in different clusters, the observations of the data are interdependent. To correct for this, a multilevel model could be used. In this study a binary logistic regression was performed without multilevel modelling. Therefore, the assumption of independence, which characterizes the regression analysis, was violated. Although the Intraclass Correlation Coefficient was only 0.0521 which means that about 5.21% of the variability in non-reporting lies between households, a multilevel analysis is necessary to account for non-independence. Future research could perform the same analysis of a binary logistic regression but with multilevel modelling so the within-cluster effects will be disentangled from the between-cluster effects.

By investigating more factors such as crime factors, by using other methods like conducting your own questionnaire and data, and by performing a multilevel model analysis, future research could advance theories about non-reporting and give more insights into factors influencing non-reporting. Exploring factors that influence non-reporting is unique because it offers insights in the definite unwillingness to call the police when witnessing a crime. This study has contributed to theories about non-reporting, by showing that social cohesion has an influence on non-reporting. People from a neighbourhood with a high degree of social cohesion show a higher probability of non-reporting when they witness a crime than people from a neighbourhood with a low degree of social cohesion.

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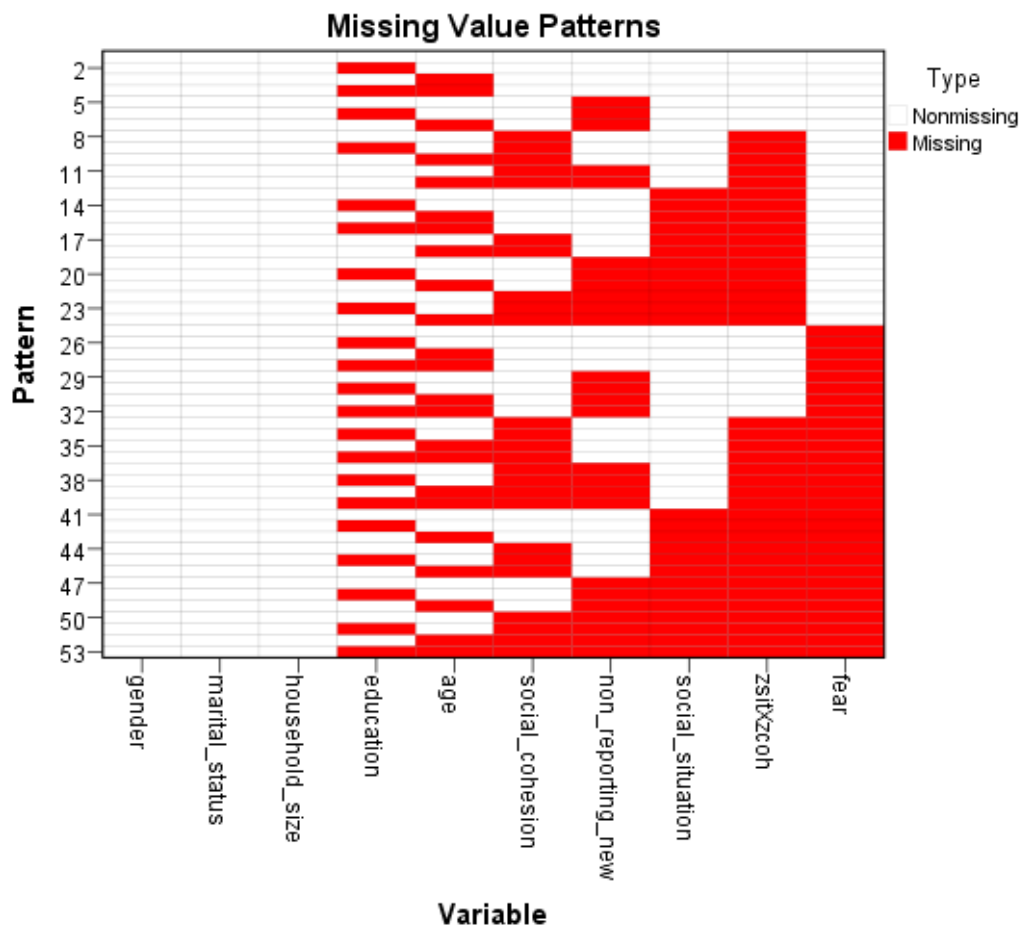
Appendix 1 – Table 1

Table 1: Crosstabulation of the variables fa11a067, fa11a070 and fa11a081

		If I see a crime in progress, I would call the police (fa11a067)					Total
		1 completely disagree	2	3	4	5 completely agree	
In the past, I have seen a crime happening and ignored it (fa11a070)	1 completely disagree	23	30	90	431	1915	2489
	2	3	20	60	325	422	830
	3	9	25	175	196	368	773
	4	2	20	61	167	184	434
	5 completely agree	6	15	35	48	172	276
	Total	43	110	421	1167	3061	4802
I will not call the police if I see a crime in my neighborhood (fa11a081)	1 completely disagree	10	25	92	600	2469	3196
	2	4	22	77	300	118	521
	3	0	16	67	43	43	169
	4	4	15	73	68	39	199
	5 completely agree	13	12	26	80	277	408
	Total	31	90	335	1091	2946	4493

Appendix 2 – Figure 2

Figure 2: Missing Value Patterns



Appendix 3 – Table 6

Table 6: Correlation table of all the variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Non-reporting	1																	
2. Non-reporting1	-0.040**	1																
3. Non-reporting2	0.255**	-0.279**	1															
4. Non-reporting3	0.508**	-0.369**	0.209**	1														
5. Social economic disadvantage	0.018	0.017	0.003	0.014	1													
6. Social cohesion	0.051**	0.012	0.005	0.003	0.032	1												
7. Socialcohesion1	0.045**	0.012	0.020	-0.002	0.023	0.784**	1											
8. Socialcohesion2	0.031*	0.007	-0.007	-0.010	0.002	0.766**	0.667**	1										
9. Socialcohesion3	0.022	0.011	-0.004	-0.010	0.016	0.773**	0.635**	0.615**	1									
10. Socialcohesion4	0.041**	-0.002	-0.004	0.016	-0.005	0.746**	0.443**	0.396**	0.453**	1								
11. Socialcohesion5	0.049**	0.011	-0.012	0.011	0.012	0.673**	0.309**	0.300**	0.353**	0.548**	1							
12. Gender	0.013	-0.019	0.07	-0.002	-0.005	0.010	0.020	-0.006	0.007	0.014	0.007	1						
13. Age	0.007	0.014	-0.011	-0.004	0.007	-0.010	-0.020	-0.024	-0.022	0.003	0.018	0.012	1					
14. Fear of reprisal	0.016	0.025	-0.010	0.016	-0.018	0.017	0.016	0.008	0.019	-0.003	0.025	-0.013	0.019	1				
15. Social economic disadvantage *social cohesion	0.022	0.003	0.003	0.028	0.027	-0.133**	-0.114**	-0.114**	-0.120**	-0.081**	-0.080**	0.044**	-0.023	0.017	1			
16. Education	-0.003	0.001	-0.002	0.006	0.019	0.020	-0.001	0.027*	0.015	-0.005	0.023	0.034**	-0.007	0.042*	0.009	1		
17. Marital status	-0.002	-0.006	0.009	0.003	0.024	0.007	-0.003	0.011	-0.007	0.000	0.019	0.009	0.438**	0.021	-0.011	0.329**	1	
18. Household size	-0.013	-0.020	-0.010	-0.028	-0.009	0.008	0.021	0.016	0.025	-0.004	-0.008	0.024*	-0.444**	-0.039*	0.021	-0.282**	-0.070**	1

*** p < .001, ** p < .01, * p < .05