The Effects of Perspective-taking on the Willingness to Execute Guardianship in Burglary Crimes among Civilians

Bachelor Thesis - Psychology of Conflict, Risk & Safety

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Abstract

This research aims to investigate the factors influencing residents' willingness to perform or invest in guardianship. Past research into this topic revealed that not all available individuals are willing to physically intervene in burglary crime situations. Thus, this research measures willingness and studies the influence of perspective-taking on willingness to perform or invest in different forms of guardianship. In a repeated-measures, perspective-taking study, 53 participants are exposed to eight manipulations from the viewpoint of a burglar and a resident. Within the manipulations, participants were exposed to two different neighbourhoods and four different forms of guardianship. However, the results of the analysis revealed no significant differences in participants' willingness to guard physically or invest in symbolic and dynamic guardianship or their perception of social cohesion pre and post-perspective-taking. Thus, the results indicate that perspective-taking did not have a significant impact on this research. It is important to understand the factors influencing residents' willingness in order to be able to influence the willingness. Increased willingness in turn would help to decrease residential burglary crimes. Therefore, further research is needed to explore effective strategies for increasing residents' willingness to guard.

The Effects of Perspective-taking on the Willingness to Execute Guardianship in Burglary Crimes among Civilians

According to conducted crime surveys, many individuals in society are worried about becoming a victim of burglary (Ceccato, 2016). This is caused by the prevalence of burglary crimes (Ceccato, 2016) and also the consequence of feeling unsafe after being a victim of burglary (Ruijsbroek et al., 2015). Cohen and Felson (1979) introduced the routine activity theory (RAT), which explains that burglary is the product of three aspects converging. Those elements are (1) a motivated offender, (2) a suitable target and (3) the absence of a capable guardian. A *Guardian* can be explained as a single individual, or a group of individuals, who deter a (potential) offender from committing a crime, either intentionally or unintentionally (Hollis-Peel et al., 2011). The fact of residents being present around a potential target is consistently found to lower the risk of a burglary crime taking place (Bennett & Wright, 1992; Coupe & Blake, 2006; Cromwell et al., 1991; Wright et al., 1995).

During the last years, the view on guardianship got expanded and researchers currently work with different forms of guardianship, for example, physical and symbolic. Reynald (2008) differentiated three levels of *physical guardianship* from each other. The first level is the mere presence of a guardian. Secondly, there is the guardian who is actively watching their surroundings. Lastly, the guardian is not only actively monitoring the environment but also willing to intervene when they observe suspicious actions happening. Not only are there different levels of guardianship, but also different forms of physical guardianship. It can take over a formal or informal position. *Formal guardians* (e.g. police officers, and security guards) take on a professional role in guardianship, while *informal guardians* (e.g. residents) do not (Elffers & Ruiter, 2016 as cited in van Sintemaartensdijk et al., 2021).

Next to the physical presence of a guardian, guardianship can also be executed by tools (Hollis-Peel, 2011). *Symbolic guardianship* may signalise to offenders that there is a possibility of being observed (Hollis et al., 2013). There are several examples of symbolic guardianship, one being closed-circuit television (CCTV). A CCTV signalises to potential offenders that there might be someone watching the tape and thus, observing them (Jones & Pridemore, 2019). The offender cannot be sure if the camera is active or maybe even just a dummy, still, it has a deterring effect on them and keeps them from burgling a property (Hollis et al., 2013). This is because the feeling of being watched is an essential mechanism involved in guardianship (van Sintemaartensdijk et al., 2022). Furthermore, there are specific

signs that can act as symbolic guardianship. For example, signs that warn of dogs (Hollis et al., 2013) or neighbourhood watch signs and police signs (van Sintemaartendijk et al., 2022). Neighbourhood Watch signs signalise that habitants may intervene and make use of mobile phone chat groups if observing suspicious actions around their neighbourhood (Lub, 2018; Pridmoreet al., 2019). Similar to the CCTV, the presence of these signs does not mean that there is actually a dog or neighbours watching, nevertheless it has a deterring effect (van Sintemaartensdijk et al., 2022). In recent years in the Netherlands, signs were introduced, which are suggesting police activity as a symbolic measure to deter potential offenders. Thus, symbols can act out as a form of guardianship, leaving the offender unsure if there might as well be a physical guardian present.

Furthermore, it is not researched well yet, but there might be an additional form of guardianship. This type might have evolved in past years with the introduction of smart homes. Smart homes allow the automatization of technologies in the house (Lobaccaro et al., 2016). Thus, in this research, we will add one type of guardianship which combines physical guardianship and symbolic guardianship. This form will be referred to as *dynamic guardianship* and gives an offender the impression that there might be someone physically present, thus could observe them or intervene. An example of dynamic guardianship could be automated lights or shutters, signalising movements in a house. Dynamic guardianship is important because it might effectively deter burglars without the need for residents to actively intervene. It increases security without someone acting as a physical guardian. Residents can create the impression of someone being around a target and possibly monitoring the area without them being at home. This form of guardianship counteracts the limitation of physical guardianship that someone has to be present. Additionally, knowing their house is protected from burglars when not being at home, might give residents feel a sense of control and peace of mind.

Willingness to Perform Guardianship

Studies revealed that not all available individuals are willing to perform physical guardianship (Reynald, 2010; Reynald & Moir, 2018). Interview studies show that the availability of an individual does not automatically results in supervision nor intervention (Reynald, 2010). Out of 225 present individuals, 15% stated that they decided to not monitor their neighbourhood. Furthermore, only 16% out of 217 witnesses of a crime stated their willingness to directly intervene. Also, only 20% of the same sample would start an

intervention while observing suspicious behaviour in their surroundings. Hence, there exists already a substantial amount of knowledge on willingness and physical guardianship. Past research revealed that the willingness of a person to act as a guardian is influenced by several factors in the context and surrounding they are placed in (Bruinsma & Weisburd, 2014). These factors include the socioeconomic status of a neighbourhood, interaction among neighbours and collective efficacy (Bruinsma & Weisburd, 2014; Reynald, 2011; Reynald, 2014). Still, the effect of the context in which an individual finds themselves on guardianship behaviour is not extensively studied (Hollis-Peel & Welsh, 2014; Hollis-Peel et al., 2012; Moir et al., 2017). The aforementioned factors influencing the willingness are thus of interest to be investigated in this study and further, it is of interest to include other forms of guardianship next to only physical guardianship.

Socioeconomic Environment

Reynalds (2014) claims that the intensity of executed guardianship by residents is influenced by the contextual factors of a neighbourhood. The subfactors of the socioeconomic environment can have an impact on neighbours' availability, monitoring behaviour, and their willingness to take intervening actions. Subfactors falling under socioeconomic environment, that can influence the probability of residents to intervene, include residential instability, disadvantage, and ethnic heterogeneity (D'Alessio et al., 2012; Garofalo & Clark, 1992; Lynch & Cantor, 1992; Miethe & McDowall, 1993).

Research into neighbourhood context and crime suggest that ethnic homogeneity and residential stability decreases the risk of crimes happening. This is because these factors influence social processes in the neighbourhood that are important for guardianship behaviour. These social processes include e.g. the ability of neighbours to effectively communicate with one another and thus can form collective norms (Weisburd et al, 2012; Weisburd et al 2014). In homogeneous communities, neighbours might agree on how to respond towards suspicious behaviour happening in the neighbourhood (Bursik & Grasmick, 1993; Leigh, 2006; Steenbeek & Hipp, 2011). This might be hindered in neighbourhoods of ethnic heterogeneity as communication might be more difficult (Weisburd et al., 2012; Weisburd et al., 2014). The establishment of behavioural norms on how to react to criminal behaviour in the neighbourhood thus might be hindered. Furthermore, neighbours might not take conventional ways to intervene like calling the police (Goudriaan et al., 2006).

High mobile, ethnically diverse and disadvantaged neighbourhoods might be connected to less guardianship behaviour to prevent crime, however, this link is not well-researched yet. Concluding, the socioeconomic environment, meaning the social and economic conditions in which individuals live, operate and interact, seems to influence the social processes among neighbours. These social processes in turn might impact if and how effectively guardianship is performed in a neighbourhood. Furthermore, research into fear of crimes shows that crime and disorder in a neighbourhood influence the perception of fear of future crimes (Skogan & Maxwell, 1981 as cited in Rountree & Land, 1996).

Interaction among Neighbours

The interaction between neighbours affects guardianship in crime situations (Reynald, 2011). Xie and McDowall (2008) mention that neighbourhoods in areas of high residential turnover have a higher risk of burglary crimes to take place. This can be explained by new neighbours having fewer friendships in the neighbourhoods and thus having fewer neighbours that are willing to act as guardians for them. Additionally, long-term neighbours know each other's' routine and can more easily detect unusual movements that might be a sign of criminal activity happening in their neighbourhood. Furthermore, they are more likely to take intervening actions as a response to suspicious behaviour (Xie & McDowall, 2008). Thus, long-term neighbours might create better bonds of helping one another for the common good of a neighbourhood. Additionally, past research revealed that social cohesion among or integration within a neighbourhood reduces the fear of crime in residents (Skogan & Maxwell, 1981 as cited in Rountree & Land, 1996).

Collective Efficacy

Recent research unravelled the effect of the social environment on the willingness to guard among residents (Bruinsma & Weisburd, 2014). The residents' willingness to intervene when witnessing a crime in their neighbourhood is influenced by mutual trust and solidarity among the residents of the neighbourhood (Coleman, 1990, as cited in Sampson et al., 1997). This construct can be named *collective efficacy* and defined as the social cohesion among residents and their willingness to intervene in crime situations in order to maintain the well-being of the entire neighbourhood (Sampson et al., 1997). Thus, a good relationship, including mutual trust and solidarity, to their neighbours is encouraging residents' willingness to guard against a burglary (Bruinsma & Weisburd, 2014; Coleman, 1990, as cited in

Sampson et al., 1997). Furthermore, studies on this topic revealed that there is a negative relationship between collective efficacy among neighbours and crimes (Hipp & Wo, 2015). Concluding, collective efficacy is an important aspect to consider while researching the willingness to guard among residents. From past research, it can be concluded that more collective efficacy among a neighbourhood increases the willingness of residents to engage in physical guardianship for properties in their neighbourhood. This is why perceived collective efficacy should be taken into account and measured within a study catered for willingness to guard. Furthermore, data on the effect of collective efficacy on the willingness to invest in other guardianship forms next to physical guardianship has to be collected still.

Perspective-taking in Crime

Perspective-taking or trying to see the world from another person's point of view (Galinsky et al., 2005) is well-known among social psychologists (Mann, 2023). In perspective-taking studies, participants are usually given a first-person narrative from a person and are asked to view the situation from that person's point of view. Research into perspective taking revealed that taking over another person's perspective can be successful in increasing empathy, altruism and understanding of the other persons' emotions and actions (Cialdini et al., 1997; Maister et al., 2015). After taking perspective in research, participants' ability to recognize other individuals' emotions increased (Seinfeld et al. 2018). Furthermore, viewing a situation from another's perspective can increase moral development (Kohlberg, 1976) and can foster prosocial behaviour (Batson et al., 1995). Taking previous research findings into account, perspective-taking might be a valuable tool to gain more insight into how residents' willingness to guard can be altered. It might be interesting to research if asking participants to take on the perspective of a burglar and resident in different neighbourhoods has an effect on their willingness to guard.

One can speculate that taking the perspective of an offender and victim in burglary situations might increase individuals' perception of the importance of the different forms of guardianship. Conclusively, participants are more willing to perform physical guardianship or invest in symbolic or dynamic guardianship. Being exposed to guardianship while taking perspective, participants would perceive this as deterring in the burglar perspective and as a tool to feel less susceptible to becoming a victim of a burglary crime. Especially taking over the perspective of a burglar, participants might have a feeling of being watched. The feeling of potentially being observed is essential for burglars to make a decision (van

Sintemaartensdijk et al., 2022). During perspective-taking, participants may become aware of the effect of CCTV on burglars' decision-making. Thus, after seeing the different neighbourhoods through the eyes of a resident and burglar, participants might see the potential benefit that guardianship brings for themselves and the community. Because of that insight, participants might feel an increased amount of concern to become victims of a burglary crime in their neighbourhood and thus, they develop a greater responsibility regarding the well-being of their neighbourhood. In conclusion, these aspects might influence participants' willingness to act as guardians or invest in symbolic and dynamic guardianship. Taking over the perspective of a resident might foster a sense of shared identity, which in turn might lead to an increased perceived social cohesion in participants (Galinsky & Moskowitz, 2000).

Current Study

The current study aims to research the willingness of available individuals to perform guardianship. The research will be conducted to test hypotheses about the willingness of residents to perform guardianship. The goal is to gain knowledge about how residents can be motivated and encouraged to act as guardians. In order to reach this goal, an online survey is administered, in which participants find themselves in different perspectives (perspective of a resident, perspective of a burglar) and surroundings (low or high socioeconomic status (SES). Furthermore, different forms of guardianship (physical guardianship, symbolic guardianship, dynamic guardianship) are either present or not. The willingness to execute guardianship among participants will be tested in the form of questions before and after they are asked to take different perspectives. Furthermore, the social cohesion among neighbours is tested as part of a collective efficacy questionnaire pre-and post-perspective-taking. Additionally, participants respond to questions regarding previous experience, their own upbringing, and their own living situation. During the perspective-taking, the participants are asked to imagine they were residents or burglar in several different surroundings.

This research aims to test the following hypothesis regarding the willingness of participants to perform guardianship:

> H1: After taking the perspective of an offender and resident, participants are more willing to invest in symbolic and dynamic guardianship.

H2: Participants that started with the burglar perspective, have an increased willingness to act as guardians or invest in dynamic or symbolic guardianship after taking the perspective.

H3: After the perspective-taking part, participants perceive the social cohesion in their neighbourhood as greater.

Methods

Design

The present study had a 2x4x2 (offender/ resident x symbolic/ physical/ dynamic/ no guardianship x low/ high SES) within-participants design. Furthermore, this research was a pre-post study, as the willingness to act as a guardian is measured at the surveys beginning and the end. Thus, the willingness to act as a guardian at the end of the survey served as a dependent variable in the study design. The neighbourhood (high SES versus low SES) was an independent variable. A second independent variable was the type of guardianship (none, physical, symbolic, and dynamic) present. Furthermore, perspective-taking (offender versus resident) was a third independent variable.

Participants

For this study, 116 participants were recruited through word of mouth, the social media channels of the researchers and from the faculty's participant recruitment pool (Sona Systems Utwente). However, because of technical problems, only 53 participants (*Mage* = 28.9, *SD* = 12.6) were exposed to a pre-questionnaire, a perspective-taking part, and a post-questionnaire. Initially, the participants were equally distributed into first taking on the offender's perspective, then the perspective of the resident and vice versa. But after data cleaning, 25 participants were assigned to start with the offender's perspective, and 28 participants were assigned to begin with the perspective of the resident. The sample for this study consisted of 35 females and 18 males. Their ages ranged from 19 years to 62 years. 31 of the participants were from Germany, ten from the Netherlands and twelve participants were from other countries.

Measures and Materials

Questionnaires

After giving consent, the participants were first asked about their demographics like age, nationality, profession, and gender. Furthermore, the questionnaires that were administered before the perspective-taking consisted of five blocks, in which the variables *Willingness*, *Individual Experience* and *Collective Efficacy* were measured.

Willingness

A block of questions regarding participants' willingness (Appendix A) to act as guardians were administered twice. Participants were exposed to this questionnaire before and after the manipulations. Five closed questions ($\alpha = .25$, $M = 2.85$, $SD = .70$) were formulated to evaluate participants' willingness to act as guardians. An example item for the questions assessing willingness is:" How likely are you to spend money on safety items (e.g., CCTV) that might prevent a burglary crime in your house?" The questions had answer possibilities ranging from *1-extremely unlikely* to *5-extremely likely* on a five-point Likert scale. Furthermore, an open question was administered, asking the participants for more elaboration.

An exploratory factor analysis (FA) was conducted in order to investigate the factor structure of the willingness scale. A Kaiser-Meyer-Olkin (KMO) measure was performed to evaluate if the scale is suitable for a FA. The KMO statistic ranges from 0 to 1, with values closer to 1 indicating better suitability for FA. The sampling adequacy of 0.64 for this scale, indicates suitability for FA. Additionally, a significant p-value ($\alpha = .05$) for Barlett's sphericity indicates that the variables are correlated, indicating suitability for a FA. Subsequently, to examine factor relevancy, "eigenvalues", the explained variances by a factor, were checked for the Kaiser's criterion (eigenvalue > 1) and a scree plot was created to check the elbow criterion, which selects factors at the steepest part of the scree plot. The first factor is quite large as it has an eigenvalue of 2.061. This suggests that it explains a large amount of the variance in the data. The second factor has an eigenvalue of 1.05, which is also relatively large, and indicates that it explains a significant amount of additional variance as well. The remaining factors have an eigenvalue of below one, thus a FA with orthogonal rotation was conducted with two factors. Factor 1 *(*$\alpha = .66$*,* $M = 2.04$*,* $SD = .84$*)* was formed by the following items: "engaging in supervision", "spending time outside to deter burglars, "neighbourhood watch scheme", "spending money on safety items" reflected a more passive

form of guardianship. Factor 2 (*M* = 4.21*, SD* = .79) was formed by the item "intervention when witnessing a crime" and reflected a more active form of guardianship. The two-factor model explains 37,5% of the total variance with 26,1% being explained by Factor 1 and 11,5% explained by Factor 2. Later on, analyses were conducted with the full scale and the independent factors separate.

Individual Experience

Next, participants were asked to fill in questions regarding their upbringing, current living situation and previous experience (Appendix B). These questions were administered to get insight into participants' *Individual Experiences*. The block consisted of eight closed questions *(*α = .45, *M* = 2.79, *SD* = .55*)* inspired by another student's work. The questions were created in order to learn more about aspects of the participant's life, which might impact their decision-making process when witnessing a burglary situation in their neighbourhood. Answer possibilities again were given on a five-point Likert scale, but this time they ranged from *1-strongly disagree* to *5-strongly agree*. An example item is: "The neighbourhood I live in nowadays is relatively wealthy".

Efficacy

Furthermore, the *Efficacy* questionnaire from Sampson et al. (1997) was altered to the needs of this study and split up into three blocks in this study. The original scale was created for the population in the US and thus included aspects that did not fit the needs of this study or lacked some aspects as it was not specialised for burglary situations. Thus, after evaluating the target population and goal of this study, some questions were altered, deleted or new questions were created and added.

The first block of the efficacy questionnaire measured *Informal Social Control* on a five-point Likert scale, ranging from *1-extremely unlikely* to *5-extremely likely*. The block consisted of six statements (α = .64, *M* = 3.09, *SD* = .66), one example is: "Would you say it is likely that your neighbours could be counted on to intervene in various ways if a fight broke out in front of your house". The Informal Social Control questions were administered before and after the manipulations.

An exploratory FA was conducted for the responses on the scale pre-manipulation to get insight into the factor structure of the informal social control scale. The sampling

adequacy of the KMO measure was 0.67, suggesting suitability for FA. The value for Barlett's sphericity tests had a significant p-value, which indicates suitability for a FA. Kaiser's criterion and a scree plot suggest a two-factor structure. The first factor with an eigenvalue of 2.294 suggests that it explains a large amount of the variance in the data. The second factor has an eigenvalue of 1.194, indicating that it explains a large amount of additional variance next to the first factor. Additional factors have an eigenvalue of smaller than one. Therefore, a FA with orthogonal rotation was conducted with two factors. Factor 1 ($\alpha = .70$, $M = 3.28$, $SD = .82$) was formed by the following items: "Children skipping school", "Children spray-painting", "Children showing disrespect", and "Fight in front of house". Factor 2 ($\alpha = .37$, $M = 2.72$, $SD = .85$) was formed by the items "Person wandering through the neighbourhood" and "Youth centre threatened with budget cuts" and reflected the items that we added/ adjusted to the scale ourselves. The two-factor model explains 38,3% of the total variance with 26,9% being explained by Factor 1 and 11,4% explained by Factor 2.

The second block from the efficacy questionnaire measured social cohesion. It included six statements ($\alpha = .82$, $M = 3.59$, $SD = .73$) that participants could answer on a five-point Likert scale ranging from *strongly disagree* to *strongly agree.* An example item would be: "People in my neighbourhood can be trusted". *Again*, participants were exposed to this block before and after they saw the manipulations.

An exploratory FA was performed for the responses on the social cohesion scale pre-manipulation. The overall MSA value for this scale is 0.83, which indicates that FA can be conducted. The MSA for each range from 0.78 to 0.86, and 0.89. The Barlett's sphericity tests had an associated p-value, which was extremely small, suggesting significance and thus suitability for FA. Kaiser's criterion and a scree plot both indicate a one-factor structure. The factor had an eigenvalue of 2.898 suggesting that it explains a substantial amount of the variance of the scale. Thus, a FA with orthogonal rotation was conducted with one factor. The one-factor model explains 48,4% of the variance in the data. The correlations between the items and the factor range from .52 to .86.

Lastly, the efficacy questionnaire consisted of a block for the *Measurement of Violence*. The scale included five items ($\alpha = .56$, $M = 1.02$, $SD = .27$). Four statements were answered again on a five-point Likert scale ranging from *1-Never* to *5-Always.* Example statement: "How often in the past six months has the following occurred in your neighbourhood a sexual assault or rape." Finally, participants were asked to indicate *0-No* or

1-Yes for the following statement: “While you have lived in this neighbourhood, has anyone ever used violence, such as in a mugging, fight, or sexual assault, against you or any household members anywhere in your neighbourhood?”. Unlike the first two blocks of the efficacy questionnaire, participants were told that they did not have to answer if they felt uncomfortable and that it was possible to continue the survey without selecting an answer option.

Again, I performed an exploratory FA on the measurement of the violence scale. A KMO was conducted and the overall MSA value was 0.69, suggesting that I can continue with the FA. The MSA for each item ranges from 0.65 to 0.78. The p-value of Barlett’s sphericity tests was significant and thus suggests suitability for FA. Kaiser's criterion and a scree plot for this scale both suggest a one-factor structure. The factor had an eigenvalue of 2.312 and thus explains a great amount of the variance. Based on this, a FA with orthogonal rotation was conducted with a single factor. The one-factor model explains 36.2% of the variance of the scale. The correlations between the single items and the factor range from .34 to .92.

Manipulations

Perspective-taking

After the participants completed the pre-questionnaire, they were asked to take on the perspective of an offender and a resident. Perspectives were created by the participants being exposed to pictures and short texts. Participants were randomly allocated to the first being exposed to the offender role, then the non-offender role and vice versa. The participants saw the following text for the offender role: “We want you to take on a burglar's perspective for the following part of the study. Thus, try to answer the following questions as best as possible, imagining you are a burglar.” And next for the resident role: “Take a minute to study the picture. Imagine that you live in the neighbourhood that you see in the picture. Do you feel as if this neighbourhood is sensitive to burglars?”.

Guardianship

Throughout the survey, participants were exposed to four different types of guardianship. The manipulations either included physical, symbolic, and dynamic guardianship or no guardianship as a control condition. For the physical guardianship

conditions, we added physical guardianship in the form of a mother walking with her child through the neighbourhood (Figure 1).

Figure 1

Physical guardianship

To display symbolic guardianship, we added a security camera for this condition (Figure 2).

Figure 2

Symbolic guardianship

Furthermore, we added pictures without any form of guardianship to represent the neighbourhoods without a guardian as control condition. For the dynamic guardianship condition, participants saw the same pictures without any form of guardianship visually present. In the dynamic guardianship condition, participants were exposed to a text which explained that dynamic guardianship is present in the neighbourhood. “Take a minute to study the picture. Now, imagine you are a burglar walking through the neighbourhood you see in the picture. When you pass a house, you see the lights turning on and the blinds closing.

However, you do not see anyone doing it. How likely are you to burgle here?" Participants were asked to answer this question on a five-point Likert scale ranging from *extremely unlikely* to *extremely likely*. There was a similar text for the non-offender condition.

High/ Low SES

In addition to the four types of guardianship, the forms of guardianship were placed in high-SES and low-SES neighbourhoods (Figures 3 and 4).

Figure 3

High SES

Figure 4

Low SES

For each of the 16 manipulations, participants in the offender role were asked how likely they were to burgle that neighbourhood. E.g.," Take a minute to study the picture. Now, imagine you are a burglar walking through the neighbourhood you see in the picture. How likely are you to burgle here". In turn, participants in the non-offender role were asked if they

felt this neighbourhood was sensitive to burglars. E.g.," Take a minute to study the picture. Imagine that you live in the neighbourhood you see in the picture. Do you feel as if this neighbourhood is sensitive to burglars?". Answer options in the perspective-taking part ranged from *extremely unlikely* to *extremely likely* on a five-point Likert scale. Thus, every participant was exposed to eight manipulations in each perspective. The eight different manipulations for each perspective were randomised to counteract the fatigue effect and participants getting bored by seeing the pictures or descriptions in the same order twice (APA Dictionary of Psychology, n.d.).

Procedure

The Ethics Committee of the Faculty of Behavioural and Management and Social Sciences at the University of Twente gave ethical approval (reference number: 230211) before the study. The study consisted of a survey created on the online platform Qualtrics. The survey was published and shared on Sona Systems of the University of Twente and the researchers shared the link on their socials. Participants filled in the survey on their private devices.

First, the participants started with the pre-questionnaire. At the beginning of the questionnaire, participants were asked to give their consent on an informed consent form (Appendix C). The actual survey was built up of several blocks of questions. Firstly, a block in which participants answered general questions like their gender, age, nationality, and profession was included. In the questionnaire administered before the perspective taking part, questions regarding participants' willingness to act as a guardian were administered to evaluate their willingness before taking part in the questionnaire. The same scale was administered in the post-questionnaire after the participants were exposed to the manipulations. Furthermore, the individual experience scale was included in the pre-questionnaire. These questions were administered to see if certain aspects or characteristics of a person's life influence their Willingness to execute guardianship. Participants were asked to fill in an efficacy questionnaire, consisting of blocks measuring informal social control, social cohesion and measurement of violence, before the manipulations. After the manipulations, participants were exposed to the informal social control and social cohesion block a second time in the post-questionnaire.

In the perspective-taking part, participants were exposed to different manipulations and asked to take on the perspective of an offender and a non-offender. They were randomly allocated first to be exposed to the offender role, then the non-offender role and vice versa. Here, it is important to take the fatigue effect into account. The role that participants started with might have a bigger impact on the participants, as the fatigue effect might hinder participants from effectively take over the second role. Additionally, pictures of a high SES and low SES neighbourhood were shown to the participants, which displayed or explained no guardian, physical or symbolic guardianship. For the dynamic guardianship condition, participants were exposed to a text which explained that dynamic guardianship is present in the neighbourhood. Thus, every participant was exposed to eight manipulations in each role. For every manipulation, participants in the offender role were asked how likely they were to burgle that neighbourhood. In turn, participants in the resident part were asked if they felt this neighbourhood was sensitive to burglars.

To conclude, participants were exposed to the debriefing and were thanked for completing the survey. A small text explained the aims of the questionnaire to the participants. Participants knowing about the study's concrete goals before the survey might have influenced their decisions and answers and was, therefore, not possible. Furthermore, participants were informed that they could withdraw after learning about the goals and having their answers deleted. Lastly, it reminded them of their anonymity and that their answers cannot be traced back to them as a person (Appendix D).

Data Analysis

The data from the Qualtrics survey was downloaded as an Excel file and imported to the RStudio version 4.2.1 (R Core Team, 2018). The data was first cleaned and prepared for further analysis. Furthermore, participants were excluded because they were not over 18 or were not exposed to the whole survey because of technical problems.

Results

Preliminary Analysis

Preliminary Analysis was conducted to gain insight into aspects that might influence the results. A correlation matrix was created, specifically to see whether *Age*, *Gender* and the item measuring previous exposure to crime, the item measuring previous experience with

burglary crimes, and the item measuring taking intervening actions before the individual experience scale correlates with the participants' final scores on the willingness scale. The correlation matrix was created with all 53 participants. According to Cohen (1992), a correlation coefficient between .3 and .5 indicates a moderate correlation. In the conducted correlation matrix, only the age of participants moderately correlated with the final scores on the willingness scale. This suggests that age is associated with the scores of the willingness scale to a certain degree. Participants being older thus might have an influence on willingness scores.

Table 1

Means, standard deviations, and correlations

Variable	*M*	*SD*	1	2	3	4	5
1. FinalScore Willingness	2.85	0.70					
2. Age	28.91	12.62	.35**				
3. Gender	0.34	0.48	.24	.50**			
4. Exposed to Crime	3.00	1.48	.05	.19	.14		
5. Previous Experience Burglary	2.75	1.64	-.03	.23	.13	.67**	
6. Intervening Actions before	2.32	1.36	.12	.26	.21	.26	.22

* indicates $p < .05$. ** indicates $p < .01$.

Main Analyses

To test the first hypothesis “After the perspective-taking part participants are more willing to invest in symbolic guardianship.”, a paired-sample t-test was administered. The

means of the items measuring willingness to invest in symbolic and dynamic guardianship of the willingness questionnaire were compared to pre-manipulation (M = 3.45, SD = *1.11*) and post-manipulation (M = 3.34, SD = 1.13) in order to answer the hypothesis. The output of the paired sample t-test was T (52) = 9.03, p = .37 with d = 0.10 thus, shows that there is no significant difference in the means of an item measuring willingness to invest in symbolic and dynamic guardianship of the willingness scale pre-manipulation and post-manipulation.

For answering hypothesis three "Participants that started with the burglar perspective, have an increased willingness after the perspective-taking part", a mixed-design ANOVA was performed. This analysis was conducted specially to see whether the perspective that participants were first placed in, had an effect on the scores on the willingness scale after perspective-taking. The output shows that the effect of the perspective first taken on, on the scores of the willingness is not statistically significant F (1, 49) = 0.03, p = .87 with n^2 = < 0.01. Thus, it can be concluded, that there is no indication that the measured willingness post-manipulation was influenced by the perspective first taken on. Next to that, the same analysis was conducted with the two identified factors of the willingness scale. Conducting an ANOVA for both identified factors separately helps to research the effect of perspective-taking on both factors independently. By separating the two factors of the willingness scale it is possible to see the unique impact of perspective-taking on these factors. This provides an extended understanding of perspective-taking in the willingness of participants. However, the output shows no significant effect of the perspective first taken on, on the scores of Factor 1 of the willingness scale F (1, 49) = 0.01, p = .94 with n^2 = > 0.01. Furthermore, there was no significant effect of the first perspective taken on, on the Factor 2 F (1, 49) = 0.65, p = .42 with n^2 = 0.01. H2 has to be rejected as well.

To test the third hypothesis "After the perspective-taking part, participants perceive the social cohesion in their neighbourhood as greater", a paired sample t-test was performed including the pre-measure (M = 3.58, SD = .73) and post-measure (M = 3.56, SD = .77) of the social cohesion scale. The t-statistic provided by the paired sample t-test was T (52) = 0.71, p = .48. These results suggest that there is no significant difference in the means of the social cohesion scale pre-manipulation and post-manipulation. However, the effect size suggests a moderate value of d = 0.63. This value suggests that, although not statistically significant, there is a difference between the means of the pre-and post-measure. Still, based on the output of the paired-sample t-test, H3 needs to be rejected.

Exploratory analyses

In this section, an exploratory analysis was performed. A one-way ANOVA was created to investigate if the different groups of participants, namely the ones who first started as offenders or the ones who first started as residents, perceive the likelihood of a burglary crime to happen as different. The perceived likelihood acts as a dependent variable in this analysis and was measured during the perspective-taking part. Answers on all 16 manipulations were taken into account for that and summed to a final score of perceived likelihood. Overall, based on the results of the one-way ANOVA analysis, there is no significant evidence to conclude that the group participants were allocated to has a significant impact on the perceived likelihood of a burglary to take place F (1, 51) = 0.85, p = .36 with an effect size of n^2 = 0.02.

Discussion

The study aimed to get more insight into the willingness of residents to execute guardianship over properties in their neighbourhood. Therefore, an online questionnaire with repeated measures and a perspective-taking part was administered. The perspective-taking part included 16 manipulations. Next to the manipulations, participants filled out scales pre-measurement and selected ones were repeated after perspective-taking. I hypothesised that participants are more willing to invest in symbolic and dynamic guardianship after the perspective-taking part. Furthermore, I speculated that participants, starting with the burglar perspective, have an increased willingness after the perspective-taking part. Additionally, I anticipated that participants perceive the social cohesion in their neighbourhood as greater after they took perspective. All three hypotheses were rejected and there was no effect of perspective-taking on the willingness and perceived social cohesion of the participants.

The Effect of Perspective-taking on Residents' Willingness

The first hypothesis was based on the literature on perspective-taking, indicating that taking perspective can increase empathy and helps people to understand others' emotions and actions better (Maister et al., 2015; Seinfeld et al. 2018). Thus, after being exposed to different perspectives, participants were thought to value the potential benefit of symbolic and dynamic guardianship as greater. This insight was thought to influence participants' willingness to invest in symbolic guardianship and dynamic. Based on this, it was

hypothesised that the perspective-taking part affects the willingness to invest through taking on perspectives.

After testing this hypothesis, the results showed no effect of perspective-taking on the willingness to invest in symbolic and dynamic guardianship. The reason for the non-significant result of the t-test, testing this hypothesis might be explained by participants not being able to effectively take on the perspectives. Most of the participants of this research were university students or family and friends of the researchers. Thus, it is quite certain, that participants mostly are part of middle to upper SES. The answers of the violence subscale of the efficacy questionnaires furthermore indicate that participants were not exposed to a lot of crime in their neighbourhood before. Thus, it can be concluded that participants had limited experience with crimes. Past research showed that people struggle to incorporate the representation of distant others into their representation of the self (Aron et al., 1991). Taking this into account, the perspective of a burglar or victim might be too distant to participants which might have hindered them from effectively taking on the offender or victim's perspective in burglary crime situations.

The second hypothesis was again based on findings of perspective-taking research. It was hypothesised that the perspective-taking part, especially taking over the perspective of a burglar, influences willingness. Taking over the perspective of a burglar would help the participants to gain insight into the actions of an offender (Maister et al., 2015; Seinfeld et al. 2018). It was hypothesised that this would lead participants to see the importance of the different forms of guardianship included in this study. Conclusively, participants are more willing to perform physical guardianship or invest in symbolic or dynamic guardianship. Only participants starting with the burglar perspective were selected to test this hypothesis because of the fatigue effect. This effect explains that participants get bored by seeing many similar manipulations and start having trouble concentrating because of this (APA Dictionary of Psychology, n.d.). Thus, the burglary perspective might have a less intense effect on participants starting with the victim perspective first because they were unconcentrated after being exposed to the victim perspective before. Taking all this into account, it was hypothesised that “Participants that started with the burglar perspective, have an increased willingness after the perspective-taking part”.

The performed statistical analyses show that the willingness of participants who started with the burglar perspective did not change significantly after the perspective-taking

part. This finding might be again due to participants being unable to effectively take on the perspective of an offender. Previous research into the deterrent effect of guardianship compared actual burglars and university students in residential burglary situations. The results of the virtual reality (VR) study showed noticeable differences between the actions taken by actual burglars and non-burglars. Offenders in the VR study showed better expertise regarding detecting cues of the behaviour of residents in the neighbourhood. Non-burglars of the research seemed to not have this expertise (van Sintemaartensdijk et al., 2021). This suggests that non-offenders have difficulties taking over the offender perspective. Participants might be unable to see the deterring effect of the different forms of guardianship and thus, willingness did not increase after being exposed to the manipulations. Additionally, the scale was created by the researchers of this study and was not administered before. Therefore, it is possible that the willingness scale administered in this survey was not sensitive enough to detect changes in the willingness of the participants. This might contribute to the non-significant effect of perspective-taking.

Lastly, it was hypothesised that "After the perspective-taking part, participants perceive the social cohesion in their neighbourhood as greater". This effect of perspective-taking on the perceived social cohesion was exploratory in nature, based on the fact that social cohesion among neighbours affects willingness to act in favour of the common good (Sampson et al., 1997). It was of interest if that effect can be reversed. Thus, it was intended to explore whether perspective-taking could increase the willingness among participants and in turn, the higher level of willingness increases the perceived social cohesion. This hypothesis is furthermore based on the assumption that perspective-taking can increase empathy and the understanding of another's feelings and actions. Taking over the perspective of a resident might foster a sense of shared identity, which in turn might lead to an increased perceived social cohesion in participants (Galinsky & Moskowitz, 2000).

When looking at the results of the t-test administered for this hypothesis, it indicates that participants did not perceive the social cohesion in their neighbourhood as greater, after they took on different perspectives. This might be due to the perspective-taking manipulations not addressing the participants' perception of social cohesion but more their perceived susceptibility to a neighbourhood. The manipulations probably did not achieve a big shift in attitudes regarding social cohesion among participants because of that. Additionally, participants probably had an already existing level of perception of social cohesion in their own neighbourhood, which was not influenced by seeing the different neighbourhoods in the

perspective-taking part. Individual differences in attitudes, and previous experiences might have shaped the perception of social cohesion and the manipulations were not adequately prompt to shift their attitudes based on what they saw while taking perspective. However, the moderate value for Cohen's d suggests, even if not significant, a noticeable difference between the means of the pre-and post-measure. This observed difference might still be interesting to investigate, although it did not reach statistical significance.

Strengths and Limitations

Although this study provides valuable insights into the factors affecting some limitations need to be addressed. Firstly, it is difficult to say if the participants were able to take perspective effectively. Recent research shows that virtual reality (VR) offers quite improved perspective-taking opportunities compared to 2D manipulations (Nyman et al. 2022). The perspective-taking in 2D might be limited due to participants not being able to focus, participants perceiving the manipulation task as weird or their troubles to effectively imagine a different perspective (Ganschow et al., 2021). Therefore, it would probably have been easier for the participants to effectively take perspective of a resident or burglar if the manipulations were conducted in a VR environment instead of looking at 2D pictures (Nyman et al. 2022). Nevertheless, as this study was conducted in the context of a bachelor thesis, administering 2D manipulations was the best option. Creating a suitable VR environment would have been a long and complicated process.

Secondly, the present study was relatively long, with each participant viewing 16 manipulations. The manipulations were randomised, meaning the high and low SES and the four types of guardianship were displayed in random order. Still, all these manipulations were quite similar because they contained the same pictures with small adjustments and texts that did not differ a lot from each other. Participants of the study reflected confusion about the lengths of the study and the fact, that the manipulations were all relatively similar. Thus, the fatigue effect may have occurred in the participants which made them less concentrated on the task (APA Dictionary of Psychology, n.d.). Still, choosing a within-participant design was the best option for this research, as a between-participant design requires more participants. In our study, it was best to make the most out of the collection of participants and thus, make each participant take over the burglar and the resident perspective.

Additionally, it can be noted from the results of the survey that most participants were from high SES areas and experienced a low level of crime before. Past research showed that people that live in areas with well-maintained buildings and those who feel rather integrated in their neighbourhood, feel a reduced level of fear regarding burglary crimes (Skogan & Maxwell, 1981 as cited in Rountree & Land, 1996). This might indicate that participants in this study did not have a high level of fear of burglary crime and thus, did not see the manipulations as very vulnerable. An important factor to note here is the sample size of the participants. Initially, 116 participants were recruited but due to unidentifiable technical problems in the Qualtrics platform, only 53 participants were able to complete the whole survey. The initial sample size might have included more participants from different socioeconomic backgrounds with different previous experiences. This might have influenced the results of this study, as the socioeconomic background has an impact on the establishment of collective norms (Weisburd et al, 2012; Weisburd et al 2014). These collective norms then may have an effect on how effectively guardianship is performed in a neighbourhood. Thus, having participants from different socioeconomic backgrounds might shed light on how they differ in willingness for guardianship.

However, the present study has some strengths that can be noted. First of all, it includes a first attempt to create scales regarding the variables of willingness and individual experience. There were no such scales previous to this study and we tried to come up with items measuring these underlying constructs. Furthermore, we created several manipulations, taking into account four different types of guardianship, and two different neighbourhoods and we created two different perspectives that participants were asked to take on. Thus, we tested several aspects that might influence residents' perception of burglary crimes happening in a neighbourhood. Lastly, we administered the study in a repeated measures style, administering pre and post-tests. This helped to identify possible changes in the willingness to execute guardianship among residents and test the effectiveness of the manipulations.

Recommendations for Future Research

On the basis of the identified limitations of this research, some recommendations for future research can be summarised. What might be of value would be a small adjustment in the survey. It might be interesting to also test the willingness to perform guardianship in between the two perspective-taking parts to be able to evaluate if there are any changes after completing just one of the perspectives. That way, it would be easier to identify the influence

of taking on the perspective of a burglar or the perspective of the resident has on the willingness separately. Furthermore, it might be of value to administer a between-participant design instead of a within-participant design. As described before, the present study was relatively long, which each participant viewing 16 manipulations. To counteract the fatigue effect, future researchers might want to separate the two perspectives and perform a between-participant design, in which participants are randomly allocated to either only take the perspective of the burglar or resident.

Another additional topic for future research is the development of a scale for willingness and personal experience. As said before, in this study, we did a first attempt in order to measure these constructs. In her article, Reynalds (2010) investigates the decision-making process of available guardians in terms of their willingness to supervise and intervene in crime events. She measured whether guardians choose to take action or not. First of all, this does not directly measure their willingness but more the decision-making process of the participants. Secondly, it only includes physical guardianship, and, in this study, this was expanded by also symbolic and dynamic guardianship. Past research into guardianship in burglary situations did not create or utilize a scale measuring participants willingness before. Thus, this study administered the first scale that was invented to really measure the willingness of participants to act as physical guardian and their willingness regarding administering symbolic and dynamic guardianship. It can be said that with this research, we have taken the first steps to contribute to the knowledge on what factors to consider for studying the willingness to perform guardianship of residents. Furthermore, this study can be seen as an early attempt to measure willingness and try to manipulate the willingness of residents with the help of perspective-taking. However, we cannot be sure if the scale measuring willingness was measuring the willingness of participants or if it was sensitive enough to detect changes in the willingness of the participants. This is why, future research could emphasize developing a scale that measures only one factor or creating a scale with several sub-scales.

Conclusion

Research shows that many residents are afraid of becoming a victim of burglary (Ceccato, 2016). It has consistently been shown during past years of research, that guardianship has a deterrent effect on burglars (Bennett & Wright, 1992; Coupe & Blake, 2006; Cromwell et al., 1991; Wright et al., 1995). However, studies on this topic indicate that

not all available individuals are willing to perform guardianship (Reynald, 2010; Reynald & Moir, 2018). Therefore, it is important to understand which factors might influence the willingness of residents to act as guardians. For that, it is important to have a tool to measure the willingness of participants. This study includes a first attempt to create a scale to order the willingness of participants. This might be important for future research into the willingness to guard. Furthermore, it is important to get insight into possibilities to increase this willingness to perform guardianship. In this study, it was tried to influence participants' willingness with the help of perspective-taking. However, results show that the manipulations used in this study were not able to increase the willingness. Still, this does not mean that there is no effect of perspective-taking on the willingness or that the willingness cannot be influenced by other factors. This is something that has to be researched in the future for which this study might serve as a basis. research into this topic is of importance because knowledge of how to effectively influence residents' willingness to guard might ultimately lead to decreased burglary rates in society.

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Appendix

Appendix A

Willingness Questionnaire

1. How likely are you to engage in supervision/monitoring/surveillance over the other houses in your neighbourhood?
2. How likely are you to spend time outside to simply deter burglars?
3. How likely are you to participate in a neighbourhood watch scheme, in which they text their neighbours on suspicious behaviour?
4. How likely are you to spend money on safety items (e.g. CCTV) that might prevent a burglary crime in your house?
5. How likely are you intervene if witnessing a burglary crime happening in your neighbourhood? (Intervention is defined as any action taken to disrupt or prevent a burglary e.g. shouting out to perpetrators, calling the police, or physically intervening to stop a crime)
6. Why would you choose to (not) intervene? Please explain.

Appendix B

Upbringing Questionnaire

1. I grew up in a relatively wealthy neighbourhood
2. My neighbourhood has a neighbourhood-watch-association to prevent crimes from happening
3. I was exposed to crimes in my neighbourhood before
4. Facilities in my neighbourhood were in bad condition
5. The neighbourhood I live in nowadays is relatively wealthy
6. I have previous experience with burglary crimes
7. I took intervening actions against a crime before
8. I have a good relationship to my neighbours

Appendix C

Consent form in the beginning of the questionnaire

Welcome!

We, Kayleigh de Bruin and Mia Kuznik are Psychology students at the University of Twente. We are conducting this research for our Bachelor Thesis under the supervision of Iris van Sintemaartensdijk from the University of Twente.

Previous research into burglary crimes has shown that the fact of residents being present around a potential target lowers the risk of a burglary crime taking place. This research aims to gain more insight into guardianship regarding burglary crimes.

Your answers are completely anonymous and will not be traced back to you as a person. The research results within the bachelor theses will only be reported based on (anonymous) group averages.

How do we proceed?
This survey will first ask you general information about yourself, some relevant previous experiences, and your upbringing. After that, an efficacy questionnaire will be administered, in which you are asked to select the answer option that is best fitting to you. Later, you will be asked to take on a specific perspective, which will be explained to you in words and with the help of pictures. We kindly ask you to take on the perspective as best as possible and answer several statements and questions while taking over the specific perspective. You can select some answers within a multiple-choice setup. Furthermore, there are also open-ended questions, where you are asked to fill in more explanations.

Potential risks and inconveniences
We might ask you questions that you might perceive as personal. Those questions are asked solely in the interest of the study, and we would like to emphasise again that your responses will be anonymised. Participation in this study is voluntary, and you can stop your participation at any point in time without giving any reason. The potential risks of participating in this study: Participants with previous experience with burglary might be

triggered by this survey. Furthermore, people without previous experience might be more concerned about becoming a victim of a burglary crime in the future.

Confidentiality of data

We will make sure to protect your privacy. None of the personal information from or about you will be disclosed in any way that will allow another person to recognise you. For further information and/or complaints, please contact us or the supervisor.

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By clicking 'I agree', you are indicating that you have been sufficiently informed about this study and are giving permission for the answers, you provide to be used.

Appendix D

Consent form at the end of the questionnaire

So much for this survey - thank you very much for your participation!

In this study, we are interested in the how different forms of guardianship have an influence on the participants willingness to act as a guardian. During the survey, the participants were exposed to different forms of guardianship (none, physical, symbolic, dynamic) and were asked to take over the perspective of either first the victim, then the offender or vice versa in two different neighbourhoods (low SES, high SES). Of interest was the question of what influence these manipulations have on the decision-making of the participants while taking over the perspective of the victim or offender.

Lastly, we would like you to indicate whether we are allowed to make use of your answers you provided for our research. The responses will be anonymized, so no one can know what you answered. If you do not give permission, your answers will be deleted.

For objections concerning the design and/or execution of the study you can contact Mia Kuznik (m.kuznik@student.utwente.nl), Kayleigh de Bruin (k.w.debruin@student.utwente.nl) or the secretary of the Ethical Committee / domain Humanities & Social Sciences of the faculty Behavioural, Management and Social Sciences at the University of Twente, via ethicscommittee-hss@utwente.nl.