

The Relationship Between Guardianship and Crime: The Impact of SES on Guardianship

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Abstract

Although the number of residential burglaries has decreased in the past few years (Centraal Bureau voor de Statistiek [CBS], n.d.), it still is one of the most occurring crimes in the Netherlands (*CBS Statline*, n.d.). This paper studies the relationship between the socioeconomic status (SES) where individuals currently reside and neighbourhood guardianship. An online survey comprised 53 participants, mainly from the Netherlands and Germany. The survey included an experimental manipulation exposing the participants to four guardianship levels in a low and high SES neighbourhood. Moreover, the willingness and collective efficacy of the participants to participate in guardianship in the different neighbourhoods alongside the neighbourhoods they are currently residing in was measured. However, no significant relationship between the variables was found, indicating no relationship between the variables SES, collective efficacy, willingness, and guardianship. Possible additions for future research could be adding variables such as neighbourhood density and social interactions among neighbours.

THE RELATIONSHIP BETWEEN GUARDIANSHIP AND CRIME: THE IMPACT OF SES ON GUARDIANSHIP

Burglaries have become a major social problem in most urban areas (Wang et al., 2021). However, one of the possible solutions is proper neighbourhood guardianship (Akkermans & Vollaard, 2015; Wickes et al., 2017). According to Hollis-Peel et al. (2011), *guardianship* is the presence of one or more individuals who can, intentionally or unintentionally, act to deter a (potential) criminal event. Cohen and Felson (1979) created their Routine Activity Theory (RAT) to describe three elements that motivate an offender to commit a crime. These are a likely or motivated offender, a suitable target, and the absence of capable guardianship present simultaneously at the same place.

According to Hollis-Peel et al. (2011), guardianship has two forms. *Physical guardianship* is the physical presence of an individual (van Sintemaartensdijk et al., 2022). A physical guardian can disrupt any crime on the property by being in the mere presence. Thus, the physical guardian is a gentle reminder that someone is watching (Felson & Boba, 2010; Hollis-Peel et al., 2011). However, guardians should not be mistaken for formal guardians, as Felson and Boba (2010) describe that formal guardians (professionals) are rarely present when a crime occurs. Residents are thus considered to be informal guardians. Nevertheless, physical guardianship is a form that can be implemented without any other tools or mechanisms, as it merely requires an individual to be present in the area. Hence, it can be executed by anyone.

Later, Hollis-Peel et al. (2011) expanded their definition of guardianship with *symbolic guardianship*, which includes using security mechanisms such as closed-circuit television (CCTV), alarms or signs. Security mechanisms, again, are gentle reminders of the offender being watched (Jones & Pridemore, 2018; van Sintemaartensdijk et al., 2022). Thus, symbolic guardianship has a similar effect as physical guardianship, as the most prominent factor in deterring crime is the reminder of being watched (Reynald, 2014; Hollis et al., 2013).

The feeling of being watched is, thus, an essential mechanism of guardianship (Hollis et al., 2013). Although physical guardianship was previously argued as the most effective, being physically present is no longer a requirement to deter criminals from the property. Hence, perhaps there could be another form of guardianship, namely dynamic guardianship. *Dynamic guardianship* combines physical and symbolic guardianship, giving the impression that a guardian is present on the property, while mechanisms are used to survey the property instead.

An example of dynamic guardianship could be a Ring doorbell that creates the illusion of being watched. Thus, the offender has the impression of being watched. Adding this third form of guardianship is interesting, as crime rates are exponentially higher when residents have left their property (Wickes et al., 2017). In turn, using mechanisms such as a Ring doorbell could not only aid the resident by being able to keep watch over their property. This form of guardianship also allows intervention while not being present at the property itself, potentially decreasing crime rates in a now-working society. However, little research has been conducted on dynamic guardianship thus far, meaning the actual effectiveness has not been confirmed.

According to Reynald (2009), *guardianship in action* (GIA) can be defined as the direct observation of guardians on the property. Despite the extensive research on the relationship between physical guardianship and GIA, only a little research has been done on symbolic guardianship relating to this concept which is remarkable as we have entered the digital century (Reynald, 2018). The research on symbolic guardianship often found many limitations along with its strengths. For instance, many concerns about the reliability of provided information and possible misuse of applications were named (Reynald, 2018). Although this research was done before 2018, and since the many developments in our society and scientific knowledge, this research might not be as reliable anymore. Moreover, nothing can be said about dynamic guardianship since no scientific research has been conducted.

As indicated, previous studies established the effectiveness of guardianship. Research from Hollis-Peel et al. (2012) conducted in the Hague stated that the relationship between the image and maintenance of properties was direct and significant, as well as the relationship between image and maintenance/surveillance opportunities. Furthermore, the introduction of neighbourhood watch signs in the Netherlands showed an immediate effect of a 40% reduction in burglary rates (Akkermans & Vollaard, 2015). This shows that the effectiveness of guardianship has been rooted in prior research. However, more opportunities should be considered to maintain the fit of guardianship in our current society since we can now implement other forms of guardianship as dynamic guardianship, and our society has seen several shifts in the behaviour of its residents.

Socioeconomic Status

Although guardianship has thus been found to be effective, research including many other factors is still required as these other factors might influence guardianship. According to Wickes et al. (2017), guardianship is more established in some places than others. Research has

shown that the relationship between guardianship and crime was weaker in ethnically diverse, disadvantaged, highly mobile communities and more robust in more affluent, stable, and homogeneous communities (Wickes et al., 2017). There also appears to be a relationship between property crime and a neighbourhood's population size, whereby larger neighbourhoods are more vulnerable to crime (Oliveira, 2021). Despite this knowledge, only some studies have investigated the relationship between *socioeconomic status* (SES) and guardianship. This far, research has merely shown that property crime in high SES neighbourhoods was positively associated with GIA. In low SES neighbourhoods, the opposite occurred (Reynald, 2009; Wickes et al., 2017). Thus, that means a relationship was present between physical guardianship and SES. However, data on the other guardianship forms relating to this factor has yet to be collected.

Collective Efficacy and Willingness

Nevertheless, residents must also be willing to participate in guardianship. Therefore, collective efficacy might be important to guardianship in neighbourhoods and burglaries. *Collective efficacy* is a psychological construct defined as the social cohesion among neighbours and the willingness to intervene for the common good (Hipp & Wo, 2015; Sampson et al., 1997). A literature review found that the crime levels were lower when collective efficacy was high among neighbours. For instance, Burchfield & Silver (2013) found that collective efficacy was associated with lower odds of robbery victimisation. Moreover, according to Hipp & Wo (2015), several studies have found a negative relationship between neighbourhood collective efficacy and crime, meaning that higher collective efficacy results in lower crime rates. A study in England exclusively found a negative relationship between collective efficacy and adolescent delinquency in poor neighbourhoods. At the same time, these results were not found in high SES neighbourhoods (Odgers et al., 2009).

Sampson et al. (1997) divided collective efficacy into three separate variables during their research: informal social control, social cohesion and trust, and measurement of violence. Social control often follows deviant behaviour. Its central goal is to create a safe neighbourhood free of crime. Examples of informal social control are a willingness to intervene from individuals hanging around a street corner or spontaneously monitoring a playground (Sampson et al., 1997). This willingness to intervene broadly depends on the trust within the neighbourhood. It was found that when neighbours show high social cohesion amongst each other, their willingness to show social control is higher. Sampson et al. (1997) argue that the widespread violence in a neighbourhood decreases when social control is high. Thus, high

scores on the former two factors would mean more guardianship will be displayed in a neighbourhood, and less violence will occur.

Nevertheless, the actual willingness to intervene needs to be clarified. It was now said that willingness increases when social cohesion is high. However, this was merely tested in Chicago, so we cannot say these factors will result in the same behaviour when tested in different neighbourhoods. Furthermore, the attributes of the variable willingness were not specified in the article of Sampson et al. (1997), and thus research on this matter is required.

Current Study

Based on this information, this current study looks at guardianship and the factors of SES, collective efficacy and willingness that impact the different guardianship forms (i.e., physical, symbolic, and dynamic). Participants were shown pictures of neighbourhoods (low and high SES), which were manipulated using the different forms of guardianship (none, physical, symbolic, and dynamic). Questions were asked in the form of a vignette study (i.e., imagine you are a resident here). Moreover, questions on upbringing, current situation, and previous experience were asked.

The following hypotheses will be tested to see whether the previously mentioned factors influence guardianship in neighbourhoods and burglaries.

H1: Participants residing in a high SES neighbourhood have a higher efficacy level in participating in all guardianship forms than participants residing in low SES neighbourhoods.

H2: Participants in the manipulated situation are more willing to participate in all forms of guardianship in high SES neighbourhoods than in low SES neighbourhoods.

H3: Participants residing in a low SES neighbourhood primarily participate in physical guardianship.

Methods

Participants and Design

The study was conducted in April 2023 as part of two separate studies. Prior to the research, ethical approval was requested and granted. During the data collection, a glitch occurred in the software used to conduct the survey (Qualtrics), which made it impossible for some participants to finish the survey. Subsequently, the study included 53 participants between the ages of 19 and 62 ($Mage = 28.90$, $SD = 12.62$). Moreover, 18.89% of the participants were from the Netherlands, 58.49% were from Germany, and 22.64% were from a different nationality. More than 50% of the participants reside in a high SES neighbourhood. The sampling technique used to gather participants was voluntary response sampling which falls under the category of non-probability sampling. Of the participants, 34% were male and 66%

female. Furthermore, no restrictions other than age 18+ and the ability to understand English were set for the current study. Next, the study was a within-group design, meaning the participants had to complete the entire study.

The experimental manipulation consisted of a 2x4x2 design (offender vs non-offender x four levels of guardianship x low vs high SES), meaning all participants had to complete questions from two perspectives: the offender and a non-offenders view. The participants also had to complete questions on all four levels of guardianship (no guardianship, physical guardianship, symbolic guardianship, and dynamic guardianship) and questions relating to the two different forms of neighbourhoods, namely, low and high SES neighbourhoods. During this part of the study, participants were randomly allocated to start with either the offender or non-offender perspective. However, discussing the offender's perspective is beyond the scope of this paper.

Materials

Questionnaires

Willingness

The variable willingness was measured using a newly developed questionnaire ($M=2.85$, $SD=0.70$, $\alpha=0.61$). Six items were used and measured using a five-item Likert scale ranging from 'extremely unlikely' to 'extremely likely'. Questions included in the questionnaire were "*How likely are you to spend time outside to simply deter burglars?*" and "*How likely are you to participate in a neighbourhood watch scheme, in which they text their neighbours on suspicious behaviour?*". The last question included in this questionnaire was an open question: "*Why would you choose to (not) intervene? Please explain.*". The questionnaire on willingness was conducted once before and after the experimental manipulation to see whether this variable had changed due to the experimental manipulation.

An exploratory factor analysis was conducted to examine the factor structure of the willingness scale. The Kaiser-Meyer-Olkin measure of sampling adequacy indicated adequate sampling for the analysis ($KMO = .64$). Additionally, Barlett's test of sphericity revealed a significant p-value, indicating that the variables were correlated and suitable for factor analysis. The reliability analysis yielded a Cronbach's alpha coefficient of .79 for the factor structure, indicating good internal consistency. A scree plot indicated an elbow at two factors, each with an eigenvalue greater than 1. The first factor consisted of the items 'engaging in supervision', 'spending time outside to deter burglars', 'neighbourhood watch scheme', and 'spending money on safety items'. This factor had an eigenvalue of 2.42, explaining 26.1% of the variance. The

second factor, represented by the item ‘intervention when witnessing a crime’, had an eigenvalue of 1.05, accounting for 11.5% of the variance.

Upbringing, Current Situation, and Previous Experience

To ensure that all variables were controlled, a questionnaire was developed based on the work of a PhD student concerning the participants’ *upbringing, living situation, and previous experiences* with burglaries in their neighbourhood. The items used were developed based on the target population and the study’s purpose ($M=3.07$, $SD=0.49$, $\alpha=0.45$). Nine items were used and measured on a five-item Likert scale ranging from ‘strongly disagree’ to ‘strongly agree’. Questions included in the questionnaire are “*I grew up in a relatively wealthy neighbourhood.*”, “*My neighbourhood has a neighbourhood-watch-association to prevent crimes from happening.*” and “*I have previous experience with burglary crimes.*”

Collective Efficacy

The variable *collective efficacy* was divided into three blocks: *informal social control, social cohesion and trust, and measurement of violence*, which were retrieved from an article from Sampson et al. (1997). However, we did adjust several items to the needs of the current study by changing the wording (e.g., changing the occurrence of a gang fight into a burglary crime). The efficacy questionnaire is conducted once before the experimental manipulation and once after.

Informal social control was measured using six items ($M=3.09$, $SD=0.66$, $\alpha=0.64$). They were measured using a five-item Likert scale ranging from ‘extremely likely’ to ‘extremely unlikely’. Questions included in the questionnaire are “*Would you say it is likely that your neighbours could be counted on to intervene in various ways if children were skipping school and hanging out on a street corner?*” and “*Would you say it is likely that your neighbours could be counted on to intervene in various ways if the youth centre closest to your home was threatened with budget cuts?*”

Moreover, exploratory factor analysis was conducted to examine the factor structure of the informal social control subscale. A Kaiser-Meyer-Olkin measure of sampling adequacy indicated acceptable sampling adequacy for the analysis ($KMO = .67$). Additionally, Bartlett’s test of sphericity revealed a significant p-value, indicating that the variables were correlated and suitable for factor analysis. The internal consistency reliability of the factor analysis was assessed using Cronbach’s alpha, yielding the following values: Factor 1, $\alpha = .77$; Factor 2, $\alpha = .77$. To determine the appropriate number of factors to retain, a scree plot was examined revealing two factors with Eigenvalues greater than 1. The first factor comprised the items ‘children skipping school’, ‘children spray painting’, ‘children showing disrespect’, and ‘fight

in front of house', with an Eigenvalue of 2.29, accounting for 26.9% of the variance. The second factor included the items 'person wandering through neighbourhood' and 'youth centre threatened with budget cuts', with an Eigenvalue of 1.19, explaining 11.4% of the variance.

Moreover, social cohesion was measured using five items ($M=3.58$, $SD=0.73$, $\alpha=0.34$). They were measured using a five-item Likert scale ranging from 'strongly disagree' to 'strongly agree'. The questionnaire includes "*People in my neighbourhood are willing to help their neighbours.*" and "*People in my neighbourhood generally don't get along.*"

Furthermore, exploratory factor analysis was conducted to investigate the factor structure of the social cohesion subscale. A Kaiser-Meyer-Olkin measure of sampling adequacy indicated adequate sampling ($KMO = .83$). Additionally, Barlett's test of sphericity revealed a significant p-value, indicating that the variables were correlated and suitable for factor analysis. A scree plot was created to check for the elbow criterion. It provided one factor with an Eigenvalue of 2.42 and explained 48.4% of the variance. Factor loadings ranged from .56 to .86.

Lastly, measurement of violence was measured using five items ($M=1.26$, $SD=0.32$, $\alpha=0.24$). This block was not mandatory for participants to fill out since it might contain sensitive topics. The first four items are measured using a five-item Likert scale ranging from 'never' to 'always'. The final question is measured using multiple choice with yes and no options. The questionnaire starts using the statement: "*How often in the past six months has the following occurred in your neighbourhood*" followed by statements such as "*a burglary crime*" and "*a violent argument between neighbours*". The final question is, "*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?*"

Finally, exploratory factor analysis was conducted to investigate the factor structure of the measurement of violence subscale. A Kaiser-Meyer-Olkin measure of sampling adequacy indicated adequate sampling ($KMO = .69$). Additionally, Barlett's test of sphericity revealed a significant p-value, indicating that the variables were correlated and suitable for factor analysis. A scree plot was created to check for the elbow criterion. It provided one factor with an Eigenvalue of 2.31 and explained 36.2% of the variance. Factor loadings ranged from .34 to .92.

Experimental Manipulation

After the questionnaires, the participants moved on to the experimental manipulations. In the experimental manipulation, the participants are asked to complete all guardianship forms twice, once using an offender's perspective and once using a non-offenders perspective. However, this paper will not discuss the offenders' perspective as it is beyond its scope.

During the experimental manipulations, the participants got exposed to manipulated images. The images were manipulated in two ways: We included four different guardianship forms, and each form of guardianship was presented once in both a high SES neighbourhood (*Figure 1*) and a low SES neighbourhood (*Figure 2*). The order in which the participants were exposed to the images was randomised.

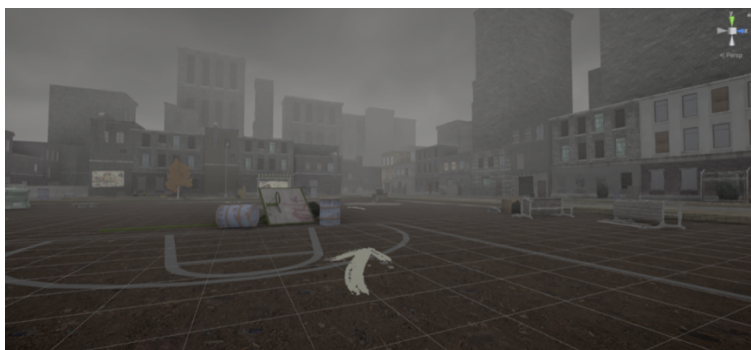
Figure 1

High SES neighbourhood



Figure 2

Low SES neighbourhood



The second manipulation included the four types of guardianship: physical, symbolic, dynamic and no guardianship as a control condition. The physical guardianship is displayed using a mother and a child walking through the neighbourhood, as indicated in *Figure 3*. Next, we added symbolic guardianship by adding a camera to the neighbourhood, as shown in *Figure 4*. Finally, we displayed the dynamic guardianship condition using the photograph of the control condition (*Figure 3*) with the text: “Take a minute to study the picture. Imagine that you live in the neighbourhood that you see in the picture. You have installed automatic lights and blinds that close automatically when it gets dark outside. Do you feel as if this neighbourhood is sensitive to burglars?”. Finally, for all guardianship forms, the items were measured using a five-item Likert scale, ranging from ‘extremely unlikely’ to ‘extremely likely’.

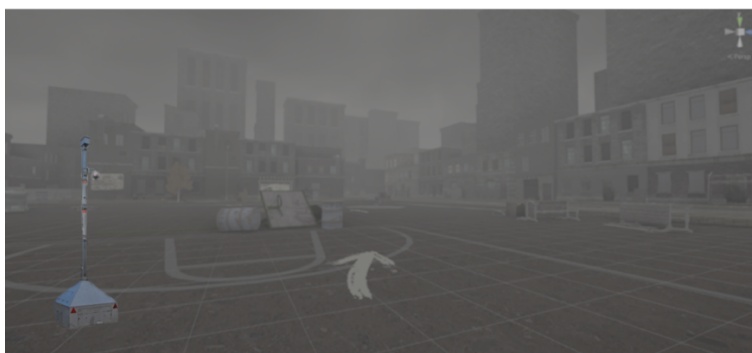
Figure 3

High SES neighbourhood with physical guardianship



Figure 4

Low SES neighbourhood with symbolic guardianship



Procedure

At the beginning of the survey, the participants were given a consent form indicating the study's goals to gain more insight into guardianship regarding burglary crimes. Next, participants were informed that participating in the survey was voluntary and that they could withdraw from participating at any time. Furthermore, participants were informed about potential risks and confidentiality. First, they read the informed consent. Then they were asked to fill out the demographics: age, nationality, profession, and gender. Subsequently, the participants had to answer questions regarding the variable's willingness, upbringing, current situation, previous experience, and collective efficacy. After the pre-measurement of the mentioned variables, the experimental manipulation was assessed. This part consisted of sixteen blocks, the first eight being the offender perspective and the latter being the non-offender perspective. The participants got randomly assigned to either start with the offender or non-offender perspective. Then the participants were shown the pictures of the different guardianship forms in a random order, and they had to fill out the question attached to the picture. After completing all four guardianship forms, the participant moved on to the other perspective and repeated the same actions. After completing the experimental manipulation, the participants had again to fill out the questionnaires on willingness and collective efficacy.

Finally, the participants were fully debriefed on the aims of the study, the anonymity of the survey as well as the contact information of the researchers.

Results

Data Analysis

I conducted a quantitative analysis for this study, and for all analyses during this study, the statistical software RStudio (version 2023.03.1+446) was used. Before further analysis, I prepared the collected data. Moreover, I removed missing data and checked for outliers. Next, the reliability and validity of the scales were measured using Cronbach's alpha. Furthermore, descriptive statistics were considered using a correlation matrix. The data were also checked on the parametric assumptions. The first hypothesis tests whether participants residing in a high SES neighbourhood have a higher efficacy level in all guardianship forms than participants residing in low SES neighbourhoods. In order to test this hypothesis, a classification was made between low and high SES and was then tested using a one-way ANOVA. The second hypothesis tests whether participants in the manipulated situation are more willing to participate in all guardianship forms in the high SES neighbourhoods than in the low SES neighbourhoods and was tested using a paired sample t-test. The final hypothesis tests whether participants residing in low SES neighbourhoods are primarily willing to participate in physical guardianship instead of the other guardianship forms and was tested using a one-way ANOVA.

Results

Preliminary Analysis

As a preliminary analysis, a correlation matrix was created to see whether the variables 'age', 'gender' and item three (previous exposure to crime), item six (previous experience with burglary crimes) and item seven (taking intervening actions before the manipulation) of the previous experience scale correlate with the final scores of the willingness scale. The correlation matrix was created using the data of all 53 participants. The correlation matrix (*Table 1*) shows that none of the variables significantly correlates with the mean score of all items on the willingness scales, meaning that the variables do not explain the scores.

Table 1

Means, standard deviations, and correlations.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Final Score	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

Note. The values with * indicate $p < .05$. ** indicates $p < .01$.

Primary Analysis

Next, a one-way ANOVA was used to test whether the hypothesis that participants residing in a high SES neighbourhood feel have a higher level of efficacy towards participating in all guardianship forms than participants residing in low SES neighbourhoods. With this, I made a classification of high vs low SES. I found no significant relationship between the participants residing in a low or high SES neighbourhood and the variable collective efficacy in the neighbourhood that the participant is residing in ($F(1, 51) = .811, p = .372, \eta^2 = .02$). Thus, the hypothesis claiming that participants residing in high SES neighbourhoods have a higher efficacy level than those residing in low SES neighbourhoods was rejected.

Next, a paired sample t-test was conducted to test the hypothesis that participants in the manipulated situation show more willingness to participate in guardianship in high SES neighbourhoods than in low SES neighbourhoods. The mean difference between the two groups was insignificant, $t(52) = 0.534, p = .595, d = .073, 95\% \text{ CI } [-0.338, 0.583]$. I found no difference between participants in higher SES neighbourhoods ($M=3.15, SD=0.90$) or lower SES neighbourhoods ($M=3.03, SD=1.06$). Thus, the hypothesis that argues that participants are more willing to participate in guardianship in high SES neighbourhoods was rejected.

Finally, a one-way ANOVA was conducted to test the hypothesis that participants residing in a low SES neighbourhood primarily participate in physical guardianship. The mean

scores of the participants residing in low SES neighbourhoods were compared across the four types of guardianship. However, no significant differences were found ($F(3, 208) = 0.143$, $p=.934$, $\eta^2 =.002$). Thus, the hypothesis claiming that participants residing in low SES neighbourhoods primarily participate in physical guardianship was rejected.

Discussion

In this study, I tested whether a neighbourhood's socioeconomic status (SES) influences whether guardianship is displayed and which guardianship forms are most likely to be chosen. I investigated whether willingness and collective efficacy impacted the displayed guardianship. This was tested using a survey, including a manipulated test whereby the participants were shown images of a low and high SES neighbourhood. These images were shown several times to all participants, each time showing a different guardianship form (none, physical, symbolic, or dynamic). Moreover, all questionnaires were measured before the experimental manipulation. Additionally, the factors of willingness and the subfactors of informal social control, social cohesion and trust, belonging to the factor of collective efficacy, were measured again after the experimental manipulation.

I anticipated that participants residing in a high SES neighbourhood would have a higher efficacy level in participating in all guardianship forms. Next, I predicted that in the manipulated situation, participants would be more willing to perform all guardianship forms in the high SES neighbourhood than in the low SES neighbourhood. Lastly, I anticipated that participants residing in a low SES neighbourhood would primarily participate in physical guardianship. All three hypotheses were rejected as no effects were found between the different variables. Thus, no relationships were found between the tested variables.

Socioeconomic Status and Guardianship

As previously discussed, it can be concluded from research that a significant factor relating to guardianship in neighbourhoods is SES (D'Allesio et al., 2012; Garofalo & Clark, 1992; Lynch & Cantor, 1992; Miethe & McDowall, 1993; Wickes et al., 2017). Research conducted in Brisbane, Australia, suggests that, especially in higher SES neighbourhoods, the relationship between the variables SES and guardianship was high (Wickes, 2017). However, these studies were conducted on different target areas that are different from the area that the current study was conducted in. Thus, the relationship between SES and guardianship may differ in other areas than in these tested urban areas.

Moreover, it is interesting that even with a simulated SES, there was no difference in the display of guardianship. This could be because the simulated neighbourhoods did not resemble their neighbourhoods, so people could not relate. Alternatively, the participants did

not feel the need to enact the different guardianship forms because confronting the burglars would be easier. It could also be possible that the participants did not feel like the simulated guardianship situations were close to reality. The police camera, for example, might have seemed unrealistic in the simulated neighbourhood and could have been the reason for participants not feeling the camera's effectiveness.

Collective Efficacy and Willingness

Furthermore, it was established in previous studies that the different subfactors of collective efficacy, informal social control, social cohesion and trust, and the measurement of violence were significantly related to the display of guardianship and the willingness to display guardianship (Sampson et al., 1997). In this paper, no effect was found. This could be because the relationship between collective efficacy and guardianship was investigated, and SES was incorporated and not separately tested. Thus, there may be no relationship between collective efficacy and SES and the amount of guardianship displayed in the different SES neighbourhoods where the participants reside. It could be that collective efficacy is merely impacted by the relationship with one's neighbours instead of the SES of the neighbourhood since social cohesion and trust were found to be of impact in previous studies. Alternatively, in the current study, I have adapted the questionnaire Sampson et al. (1997) used. The questions from that study needed to be more relevant for our target group since that study was conducted in Chicago. On the other hand, the adaptations of the questions could have been a limitation as it might have resulted in less adequate answers for our target group as the adaptations made were not previously tested.

Moreover, we found no effect of the participants showing a different level of willingness in the manipulated situations. The willingness questionnaire was created for this study since no specific questions regarding this topic could be found alongside limited scientific literature on the concept. Hence, the questions were based on personal knowledge, which could have caused the no-effect result. Nevertheless, research was previously conducted on the relationship between social cohesion and trust and willingness. Although these factors were not separately tested in this study and SES was incorporated. Since no research on this specific topic was conducted before, it might be that no relationship exists.

Guardianship in Action

Additionally, I argued that more research must be conducted on the different guardianship forms. The results of this research imply no difference in the effect of the different guardianship forms. We did include a new form of guardianship: dynamic guardianship, which is a form that has yet to be explored. Dynamic guardianship is a guardianship form that still

needs more development to see how it works best. Since dynamic guardianship is still in development, it is possible that in the experimental manipulation must be displayed differently. The same image as in the control version was shown to the participants, and the dynamic guardianship was merely presented using a small text. This brought a different impression than what we intended to bring to our participants. Alongside, there were better forms of dynamic guardianship than the automated lights that could have been used. For instance, using a Ring doorbell could have made a more significant impression on the participants as actual interaction with the burglar would have been attainable. In the current study, the decision to not use a Ring doorbell was made as we did not consider the images of the low and high SES neighbourhood suitable to photoshop this doorbell into since it is rather small and would be hard to see. A different image of a neighbourhood could have been incorporated, but we chose not to do this since not all guardianship forms would be portrayed in the same neighbourhood, which could cause different results.

Moreover, the effectiveness of physical and symbolic guardianship has both been proven to be effective (Akkermans & Vollaard, 2015; Hollis et al., 2013; Reynald, 2014; van Sintemaartensdijk et al., 2022; Wickes et al., 2017). Although, when looking at the results, there is no effect between the guardianship forms and the variables that were tested in this study. This could be due to the poor photoshopping of the images used during the experimental manipulation. The images seem unrealistic, which could have affected the participants' responses. A formal guardianship form was also introduced for the symbolic guardianship condition since the camera belongs to the police. Research on police cameras argues that cameras do not have an apparent effect (Lum et al., 2020). According to the Metropolitan Police, the cameras are only sometimes turned on when incidents occur (*How And When BWV Cameras Are Used*, n.d.). Thus, the likelihood of the cameras recording is small. Alongside, police cameras have their limitations as privacy concerns (Miethe et al., 2019). For example, measures such as the European privacy legalisation (General Data Protection Regulation (GDPR)) should be accounted for. Another effect of this law could be that it withdraws many people from adding symbolic or dynamic guardianship in the form of security cameras to their homes (Wolford, 2022).

Limitations and Strengths

Several limitations of this study have already been considered in the previous paragraphs. However, this study should have accounted for another factor: the division of the samples' socioeconomic status. Since most participants indicated that they belong to a higher socioeconomic class, this could have impacted the results of this study as the participants had

a more difficult time imagining residing in a lower socioeconomic class. Thus, the results might be biased. Moreover, the sample included only slight variation as most participants were students or belonged to a higher age group, between 45 and 62. Next to that, most participants were from the Netherlands or Germany, two countries that resemble each other in many perspectives. As a result, it might have been the case that the participants shared the same perspectives making the results less diverse.

Nonetheless, the strengths of the current study should also be acknowledged. Although it was considered a limitation, the fact that the study's participants differed between the Netherlands and Germany could also be considered a strength. The inclusion of the different countries does allow for more detailed observations. Even though both countries share many aspects, they also have their differences. Hence, ensuring the sample consisted of a broader target population makes the study results more representative.

Furthermore, the questionnaires used during the study have been adapted to fit our target population. The existing questions were either changed or adapted by including different words or sentence fragments and removing certain questions (e.g., adding in a youth centre instead of the fire department and removing gang fights) to make the survey more fitting for the area where the survey is conducted. The experimental manipulations were also created with the target population in mind. The experimental manipulations included guardianship forms that the participants could expect in their neighbourhood. By including these forms, for instance, the parent with the child, we increased the possibility of taking on the perspective of the resident residing in that neighbourhood. Besides that, we used images that made it clear whether the neighbourhood was low or high SES to ensure that participants would not get both neighbourhoods mixed up.

Future Research

Some studies suggest that SES is not necessarily the primary factor in property crime, but neighbourhood density is what makes it more vulnerable (Harries, 2006). In comparison, other studies associate social interaction with effective neighbourhood guardianship (Bellair, 1997). Social interactions among neighbours were positively and significantly correlated with guardianship intensity (Reynald et al., 2018). Moreover, it was found that the lesser neighbours interact, the more deviant others tend to appear (Ahlin & Antunes, 2017). During their research, Nee and Taylor (2000) concluded that instead of specific environmental cues, the interaction of environmental cues at the property was meaningful for burglars to select their target. Nevertheless, Reynald (2011) explains that the usage of public spaces should be promoted to

encourage social interaction among neighbours. Hence, in future research, these factors should be considered when testing guardianship in neighbourhoods.

Furthermore, much of the previously conducted research on guardianship has been correlational instead of causal, or researchers assume a one-directional causal relationship (Hipp & Wo, 2015). Although most studies emphasise physical guardianship, symbolic and dynamic guardianship could change the correlational relationship and make a one-directional causal relationship feasible. In future research, all guardianship forms should be tested alongside each other and separately to investigate which relationship exists. This could be done using the guardianship forms separately from the factors such as SES to see whether the participants are willing to participate in guardianship in the first place. Later on, the factors can be incorporated again to see whether the added variable changes the previous outcome. Another direction for future research projects is using a VR setting instead of images to expose the participants to manipulated situations. By doing so, the participants might feel more engaged with the situation as they are now more invested in the neighbourhood and by using a VR setting, it is easier to expose the participants to the dynamic guardianship situation as the participants then have the option to walk up to houses and see movement within the neighbourhood.

Conclusion

Over the past century, our society has changed from doors not having locks to doors having multiple locks and Ring doorbells. We know the safety measures we thus need to take to keep our homes and our neighbourhoods safe. Alternatively, this is simply what we assume until it is too late. Additionally, measures we all know about, such as adding security cameras to one's home, are more challenging than imagined since new laws like the GDPR now withhold individuals from recording without permission (Wolford, 2022). Therefore, it is crucial to continue research to find the most effective and efficient forms of guardianship alongside ways to promote its execution.

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