You Can Stop Crime! Understanding The Impact Of Guardianship On Crime

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Abstract

Crime affects society on a daily basis and is a major problem (Dustman & Fasani, 2012). Burglary in particular, is a prominent form of crime, and it often leaves the victims not only with material loss but also with psychological distress (Kunst & Hoek, 2023). This current study explores the effect of dynamic guardianship on safety with regard to residents and the result in crime prevention when these dynamic guardianship measures are present. An online questionnaire with 43 participants was created to explore the effect of different guardianship conditions involving dynamic guardianship measures such as voice activation cameras, self-turning on lights and self-closing blinds. These conditions were shown in the form of clips. Each participant received all eight conditions, which were all a combination of these guardianship measures and one control condition with no guardianship present. After watching the clips, each participant had to answer a questionnaire regarding these clips and general personality questionnaires. There was no significant relationship found between guardianship and the prevention of burglary; however, there was a significant effect found between the feeling of safety of residents when dynamic guardianship was present. Future research should possibly explore the topic of different dynamic guardianship measures towards crime prevention since the ones used in this study showed no effectiveness. Another possible future research would be to compare public cameras (CCTV) with private cameras and the effect of that on burglars.

You Can Stop Crime! Understanding The Impact Of Guardianship On Crime

Crime has been a deep-rooted problem and challenge of societies and governance worldwide that affects social structures and factors within a town or city(Van Dijk et al., 2021). The crime levels in each country are interconnected to the incentive to commit a crime. Factors like urbanisation have led to an increase of criminal behaviour, which changes the social structure in society (Van Dijk et al., 2021). Burglary and specifically residential burglary, is an ongoing problem of society and is one of the most common forms of criminal activity. Burglary not only affects one's property but also one's feelings and personal security (Coupe & Griffiths, 1996). Burglary is one of the most psychologically invasive crimes that can occur, which not only might result in physical loss (property) but also affects a person mentally in terms of emotional impact, such as fear (Kunst & Hoek, 2023). Furthermore, there are precautions to minimise the risk of becoming a victim of burglary, such as guardianship (Sintemaartensdijk et al., 2022).

Guardianship

Felson (1955) was the first to describe guardianship. He described it as the presence of people who can prevent crime. Studies have shown that the use of guardianship is very beneficial in reducing the risk of property crimes, such as burglary. Hollis-Peel et al. (2012) described it as the presence of informal (e.g. residents at home) or formal guardians (e.g. police officers). With guardianship residential burglaries are less likely to happen, and when this is absent, crime becomes more likely (Hollis-Peel et al., 2012). Nee & Meenaghan (2006) also mentioned that burglars pay attention to visual cues on residences to determine their targets, such as wealth, occupancy or security. Security and occupancy are directly related to forms of guardianship. Occupancy is physical guardianship, and security is either symbolic or

dynamic guardianship. In the following paragraphs, this type of guardianship will be described in greater detail.

Guardianship consists of two different types. There is physical and symbolic guardianship (Hollis-Peel et al., 2012). According to Hollis-Peel et al. (2012), examining physical guardianship and symbolic guardianship strategies, one can enhance their understanding of crime prevention. There is physical guardianship, which describes the physical presence of an individual or property by other people to prevent crime. Furthermore, there is also a distinction between formal guardians and informal guardians within physical guardianship. A formal guardian is someone who's profession it is to prevent burglaries from occurring, such as police officers or security personnel (Sintemaartensdijk et al., 2022). An informal guardian is a non-professional, for example, is a resident being inside their home. Physical guardianship describes, in terms of burglary prevention, that a resident of their home is present, and one does not need any form of additional tools or mechanisms to prevent crime from occurring. Reynald (2008) described the stages of guardianship intensity in a four-stage model. The steps range from 0-3, with stage 0 being "Invisible". This stage represents the guardian being absent and therefore unable to respond. Stage 1 is "Available", in this stage the physical guardian is present but not attentive or can not act. For example, a person is at home but does not act or is unaware of what is happening. The second stage is "Capable", where the guardian is present and is aware of what is occurring and is attentive. This stage is passive monitoring. Lastly, there is the third stage, which is called "Intervening", where the guardian is also present, is aware of the situation and is capable of actively intervening (Reynald, 2008).

Symbolic guardianship is very different to physical guardianship since this does not have a person present at the residency. Symbolic guardianship can also be seen as symbolic

barriers that create some form of territoriality, which work as a psychological barrier against burglars (Hollis-Peel et al., 2012). Symbolic guardianship allows the resident to have the feeling of security in their homes while being absent and reduces the risk of criminal activity happening when not being there physically. Symbolic guardianship can also be in the form of dummies, such as tools that look like a camera, even though there are none present at the residency. Implementing symbolic guardianship would be possible to use CCTV cameras or neighbourhood watch signs. (Sintemaartensdijk et al., 2022). These symbolic guardianship measures could give the potential burglar the feeling that they are being watched even though no physical guardian is present. Though the feeling of being watched may not be elicited (Sintemaartensdijk et al., 2022). These signs might also fail to represent an actual physical guardian, since the presence of the sign does not automatically indicate a physical guardian being available or observant (Sintemaartensdijk et al., 2022). Symbolic guardianship is always static and non-moving, like a camera that's attached to the front porch or a light being on inside a residence. Additionally, regarding physical guardianship, it is difficult to always have a person at the residency. To resolve the issues regarding symbolic and physical guardianship, dynamic guardianship would be a possible solution.

Dynamic Guardianship

Dynamic guardianship, as used in this paper, is not an established term currently used in the literature. Dynamic guardianship is an extension of symbolic guardianship to improve symbolic guardianship and the way it functions. Dynamic guardianship is any symbolic guardianship feature that has movement or is active, and does not include any form of physical presence. There are many different ways to implement dynamic guardianship as a measure to protect a residence. An example of dynamic guardianship would be to change a camera from being symbolic to dynamic by adding a voice activation to it when a person gets

too close to the house. Gill & Spriggs (2005) have identified that when voices come from cameras and talk to criminals, the likelihood of crime occurring reduces. Combining these two measures would also solve the issue of cameras not being noticed, since in order for cameras to work in the form of prevention, they have to be noticed (Gill & Spriggs, 2005).

Another interesting aspect when looking into guardianship measures in general and specifically when looking at any form of symbolic/dynamic guardianship features is conscious awareness. Conscious awareness describes the subjective experiences of perceptual processes (Lau & Rosenthal, 2011)

An additional guardianship measure would be dynamic lights within a residence that also get triggered by a motion sensor when an individual gets too close to the residence. McClanahan (2024) identified that dynamic lighting leads to a greater feeling of safety and reduces the risk of burglary. Lights work well, first of all, because they take away the darkness, which burglars use to their advantage (McClanahan, 2024). Secondly, self-turning on lights might also give a feeling of someone being home and therefore might scare off potential burglars when scouting a potential target.

One other possible dynamic guardianship measure that could be used is self-closing curtains that also get triggered by motion. Curtains being closed by themselves might not work as a prevention method since they can be closed before someone leaves the residence. However, when the curtains close live in front of the burglar, this might indicate someone from inside the residence is closing them manually. The reason why this might not be the most effective would be that when it is dark outside, the burglar might not see the blinds closing (McClanahan, 2024)..

Residents

One's own home should be a space where one feels safe, protected and comfortable. Residents should not feel unsafe at home and should not fear crime against them (Kunst & Hoek. 2023). When conducting research into the field of dynamic guardianship and the effectiveness in preventing crime, it is also important to consider the people using these guardianship measures to ensure the safety of their property and themselves. Feeling safe in one's own residence is an important factor one must account for when creating guardianship measures (Brands et al., 2016) for example, knowing the opinion of the resident towards the guardianship measure and how much safer they feel in their own house. In previous research by Brands et al. (2016), there were findings that people felt safer with cameras around them compared to when they were absent (2016).

Current study

This study focuses on the effects and benefits of dynamic guardianship on burglary and residential safety. To test this appropriately, three dynamic guardianship measures were tested (self-turning on lights, cameras with voice recognition, and self-closing blinds) in an online questionnaire, where participants watched eight clips with different combinations of these three dynamic guardianship measures. They were also allocated to either being a burglar or a resident. After these clips and the questionnaires regarding these clips, the participants were asked to fill in personality questionnaires.

H1: Burglars are less likely to burgle a residence when there are cameras attached to the house, in comparison to when other guardianship measures are present (e.g. light, blinds)

H2: Burglars are less likely to burgle a residence when dynamic guardianship is present in comparison to when they are absent.

H3: Residents feel safer when there are guardianship measures at the residency in comparison to when they are absent

Methods

Participants and Design

The study was conducted in April 2025. Before the research was able to be conducted the ethical approval process was submitted and approved by the Humanities & Social Sciences (HSS) Ethics Committee of the University of Twente (Application nr. 250321). This study was an online study in the form of a questionnaire created with Qualtrics. The total number of participants after deletion of incomplete responses was 43, and 15 were male, 17 were female and one was non-binary/third gender and 11 preferred not to say. The average age of the participants was 41.12 years. The sampling technique used to distribute the study was snowball sampling, and the study was uploaded to SONA, which rewarded the participants with credits after completion. The only restriction regarding the study was that the participants must be at least 18 years of age.

The design consisted of eight different conditions and two possible groups, to which the participants were randomly allocated. The participants were randomly allocated to take a burglar or resident perspective. Participants saw (1) a clip of a neighbourhood with no measures, (2) clips with one of the dynamic guardians (dynamic lights, camera with voice activation and self-closing blinds)(3) a clip combining two dynamic guardians and (4) a clip with all dynamic guardians present. All participants were shown all eight conditions in the form of video clips created in a VR environment. The study had a within-and-between design. The dependent variables used in this study are for the burglar condition, the overall scale mean of the burglar group and the two subscales being “burglary threat” and “response expectation”. For the citizen group, the dependent variable was the overall scale mean of the

citizen group. The subscales of the citizen group (surveillance, burglary risk and guardianship action) were also dependent variables.

Materials

Clips

As mentioned before, there were different types of conditions created in the VR environment for the participants to see in the form of videoclips. There were 8 videoclips created, 7 of them with each clip having a different constellation of dynamic guardianship measures and one clip with no guardianship measures (control condition). Three clips contained only one guardianship measure (Blinds, lights and camera). Three clips with two guardianship measures present, all clips had a different constellation every time and then one clip with all three present at the same time. And lastly, one clip with no measure present for the control condition. So all participants at the end saw every possible combination of the guardianship measures. Since all clips were shown to every participant, the order of the clips was not important. The participants were told to watch them with the sound on. The clips were the same for both roles (burglar and citizen). After watching each clip, they had to fill in a questionnaire regarding the clip. As can be seen in Figure 1, there is a small residential area that looks like the average Dutch neighbourhood. There were multiple houses on one street. All houses are different, but all have a little entrance area that leads to the house doors. To make everything more realistic, flowers were also present, and the same goes for trees, letterboxes and bins. All the conditions were randomly allocated to either one of the houses but all were in the bottom floor of the house. In Figure 2, the third condition is visible, showing the voice activation camera. The red light means that the person stepped into a certain range, and the sound activation started where a female voice said: “Hey, I can see you are looking for something, can I help you?”. In Figure 3, the self-closing curtain condition is

visible. In Figure 4, there is no dynamic guardianship to see since this is the control condition. All the dynamic guardianship measures were triggered through a specific trigger zone created in front of the house on the sidewalk. This means that when a person walks into the trigger zone, they will experience the dynamic guardianship measure, such as hearing the voice from the camera. These trigger zones were also created to symbolise a motion sensor, which is used in real life.

Figure 1

The neighbourhood where the clips were created

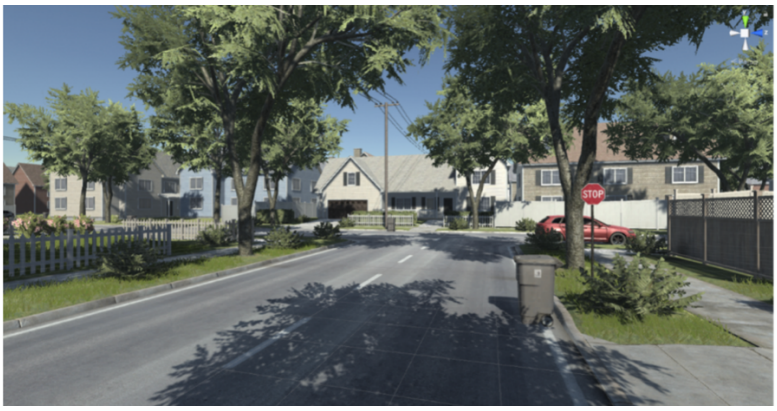

Figure 2

Camera with voice activation

Figure 3

The dynamic lights in the residence

Figure 4

The self-closing curtains

Questionnaires

Table 1 shows all the means, standard deviations and Cronbach's alpha for the questionnaires used in this study.

Role of Burglar Questionnaire

To test the likelihood of a burglar breaking into the showed residence in the clips, a seven-question questionnaire was created (Appendix 1). All the questions were closed with five possible answer options measured on a five-item Likert scale where participants chose

from an answer ranging from ‘completely disagree’ to completely agree’. One example question was: “I felt as if I was being watched”.

The questionnaire was divided into two subscales to examine two different variables regarding the likelihood of burglarising the residence. One subscale was “threat perception”, which included questions regarding the perceived threat of being observed or seen during the burglary. The second subscale was response expectation, which included questions regarding the perceived chance of getting caught while burglarising. These subscales were also used later for data analyses. This questionnaire was partially self-created but also used items from other questionnaires. Items 1 and 2 are from McClanahan et al. (2024) and items 3 and 4 are from Sintemaartensdijk et al. (2021) and were not changed. The other three items were self-created. Items 1 and 2 were the same for both the role of burglar questionnaire and the role of Citizen questionnaire.

Role of Citizen Questionnaire

To test the perceived safety, a resident feels in the residences shown in the clips, a questionnaire with nine items was used (Appendix 2). This scale used the five-item Likert scale, where participants chose from an answer ranging from ‘totally disagree’ to ‘totally agree’. One example question was:” This house appears to have low levels of crime”.

Since there were different variables explored in this questionnaire, three subscales were created. These three subscales were “Citizen Surveillance”, “Citizen Burglary Risk”, and “Citizen Guard Action”. Citizen surveillance focused on the feeling that other house residents will call the police when they see a crime taking place. Citizen burglary risk focuses on the feeling the resident has regarding the perception of how likely it is that the residence will be burglarised. Lastly, “Citizen Guard Action”, explores the effect the guardianship measures a the house have on the participant in the role of a citizen.

Like the “role of the burglar questionnaire”, some items were self-created, and some were taken from previous questionnaires. Items 1 and 2 were taken from McClanahan et al. (2024), and items 5 and 6 were from Sintemaartensdijk et al. (2021) and they were not changed. Items 3, 4, 7, 8 and 9 were self-created.

Perceived Scenario Realism.

To test the variable perceived scenario realism, a six-question questionnaire was created asking the participants how realistic, convincing, understandable and clear they found the environment shown to them in the video clip. One example question for example is: “I thought the scenario was convincing”. All the questions were closed with five possible answer options measured on a five-item Likert scale where participants chose from an answer ranging from ‘strongly disagree’ to strongly agree’. This questionnaire derived from the Van Gelder et al. (2019).

Trait fear of crime

The next variable that was explored by using the questionnaire of Pauwels & Pleysier (2005) was the “trait fear of crime”. This questionnaire was primarily used to understand the general feeling of safety of the participants. The questionnaire contained eight questions with five possible answer options ranging from ‘Never’ to ‘Always’. An example question of trait fear crime was:” Do you sometimes avoid certain areas in your neighbourhood because you do not consider them safe?”.

Self-reported delinquency

The reason why self-reported delinquency was included was to get a better understanding of the current life of the participant regarding factors around crime, such as burglary or illicit drug consumption or selling. To test this the work of Svensson et al. (2013) was used. There were 23 questions regarding self-reported delinquency, with 5 possible

answer options ranging from “never’ to ‘more than 10 times’. One question for example was: “stolen something from someone or taken their possessions (e.g. money, a phone, clothes or something else)?” All these questions ask about experiences that happened within the last two years. This information can be beneficial to know if the participant is involved in certain criminality or not.

Willingness

The next variable which was explored was the willingness of using and install smart home devices (SHD), such as self-closing blinds, self-switching lights, and ring cameras. This questionnaire was solely self-created and there were 18 questions, which had five possible answer options measured on a similar five-item Likert scale where participants chose from an answer ranging from ‘completely disagree’ to ‘completely agree’ (Appendix 3). This variable was of great interest since it explored the readiness of the participants to use dynamic guardianship measures to protect their home in any form of way. It contained questions such as: “The attractiveness of my home to a burglar will decline if I install an SHD”.

HEXACO-60 Personality Inventory

The HEXACO-60 Personality Inventory of Ashton & Lee (2009) were solely used to gaining a better understanding of the different personality types the participants had and to find a possible relation between personality and dynamic guardianship. The questions covered all six major dimensions of personality, which included the traditional “Big Five model” and a sixth factor which is “Honest-Humility” The “Big Five model” contained openness (to experience), conscientiousness, extraversion, agreeableness, and neuroticism. This is very beneficial since it was broad but was still accurate in finding the personality type of the participant.

Self-control

The last questionnaire of Tangney et al. (2018) included the variable “Self-control”. These questions were a rating system based on specific characteristics, such as temptation, self-discipline or laziness. This questionnaire was also used to gain a better understanding of the participants and what time of personality they have, which can later be compared to dynamic guardianship measures and their effect on humans. There were 13 questions included, and the five possible answer options were measured on a five-item Likert scale where participants chose from an answer ranging from ‘strongly disagree’ to strongly agree’.

Table 1

Means, Standard deviations and Cronbach’s alpha for a questionnaire used

Scale	M	SD	α
Citizen Total	3.19	0.26	0.92
Burglar Total	3.07	0.22	0.9
SRD	1.28	0.72	0.98
Fear of Crime	2.72	0.87	0.9
Self-Control	3.09	0.28	0.76
ScenarioRealism	3.79	0.59	0.79
HEXACO	3	0.31	0.82

Note. All questionnaires used the Likert-type scale

Procedure

When beginning the study, the participants were given the informed consent. The informed consent stated a short explanation regarding the study topic and explained what the procedure of the study will be. The participants were informed that the study is voluntary and can be cancelled at any point in time. The possible risk factors were mentioned and also the

confidentiality of the study. The participants then must decide if they want to proceed with the study or decide not to. When the participant agreed to the informed consent, the participant progressed to the next page. The next page contained the demographic information which included age, gender, nationality, education level, questions about native language and level of English speaking. After filling in all the demographic information the participant went on to the next page which they will be randomly allocated towards either being in the position of the burglar or the position of a resident. Once allocated the participants got a short explanation about their role and then they will proceed. Furthermore, the participants were shown eight video clips in total and after each video clip, they must answer a few questions regarding the house seen in the video clip, either from the perspective of a burglar or resident living in that house. After these clips the participants must fill in seven questionnaires regarding: perceived scenario realism, trait fear of crime, self-reported delinquency, willingness, self-control, HEXACO and HEXACO-60 Personality Inventory. After completion of all the questionnaires, the participant received a debriefing and can close the study.

Data analyses

All of the following analyses were conducted using R-studio (version 2023.03.1+446). The dataset was extracted from Qualtrics in Excel format and added to R-studio. The dataset was initially cleaned and resorted by removing all responses that were incomplete, for each experimental condition (citizen and burglar perspective). After cleaning the data, subscales were created to ensure organised and coherent analyses. The following subscales were created: Citizen Surveillance, Citizen Burglary Risk, Citizen Guard Action for the citizen condition and Threat, Burglar Response Expectation for the burglar condition. These subscales originate from the Burglar and Citizen questionnaire. Furthermore, the demographic variables, including age, were also scored as mean composites for each

participant, and the same was done for self-reported delinquency (SRD), fear of crime, and self-control. To test the three hypotheses, repeated-measures ANOVAs were used for each pair of measures to test for significance. After the ANOVAs for each hypothesis were conducted, two planned contrasts were performed to compare the two variables tested for in each hypothesis. For each hypothesis, there were always two ANOVAs and planned contrasts, one for the mean value per condition and one for the subscales that were created prior.

Results

Preliminary analyses

The mean and standard deviation for personality variables were created to determine whether there is a correlation between the main variables (the subscales) and demographic data and personality variables (Table 2). The mean for self-reported delinquency was M = 1.28, SD = 0.72, fear of crime M = 2.72, SD = 0.87, and self-control M = 3.09, SD = 0.28. As can be seen in Table 1, age was positively correlated with citizen surveillance, and self-control was positively correlated with citizen surveillance. Self-control was negatively correlated with burglary risk. The other correlations in Table 1 are generally too small to indicate any significant correlation.

Table 2

Pearson Correlations (r) and p-values between Demographics/Personality and Subscales

Subscale	Age (r/p)	SRD (r/p)	Fear of crime (r/p)	Self-control (r/p)
Citizen Surveillance	0.20 / 0.48	-0.03/0.93	0.02 / 0.93	0.39 / 0.15
Citizen Burglary Risk	-0.39/0.16	-0.25/0.37	0.44 / 0.10	-0.51 / 0.05 *
Citizen Guard Action	-0.07/0.81	0.44 / 0.10	-0.05/0.86	0.02 / 0.94

Subscale	Age (r/p)	SRD (r/p)	Fear of crime (r/p)	Self-control (r/p)
Burglar Threat	-0.05/0.84	-0.15/0.55	0.22 / 0.39	0.27 / 0.28
Burglar Response Exp.	-0.14/0.57	-0.15/0.56	-0.09/0.73	0.09 / 0.73

Note. p<.05 * indicates statistically significant correlation

Table 3

Pearson Correlations (r) and p-values between Demographics/Personality and Full scale

Full-Scale	Age (r/p)	SRD (r/p)	Fear of crime (r/p)	Self-Control (r/p)
Burglar	-0.17 / 0.51	-0.24 / 0.33	0.09 / 0.74	0.28 / 0.26
Citizen	-0.19 / 0.50	0.20 / 0.47	0.24 / 0.39	-0.07 / 0.79

Note. p<.05 * indicates statistically significant correlation

Main analyses

To answer the first hypothesis “Burglars are less likely to burglarise a residency when there are cameras attached to the house, in comparison to when other guardianship measures are present“, two repeated measures ANOVA’s were conducted one for overall scale mean and one for the two subscales, which are “Burglary Threat” and “Response expectation”. There was no significance found when testing the mean value of the responses per condition, with the variable camera versus no camera, $F(6, 102) = 1.67$, $p = .136$, $\eta^2 = 0.07$ The same analyses were also conducted, but with the two subscales. A repeated measures ANOVA was used to analyse the subscales “Threat” and “Response Expectancy”, but there was also no significance found for either the repeated measures ANOVA. For “Threat” the findings were ($F(6, 102) = 1.40$, $p = .220$, $\eta^2 = 0.05$) and for the Response Expectation subscale ($F(6, 102)$

= 1.62, p = .149), η^2 = 0.06). Due to no significance being found no further analyses was conducted.

For the second hypothesis, “Burglars are less likely to burglarise a residency when dynamic guardianship is present in comparison to when they are absent”, there were also two repeated measures ANOVA’s used to analyse this hypothesis. Like in the first hypothesis, one for the overall scale mean and one for the two subscales. For the means, there was no significance found $F(7, 119) = 1.80$, p = .092, η^2 = 0.07. There was significance found in the one subscale being “Response Expectation” ($F(7, 119) = 2.23$, p = .036, η^2 = 0.08), and the planned contrast showed significance (B = 0.42, p = .040). Participants had a higher values regarding response expectation in guardianship conditions (M = 3.51, SD = 0.74, n = 126), than in the control condition (M = 3.09, SD = 0.93, n = 18). The threat subscale did not show any significance $F(7,119) = 1.29$, p = 0.281, η^2 = 0.05.

For the third hypothesis, “Residents feel safer when there are guardianship measures at the residency in comparison to when they are absent” the same analyses were done as in hypothesis two, just with the three subscales of citizens. The repeated measures ANOVA showed a significance for the mean analyses ($F(7.98) = 2.90$, p = .008, η^2 = 0.09 and the planned contrast between guardian and control was also significant (B = 0.30, SE = 0.07, $t(14) = 3.99$, p = .001). Citizens felt higher perceived safety in guardianship conditions (M = 3.22, SD = 1.17, n = 2709) than in the control condition (M = 2.93, SD = 1.11, n = 387). The first subscale, Burglary risk was not significant $F(7,98) = 1.25$, p = 0.029, η^2 = 0.039) and Guardianship action was also not significant $F(7,98) = 1.35$, p = 0.24, η^2 = 0.02. Surveillance showed a significance ($F(7.98) = 3.09$, p = .005) and also a significant contrast (B = 0.84, p = .004, η^2 = 0.14) The perceived surveillance was higher in guardianship conditions (M = 3.43, SD = 0.82, n = 301) than in the control condition (M = 2.60, SD = 0.81, n = 43).

Discussion

In this research project, the goal was to find out the effect of dynamic guardianship in general and how burglars and residents respond to it. I created an online questionnaire to test my three hypotheses. The study consisted of different parts. Before starting the study itself, the participants were allocated to either being in a burglar or a resident role. The first part of the study was that participants had to watch clips of different dynamic guardianship measures, such as a house with a camera attached that has voice activation or self-closing blinds. After watching each of these clips, the participants had to fill in a questionnaire. After completion of the clips, the participant was asked to fill in multiple questionnaires regarding visibility, personality traits and personal questions regarding their self-reported delinquency.

Dynamic Guardianship on Burglary

The two major topics explored in this research were whether dynamic guardianship has a significant effect on burglars. It was tested whether burglars are less likely to burgle a residence when there are cameras attached to the house, in comparison to when other guardianship measures are present (e.g. light, blinds) and if burglars are less likely to burgle a residence when dynamic guardianship is present in comparison to when they are absent. For both of these hypotheses, no significance was found.

A possible cause why there was no significance could have been that the clips were created in a VR environment, which aimed to simulate a neighbourhood. It is possible that the participants were not able to capture the full emotion or stakes involved when planning to burgle or even directly burgle a residence (Green et al., 2025). Since this online questionnaire and being in the role of the burglar does not actually involve any sense of danger, plus the fact that there are no consequences, might have made this situation more hypothetical rather than real (Green et al., 2025).

Another possible explanation could be that the participant could not directly picture themselves in the position of a burglar and therefore might not have been able to fully commit to their assigned role. Experiencing oneself in such an extreme role that is different from one's own life might prevent the participant from taking the role of the burglar (Erle & Topolinski, 2017). Erle & Topolinski (2017) highlighted the importance of guidance when assigning a role to a participant, which is more difficult in an online study compared to discussing the role in person with a participant.

Issues regarding Dynamic Guardianship

Despite the findings in previous studies of dynamic guardianship were guardianship was found to have significance, the three dynamic guardianship measures used in this study showed no significant effect on the prevention of burglary (Sintemaartensdijk et al., 2020). There are several possible explanations why this might have been the case.

Firstly, dynamic lights are a common prevention method used as security measures against burglary. This might lead to the conclusion that this is also known by the potential burglars when looking for a possible residence to break into. McClanahan et al. (2024) also mentioned in their study that lights lead to a greater feeling of safety in residents, but as a crime prevention method, its impact is highly influenced by the interpretation of the burglar. When these lights with motion sensors are used frequently and are also often used as a guardianship measure, the effect of simulating a person being home might diminish and therefore also the effect of dynamic guardianship (Tseloni et al., 2017).

Secondly, regarding the aspect of voice-activated cameras, these might not be enough to scare away burglars due to the fact that these have become a very prominent and well-known security measure. Due to the rise of voice-activated cameras such as "RING" doorbells allow a person to speak through the camera from anywhere, even when not present

at the house. Gill and Spriggs (2005) concluded that voice-activated cameras have an effect on reducing crime, but they also mention that how the message is portrayed is an important aspect one has to take into account. Since in this study, the voice that spoke to the burglars was very polite and not intimidating enough ("Hey, I can see you are looking for something"), this might not have been enough to scare the burglars away (Gill and Spriggs, 2005). Another reason might be that burglars know that private surveillance cameras are not actively monitored and therefore might not be intimidating enough to prevent a break-in (Piza et al., 2019).

Thirdly, self-closing curtains may not be an effective prevention method since they often do not stand out visually. The visibility issues often experienced are regarding the low-light conditions (McClanahan, 2024). As mentioned previously, burglars often use the darkness as their advantage, and curtains are often not visible in dark lighting, so the movement of the curtains is not recognised (McClanahan, 2024). One of the main effects of guardianship is the increased visibility of the measures (Lau & Rosenthal, 2011).

Regarding the non-existent significant effect of the hypotheses, one of the main reasons mentioned above was that many of the guardianship measures used, e.g., dynamic lights or cameras with voice activation, are used very frequently, which could lead to a desensitisation effect on burglars. A possible solution for this would be to implement new dynamic guardianship measures that are more unexpected, interactive for burglars and that there will be a stronger feeling that residents are home. One possible way to implement a more effective and unexpected auditory response to burglars could be multiple voice messages with variability that directly cause fear in the burglar, such as quotes like "The police have already been called" or even "Your face is being recorded and saved" (Chae et al., 2024). Another possible new dynamic guardianship measure would be that one can see a shadow portrayed on the wall, induced through a projector inside a house when the light turns

on through a motion sensor (Jenkins & Jenkins, 1990). This would give a strong indication that someone is home and therefore symbolise a physical guardian.

Safety Feeling of Residents

One of the main topics this research explored was whether residents feel safer at their residence when dynamic guardianship is present, compared to when it is absent. The findings of this research showed significance. Even though the dynamic guardianship measures used were not significant regarding the prevention of burglaries, the feeling of safety in the eyes of the residents was created.

This opens up the discussion as to whether the feeling of safety, even though this might not go along with actual crime reduction, is of value itself. The feeling of safety is an important factor regarding mental health, stress levels and general happiness in life (Lynch et al., 2025). Guardianship can lead to dual function, such as the prevention of crime, which has been found to be effective in prevention of crime and can also lead to a reassuring psychological state of safety, which increases people's safety feeling in their residence (Hollis-Peel et al., 2011). It can also lead to people to invest more into further guardianship measures or in general security measures to ensure their safety and possibly including ones that are actually do prevent against burglary (Tseloni et al., 2017).

When looking at this topic, one has to also take into account that this could also have possible side effects. Since there were no significant results found in proving that these dynamic guardianship measures prevent burglary, residents might feel safe with the existing ones, even though they do not affect protecting them. This might lead to them not upgrading or changing their security measures that actually protect them, because they already have the feeling of safety. This might lead to them becoming a victim of crime, and especially of potential burglary (Tseloni et al., 2017).

Privacy vs security

Some dynamic guardianship measures might be intrusive in certain people's lives and might lead to ethical or social concerns (Emilsson, 2023). Some dynamic guardianship measures, such as voice activation, motion sensors or cameras, lead to the feeling of being monitored or watched (Emilsson, 2023). It could also lead to problems such as inadvertently recording or monitoring people passing by the residence and treating them as potential burglars, since the motion sensors might get triggered (Perez et al, 2020). A counterargument against cameras would be, for example, that there could be potential neighbour disputes when having a camera attached to one's house, that might have a view on someone else's property or public spaces such as the footpath or street (Buil et al., 2022). This can cause distress and a form of anxiety in bystanders when passing the residence (Wong et al., 2023).

A possible way to solve the issue of privacy invasion and monitoring of random bystanders and neighbours could be that motion sensors would only be triggered once a person gets very close to a residence such as standing in front of someone's door, rather than in this study were the motion sensors were triggered as soon as someone from the sidewalk passed the house (Naccarelli et al., 2022). Furthermore, another possible way to resolve the privacy issue would be that cameras to censor or black out every recorded picture that does not show the property of the house it is attached to (British Security Industry Association, 2016).

Another possible problem would be that this would create an even larger gap between wealthier and poorer communities, due to the fact that people who live in wealthier communities have the financial means to equip their homes with guardianship precautions. Furthermore, the neighbour dispute regarding privacy and recording would not be as

prominent since many houses in wealthy neighbourhoods have cameras attached to their houses (Sheng et al., 2021).

Limitations

Certain limitations of the study have been mentioned previously. One major limitation that has to be mentioned is the small sample size of 43 participants. One possible way to have increased it would have been to use forced responses earlier in the study, so people were not able to skip questions and therefore avoid the need to have to delete incomplete responses. Another aspect to mention is that non-random sampling was used in the form of snowball sampling and the distribution via the university study platform SONA. This might have created a certain bias since this may not represent the general population or real-world burglars or residents.

Furthermore, the virtual reality aspect has been mentioned previously as well, but this is possibly one limitation one must account for when creating an online study like this with clips. Another aspect regarding realism would be that it might be difficult for a participant to picture themselves in the role of a burglar scouting a potential burglary victim. The same can also account for the resident role since many people cannot even picture themselves living in their own house and thinking about safety precaution methods.

Lastly, because this study is in the form of a questionnaire, it might be that it can be affected by social desirability bias or possibly inaccurate responses because criminal behaviour is a sensitive topic. Some participants might have felt it would be wrong to indicate that they would burglarise the residents in the video shown, even though it is only hypothetically meant within the study.

Future research

When exploring possible future research, there are many different possibilities for a researcher. Firstly, an interesting topic that is lacking research would be comparing CCTV cameras directly with private cameras. Not only with regard to the aspect of reducing crime, especially against burglary, but also how the residents or in general, the society, perceives the safety feeling within their neighbourhood with either one of them present or possibly even both (Lynch et al., 2025). For both of these topics, there has been individual research done, for example, the crime reduction strategies of CCTV (Fussey, 2004).

What would also be very interesting would be to explore how people would perceive dynamic guardianship in real-world studies, since this would directly be connected to one of the limitations mentioned in this study regarding VR. This could be tested by showing particpants different types of dynamic guardianship in real-life and make them voice their opinion on these prevention methods and which they think would be most effective. Another interesting way to test the effect of dynamic guardianship would be to create a focus group session, to better understand attitudes, safety concerns and perception of guardianship. The benefit of doing the study in person would be to be able to actively hear the explanation of why a participant chose a certain response to a question and how he argues it. This is, of course, difficult to do in real-life, but could be beneficial. This could be beneficial since, as an observer, one can directly observe a discussion that might show different standpoints one would not identify in an online study.

A possible way to resolve the issue of complications in setting this study up in real life would be to redo the study in a VR environment directly, and not only show the participants clips. Chittaro & Zangrando (2010) showed in his study that when people perceive a situation in VR that they show greater emotion towards a situation in compared to watching it on a regular screen. VR could be also a lot more engaging than just watching clips which would

more the situation more realistic and maybe the participants would feel more in the role of a burglar (Chittaro & Zangrando, 2010)

Conclusion

Crime, and especially burglary, has been a problem in our society and will not stop suddenly. Nowadays, there are luckily precautions one can take as a homeowner. It can be anything from having a fence to having cameras or even self-closing curtains. It is important to understand the extent to which beneficial guardianship is to be able to prevent crime and ensure a secure feeling within the resident's home. Even though this research did not show any significant findings regarding the prevention of burglary events, there has been other research that showed it differently. Ongoing research could improve the benefits of guardianship and, therefore, create a safer and better environment to live in.

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Appendices

During the preparation of this work, I used Grammarly to correct some spelling mistakes, for example, changing the spelling of American English into British English. After using Grammarly, I thoroughly reviewed and edited the content as needed, taking full responsibility for the final outcome."

Appendix 1

Burglar Questionnaire

1. I felt as if I was being watched
2. I felt as if someone else was present in the house
3. House residents will call the police when they see crime taking place
4. House residents will intervene the police when they see crime taking place
5. I would burgle this house
6. I think this house would be an easy target for burglary.
7. I would expect people to be at the house

Appendix 2

Citizen Questionnaire

1. I felt as if I was being watched
2. I felt as if someone else was present in the house
3. This house would likely be burgled
4. This house appears to have low levels of crime
5. House residents will call the police when they see crime taking place
6. House residents will intervene the police when they see crime taking place
7. This house appears to be safe.
8. I would intervene if I would notice someone trying to burgle

9. I would expect people to be at the house

Appendix 3

1. Not using SHD is a serious threat to my safety
2. The longer you wait to install an SHD, the greater the likelihood of a burglary
3. If I do not install an SHD my home is at a higher risk of getting burgled while I am away.
4. I am partially responsible if my house gets burgle if I do not have an SHD installed
5. I can protect my own resources, such as free time and energy, by installing SHDs.
6. I can still protect myself from a burglary even if I do not install SHDs.
7. It is more convenient to rely on other preventative measures of burglary than SHDs.
8. It will save me money if I do not install an SHD.
9. I can avoid the hassles of installing an SHD.
10. I will save myself time by not installing a SHD
11. I will be less concerned about my privacy if I do not install an SHD
12. I will not become a victim of burglary if I install an SHD.
13. The surrounding neighbourhood will be safer after I installed an SHD.
14. The attractiveness of my home to a burglar will decline if I install an SHD.
15. I will be able to find a suitable SHD to install at home.
16. I have the skills to install an SHD if necessary
17. My friends will believe that I am protected against burglaries if I use and SHD.
18. My neighbours or people that live with me will not appreciate it if I install SHDs.