Environmental Intervention On Perceptions of Safety and Happiness

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Abstract

Crime in urban areas is an abundant problem that presents costly solutions such as over-policing, high prison populations, and neighborhood stratification. This study examines the concept of Crime Prevention Through Environmental Design (C.P.T.E.D.) in the neighborhood of Lansdowne Avenue, Philadelphia which has abundant, yet isolated crime. C.P.T.E.D. offers a fiscally and socially responsible solution through environmental crime deterrents. Interventions such as security cameras, graffiti and litter removal, as well as beautification through potted plants and benches. Many studies support C.P.T.E.D.’s effectiveness by making crime inhospitable in a given neighborhood. This study hopes to prove that through comparably minimal financial costs a neighborhood can have improved quality of living, and reduced fear of victimization. By using a pre and post intervention survey, residents' perceptions of happiness, sense of safety, and support of interventions were measured. This study found that environmental intervention caused a statistically significant improvement in residents' sense of safety. Due to a reduced post intervention sample size further studies should look to increase participant numbers.

1. **Introduction**

The urban inner-cities hold an infamous reputation of crime and violence within the United States. Victimization within these areas is compounded as we focus on the particularly low-income neighborhoods. Residents living in those low-income neighborhoods are more likely to experience crime whether through participation or victimization. A study titled *Social Disadvantage and Crime* addressed this by noting “differences in the number of very crime-prone people and the extent of their criminogenic exposure by disadvantaged groups are a consequence of disadvantage-related differences resulting from (rules and resource-based) social and self-selection processes” (Wikström 2016). Revitalization offers a possible solution to their abundant crime and fear of crime through C.P.T.E.D. This includes environmental alterations including litter removal, trashcan and security camera installation, and the beautification of potted plants and graffiti removal. The term C.P.T.E.D. was originally coined by architect Oscar Newman, who believed environmental factors can influence the temptation of crime and fear of crime. Using C.P.T.E.D., this study aims to reduce the fear of victimization and increase perception of safety within the neighborhood by applying neighborhood effort and grants provided through the city of Philadelphia. This study focuses on Lansdowne avenue where the local high school has 99% of students on free or reduced lunch. Located in West Philadelphia bordering Overbrook and Bala Cynwyd; this street has built a reputation over the years of having an exceptionally higher crime rate than the surrounding neighborhood (Crime, 2020). When entering this area, the street is covered in litter, graffiti is prominently displayed on most available spaces and abandoned buildings are abundant throughout. This research intends to measure changes of residents’ fear of crime in Lansdowne avenue by altering the environment to be unconducive with crime.

1. **Literature Review**

Environmental Impacts on Perceptions of Safety

Living in a high crime area comes with many difficulties throughout a residents day to day life. Along with living with a fear of crime, there is a lower quality of life, a reduced property value, and a lack of neighborhood cohesion. Yet there are numerous environmental alterations that can improve this situation. Simple additions such as improved lighting or reduced graffiti can decrease fear of victimization by perceiving the environment as safer. By that same logic, crime may also be reduced by the neighborhood appearing unaccepting of crime, whereby criminal activity will stick out and likely be caught and punished (Clarke 1995).

Clarke (1995) addresses CPTED as an effective means of this by being “opportunity reducing” for crime. Furthermore, both perceiving a neighborhood as safer, as well as reducing crime, will cause property values and quality of life to improve. This is through creating an environment that is inhospitable to crime. Through increasing light, natural surveillance and improving the situational appearance of the neighborhood, crime can have a lower appeal. By increasing the likelihood of arrest and making crime seem more ‘out of place’ potential criminals can be persuaded to not commit criminal acts. This will eventually lower fear of crime in the neighborhood because the same changes that are dissuading criminal acts can offer a sense of safety to residents.

For instance, a study by Wesley Skogan shows that neighborhood deterioration increases fear of crime. This includes litter, graffiti, and abandoned buildings. This fear of crime causes members of the neighborhood to “check out” allowing businesses to fail and damaging neighborhood cohesion. When the majority of the not criminally inclined neighborhood “check out” they no longer bother to keep an eye out for crime, keep their property visually appealing, or associate with neighbors (Skogan 1986).

Similarly, a study by Lewis and Maxfield addresses major factors that create a fear of crime which include abandoned buildings, vandalism, drug use, and loitering teenagers. Lewis mentions that these factors have a greater impact on perception than actual crime statistics. This shows how environmental factors can greatly impact quality of life and fear of victimization within these neighborhoods. Even when compared with knowing specific crime statistics, one's perception of safety comes more from what they see on the street. Thus, perceptions of safety may rise following these environmental changes. (Lewis 1980)

Effectiveness of CPTED on Reducing Fear of Crime

C.P.T.E.D. has become an increasingly common topic within criminal justice in recent years. Since its creation, it has steadily been accepted as a cost-effective means of crime control and neighborhood improvement. A study (Carter, Carter, Dannenburg, 2003) conducted on a high crime and drug addled community located in Sarasota, Florida, known as the North Corridor, compared police data before and after a complete C.P.T.E.D. intervention was applied. The researchers found that “calls for service decreased in the North Trail Corridor and increased in the rest of the city” (Carter, Carter, Dannenburg, 2003, p. 1443); furthermore, lower instances of prostitution and crimes against persons and property were found. These positive results did not occur within the rest of Sarasota which did receive C.P.T.E.D. intervention. Within these neighboring communities calls for police rose, and while drug related crime increased in all of Sarasota, it rose significantly less within the North Corridor due to the intervention. Calls to police decreased by approximately 33% in the North Corridor over the following 7 years after the changes were applied. Conversely, calls to police increased throughout the rest of Sarasota. Additionally, crimes committed against persons and property decreased by over 50% within the North Corridor, while the surrounding neighborhoods had a reduction of approximately 25%.

A similar study was conducted in 2004, researchers examined the effects of a fully funded CPTED application among Santa Monica liquor stores. (Casteel 2004). These liquor stores have a very high rate of crime, and the researchers offered a full assessment and CPTED intervention at no cost to the liquor stores. Out of the 22 liquor stores who were offered this intervention, only nine agreed. Results following the changes showed “intervention stores experienced the largest decreases for robbery (82.2%) and shoplifting (87.1%) events” (Casteel, Peek-Asa, Howard, Kraus, 2004, p. 453). This supports the effectiveness of C.P.T.E.D. intervention yet an inability for local residents to finance these installations represents an issue of feasibility.

Another study (Miller 2008) addresses situational factors that affect perceptions of safety, which applies to multiple aspects of this study. Miller’s study examines how the time of day and attributes of the street can affect fear of victimization. Factors such as litter, abandoned buildings, and graffiti can greatly impact one’s sense of safety. Furthermore, changing situations such as how crowded the street is and at what time of day the interview was given impacted participants survey responses. This shows how perceptions of crime can be fickle and easily affected beyond reasonable thought. A similar study was conducted which compared how safe people view the same neighborhood with and without graffiti (Austin 2007). This study found that even when considering time of day and other situational factors graffiti can increase a sense of danger.

Perceptions of Safety and its impact on Happiness

Reducing crime and improving the quality of life of residents is a common goal within C.P.T.E.D. intervention. Many of the same alterations that reduce crime such as beautification, also benefit residents happiness. Yet the reduction of crime alone has been shown in prior studies to improve the happiness of residents. A study by Zhiming Cheng found that “being a victim of crime, and having an acquaintance who is a victim of crime, have a negative effect on happiness” (Cheng 2015, p.2). This supports that improvements to residents perceptions of safety may indirectly improve residents' happiness. Zhiming Cheng’s study also notes that living in safe neighborhoods had an additional positive impact on happiness; further supporting that perceptions of safety may impact residents' happiness. (Cheng 2015).

Police presence and its impact on Perceptions of Safety

C.P.T.E.D. interventions offer a solution to crime reduction without needing to continuously staff police or security. Yet it is important to assess their value in addition to alterations since police presence increases the likelihood of arrest, thus further deterring crime. A study titled *Feelings of Safety In The Presence Of the Police, Security Guards, and Police Volunteers* found that uniformed presence only improved perceptions of safety in an area of perceived danger. If the neighborhood is viewed as relatively safe, police or security presence has little impact (Doyle 2015). This study represents the limited impact that police can have on perceptions of safety. While their presence may benefit a neighborhood prior to or in the process of revitalizing; a neighborhood successfully perceived as safe would require minimal police presence.

**4. Research questions and hypotheses**

Based on the prior literature and the situational factors along Lansdowne Avenue; this study aims to examine four research questions. These questions are regarding the impact of environmental revitalization, police presence, and happiness on their respective impacts on perceptions of safety. Additionally one question attempts to examine pre and post intervention support.

R1. What is the impact of environment revitalization on residents’ perception of safety?

H1. Residents are more likely to feel safe after revitalization.

R2. What is the impact of police presence on residents’ perception of safety?

H2. Residents will associate a higher police presence with reduced safety.

R3. Is there an association between higher perceptions of safety with higher perceptions of happiness?

H3. Residents will associate an improved sense of safety with an improved sense of happiness.

R4. What is the impact of pre-installation support on post-installation support?

H4. Residents who supported installations will be more likely to support them post-intervention.

**5. Current study**

**Objectives**

This study has multiple measures for effectiveness and feasibility of C.P.T.E.D. intervention. Primarily, this study hopes to prove environmental alterations present a financially viable form of crime deterrent. This is through the alterations costing less than alternative crime prevention methods. This research looks to further prove the effectiveness of these methods on quality of living and perception of victimization. Assuming these objectives are met this study will show a financially beneficial method to improve a high crime area.

**Location**

This study focuses on the environmental alterations of the 59th-64th block of Lansdowne Avenue. This area is located in West Philadelphia to the east of Havertown. It is difficult to measure the exact crime level of this neighborhood because while it is rife with crime, even the narrowest available data to measure it includes surrounding neighborhoods which are both higher income and lower crime. This borough of Philadelphia even includes Saint Joseph’s University which is located in a relatively safe area. A simple internet search of Lansdowne Avenue will result in countless crime reports, as well as word of mouth painting the picture of an area abundant with crime. In recent years, there have been numerous shootings, armed robberies, burglaries, and mass shootings in the 59th-64th block as well as the surrounding blocks. A recent shooting of 7 at a basketball court covered by6 ABC is an example of one such incident, which includes comments of residents viewing the event as “typical” and being “accustomed to these types of things” (WPVI 2019).

This revitalization project used numerous city grants to provide different aspects of CPTED intervention. These grants include the “Business Security Camera Program” which reimburses business owners with 50% of the cost of security camera installation (Business Security 2019). This program was introduced to 5 business owners within the study location, of which 3 confirmed beginning the process of installation. Additionally, graffiti was reported and removed through Philadelphia services (Report, 2019). Street cleaning and trash can installation was procured through the Philadelphia Corridor Enhancement Grant (Commercial, 2019).

**Survey procedure**

This study uses a quantitative pre and post-survey method for examining the effectiveness of C.P.T.E.D. intervention on the perception of victimization. This is used to measure the quality of life the residents of Lansdowne avenue had before the intervention, including their perception of crime within their neighborhood. The pre and post-survey is used to compare these results and estimate how effective these changes were to the residents of the neighborhood.

This study used a convenience sample through approaching residents with the survey between November 1st and December 10th. Included in this survey is a request for their email to administer the post-survey. Residents were generally skeptical or uninterested in participating in this survey, while business owners were receptive with approximately 20 surveys being filled out by business owners. Many residents responded to the notion of this study as unnecessary due to ‘being safe if you belong here’. Additionally, during one of the days residents were approached to survey, a 20-year-old man who was shot the night before while walking with his father, likely raising doubt towards the notion of change in general. The majority of residences did not answer their doors, but of those who did the majority agreed to complete the survey. The relatively small area of study severely impacted the total number of participants. Additionally, a snowball method of sampling was also utilized by requesting participants to refer other residents who may be interested in participating in this survey. A total of 71 participants were used in the pre-survey, with a post-survey number of 53. Approximately 48 of the survey respondents identified themselves as male. This data can be ultimately compared with the crime rate of the greater Wynnfield area to postulate whether the perceptions accurately reflect the changes in crime. Unfortunately, due to the relatively small area being revitalized and surveyed, the total number of participants was relatively small. Within these 5 blocks of Lansdowne Avenue as well as those living directly adjacent would only include a relatively small population.

**6. Measures**

*Neighborhood Revitalization (Intervention)*

Neighborhood Revitalization was the actual intervention performed during this study. These interventions included the installation of trash cans, cameras, and the use of street cleaning crews to remove litter. Three businesses’ including a corner market, hair salon and a fabric store confirmed camera installations prior to the middle of January. Which is approximately 75 days prior to the collection of post surveys. Three trash cans and numerous potted plants were installed throughout the study location. The Trash Cans were placed on every other block to provide convenience to residents. These were installed in early December but minor vandalism ultimately limited the use of potted plants. Regular biweekly street cleaning began in late December as well as local community cleaning efforts. Additionally, graffiti was reported to Philadelphia services consistently as they were spotted along Lansdowne. These interventions occurred between when the Pre and Post surveys were administered.

*Perception of Safety*

Participants were asked about their generally perceived sense of safety. This measure included questions on the perceived safety of children, the elderly, as well as addressing specific times of the day. The responses provided for these questions included very safe, safe, unsure, unsafe, or very unsafe. Unsure was provided for those who felt indifferent towards their sense of safety or were confused on how to quantify it. Using questions 5-11[[1]](#footnote-0) the range for safety can fall anywhere from 5 (Very Safe) to 35 (Very Unsafe). Participants who answered unsure for this question were given a neutral score of 3 per question due to being unsure if they feel safe or unsafe.

*Sense of Happiness*

Participants were asked about their general sense of happiness living within the neighborhood of Lansdowne Avenue. Responses provided for these questions include very happy, happy, unhappy, very unhappy, or unsure. This question intended to gather data on how happy these residents were and what possible factors could affect their sense of happiness. Unsure was provided for those who felt indifferent or were unable to quantify their sense of happiness living within the neighborhood of Lansdowne Avenue. Using question 13 the range for sense of happiness can fall between 1 (Very Happy) - 5 (Very Unhappy). Participants who answered ‘Unsure’ were given a neutral score of 3 due to being unsure if they are happy or unhappy.

*Police Presence*

Participants were asked about how present they felt police were in their neighborhood. This could be through typical police sightings and police response activity. Responses provided for these questions included Very Present, Present, Rarely Present, Not Present or Unsure. This question is used to see what possible impacts police presence has on residents whether that be happiness or sense of safety. Unsure was provided for those who felt indifferent to the level of police presence or had not previously noticed the level of police presence. Using question 12 the range of police presence falls between 1(Very Present)-4(Not Present) Participants who answered ‘unsure’ were unused due to the possibility that they had not noticed or ever considered police presence.

*Support of Neighborhood Revitalization*

Participants were asked about their support for certain aspects of neighborhood revitalization. These features included security camera installation, graffiti removal, trashcan installation, and regular street cleaning. These questions were given the responses of strongly support, support, oppose, strongly oppose, or unsure. These questions intended to garner data on how receptive the residents would be to these changes. Unsure was provided for those respondents who had no opinion on these alterations or were confused about their exact application. Using questions 16-18[[2]](#footnote-1) support for neighborhood revitalization can range from 3 (Strongly Supports)- 12 (Strongly Opposes). Participants answering ‘Unsure; for this question were unused in range due to the possibility of being confused about the actual intervention. Four participants of the 71 pre survey were unused due to this, while zero of the 53 post survey participants were unused.

**7. Results**

This study used a convenience sample of 71 residents living along Lansdowne Avenue. The focus of this study was to better understand and measure the impact of typical ‘Crime Prevention Through Environmental Design’ installations on a high crime neighborhood. Prior to these installations, 71 residents were surveyed. Within these results, many residents provided information expressing a low sense of safety while living within the neighborhood. As Table 1 shows, the majority of the residents considered the neighborhood “Unsafe” or “Very Unsafe” (53.52%). Additionally, residents were considerably unhappy living within Lansdowne Avenue. This is seen by 63.38% of the residents considering themselves “Unhappy” or “Very Unhappy” within the Pre-Survey. Following the intervention, post-survey results indicate that there were many notable changes in the respondent’s answers. Sense of safety notably improved with only 28.30% considering themselves “unsafe” or “very unsafe”. Happiness also benefited with only 31.98% considering themselves “Unhappy” or “Very Unhappy”.

Table 1 – Descriptive Statistics of the Participants

|  |  |  |
| --- | --- | --- |
| Variable | Pre-survey  (n=71) | Post-survey  (n=53) |
| Gender  Male  Female  Prefer Not to Answer | 63.89%  31.94%  2.78% | 62.26%  37.74% |
| Age  Residency Length  Education Level  *Some Highschool*  *Highschool Graduate*  *Some College*  *College Graduate*  *Education Beyond College* | 39.41(avg.)  24.6(avg.)  11.27%  35.21%  30.99%  21.13%  1.41% | 37.91(Avg.)  22.67(Avg.)  9.43%  37.74%  33.96%  16.98%  1.89% |
| Overall Sense of Safety  *Very Safe*  *Safe*  *Neither Safe Nor Unsafe*  *Unsafe*  *Very Unsafe* | 5.63%  11.27%  29.56%  39.44%  14.08% | 0%  16.98%  54.72%  28.30%  0% |
| Safety At Night  *Very Safe*  *Safe*  *Neither Safe Nor Unsafe*  *Unsafe*  *Very Unsafe* | 0%  7.04%  2.82%  38.03%  52.11% | 1.89%  1.89%  13.21%  64.15%  18.87% |
| Police Presence  *Very Present*  *Present*  *Rarely Present*  *Not Present* | 19.72%  33.8%  32.39%  14.08% | 7.55%  33.96%  39.62%  1.89% |
| Sense of Happiness  *Very Happy*  *Happy*  *Neither Happy nor Unhappy*  *Unhappy*  *Very Unhappy* | 9.86%  22.54%  4.23%  32.39%  30.99% | 5.66%  28.30%  33.96%  24.53%  7.55% |
| Installation Support  *Strongly Support*  *Support*  *Unsure*  *Don’t Support*  *Strongly Don’t Support* | 88.06%  11.94%  0%  0%  0% | 96.23%  3.77%  0%  0%  0% |

To test whether the intervention has an effect on the perception of safety among the residents, a paired T-test was conducted. This allows the effectiveness of the intervention to be measured by assessing changes in safety. As Table 2 shows that there was a statistically significant difference between the perceptions of safety before and after the intervention (p=0.000). Additionally, the mean of perception of safety in the pre-survey was 3.34 and the mean in post survey was 3.09 showing the participants felt safer after the intervention.

Table 2. Perception of safety

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | N | Mean | S.D. | df | Sig |
| Pre-Intervention Safety | 53 | 3.34 | .75 | 52 | .000 |
| Post-Intervention Safety | 53 | 3.09 | .42 | 52 | .000 |

To test whether there is a relationship between police presence and perception of safety, a test of correlation was used. As Table 3 shows, there is no significant relationship between these two variables (p=.654). Thus no discernable relationship between police presence and perception of safety is measured as well as any reliable correlation.

Table 3. The relationship between police presence and perception of safety

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | N | Correlation | Sig |
| Pre-Intervention Safety | 71 | .05 | .654 |
| Pre-Intervention Police Presence | 71 | 1.00 | .654 |

To test the effect of perception of safety on perception of happiness, a test of significance was used comparing perception of safety on the perception of happiness. As table 4 shows, with a significance of .000 there is a positive significant relationship between the perception of happiness and perception of safety. This indicates that when residents feel safer, they are more likely to feel happier. Additionally, a correlation of .48 shows a significant, yet moderate correlation. This shows that while these variables are significantly associated with one another, they do not strongly relate.

Table 4. The relationship between perception of safety and happiness

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | N | Correlation | Sig |
| Safety | 71 | .48 | .000 |
| Happiness | 71 | 1.00 | .000 |

To test the relationship between pre and post-installation support, a paired T-test was used to compare pre-installation support on post-installation support. As table 5 shows, with a significance of .021 there is a significant relationship between the pre and post-installation support. Additionally, with a correlation of .32 there is a weak but significant correlation. This shows that while there is a significant relationship between these variables, they do not strongly relate.

Table 5. The relationship between Support for Pre and Post intervention

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Mean | S.D. | df | Sig | Correlation |
| Pre-Intervention Support | 1.31 | .35 | 49 | .021 | .32 |
| Post-Intervention Support | 1.16 | .28 | 49 | .021 | .32 |

**8. Discussion**

This study intended to measure the effects of environmental alterations on perceptions of crime. Lansdowne Avenue was used as the area of study due to its high crime rate. Environmental alterations included the cleaning of streets, installation of security cameras, and the installation of trash cans. There were multiple limitations when conducting this study due to a variety of circumstances. The initial sample size was smaller than originally planned due to the small area of study as well as little interest in participation from residents. Following the installations, the post-intervention survey received only 53 responses from the original 71. This could be due to the recent impact of the Coronavirus, or simply disinterest in responding. Multiple participants of the Pre-Intervention survey did not provide their email addresses which further limited the Post sample. Additionally, while surveys were conducted on location, the participants were found through convenience sampling, which would allow non-residents to have the ability to complete the survey if they stated they did live along Lansdowne. Despite these limitations, the primary hypothesis of this study was supported with strong statistical significance. The sense of safety prior to intervention was significantly proven to increase following C.P.T.E.D. intervention. This supports the value of C.P.T.E.D. application in high crime areas where over-policing may not be the fiscally or feasibly best answer. Furthermore, this study supported that safer residents typically feel happier living within their neighborhood; supporting that safety and quality of life can be improved through this intervention. Participants initially strong support of these changes only grew following their installation, further supporting its value. There was ultimately no proven relationship between presence of police and sense of safety which provides insight on what factors do impact perceptions of safety. This study provides support for the effectiveness of C.P.T.E.D. intervention rather than police intervention; further studies should be used to expand on its value using a larger sample size and a larger study location.

C.P.T.E.D. as a Cost-Effective Solution

When discussing the costs and benefits of these alterations, it is important to address that all of these changes were funded through public city grants and neighborhood efforts. Revitalization such as this offers a cost-effective means of neighborhood improvements that offer numerous financial benefits. Residents of this neighborhood would see a rise in property value over time as crime is reduced and the quality of living is improved (Fennelly 2018). Within the book **Cpted and Traditional Security Measures**, rising property values are addressed as a result of successful CPTED intervention. Furthermore, a reduced crime rate requires less police activity, ambulance responses, and improved business among the local store owners (Carter 2003). Sarasota, Florida existed as a town plagued by crime, yet with a complete CPTED intervention, it found a reduced number of police callouts, reduced ambulance calls, and improved business for store owners, all of which could apply to Lansdowne. This makes these interventions cost beneficial without considering the additional improvement to human life and safety.

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Appendix

Survey Questions

1. What is your sex

1. Male
2. Female
3. Prefer not to answer

2. What is your age?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. What is your highest level of education?

1. Some Highschool
2. Highschool Graduate
3. Some College
4. College Graduate
5. Education beyond College

4. How long have you lived within the 5900-6300 block of Lansdowne Ave.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. How safe do you feel the neighborhood of 5900-6300 of Lansdown is?

1. Very Safe
2. Somewhat Safe
3. Somewhat Unsafe
4. Very Unsafe
5. Unsure

6. How safe would you feel walking in your neighborhood during the day?

1. Very Safe
2. Somewhat Safe
3. Somewhat Unsafe
4. Very Unsafe
5. Unsure

7. How safe would you feel walking in your neighborhood during the evening?

1. Very Safe
2. Somewhat Safe
3. Somewhat Unsafe
4. Very Unsafe
5. Unsure

8. How safe would you feel walking in your neighborhood during the night?

1. Very Safe
2. Somewhat Safe
3. Somewhat Unsafe
4. Very Unsafe
5. Unsure

9. How safe do you feel the neighborhood is for children playing outside during the day?

1. Very Safe
2. Somewhat Safe
3. Somewhat Unsafe
4. Very Unsafe
5. Unsure

10. How safe do you feel the neighborhood is for the elderly walking in your neighborhood during the day?

1. Very Safe
2. Somewhat Safe
3. Somewhat Unsafe
4. Very Unsafe
5. Unsure

11. How safe do you feel the neighborhood is for the elderly walking in your neighborhood during the night?

1. Very Safe
2. Somewhat Safe
3. Somewhat Unsafe
4. Very Unsafe
5. Unsure

12. How present do you feel the police are in your neighborhood?

1. Very present
2. Present
3. Rarely present
4. Not present
5. Unsure

13. How happy are you living in this neighborhood?

1. Very happy
2. Happy
3. Unhappy
4. Very Unhappy
5. Unsure

14. How has your feeling of safety in the neighborhood changed in recent years?

1. Improved
2. Same
3. Worse
4. Unsure

15. How do you feel the safety will be in this neighborhood a year from now?

1. Better
2. Same
3. Worse
4. Unsure

16. Do you support the recent installation of trash cans along Lansdowne?

1. Strongly support
2. Support
3. Oppose
4. Strongly Oppose
5. Unsure

17. Do you support the recent installation of security cameras along Lansdowne?

1. Strongly Support
2. Support
3. Oppose
4. Strongly Oppose
5. Unsure

18. Do you support the recent regular cleaning of litter off the sidewalks?

1. Strongly Support
2. Support
3. Oppose
4. Strongly Oppose
5. Unsure

19. Do you believe litter on the street is a problem

1. Strongly Agree
2. Somewhat Agree
3. Neither Agree nor Disagree
4. Somewhat Disagree
5. Strongly Disagree

1. Q5-11 included questions on general safety, safety during the day, evening and night. Also safety for children and elderly. [↑](#footnote-ref-0)
2. Q16-18 asked participants support of trash can installation, camera installation, and street cleaning; respectively. [↑](#footnote-ref-1)