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Do Crime Prevention Through Environmental Design Strategies Deter Taggers? Voices from the Street

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Abstract

Crime Prevention Through Environmental Design (CPTED) postulates that crime and antisocial behavior can be deterred with the effective use and proper design of the physical environment. When CPTED strategies are implemented, it makes involvement in criminal behavior more difficult to complete by increasing the individual's visibility, thereby increasing the chance of being caught. Using interviews with 35 active juvenile street taggers from a large metropolitan area in Texas, this research explores whether offenders are deterred from engaging in criminal activity due to the implementation of CPTED strategies. Results suggest that offenders reported physical barriers, natural surveillance, access, and signage served as deterrents during the target selection process.

Keywords: Crime Prevention Through Environmental Design, graffiti, delinquency, qualitative, CPTED

Introduction

For many law enforcement agencies, graffiti is not a top priority; however in many neighborhoods, graffiti is among the highest quality of life concerns for community members (CITE). According to Wilson and Kelling's (1982) broken window theory, if graffiti is continuously left unchecked, there is a risk that property values would decline, citizen safety could be at risk, and neighborhoods could slowly decay. Further, if the area fails to 'fix' or remove graffiti, then it could send a message to potential offenders that the community has no guardian(s) and serves as an invitation to other taggers to come tag the same area.

At the national level, graffiti costs the United States an estimated \$12 billion dollars yearly in clean-up efforts, decline in property values, and lost revenue in public transportation due to reduced use stemming from public fear of gang crime perceived to be associated with graffiti (Weisel, 2004). While graffiti is prevalent in most large cities with populations over 100,000, relatively few offenders are caught and interviewed; therefore little is known about the individuals who participate in this type of crime (for exceptions see DeShay, Vasquez, & Vieraitis, 2020; Lachmann, 1988; Ferrell, 1995; Halsey & Young 2006; Monto, Machalek, & Anderson, 2012; Taylor, 2012; Taylor, Marais, & Cottman, 2012; Vasquez & Vieraitis, 2016). Researchers know even less about how Crime Prevention Through Environmental Design (CPTED) strategies affect target selection amongst active street taggers.

Preventing crime is a complex matter and the strategies of CPTED have shown it can reduce the possibility of crime, such as in appointment robbery (Vasquez, Rodriquez, Suh, Cosio-Martinez, 2020), robbery (Casteel & Peek-Asa, 2000), and residential burglary (Marzbali, Abdullah, Ignatius, & Tilaki, 2016). Crime reduction can be accomplished with planning and modifications to the physical environment by making criminal involvement difficult to complete or by making the individual visible thereby increasing the risk of being caught (Armitage, 2013; Poyner & Webb, 1991; Sakip and Abdullah, 2010). Prior research has found that the design of the physical environment can reduce crime in the early stages of planning (Nasar & Fisher, 1993), design (Crowe, 2000), and adding or removing design features (Newman, 1973). According to CPTED, the physical elements and the layout of an environmental structure are the key principal conditions for opportunities for crime (Rostami & Madanipour, 2006). Therefore, under CPTED, the contributing factor that increases the potential of criminal activity is an ineffective or poorly designed physical environment (Anastasia and Eck, 2007).

The underlying goal of CPTED is to deter crime, which is the same goal for deterrence theory. The difference is that deterrence theory posits that crime is the result of expected gains outweighing the risk of the perceived sanctions if caught. Whereas CPTED theory attempts to deter individuals in a more multi-disciplinary approach that looks to make changes on behavioral, social, political, biological, psychological, and the physical environments (Cozens & Love, 2015). The connection is that CPTED seeks to increase the visibility and the psychological risks of getting caught thereby reducing the decision to commit crime (Cozens & Love, 2015).

Extant literature has examined how environmental changes based on CPTED strategies can have a psychological effect on the offender by heightening their perception of risk (Cozens & Love, 2015; Jacobs 1961; Jeffery, 1971). Previous CPTED research has considered how environmental changes can psychologically affect the offender and their perception of risk, but it is unclear to what degree these environmental modifications actually succeed in deterring active property crime offenders. When considering CPETD strategies, the current study asks whether changes in the physical environment could potentially alter the perception of risk, thus deterring offenders from engaging in criminal activity.

Theoretical Background

Prior Research on Graffiti

Prior research has predominantly used qualitative methods to examine why street taggers engage in tagging (Ferrell, 1995, 1997; Halsey and Young, 2006; Taylor, 2012). Qualitative research provides opportunities to examine street taggers perceptions of deterrence, the target selection process, interactions, social processes, and how they make sense of their particular setting in everyday life. Personal interviews and observations permit researchers to identify the offender's rationalizations for committing crime and target selection (Decker & Winkle, 1996; Ferrell 1995; Taylor 2012; Vasquez & Vieraitis, 2016). A major benefit in exploring active offenders in the field is that the researcher is with the offender as they consider participating in, or as they recently finished participating in graffiti vandalism (Vasquez & Vieraitis, 2016). Additionally, qualitative research allows the researcher to be nearby in order to experience first-hand the offender's decision-making skills and target selection, which is problematic to detect using quantitative methods or with individuals who have already been identified by law enforcement and allows the participants to articulate their personal behaviors and experiences in order to gain a better understanding of the criminal activity in the context of their environment (Decker & Winkle, 1996).

Taylor (2012) concluded individual motivations to engage in street tagging range from the need to alleviate boredom, delinquent peer associations, the desire to experience the adrenaline rush from tagging, and looking to reaffirm their non-conformist identities. Furthermore, Halsey & Young (2006) found pride, pleasure, and recognition as feelings associated with street tagging. The 11- to 18-year-old participants in their study stated that street tagging was a sociable way to make friends as well as to alleviate boredom and to rebel against authority. Previous research also found that street taggers commit graffiti to fulfill a need for excitement, to overcome boredom, to relieve family related stress, and to obtain recognition or to "get up" as a genuine street tagger (Vasquez and Vieraitis, 2016). The decision to participate in tagging was precipitated by the need to avoid or find relief from stressors such as overcoming boredom and feelings of anxiety associated with family matters (Vasquez & Vieraitis, 2016).

Ferrell (1995) collected data from four years of field work to examine social control, political, and legal frameworks and asserted that street tagger's decision to engage in tagging could be seen as an opposition to control. The attempt to resist control from society resulted in the creation of a new individual identity while at the same time created a development of an alternative community of taggers based upon their collectivist ideals (Ferrell, 1995). Within these newly developed communities, taggers were able to further develop their new identities outside the control mechanisms of

authority figures. The criminalization of street taggers was a direct result of the battle between mainstream cultural and social control and the new alternative cultural spaces (Ferrell, 1997). Under this ideology, society tries to control this form of resistance, street tagging, by criminalizing the act.

Furthermore, the decision to participate in street tagging was also made easy by the readily available justifications to neutralize any shame or guilt in offending (Vasquez & Vieraitis, 2016). Offenders often use neutralization techniques to justify and excuse their behaviors in order to remove any moral obstacles in order to engage in criminal activity (Skyles & Matza, 1957). Street taggers also downplayed their criminal activity as less severe when compared to other crimes such as robbery (Vasquez & Vieraitis, 2016). The comparison to other crimes is often used by offenders to reduce guilt and shame by excusing or justifying their criminal behavior (Cromwell & Thurman, 2003). Lastly, a lack of structured activities was also identified as a source of deciding to engage in criminal activities since the lack of structural factors inhibited their access to legitimate recreational activities (Vasquez & Vieraitis, 2016). While we understand some of the motivational and psychological factors associated with tagging, there is less known about the deterrent effect of the physical environment on the perception of risk resulting in the decision making regarding illegal graffiti.

Crime Prevention through Environmental Design (CPTED)

Theories that highlight the role of the physical environment in safety and crime typically encompass six main theories, which include (1) 'Eyes on the Street' (Jacobs, 1961), (2) 'Defensible Space' (Newman, 1972), (3) 'Social Disorganization' (Shaw & McKay, 1972), (4) 'Crime Prevention Through Environmental Design' (Jeffery, 1971), (5) 'Situational Crime Prevention' (Clarke, 1980), and (6) 'Broken Windows' (Wilson & Kelling, 1982). Each of the theories requires their own distinctive assumptions; however, the theory that is considered an essential proactive theory of deterrence is CPTED. This is based on CPTED's theoretical strategies that examine crime prevention from the initial stages of agenda setting, formation, legitimation, implementation, and evaluation (Easton, 1953; Sakip & Abdullah, 2010). CPTED stresses strategies which could reduce crime by focusing on areas where crime occurs frequently (Taylor & Hale, 1986).

CPTED was originally written by Jeffery in 1971, who was inspired by the work of Jane Jacobs' 1961 work in the book *The Death and Life of Great American Cities*. In her book, Jacobs (1961) indicated that varied land use areas with higher individual activity were important attributes for community safety. Over the next few decades, studies

verified how a built design might reduce crime in a location-based approach (Jacobs, 1961; Jeffery, 1971, Newman, 1973). Eventually the strategies of CPTED began to be widely accepted as an important approach in the reduction of crime (Armitage 2013; Poyner & Webb, 1991). CPTED is a multilayered approach to reducing crime by utilizing aspects from architecture, environmental criminology, and urban design while at the same time necessitates the commitment of various agencies such as residential developers, planners, and law enforcement (Cozens & Love 2015). CPTED focuses on associations between people and the environment while using environmental and behavioral psychology (Cozens & Love, 2015). Researchers have shown the importance and effectiveness of CPTED for reducing crime when applied by agencies to develop their crime reduction strategies, policies, and regulations (Armitage & Monchuk, 2011; Pascoe, 1999; Teedon, Reid, Griffiths, & McFayden, 2009; 2010). Under Crime Prevention Through Environmental Design, there could be built strategies that might influence how individuals respond to environmental signs based on their perception of the built environment (Cozens & Love, 2015).

The effect of place on the risk of crime has been well recognized in the study of crime. From the work of Burgess (1916) and Park, Burgess and McKenzie (1925) at the University of Chicago School of Sociology to Brantingham and Brantingham's (1981) study of Environmental Criminology to the interdisciplinary approach of Crime Science by Smith and Tilley (2005), prior research has repeatedly validated that location plays a pivotal role in criminal risk predictions (Armitage, 2006). Property location can influence the risk of crime at the neighborhood level (meso) such as the distance from the offender's residence to a property (see Bernasco and Luykx, 2003; Bernasco and Nieuwbeerta, 2005; Rengert & Wasilchick, 1985; Wright & Decker, 1994), distance of a public transport interchange to a property (Groff & LaVigne, 2001), and the distance of a pedestrian walkway to a property (Armitage, 2006; 2013).

Property can also be an influence at the individual level (micro) (Armitage, 2006). This is based on the idea that once a neighborhood has been selected by an offender, the offender only has to decide *which* property will be individually selected as suitable target. The individual features of a property contribute to the offender's target selection and can include the positioning of the property in relation to traffic or the street, the amount the property that can be seen by neighboring properties, the access level of the property, and the visible physical security (Armitage, 2006; 2013; Brown and Altman, 1983; Brown & Bentley, 1993; Cromwell, Olson, & Avary, 1991; Cromwell & Thurman, 2003; and Tseloni, Thompson, Grove, Tilley, & Farrell, 2014). Therefore, CPTED seeks to alter many of these aspects of the environment that influence decision

making and to deter the individuals who potentially have a propensity to commit crime, and in this case, graffiti (Cozens & Love, 2015). Whereas traditional crime prevention usually depends on reactive law enforcement practices, CPTED tries to decrease crime by using mechanical and natural preventive strategies along with individual activities and location design that could be applied proactively at the initial design stage (Cozens & Love, 2015).

This study will investigate the data through the lens of the original CPTED theory as offered by Jeffery (1971) who based his research on the work of Jacobs (1961) to propose a new crime control approach which was eventually named Crime Prevention Through Environmental Design (Greenberg & Rohe, 2007). The design concept of CPTED incorporates various strategies of crime prevention into the planning and designing stages of large-scale open spaces (Cozens & Love, 2015). CPTED incorporates the design, management, and manipulation of the built environment to reduce the fear of crime and reduce crime at the individual (micro-level), the neighborhood (meso-level), and the national level (macro) (Armitage, 2013; Crowe 2000). Previous research has identified the original four strategies that encompass CPTED which are aimed at modifying the built environment in order to reduce crime (Cozens, 2002; Carter, Carter, Dannenberg, 2003, Kajalo & Lindblom, 2015). The original CPTED strategies that Jeffery (1971) discussed are (1) territoriality, (2) natural surveillance, (3) activity support, and (4) access control.

Territoriality

Territoriality is a design strategy aimed at strengthening notions of a 'sense of ownership' within legitimate users of a specified space and, by doing this, decrease potential opportunities of crime by discouraging illegitimate users (Cozens & Love, 2015; Crowe, 2000; Cullen, Agnew, & Wilcox 2013). The strategy of territoriality can encompass real barriers (e.g. physical walls and fences) and symbolic barriers (e.g. signs) (Cozens & Love, 2015). Both types of barriers are aimed at informing the illegitimate user of the area being either, public, semi-private, or private. At the core of CPTED, it promotes crime prevention strategies that utilize the opportunities within the environment "both to naturally and routinely facilitate access control and surveillance and to reinforce positive behavior in the use of the environment" (Crowe, 2000, p. 37). Territoriality is based on the premise that individuals will protect their own area as well respect the territory of other individuals. Once this is accomplished, the identification of potential offenders and/or illegitimate users is easier in these well-defined areas (Cozens & Love, 2015).

Natural Surveillance

Natural Surveillance includes various methods of ensuring that the potential offender would be visible. This is accomplished by the way the area is designed in order to increase the ability of informal (passers-by, residents, legitimate users) or formal (employees, security guards, law enforcement) users of the area to observe any potential suspicious criminal behavior (Armitage, 2018). Natural surveillance also includes the extent in which potential offenders perceive their likelihood of being seen, even when that perception could be inaccurate (Armitage, 2018). This can be achieved by making sure that building entrances face the street, windows are clear of obstructions, and sightlines are clear of high fences, walls, and shrubbery. A potential offender is less likely to commit a crime if they know that they are visible to others.

Activity Support

Activity Support can include any functions that enhance and promote interaction amongst the residents and any other legitimate users in the neighborhood (Worrall, 2008). The idea behind activity support is to promote activities or events in public areas so that the intended legitimate users can gather together, thereby increasing the 'eyes on the street' and a sense of ownership, all of which would discourage the potential offender. This could potentially also mean the building of a general purpose community area within a neighborhood. These types of areas could then host functions to bring members of the neighborhood together. When there is frequent interaction amongst the residents, it results in the residents becoming familiar with one another and also increases in communal bonds or collective efficacy.

Access Control

Access control focuses on methods to control and limit access to only to those identified users. It is a way to control the access to an area by utilizing such items as walkways, landscaping, signage, and lighting. This strategy does not keep offenders out of an area, but it does ensure that access and exit points are visible, well illuminated, and use physical barriers to restrict a quick get-away in the event of a crime. To accomplish this, it uses the actual physical design of the area by manipulating the interaction of how the entrance, exit, lighting, and landscape come together to create the appearance of order and thereby maintaining control of the entrances and exits of individuals to and from a specific area (Parnaby, 2007).

Current Study

The focus of CPTED is to maximize natural surveillance, limit throughway movement, make sure physical security is equal to risk of crime, and to ensure properties and adjacent areas are properly maintained and managed. The broader focus of CPTED is to highlight and encourage positive community ownership of a space and to support legitimate use of the space, while psychologically deterring potential offenders and preventing criminal activity. Research has shown that techniques of CPTED are best used early in the design stages so that the physical appearance of the area can be built to reduce criminal activity (Parnaby, 2007; Cozens & Love, 2015; Marzbali, Abdullah, Ignatius, Tilaki, 2016; Armitage, 2018; Vasquez, Rodriguez, Suh, & Martinez-Cosio, 2019). Yet there remains a lack of clarity regarding a model that emphasizes which of CPTED's fundamental components actually works from the offender's perspective. As minimal research is available on understanding the relationship between target selection and street taggers, the current study seeks to determine whether specific features of environmental design serve as effective deterrents for this specific population of offenders.

The study was exploratory and inductive, with the respondents asked to express their perceptions of CPTED as it relates to which feature would decrease their criminal behavior as street taggers. This study used in-depth interviews and participant observation with 35 active juvenile street taggers, aged 13-18 years old, from a large metropolitan area in Texas to examine their rationale when selecting a target and whether or not they were deterred by environmental or physical structures. Prior research of street tagging has not used the words and experiences from active taggers to examine the target selection and the reasons why they decide 'not to' engage in street tagging as it relates to the use of crime prevention through environmental design strategies.

Semi-structured interviews were the primary source of data for this study. A discussion guide allowed a continuous but flexible structure during the data collection; however, the interviews differed in terms of emphasis on specific topics. The discussion guide included broad topics that were based on the strategies of CPTED. Each topic included probing questions that allowed for an open format that promoted conversations that were driven by the research participant, which is consistent with the ground theory method (Charmaz, 2004; Patton, 1987; Polsky, 1969; Wright, Decker, Redfern, & Smith, 1992). All interviews were recorded, transcribed, and securely stored. Next, following qualitative methodologies, a preliminary analysis was conducted to look for common themes in the transcripts and research notes (Glesne, 2006; Silverman, 2005). Once

the common concepts and themes were identified they were arranged in clusters and are presented in the results section.

Sampling Approach

Semi-structured interviews with 35 active street taggers from a large Texas metropolitan area were conducted to obtain the data. For the purpose of this study, only active street taggers were interviewed to provide insight into active offenders. Active street taggers were characterized as individuals who had participated in two or more illegal acts of street tagging during the prior two months and who have also not been identified by law enforcement as street taggers (DeShay, Vasquez, & Vieraitis, 2020; Vasquez & Vieraitis, 2016). The participants in this study were all considered active by other active taggers, defined themselves as active street taggers, and admitted to committing illegal tagging within the prior 30 days.

Respondents for this study were recruited from the large Texas metropolitan streets by use of snowball sampling (Chambliss, 1975; DeShay, Vasquez, & Vieraitis, 2020; Polsky, 1969; Sudman, 1976; Vasquez & Vieraitis, 2016). The gatekeeper for this study was identified through the first author's prior work as a gang interventionist and whom the interviewer has known for five years. This gatekeeper was already involved in illegal street tagging and had built up a strong reputation throughout the tagging networks area as an active street tagger (DeShay, Vasquez, & Vieraitis, 2020; Taylor 1985; Vasquez & Vieraitis, 2016). The gatekeeper helped the interviewer explain the study objectives to any potential participants and also verified the interviewer as a non-threatening individual that would not jeopardize their social or legal status (Biernacki & Waldorf, 1981; DeShay, Vasquez, & Vieraitis, 2020; Irwin, 1972; Vasquez & Vieraitis, 2016). Once the interview was completed, the respondent was asked to provide a referral to additional active street taggers.

The all-male sample consisted of 28 Latinos, five Caucasians, and two African Americans and were between the ages of 13 to 18 years old. They came from different family units stretching from multiple family, two-parent, and single-parent households. All were enrolled in public schools at the time of the study and were in grades ranging from seventh to twelfth. The public school system the respondents attended report a yearly average of 114 gangs (Dovick, 2013). The area the respondents live in has been identified as having high teen pregnancy rate of 27.3 per 1,000 (Children's Medical Center and the Coalition for North Texas Children, 2007), is known to have high activity of gangs and drugs, and only a 46.6% high school graduation rate (Swanson, 2008). Two of the twenty-five respondents came from middle and upper class

backgrounds and the other twenty-three respondents were considered low income as indicated by the United States poverty guidelines (U.S. Department of Health & Human Services, 2017). The area in which they resided was classified as “high poverty” with 24.9% of the population under 18 years old living in poverty and had an overall poverty rate of 18.3% (U.S. Census Bureau, 2013). Weekly, their neighborhoods reported an average rate of 60 new incidents of illegal non-gang related graffiti and have been identified as graffiti abatement hotspots (Brown, 2012).

Data Collection

The interviewing style used was a non-formal format and semi-structured which permitted the respondents to feel comfortable to speak freely in their specific environment (Patton, 1987; Polsky, 1969; Wright, Decker, Redfern, & Smith, 1992). The interviewing style allowed the questions posed to each respondent to be varied from one another based on the flow and built rapport of each interview (Patton, 1987; Polsky, 1969; Wright, et al., 1992). Confidentiality was promised to each respondent to ensure comfort, and in turn, it resulted in an increase in cooperation. Confidentiality was obtained by allowing the respondents to self-assign a street nickname during the course of the study. For the purpose of this study, the authors changed their self-assigned nicknames to further ensure confidentiality and identity protection of the respondents. The authors made sure to retain the tagging ‘style’ of their tagging names.

Interviews of the sample were conducted over a six year period beginning in September 2011 and ending in August 2017 and was approved by the appropriate Office of Research Compliance and the Institutional Review Board. All interviews were audio recorded, transcribed, and typically lasted between 45 minutes to one hour. Sixty percent of the interviews occurred ‘in the street’ where the taggers usually gathered, and the other forty percent of the interviews took place in various other locations such as in cars, fast food restaurants, at graffiti events, and in homes. Once the respondent agreed to participate, they were asked to talk about their recent street tagging involvement. This format of recall interviewing allowed the respondent to discuss their most recent street tagging experiences as the interviewer asked descriptive, contrast, and structural questions (Spradley, 1979). The process allowed the author to prompt questions about target selection and their perceptions of the risks and rewards. The interviewer also asked about their specific decisions before, during, and after committing the crime. Notes were taken during the interview to gain a better understanding of responses and to monitor any issues with inconsistent or

vague responses. Most respondents did not open up until the interviewer was 'vouched in' by the gatekeeper and then tested the interviewer's knowledge of the illegal underground. Once the interviewer was 'vouched in' and 'passed the test' the respondents then felt more relaxed to openly discuss their criminal activity experiences.

Coding Method

Once the interviews were recorded, they were transcribed and manually analyzed using inductive and deductive coding (Strauss, 1987). Open coding was the first step in identifying any common themes within the transcripts. Conceptualization was then used to pull apart and then re-organized to develop a deeper meaningful understanding of any potential themes uncovered (Stake, 1995). The objective of both coding and conceptualization was to obtain a thorough account of the transcript and to attempt to make sense of its importance. The inductive coding was done manually to look for patterns. All transcripts were organized and categorized by using coding frames and any potential relationships were further examined to identify any possible latent themes. Deductive coding was next used to analyze the transcripts through Jeffery's (1971) four original crime prevention through environmental design strategies. Each transcript was deductively coded on how each street tagger selected or did not select a target. The main objective of this study was to understand if street taggers are deterred by implemented CPTED strategies.

One of the main arguments for deterrence theory is that individuals will not commit crime if they perceive the potential costs outweigh the rewards. To answer this, the authors made note of the specific reasons respondents provided for why they decided 'to commit' and 'not to commit' tagging based on the crime prevention through environmental design strategies. Participants were specifically asked to recall from previous experiences, what, if anything, deterred them from tagging. Additionally, participants were asked, what event if anything, would deter them from tagging a specific target location.

CPTED Results: A Crime Prevention Strategy

The value of CPTED interventions in the prevention of crime is important to investigate through the narratives of offenders. If research does not evaluate the CPTED strategies, then it would not be clear if the strategies are effective (Zahm, 2005). CPTED prevention and interventions strategies use an extremely multifaceted mix of interdependent factors and disciplines (Cozens, 2002). This section will present the

results of the CPTED strategies of territoriality, natural surveillance, activity support, and access control through the voices of active street taggers.

Territoriality

The strategy of territorial surveillance is to promote a sense of ownership to discourage criminal opportunities. Territoriality includes the use of symbolic barriers such as signage, landscaping, and the use of real barriers such as fences to show which areas are public, semi-private, and private spaces. Street taggers overwhelmingly recognized areas that promote ownership as WOOK stated, *"It makes it too damn hard to get into those buildings whenever they put up those damn fences around em"*. When asked to further explain about the fence barrier, WOOK stated that, *"shit, I don't go into places that are fenced off, I ain't trying to get a felony breaking and entering charge, Im just a tagger."* In this case, the fence was not only a physical barrier, but was also resulted in the perception of an increase in risk of sanctions. Frequently the taggers simply wanted to get into specific areas but were often blocked by physical barriers. Respondents also stated that if an area was too difficult to get to, they would opt for locations that were easily reached. EMOT expressed this by stating, *"yeah I know it's dangerous sometimes, but most of the time I just hit some spots where they are just along the roadways, so I don't have to climb something to get the spots."*

Territoriality attempts to inform the public that the built environment is well maintained and cared for to promote and transmit a positive image. The positive image has a potential effect on the fear of crime and crime itself (see Kraut, 1999; Newman, 1973; Perlmut, 1983; Ross & Jang, 2000; Ross & Mirowsky, 1999; Wilson & Kelling, 1982). Respondents often did not select areas that looked like they were well-maintained frequently stating that it would be a waste of paint because they knew their tag would be covered up quickly. In turn, respondents often selected areas that appeared to be in disorder, repeatedly citing a comparison of their neighborhood:

"Im, just saying that the city treats different hoods differently. Like in the nicer areas, they take down graffiti fast, but in the hoods, they don't care to take it down. My hood is full of trash and graffiti. People in my hood don't care if there is graffiti up everywhere. Shit, the city don't care about my hood. Hell when I walk bout my hood, I see all da graffiti and I just wanna hit it up too. It's like the walls in my hood are telling me to tag. I hear them calling my name errday [everyday] when I walk home." (ABOT)

When ASKO was asked to expound on his perspective of what he considers a nice area, ASKO said,

"If I feel in the mood paint, I know that I ain't gonna hit up an area that looks too clean with a bunch of fancy shit everywhere cos I know that dem assholes will buff my shit out real quick. Dat be a waste of paint. Hells, that's if I can even fit in their hood, cos it be too nice and shit with flowers everywhere."

The strategy of territoriality states that a poorly kept and maintained space could deter legitimate use by citizens and could attract crime. When areas looked uncared for, it increased the chances that the respondents would select that area to tag. When asked if they felt more comfortable in a well-maintained area or a non-maintained area, most responded such as ETSI said: *"Yeah, of course I'd feel more comfortable at the abandoned building cuz they ain't gonna tell you nothing for tagging it up cuz no one cares if you tag it up. It's just abandoned, so it's cool to tag it up."*

The concept of territoriality may encourage residents to care and even want to defend their environment (Newman, 1972). Many respondents indicated they have encountered residents who wanted to defend their neighborhood. ORAS and ETSI described instances when they faced defending residents:

ORAS: *"they just yelled at me saying shit like 'I'm gonna call the cops on you', but most of the time they just act like they gonna call the cops, but they really don't call the cops. They just try to scare me so I'll stop taggin up that wall."*

ETSI: *"One time I was tagging up this spot off the road in this neighborhood and a bunch of cars saw me and they were honking their horn and shit and I guess one of em fuckers called the cops cuz I saw a cop turn the corners and I was like fuck it. I took off quick. I jumped a wall and dropped my bag in some bushes."*

When asked how often a resident attempted to intervene while they were tagging, some said it happened very often. ETSI stated, *"Oh hellz yeah. It's like every other week some old dude is yelling or honking his horn at me while I beez taggin."*

Thus, we find physical features did play a role in the target selection process. Most respondents did not want to spend the effort or risk receiving a higher possible sanction to get around, over or through physical barriers. When weighing the possible target options to tag, it is clear that the ability of the built environment to construct a perceived area of ownership aided in the location not being selected. Additionally,

when residents want to defend their environment, they will take an active role to defend it being getting involved.

Natural Surveillance

Natural surveillance is a crime prevention strategy that can be established by increasing opportunities for citizens to observe the street and any potential suspicious behavior. Natural surveillance refers to the level that a potential offender thinks the likelihood of being visible, even if their perception may be wrong. This strategy utilizes the proper lighting, windows, and landscape to increase the chance of seeing suspicious activity within a specific area. Respondents often made sure to select a location that was not as visible by the public. EMOT described how he selected a spot to tag, *"I would check it out from at least two views, by walking by there to see if you can see down there if you were driving by."*

When respondents thought about the decision to tag or not at a specific location, all of the respondents debated the choice to tag by deciding on whether they would be seen while the commission of their crime. In order to decrease the opportunity being visible during their crime, respondents frequently tried to ensure that target selection to locations that had fewer 'eyes on the street'. Respondent MAXO stated, *"When I go tag, I always make sure that it's at a spot where there's not a lot of nosey people that can see me."* When MAXO was probed to describe what kind of location he would tag he said, *"I usually pick spots off of the freeway, like behind some buildings and shit. Ain't no one gonna be looking behind some closed buildings late at night. All theyz gonna see from the street is a closed building, but shit, I'll be dropping a fat piece in the back, so it can be seen by the freeway."*

Natural surveillance can be viewed as a type of capable guardianship since it can decrease crime because potential offenders perceive they are being observed, even though they are not. Some respondents did state they would not tag in areas where they 'felt' they were being watched, even if it was by a person (natural surveillance) or a camera (mechanical surveillance). When asked to explain, respondent OAKS stated, *"Man if there are some lights where I want to throw up a tag, then I know that there is probably some camera nearby."* Surveillance also includes various other types such as electronic/mechanical strategies (e.g. closed-circuit television and street lighting) and formal strategies (e.g. law enforcement patrols). When taggers saw a camera at a desired location, they all responded in a similar way as WOOK, *"Shit, if I see a camera at a spot I want to tag, I ain't tagging. It ain't worth the risk if someone is watching or*

not." Even though they did not know whether the camera worked, they all decided not to tag at that location.

Other respondents discussed how law enforcement patrols (formal organized surveillance) altered their decision-making process. When asked if law enforcement patrols had any effect on when they decided to commit the crime, ETSI responded:

"Yeah, I don't like to go taggin on the weekends cuz the law be out in full effect. The cops are out a lot cruising the streets on the weekend, that's why I don't go taggin on the weekend. Hell yeah, on the weekends, cops are always out in full force trying to catch a niggah slipping. That's why I don't go taggin on the weekends; I prefer to go tagging during the week like on a Tuesday, Wednesday, or Thursday when the cops aren't really out in full force. During the week, it aint nothing for kids to be walking around with back packs, so I just blend in. But can you imagine a Mexican like me walking the streets with a back pack at one in the morning, shit you best believe da cops will stop me. I aint stupid, that's why I chill on the weekends and tag during the week. I don't wanna get caught for looking suspicious."

Formal access control strategies (e.g. law enforcement) as well as mechanical strategies (e.g. closed-circuit cameras and lights) can also be used to deter potential offenders. Taggers knew where there was no strategy of natural surveillance by selecting locations where they could take their time committing crime. ORAS explained:

"Yeah, cuz you can go there to tag and you won't be bothered and shit cuz no cars can go in there, you have to walk in there. The only people that can really see it are the people on the 'PUBLIC TRAIN'. So, you can take your time when you are tagging over there since the trains cut off at a certain time, then I can just walk down the tracks to the spot and throw up my piece."

Respondents often talked about how the target location for graffiti had to be visible to the general public, so if it was visually blocked, then they would not select that location. Several respondents indicated this:

ORAS: *"Yeah, there are spots that I won't waste my paint, like on some under passes, where no one can see it, or behind some fucking bushes. Why would I tag up a wall that no one can see? Shit, that is a waste of some good ass paint. Why*

else would I be out there risking getting caught if no one is gonna sees my work. I want my tags to be front and center and not behind some trees and shit."

ETSI: *"The only spot that I don't like to tag on is where there is a lot of shit in front of the wall. I mean, where there is a bunch of trees and bushes and shit. Cuz, why tag a spot where there is gonna be a bunch of bushes in front of it and then no one can see my tag."*

EMOT: *"I wouldn't waste my paint on some place that no one can see it. ... under bridges are chill, cuz you can practice. I ain't gonna waste my paint when you can't even see it from the street cuz off all that grass and trees and shit".*

While the strategy of natural surveillance strives to reduce criminal activity, taggers strive to position their graffiti in locations where it is visible by numerous people. Taggers strive to select locations where their tag can be seen by their peers, so they end up risking being visible in order to get recognized (or "get up") by fellow tagger (Vasquez & Vieraitis, 2016). SEMO explained the meaning of "getting up" as it relates to quality and quantity:

Yeah, getting up means who is tagging a lot. But it also has to be good work not some fake stuff. ...When they [taggers] say that they are trying to "get up" that means that they trying, like they want more people to know them, like BORO. Like they trying to "get up" so that everyone knows 'em, just like RITE. A lot of people is starting to know him. Like you know how the Krew ABC, everyone's know 'em like that you wanna get up like that.

Most taggers who want their tag to be seen will develop a plan to determine if there is any surveillance in place at the desired target location such as street tagger ABOT did: *"I'll try to scope out the place before I go tag. I usually want a spot where I can drop a piece where everyone can see it from the road."* ABOT goes on to state: *"Anyone can tag up some hidden spot, but it takes a lot of balls to put your tag in spots where you drive by and say to yourself 'damn, how'd that mutherfucker get up there.'"*

The most common areas street taggers preferred to tag were locations that were visible to others, more importantly locations that would be seen by their peers. If the location was hard to reach, as well as more visible to the public, then it would earn them a higher status among their peers (Ferrell, 1885, 1996; Powers, 1996; Synder, 2009). DOME elaborated:

"If I choose a spot it would be where I can take my time and do some nice pieces. Like if you ride the train a lot, you can see some of my work cuz it's behind some buildings; back there I can take my time with them. Yeah, it all depends where you tag, cuz I don't want to throw up a nice piece if no one's gonna see it. I ain't gonna waste my paint if no one's gonna see it. But if it's just some quick tags, then it don't matter where I throw it up, a freeway, some business wall, or random walls."

Activity Support

The strategy of activity support promotes outside events, gatherings, and prosocial behavior through the use of design, location, and planning to encourage the use of public space for safe activities. In some areas, the city has designated specific areas as 'safe' by placing a sign indicating that the area promotes positive safe activities for legitimate users to engage in activities such as transactions involving money (e.g. selling items from classified advertisements). The safe locations are clearly identified with signage stating that the area is a designated a 'Safe Place'. This informs the public that the location provides surveillance and has high levels of visibility (Cozens & Love, 2015). Although these 'safe' signs are typically not located in areas where the respondents would choose to tag, a few did mention what the signs meant to them. MAXI discussed that he would not tag at locations with the 'safe' sign out front because he perceived it as a location with numerous cameras and a place where law enforcement visited frequently. He also stated that *"those places that have those yellow safe signs are hot, cops are always coming and going from those places"*.

Activity support also pertains to such things as providing an area for open space, developing walkways, and promoting prosocial activities in community areas (Sohn, 2016). When neighborhoods are designed to increase public activity, it also raises the opportunities for natural surveillance (Crowe, 2000). Respondent ATOM stated that he would not tag an area if he saw people close-by engaging in daily activities. When ATOM was asked to elaborate, he said,

"Man, if I want to tag, and I go to spot that I think might be good, but then likes I see a bunch of people outside walking around and exercising and shit, I ain't gonna hit up that spot cus there beez too many people that could see me."

During the study, taggers also stated that they would not tag in areas that had 'historic district' or 'revitalization' signs placed above neighborhood street signs. When asked what the signs meant, HAZE said: *"Whenever I seez those signs, I know that hood is going to be having a shit load of people outside, with their kids playing and shit, their*

old man cutting the grass or washing the cars". When other respondents were asked to clarify what they thought the revitalization signs meant, DAZZ said:

"Oh man, we can't tag up in those neighborhoods, cuz those signs mean that they are all protected by the federal government. They gots some money to fix their houses so like they are now protected. And plus that area looks too clean to tag up, cuz you know that it is just gonna come down in a day, real quick. Then I might get a big charge cuz it is federal stuff."

Therefore, the perception of an official sign was enough to deter some taggers from a neighborhood. While taggers seemed to not fully understand the sign, they perceived it to be an official governmental sign and that perception was enough to deter the offenders.

Access Control

The strategy of access control is based on reducing criminal opportunities by raising the perception of risk in potential offenders. This strategy is based on the design which attempts to reduce crime opportunities by refusing access to possible targets while at the same time developing a higher awareness of risk for the potential offender (Cozens, Saville, & Hiller, 2005; Mair & Mair, 2003). This includes the design of the street, the location of exits and entrances, and placements of windows on buildings. Many respondents discussed how a location exits and entrances played a part in their decision-making process. DOME stated:

"If someone calls the cops on you, then like they gonna come down only one of two ways into the alley, and I can't outrun a cop car. You can get caught faster in an alley. That is why I don't tag up alleys; cuz there is no good escape route. You'll be stuck, and I ain't jumping no fence, cuz in the hood you never know if that person has a big ass dog."

Physical elements at the neighborhood level can include such policies as instituting parking restrictions, closing off vehicle traffic in specific areas, as well as other design features that could introduce a psychological barrier in the offender (Cozens, 2002). The strategy of access control is dependent upon the physical barriers to create a psychological barrier in the potential offender. Therefore, when the taggers even saw a small physical barrier, it created a psychological barrier by making the taggers aware of the increased risk of tagging at that location. RAZE stated that whenever he saw a

traffic sign indicating 'one-way' he would not commit a crime because, *"When it's only one way in, then it makes too hard to get away when the cops come."*

The access control strategy is to limit or deny access to an opportunity of crime by implementing the use of physical barriers (e.g. gates, locks, doors, fences). A common way to deal with the graffiti problem is to simply use code enforcement or abatement policies. However, some locations can be protected from graffiti by placing a literal barrier preventing individuals from tagging the location. When asked about the difficulty in getting to a location that had barriers ETSI said, *"cuz I ain't gonna waste my paint tagging up a spot that is covered by a bunch of bushes. Plus, they kind of hurt having to walk through to get to the wall."*

It was also discovered that if the area had an active graffiti removal program it influenced the decision-making process to offend at a specific target selection. This was seen in the transcripts when respondents indicated they recognized the response rate of a jurisdiction with their graffiti abatement policy. When asked to talk about how he picked a location to tag, EMOT elaborated by stating, *"I'll wait to see how long my piece stays up to see if it is a good spot to tag up again. Like if they buff me out fast, then I might find another spot to tag."* When asked what he would do if the tag stayed up for a long time, EMOT responded, *"Then shit, I'll be back to tag up that area. I'll just go back and hit up that whole area in a night, just walking round dropping tags, fills, bombs and stickers all over that hood."*

Discussion

The main focus of this research was to evaluate whether the perceptions of active street taggers are influenced by the original four strategies of crime prevention through environmental design which are implemented by municipalities. The strategies of CPTED are intended to modify aspects of the physical environment to emphasize defensible space to increase the perceived risk of offending. Since CPTED's aim is to prevent crime, it is theoretically different from reactive strategies (Robinson, 1996). The focus of CPTED is to reduce opportunities of crime by properly implementing the strategies to deter potential offenders by increasing the likelihood of being observed in public, semi-private, and private environments.

Our study finds overwhelming support for the four key strategies of crime prevention through environmental design: (1) territoriality, (2) natural surveillance, (3) activity support, and (4) access control. Within CPTED, all four strategies were seen following deductive coding of the transcripts as physical and environmental deterrents reported

by active street taggers. The role of territoriality, natural surveillance, activity support, and access control became significant factors as our street taggers were deciding when and how to select their target location. Our participants consistently reported physical barriers such as fences or bushes; natural surveillance such as the visibility of the space; access control, the ease of access/escape routes; and even the presence of “historic district” or “revitalization” signage, all served as deterrents when taggers were in the process of target selection. Additionally, when the street taggers perceived an area to be in disorder, it increased the chances the area would be targeted, resulting in an increase in the overall decay of the area.

The study was exploratory and inductive, with the respondents asked to express their perceptions of the CPTED concepts as it relates to decreasing their criminal behavior as street taggers. The findings reveal key similarities between the street taggers and CPTED and confirm the significance of CPETD concepts in deterring potential crime. The study also concludes that in order to reduce illegal graffiti, municipalities should not only depend on law enforcement tactics to curtail graffiti but should implement proactive concepts of CPTED in their crime reduction policies. These could include increased lighting in areas that are hot areas for graffiti; increased graffiti abatement programs; creating spaces for legitimate use; creating activities for residents to know each other; and planting bushes in-front of locations that are frequently targeted for graffiti.

As previously stated, research on active street taggers target selection, specifically reasons why ‘not to commit’ is limited. The current study offered a different point of view by demonstrating a through in-depth inquiry into the role of target section, and its reciprocal relationship between crime prevention through environmental design. Previous research has missed out on engaging with active street taggers and the current study aimed to correct this oversight by providing the street taggers own perspective in their own words.

The intention is not to generalize street taggers at large. The lack of generalizability is one of the limitations of this research. This research design allowed the researchers to tell the story of a select few of street taggers who are engaged in illegal graffiti. While it is limited in scope, our sample of participants paints a picture of target selection as it relates to perceptions of risk and rewards that has been omitted in prior research literature. The analysis of the data presented here offers an account of the struggles faced by municipalities as they attempt to deal with graffiti within their jurisdiction. Future research should examine any reduction in tagging and/or graffiti associated

with increased implementation of CPTED strategies as well as public notification of the legal consequences of participating in illegal graffiti.

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