PSIPublic Safety Institute

BEST PRACTICE TOPIC September, 2024

THROUGH ENVIRONMENTAL DESIGN (CPTED)



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TABLE OF CONTENTS

- 1 Introduction
- 1 Review of Research
- 3 CPTED in Memphis
- 4 Main Conclusions and Takeaways
- 6 References

INTRODUCTION

Crime Prevention Through Environmental Design (CPTED) has been a significant topic in the fields of criminology and urban planning. CPTED examines how the design features of buildings (schools, apartment communities, shopping malls, etc.) and the surrounding natural environment impact crime risk. It then focuses on how these features can be modified in order to reduce that risk. These practices can then be taken beyond the physical design by considering how individuals interact with these spaces. One example is through "activity support" which focuses on how attracting the intended users to an area will make it less favorable to criminal activity (Ryan, 2014). Another example is through "greening" empty lots to help ensure that these properties are being used to some degree while waiting for purchase (Cui, Jensen, and MacDonald, 2021).

The document reviews some of the most recent research around CPTED as a potential best practice, summarizes results, and provides recommendations for policy reform.

REVIEW OF RESEARCH

Silva et al. (2021) focused on the effectiveness of CPTED strategies in deterring criminal activities and identified key elements of CPTED, such as territoriality, natural surveillance, activity support, and access control. These elements are designed to serve as deterrents to potential offenders when considering criminal activity. This underscores the importance of designing urban spaces to enhance safety and security by promoting these elements. Their review of ten articles found that aspects of CPTED such as territoriality, surveillance, and access control all improve the overall premise and personal security of an area. In addition, having a proper design and use of these areas can reduce crime fear and incidents as well as improve the quality of life.

Recent research by Shariati (2021) involved a qualitative study focusing on the application of CPTED principles to improve campus safety. By evaluating the relationship between the environmental design and CPTED strategies, the study shed light on the effectiveness of implementing CPTED measures in enhancing safety on college campuses. Through analysis, the study showed how elements such as natural

surveillance (campus visibility, regular control of lighting), access control (restricted access to residential and non-residential buildings), territorial reinforcement (defining campus boundaries), maintenance (landscaping and regular control of broken fixtures), and activity support (holding events, existence of gathering areas) can contribute to reducing criminal behaviors on college campuses.

Public parks play a significant role in urban environments. These parks offer spaces for recreation and social interactions among citizens. However, with the construction of new public parks and upgrades to existing ones, safety and crime in these areas are always a high concern. In one study, Eybergen and Andresen (2021) explored the relationship between public parks and property crime. Focusing on 460 parks within London, Ontario, they noted that the city-regional parks are the only group of parks that have a positive relationship with crime; these parks are the ones that are more centrally located and closer to the downtown center. This leads them to be the ones that are often most known and that attract much larger crowds from the local population as well as visitors to the area. Factors such as park layout, visibility, and maintenance can all influence the likelihood of criminal activities occurring within these spaces.

In a similar focus, Kaplan & Chalfin (2021) conducted a survey focusing on ambient lighting, the use of outdoor spaces, and the perception of public safety. Their study identified that not only do the majority of people feel safer with ambient lighting, but that citizens are willing to pay more in annual taxes (\$400 in this study) in order to ensure that those lights were installed and maintained. They also noted that their results had little evidence that showed that policing targeted to crime hot spots alone had the same supporting benefits. Despite more officers being present in hot spot areas in order to combat crime, citizens often decode higher police presence as a fear of more crime.

Another popular aspect that has been shown to work within CPTED is through traffic offenses. Speeding is a widespread issue on roadways worldwide, adding to road traffic accidents and fatalities. Various solutions have been attempted to address this speeding problem, one of which is by utilizing inanimate police presence as a deterrent. Simpson, McCutcheon, and Lal (2020) analyzed the effectiveness of reducing speeding through inanimate police presence. Stemming from CPTED, environments are created in specific ways to help limit the opportunities for those who may have criminal intent. Efforts can be created to not only make environments more defensible but create a more desirable atmosphere. By law enforcement

parking their vehicles along popular corridors they may prevent attempted car breakins or speeding offenses. The study found that the presence of these visual cues (police vehicles) had a notable positive impact on motorist behavior. This behavior is impacted by altering the physical environment around popular roadways to serve as a crime prevention measure.

Another study conducted by Cui, Jensen, and MacDonald (2021) aimed to examine the effect of the Philadelphia LandCare (PLC) vacant lot greening initiative on crime and how the surrounding land uses and business mediate this intervention. The primary goal of the PLC is to intervene on vacant lots in Philadelphia by cleaning them up and turning them into small public spaces. For the lots that had gone through the "greening" process, there were estimated beneficial effects of crime decreasing between 2 to 3 percent per year. However, these effects were larger in high residential and low transportation residential zoning areas, likely resulting in elevated guardianship from the residents around the immediate area.

CPTED IN MEMPHIS

As an example, CPTED has also been shown to be successful within Memphis in a number of apartment communities. SafeWays is an organization which aims to enhance community safety and quality of life in apartment communities across Memphis using the principles of CPTED. This collaboration among law enforcement, property managers, and social service providers allows SafeWays to recommend environmental and place-management interventions, such as improved lighting, maintenance of clean and well-kept surroundings, etc. In addition to these changes, SafeWays also puts a focus on education, training, and community-building initiatives to help promote a sense of ownership among residents.

Properties that have gone through SafeWays Certification benefit from ongoing crime suppression support and additional assistance to their specific needs. By having both a data analysis approach with on-the-ground style interventions, SafeWays has contributed to a measurable reduction in crime within participating apartment communities. For a 2020 assessment of SafeWays by the Public Safety Institute (PSI), go to https://memphis.edu/psi/research. The challenge remains to scale SafeWays up to involve more apartment communities.

In the fall of 2023, the Public Safety Institute, in partnership with the Downtown Memphis Commission, created a team to help develop a safety plan for Downtown Memphis. The team was comprised of various leaders across Memphis and included individuals with backgrounds in law enforcement, economics, anthropology, civil engineering, and others. The overall goal of the plan is to help ensure that the downtown area is a safe environment for all to enjoy. Many of the recommendations and strategies that were created under the plan have the elements of CPTED built into them, primarily to help limit criminal opportunities and promote overall safety. Some of the recommendations are currently being implemented. To review the plan, go to https://memphis.edu/psi/research.

Memphis Mayor Paul Young and Memphis Police Department Interim Chief C.J. Davis announced recently a new initiative from the City's Economic Development Growth Engine (EDGE). This new initiative aims to support use of CPTED principles by local businesses that have been impacted by crime. It offers financial assistance of up to \$25,000 to help local businesses improve security measures, such as installing adequate lighting or enhancing landscaping, both of which can be effective in deterring criminal activity. With a total fund of \$1 million, EDGE hopes to strengthen community safety through these investments. Businesses that are eligible are those that have experienced robbery, incidents of customers or staff being robbed or assaulted on-site, structural damage resulting from a burglary or robbery, car thefts on break-ins occurring despite the presence of security, and businesses that have been burglarized.

In Memphis, there has been a push to upgrade several of the more city-regional parks such as Tom Lee Park and the Mud Island Park. As the city moves forward on upgrading its busier parks, considering many of the practices within CPTED – with a focus on maintenance and visibility – may prove to be crucial to ensuring that these parks limit the offending opportunities of those who may visit them with criminal intent. Additionally, following similar practices such as the Philadelphia LandCare plan could be viable in a city such as Memphis to help create vacant lots into a project area to be used by the nearby residents.

MAIN CONCLUSIONS AND TAKEWAYS

The implications of Silva et al. (2021) study findings are substantial for urban planners, architects, and law enforcement agencies. By integrating CPTED principles into the

design of public spaces, buildings, and neighborhoods, practitioners can create environments that naturally discourage criminal behavior. For example, establishing clear property boundaries (territoriality), increasing visibility (natural surveillance), encouraging community engagement and activity (activity support), and implementing effective security measures (access control) can collectively help reduce the likelihood of crimes like robbery.

One of the important aspects outlined by Shariati (2021), was the need for better collaboration between various stakeholders such as architects, urban planners, law enforcement, apartment community owners and managers, and campus administrators in regard to implementing CPTED measures. Having these types of partnerships in place allows for these new implementations to have a strong impact on creating more secure spaces.

The practical application of CPTED principles requires a multidisciplinary approach, where professionals from various fields collaborate to design and modify urban environments with safety in mind. By incorporating these strategies into the planning and development of spaces, stakeholders can create environments that not only enhance security but also promote community cohesion and well-being. This proactive crime prevention approach aligns with the concept of creating "defensible space" that is unattractive to potential offenders, ultimately contributing to safer and more livable communities.

This best practice topic seeks to shed light on the effectiveness of CPTED strategies in deterring crime and stresses the importance of integrating elements like territoriality, natural surveillance, activity support, and access control in urban design. The practical implementation of these findings can lead to the development of safer environments that enhance community safety and well-being while reducing the risk of criminal activities. By incorporating CPTED principles into practice, bringing them to scale, and sustaining them over time, cities can make significant strides toward constructing more secure and resilient communities.

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