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Reclaiming public spaces: The case for the built environment as a restorative tool in neighborhoods with high levels of community violence

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Abstract

Early-life exposure to neighborhood violence can negatively affect children's socioemotional development and long-term health outcomes. Community-level interventions that modify the built environment to facilitate social encounters can have a positive impact on health. An example of such interventions is the building of green spaces and playgrounds. This case study describes collaboration among residents, local organizations, and a university that aimed to increase the utilization of a vacant lot by converting it into a green space with a playground. Informal conversations at volunteer gatherings and neighborhood association meetings indicated a positive impact of this project in the community. We propose a model for future program implementation and research to improve health in disinvested and disordered communities. We conclude that more research is needed on community partnerships that modify the built environment to decrease community violence. Community-based participatory research may be successful in evaluating future projects with this goal.

KEYWORDS
built environment, community partnerships, community violence, environment design, playgrounds, trauma-sensitive places

1 | INTRODUCTION

Exposure to a violent environment early in life can negatively affect a person's social and emotional development (Roehler et al., 2018; Schilling et al., 2007). Children are especially sensitive to their environment. They are physiologically vulnerable as they are still developing, unable to respond to threats by changing their living location or having political influence, and more exposed to barriers of the built environment due to their limited autonomy (Lopez, 2012). Interventions focused on the built environment have proven effective in targeting diseases, such as obesity by promoting physical activity and access to healthy foods (Christian et al., 2015; Remington & Brownson, 2011). These interventions can also be useful in the promotion of mental health.

The purpose of this case study is threefold. First, we review the literature on community violence and associated social and emotional outcomes, and the opportunities for the built environment to serve a restorative purpose in neighborhoods with high levels of violence. Second, we review evidence supporting key components of a proposed intervention that promotes greenness, social connections, and play. This evidence validates the development of an organic, slow-paced approach that reclaims a public space for play in a neighborhood with high levels of violence. Finally, we present a case study as an example of a collaboration among different local entities and institutions to improve a neighborhood lot by creating green space with a playground and propose a model for future program implementation and research.

1.1 | Community violence, social and emotional health, and restorative environments

Exposure to violence in childhood increases the risk of criminal behaviors (Menard, 2002) and violence perpetration (Reed et al., 2014), and the presence of disorders such as depression and substance abuse later in life (Roehler et al., 2018; Schilling et al., 2007). High school students living in areas with high exposure to community violence report more fears and negative life experiences than those with lower exposure to violence (Cooley-Quille et al., 2001). Violence impacts mental health by increasing stress (Charles et al., 2004) and limiting residents' access to public spaces (Anderson, 2000; Venkatesh, 2001), depriving them of opportunities to socialize (Harding, 2009).

The effects of experiencing or witnessing traumatic events can be seen as a continuum. At one end of the continuum are the responses to discrete life-threatening or traumatic events that happen once to people with healthy development and with no comorbid mental disorders. At the other end are the responses to multiple traumatic events that happen over time, with an early onset, and occurring to people who are already vulnerable (Briere & Spinazzola, 2005). Children living in high poverty areas who frequently experience traumatic events, such as domestic and community violence often present the latter type of response. These children can experience a range of symptoms; from the traditional symptoms of posttraumatic stress disorder (PTSD), such as reliving or re-experiencing the event, presenting increased alertness and anxiety, and avoiding reminders of the event (American Psychiatric Association, 2013), to mood dysregulation, and interpersonal difficulties (Herman, 1992). Trauma-related symptoms can make public outings anxiety-provoking and unpleasant, leading to activity avoidance in public spaces (Wagenfeld et al., 2013).

While interventions to minimize the effects of trauma have traditionally focused on the individual and the family, less emphasis has been placed on community-level interventions. However, out of the 20%–25% children and adolescents in the US who suffer from mental health disorders, only less than half receive mental health care (Merikangas et al., 2010, 2011). Additionally, the shortage of specialty services and difficulties accessing mental health services among low-income families and minorities (American Academy of Pediatrics, 2009) support the need for more community-based interventions to prevent retraumatization.

According to the National Executive Training Institute (2005), an effective trauma treatment intervention must account for a dysregulated nervous system and a social environment that cannot contain this dysregulation. The Substance Abuse and Mental health Services Administration (SAMHSA, 2014) guide to implementing a trauma-

informed approach in behavioral health settings lists domains to address the trauma that include policy, physical environment, engagement and involvement, and cross-sector collaboration and stresses the need for the physical environment to provide a sense of safety. An extension of trauma-informed care from the behavioral health system to neighborhoods would require the built environment to be sensitive to the needs of residents who have suffered traumatic experiences and to provide social engagement opportunities.

Studies across the world have examined trauma-related symptoms in children through the lens of the physical environment as it pertains to community violence. Some anxieties can be triggered by locations similar to the sites where the child experienced the traumatic event (Lalor, 2013). Foley et al. (2013) studied gang formation and its relationship to the built environment, exploring how youth experience urban spaces and how they navigate threats to their safety. The authors concluded that there is a need for *spatial sensitivity* when creating new built environments to prevent retraumatization and violence. Spatial sensitivity is achieved by creating spaces that can be perceived in their entirety as these spaces reduce the threat of assault. Easy-to-navigate outdoor environments and easy-to-understand wayfinding systems can also help the person feel they can easily leave the space if faced with danger, minimizing stress and uncertainty (Carpman & Grant, 1993). Moreover, spaces that progressively challenge the person who has been traumatized can have a therapeutic effect. Progressive exposure to the feared object is the basis of the treatment for anxiety and trauma-related symptoms and is encouraged while skills are gained in dealing with the trauma response. Beyond spatial sensitivity, research conducted with war veterans suffering from PTSD has demonstrated a need for environmental design that is *meaningful* and *with the purpose* (Wagenfeld et al., 2013).

1.2 | Modifying the environment to promote social connections and play

People give meaning to places through the physical, social, and emotional connections they experience with the place (Saar & Palang, 2009) and with other people in those places (Gustafson, 2001). These social connections can be augmented through the design of spaces that facilitate casual encounters and through programmed activities (Wagenfeld et al., 2013). The existing link between social support and health outcomes in vulnerable populations (Landsdowne, 2011) supports the creation of structural-level interventions that contribute to increasing social ties and promote mental health (Kawachi & Berkman, 2001).

One way to increase these social connections through neighborhood design is by using outdoor natural settings and green common spaces (Taylor et al., 2001). As outdoor green spaces, parks have a role in improving the social health of communities. For example, in Los Angeles, a study using geographical data found a positive association between the presence of parks and collective efficacy (Cohen et al., 2008). Community involvement in neighborhood parks also increases social capital and collective efficacy (Kuo et al., 1998; Sherer, 2004), which are associated with lower rates of violence, regardless of the sociodemographic characteristics of the population and the level of neighborhood disorder observed (Sampson & Raudenbush, 2001).

Overall, there is a positive association between the quantity of green spaces and perceived health and all-cause mortality (Van den Berg et al., 2015). This association is especially true for people in lower socioeconomic status (SES) groups, suggesting that green spaces can minimize the existing health differences among SES groups (Marmot, 2006) and attenuate the negative effects of poverty (Lachowycz & Jones, 2014; Maas et al., 2006; Mitchell & Popham, 2007, 2008; Mitchell et al., 2015). Yet, the association between greenness and health is not always limited to access to traditional green spaces such as parks. Positive health outcomes have also been associated with small green spaces such as street trees, paths, greenways, or gardens (Mitchell et al., 2011). These smaller green spaces provide more effective opportunities for stress reduction as they serve as microrestorative settings. For example, nearby natural outdoor environments such as viewing trees from a window, or listening to birds have been successfully used in restoration processes (De Vries et al., 2013; Kaplan, 2001; Triguero-Mas et al., 2015).

Previous research has also demonstrated that urban green spaces and trees influence the rates of violent crime in a community (Lösel & Farrington, 2012) with more green exposure being associated with lower levels of violent crime (Kondo et al., 2017; Wolfe & Mennis, 2012).

Place-based solutions to reduce violence support the use of greening of vacant spaces to decrease community violence (Kondo et al., 2018). Studies have found a significant reduction in gun violence (Branas et al., 2011) and property crime (Kondo et al., 2016), and an increase in residents' perceptions of safety (Garvin et al., 2013) when greening vacant land compared to control lots. A cluster-randomized trial examined adults living within vacant lot clusters randomly assigned to three study groups (greening, trash cleanup, and a control group) and followed them up for 18 months. Pre- and postintervention measures showed that self-reported feelings of depression and worthlessness decreased for those living near greened vacant land (South et al., 2018).

The ultimate goal when designing spaces is to create environments that allow people to engage in activities of their preference. Play is a basic activity for healthy growth in children as it promotes cognitive, physical, and socioemotional development (Shonkoff & Phillips, 2000). It also increases the brain's capacity for learning through exercise, often embedded in outdoor play (Isenberg & Quisenberry, 2012). Playgrounds provide a safe environment that is designed specifically to enhance the opportunities for a child to play (Duerr Evaluation Resources, 2018).

The benefits of play are especially relevant for children and families living in more stressful environments as shown by declines in outdoor play in recent decades (Burdette & Whitaker, 2005; Hofferth & Sandberg, 2001), which coincide with an increase in concerns about safety (Clements, 2004). Neighborhoods with higher numbers of households in poverty are associated with an increase in maternal fear of children playing outdoors (Timperio et al., 2005; Weir et al., 2006). Conversely, a perception of higher collective efficacy in the neighborhood is associated with a decrease in fear of outdoor child play (Kimbro & Schachter, 2011). Concurrently, there has been a decrease in overall time spent in free play (Hofferth & Sandberg, 2001) at the expense of structured activities, which children consider less important to their wellbeing (Fattore et al., 2016), calling for a need for safe outdoor spaces that can provide opportunities for unstructured play.

In summary, creating outdoor green spaces that encourage social engagement and facilitate activities like play can serve a restorative purpose. These spaces can directly improve social and emotional wellbeing and facilitate social engagement. Social engagement can have a positive effect on the communities by positively strengthening the neighborhood's social environment and ultimately decreasing community violence.

2 | CASE STUDY

We discuss intervention in an urban neighborhood with high rates of community violence in the Mid-Atlantic region, as an example of the potential of built spaces for play and social connection to improve overall community health. We aimed to understand the mechanisms by which the built environment affected community violence and how community participation changed through the process of building a green space with a playground. The plan was to conduct meetings with community members to collect qualitative data on perceptions about community violence and engagement as changes in the physical space started to take place. We conducted two meetings with community members to collect qualitative data at baseline and nine months after the installation of a playground in a lot. The team obtained the University's Institutional Review Board approval.

2.1 | Setting

The project was conducted in Baltimore, a Mid-Atlantic city in the state of Maryland. Baltimore was the second most violent city after Saint Louis, MO, in 2016, with a homicide rate of 55.2 per 100,000 people (The Trace, 2018). After decades of a steady decrease in homicides, there was a spike in murders following the unrest caused by the

death of an unarmed Black man (Freddy Gray) under police custody. In 2017, the city set a record of homicides per capita with a total of 343 homicides and 55.8 killings per 100,000 people. The majority of the victims were Black males (n = 250) (The Baltimore Sun, 2017a).

This project was conducted in 2016 in the Darley Park Community, a small section of the Clifton-Berea neighborhood located in the east and north part of Baltimore City. Census data from 2010 (U.S. Census Bureau, 2010) showed the Clifton-Berea neighborhood to have a lower median household income, lower adult educational attainment, higher unemployment rates, a higher percentage of households with a median income of less than $25,000, and a higher family poverty rate than the average for the city of Baltimore. The alcohol and tobacco store density in the Clifton-Berea doubled that of the city. The number of arrests of youth ages 10–17 per 1000 was 326.5 for Clifton-Berea versus 145.1 for Baltimore City. This neighborhood's homicide incidence rate was three times as high (61.8 vs. 20.9) as that of the city. At the time, the neighborhood ranked among the highest in violent crime rate, gun-related homicides, adult and juvenile arrests, and 911 calls per 1000 residents in the city (Baltimore Neighborhood Indicators Alliance, 2017).

2.2 | Community partner organizations

The Darley Park project began as a neighborhood-led initiative. *Baltimoreans United in Leadership Development* (BUILD), a local organization that focuses on engaging communities by building relationships, began organizing neighbors to make the neighborhood safer. At the time, the levels of violence in the neighborhood were such that the neighborhood association needed to hold meetings outside of the neighborhood. In 2011 and 2012, respectively, the murders of a 12-year-old boy and a 13-year-old girl stunned the community (The Baltimore Sun, 2012) and the increased police involvement led to a slight decrease in violence. The neighborhood meetings were then transferred to the local church and from there to the recreational center. Darley Park neighbors had initially expressed interest in having a painted mural on a building wall surrounding an abandoned lot. They chose the location for the mural because of its potential as a space for play and gathering, and the need for aesthetic improvement. Their interest eventually expanded to improving the lot itself. In January 2015, the leaders of BUILD connected with *the 6th Branch*, an organization that utilizes the skills of military veterans to execute assertive community service initiatives, after hearing about their work with a reconstruction project of an abandoned lot in a nearby neighborhood. At the same time, the *Neighborhood Design Center* (NDC) became involved. The NDC is an organization with *6th Branch* connections that works locally to create "people places" by promoting social use and improving access to play, turning vacant lots into community assets through greening. These organizations engaged by listening in neighborhood association meetings and proceeded to involve community members by having regular work meetings at the park launching the project on Martin Luther King's Day in 2015. The *Darley Park Gateway Park* space was claimed as a park with a sign, a tire pyramid that served the purpose of allowing play for children, and planters to designate the park's perimeter and block truck traffic and parking.

The community worked through a visioning process that highlighted the need to provide a community-convening space for occasional events and to make an area for local children that would be dedicated, safe, and have open lines of visibility. The site layout was developed to incorporate both of these identified uses, with a smaller section for play, set back from a highly transited adjacent road, and a larger section identified for community events.

2.3 | Process

The local University had initial planning conversations with NDC in the spring of 2015. In the summer of 2016, 16 neighbors from *Darley Park* and representatives from the community organizations gathered to discuss the use

of the neighborhood's open lot that the community wanted to turn into a park. An NDC representative facilitated the meeting and a representative from the local university transcribed the neighbors' comments. The setting of the meeting was the community room at the *Rita Church Community Center* in Baltimore City. The building is managed by Baltimore City Parks and Recreation and is a newly remodeled, state-of-the-art community recreation center. It is also the closest public facility for community meetings to the neighborhood, located just outside the boundaries of the small community. The neighbors were asked to discuss how they felt about the conditions in the neighborhood's built and social environments and their use of the neighborhood's public spaces, as well as their wishes for the lot and the expected challenges or barriers for the implementation of the project. The quotes gathered from the neighbors' comments were discussed by the first (Carol Vidal) and last (Briony Hynson) authors and grouped into two main themes consisting of the hopes and perceived barriers and challenges in the construction of a playground and a space for a social gathering in the neighborhood. The results were further discussed with the rest of the authors. Community residents shared hopes to have a play area for children and a gathering spot for the community to conduct events and meetings. They also wanted the space to be aesthetically pleasing. The challenges identified for the space were the high levels of community violence, the existing traffic, and pollution levels, the fear for the levels of drug activity and the underground economy, the low levels of collective efficacy and community trust in other neighbors and existing institutions like the police department, trash and overall lack of care for common spaces, and a general sense of hopelessness that things would improve (For details on the responses, see Table 1).

The team tested the soil to ensure that levels of chemicals from previous demolitions were not above the toxic threshold. We purchased boulders, benches, and flowerpots to block truck traffic that made the space unsafe for children to play in. A swing set was procured and installed, attracting children to the area. Other organizations supplied pieces of equipment. Additionally, a local art university class designed a mural for one of the walls bordering the lot. Adjacent murals with themes about the Chesapeake Bay were designed by an environmental organization that hired two local neighbors. *The 6th Branch* held weekly volunteer gatherings in which anyone was invited to build the space. From 2015 to 2017, the project leveraged over 4300 volunteer hours at regular weekly volunteer days. The momentum created by the improvement of the small lot of the park helped secure more private and public funds.

A second meeting was held with neighbors 9 months after the first one, to discuss changes in the park and perceptions of its impact in the community with neighbors and community leaders. The neighbors explained that "the lot has truly lifted the neighborhood" and that more children were using the space. During this meeting, the neighbors planned the "First Darley Park Art Day" organized by local residents and community organizations. Though the community had identified the need for community convening spaces for social activities, the exact nature of some of these uses was unanticipated. The wood platform was used for spoken word performances, and the general space was used for gatherings for memorial services, the local school's ice-cream social, graduation parties, and a backpack give-away day to distribute schools supplies. The local police also sponsored a community movie night. The neighbors took ownership of the space, resisting the proposed building of a laundromat. While the levels of violence in the community continued to be high, the space was not perceived as dangerous, as per the neighbors, even drug dealers in the neighborhood "make sure that nothing goes on there."

In the Summer of 2017, a brutal murder in the neighborhood (The Baltimore Sun, 2017b) prompted leaders to plan a press conference and vigil at the site to bring light to the problem of community violence, and start a "listening campaign" to capture top concerns of the neighbors. Led by BUILD, a group of neighbors and members of churches and organizations went door by the door asking the neighbors what they thought were the solutions to reduce community violence. The top two issues identified were: 1—*Children and youth are traumatized and have few opportunities for positive activities and relationships*. 2—*Criminal activity results in a lack of safe places for people to walk and play*. This neighborhood response validated continued efforts to create safe public spaces in disinvested neighborhoods.

TABLE 1 Hopes and perceived barriers and challenges in the construction of a playground and space for social gathering

Community hopes	Comments
Play area for children	Closer play area. Children to participate in building playground
A gathering spot for the community	Events "like Jazz Night" Community meetings held outside
Aesthetically pleasant	Clean, with no trash
Challenges/barriers	Comments
Community violence	"A lot" of violence "We don't want to go out" "We can't even use our porch during the day, much less at night time" The weekend prior "before 12pm, on a Sunday morning, there was a shooting" "It's important that the community comes outside. That's the only way you can reclaim spaces" There were shootings at all times, which created a sense of unpredictability and constant danger
Traffic and pollution	Traffic and pollution (including noise pollution) Nuisance trucks driving into the lot impede the use of the space for play
Fear of drug activity and the underground economy	Corner store owner allowing drug deals to happen in the store Residences used for prostitution Fear of "foot traffic" because it becomes a "drug area" Wish to control environment "alley needs to be blocked" so no drug dealers go from one street to the other Alleys being used by children to go to school
Low collective efficacy and community trust	"Need to retrain neighbors to call the police" Neighbors "move in and out," and "before you know their names, they are gone" although there are still some "old timers" "I know not all Section 8 housing people are bad, but "they keep putting them in my block"
Trash	Open spaces used to "dump trash" "People come from the outside [of Baltimore/the neighborhood] and dump their trash" "They buy these houses for nothing and then they throw all the things out"
Sense of hopelessness	"You work so hard all your life to be able to enjoy your home, and then you can't" "We live in a total different time. We don't have the same values"

3 | FINDINGS

We conducted an intervention that consisted of codesigning, prototyping, and holding *community build days* in a public space in collaboration with local residents. We conceptualize the outcomes of this project in a proposed model (Figure 1), where an intervention in a disinvested neighborhood facilitates community engagement and improves a sense of safety among neighbors, reducing stress and social isolation, and potentially improving health outcomes.

While often only high-cost changes are considered as worthy of implementation in disinvested communities, small changes that are driven by community stakeholders, and have the buy-in of the neighbors can have a positive

FIGURE 1 Model of an intervention to reclaim public spaces to increase community engagement with the purpose of improving health outcomes in disinvested and disordered environments

impact in creating community attachments to the local space and pride in preserving it. In this case, perpetrators of community violence involved in underground economies retrieved their activities from the redesigned space, demonstrating that valuable built environment changes that are community-led can halt illegal activity in those spaces.

The community organizations became involved in the project in a staggered way. Yet, these organizations valued and utilized each other's expertise, jointly working to facilitate the implementation of the neighbors' vision of the lot. Some of the community partners involved in the project had invested years in community organizations. This time investment created the groundwork for the snowball effect of the contributions each new partner helped create, ultimately promoting bigger investments.

After discussion with community leaders and organizers, the team learned that many of the neighbors were transient, which made it difficult to have a captive audience to evaluate the effects of the intervention on the neighbors. We identified some discrepancies in needs between the community that needed a more organic timeline and the needs of the university's regulatory enterprises. Yet, the connections established with the community were beneficial and the concrete purchase of playground materials showed the interest of the institution in the project beyond evaluation.

4 | DISCUSSION

This case study is an example of an environmental intervention that promotes play and social interaction in a neighborhood with high rates of community violence. The project collaboratively turned a vacant lot into a small green space with a playground and attempted to empower the neighbors to make decisions about their own community space. The experience with this process supports the notion that comprehensive interventions in community settings, beyond the clinic, are necessary for poorly resourced communities with high levels of community violence, where the traditional medical resources are insufficient to prevent mental health problems. We suggest that a balance of evidence-based community-level interventions that see health as the promotion of wellness, and clinical interventions, may have broader positive effects on the health of vulnerable populations.

Some barriers limited our ability to better understand the association between building the green space with a playground and the improvement of health, as the evaluation of this project was limited to the collection of perceptions by the neighbors, the number of volunteer hours, and the activities held in the space. More rigorous methodological methods will be needed in the future as there is a need to include mental health measures in environmental interventions. Community-based participatory research can be helpful in evaluating these projects, as well as observations about parks' characteristics, park utilization, and surveying neighbors.

Despite these limitations, comments made by community members suggested a positive impact on the neighborhood. The success of this collaboration calls for interdisciplinary work between mental health and design professionals to create spaces that take into consideration the recovery needs of highly traumatized populations

(Wagenfeld et al., 2013). These collaborations should incorporate sustained input from the local community. A simple intervention like the one exposed in this case study can help soften the effects of community violence in two essential ways: by increasing social connections (Taylor et al., 2001); and by restoring health in those affected by violence exposure (Christiansen, 1999).

The next steps may involve the implementation of activities to promote the use of the already created physical space and the continuation of volunteer involvement in the improvement of the park. Parks in low-income neighborhoods are often less utilized than those in high-income areas (Cohen et al., 2013), but park safety is not as important as park programming (i.e., free exercise classes) in park utilization (Cohen et al., 2016).

Additionally, interventions at this level have multiple confounding elements that will need to be considered as potentially affecting outcomes. Finally, there is often tension between the need to measure outcomes and the community's need for organic change that does not always adjust to research protocols. This tension should be considered so an appropriate amount of time is dedicated to building relationships and measuring outcomes longitudinally. Larger projects with community participation from beginning to end will be necessary.

5 | CONCLUSION

Children's exposure to community violence affects their socioemotional development and long-term health outcomes. Local community engagement to change the built environment can have benefits derived both from the physical changes themselves and the promotion of social connections. Simple interventions that include components such as greenness and playgrounds can positively affect neighborhoods with high rates of community violence. This case study exemplifies an environmental intervention driven by neighbors and supported by local entities to promote play and social interaction in a neighborhood with high rates of community violence by turning a vacant lot into a small green space with a playground. Balancing evidence-based community-level interventions that promote wellness and traditional clinical interventions may have broader positive effects on the health of vulnerable populations.

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CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

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REFERENCES

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.).

Anderson, E. (2000). *Code of the street: Decency, violence, and the moral life of the inner city*. Norton.

Committee on Psychosocial Aspects of Child and Family Health and Task Force on Mental Health. (2009). Policy statement—The future of pediatrics: Mental health competencies for pediatric primary care. *Pediatrics*, *124*(1), 410-421. https://doi.org/10.1542/peds.2009-1061

Baltimore Neighborhood Indicators Alliance (BNIA). (2017). Vital signs 15: Measuring progress toward a better quality of life in every neighborhood. Jacob France Institute, University of Baltimore.

Branas, C. C., Cheney, R. A., MacDonald, J. M., Tam V. W., Jackson T. D., Ten Have T. R. (2011). A difference-indifferences analysis of health, safety, and greening vacant urban space. *American Journal of Epidemiology*, *174*(11), 1296–1306. https://doi.org/10.1093/aje/kwr273

Briere, J., & Spinazzola, J. (2005). Phenomenology and psychological assessment of complex posttraumatic states. *Journal of Traumatic Stress*, *18*(5), 401–412.

Burdette, H. L., & Whitaker, R. C. (2005). Resurrecting free play in young children: Looking beyond fitness and fatness to attention, affiliation, and affect. *Archives of Pediatrics & Adolescent Medicine*, *159*(1), 46–50.

Carpman, J. R., Grant, M. A. (1993). *Design that cares: Planning health facilities for patients and visitors* (2nd ed.). American Hospital Publishing.

Charles, C. Z., Dinwiddie, G., & Massey, D. S. (2004). The continuing consequences of segregation: Family stress and college academic performance. *Social Science Quarterly*, *85*(5), 1353–1373. https://doi.org/10.1111/j.0038-4941.2004.00280.x

Christian, H., Zubrick, S. R., Foster, S., Giles-Corti, B., Bull, F., Wood, L., Knuiman, M., Brinkman, S., Houghton, S., & Boruff, B. (2015). The influence of the neighborhood physical environment on early child health and development: A review and call for research. *Health & Place*, *33*, 25–36.

Christiansen, C. H. (1999). Defining lives: Occupation as identity: An essay on competence, coherence, and the creation of meaning. *American Journal of Occupational Therapy*, *53*, 547–558. https://doi.org/10.5014/ajot.53.6.547

Clements, R. (2004). An investigation of the state of outdoor play. *Contemporary Issues in Early Childhood*, *5*, 68–80. https://doi.org/10.1111/j.0038-4941.2004.00280.x

Cohen, D. A., Han, B., Derose, K. P., Williamson, S., Marsh, T., Raaen, L., & McKenzie, T. L. (2016). The paradox of parks in low-income areas: Park use and perceived threats. *Environment and Behavior*, *48*(1), 230–245.

Cohen, D. A., Inagami, S., & Finch, B. (2008). The built environment and collective efficacy. *Health & Place*, *14*(2), 198–208.

Cohen, D. A., Lapham, S., Evenson, K. R., Williamson, S., Golinelli, D., Ward, P., Hillier, A., & McKenzie, T. L. (2013). Use of neighbourhood parks: Does socio-economic status matter? A four-city study. *Public Health*, *127*(4), 325-332. https://doi.org/10.1016/j.puhe.2013.01.003

Cooley-Quille, M., Boyd, R. C., Frantz, E., & Walsh, J. (2001). Emotional and behavioral impact of exposure to community violence in inner-city adolescents. *Journal of Clinical Child Psychology*, *30*(2), 199–206.

De Vries, S., van Dillen, S. M., Groenewegen, P. P., & Spreeuwenberg, P. (2013). Streetscape greenery and health: Stress, social cohesion and physical activity as mediators. *Social Science & Medicine*, *94*, 26–33.

Duerr Evaluation Resources. (2018). Shasta children and families first commission. research paper: The benefits of playgrounds for children aged 0-5. http://www.imaginationplayground.com/images/content/2/9/2999/the-benefits-of-playgrounds-for-children-aged-0-5.pdf

Fattore, T., Mason, J., & Watson, E. (2016). Children's understandings of well-being: Towards a child standpoint, *Children's well-being: Indicators and research* (Vol. 14). Springer. https://doi.org/10.1007/978-94-024-0829-4

Foley, E., Ross, L., & Arista, C. (2013). Basketball courts, street corners and empty lots: The spatial dimensions of youth fear and vulnerability to violence. *Children, Youth and Environments*, *23*, 43–63.

Garvin, E. C., Cannuscio, C. C., & Branas, C. C. (2013). Greening vacant lots to reduce violent crime: A randomized controlled trial. *Injury Prevention*, *19*, 198–203.

Gustafson, P. (2001). Meanings of place: Everyday experience and theoretical conceptualizations. *Journal of Environmental Psychology*, *21*(1), 5–16. https://doi.org/10.1006/jevp.2000.0185

Harding, D. J. (2009). Collateral consequences of violence in disadvantaged neighborhoods. *Social Forces*, *88*(2), 757–784.

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, *5*, 377–391.

Hofferth, S. L., & Sandberg, J. F. (2001). How American children spend their time. *Journal of Marriage and Family*, *63*(2), 295–308.

Isenberg, J. P., & Quisenberry, N. (2012). *A position paper of the association for childhood education international PLAY: Essential for all children*. (pp. 33–39). Association for Childhood Education International. https://doi.org/10.1080/00094056.2002.10522763

Kaplan, R. (2001). The nature of the view from home. *Environment and Behavior*, *33*(4), 507–542.

Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban Health : Bulletin of the New York Academy of Medicine*, *78*(3), 458–467. https://doi.org/10.1093/jurban/78.3.458

Kimbro, R. T., & Schachter, A. (2011). Neighborhood poverty and maternal fears of children's outdoor play. *Family Relations*, *60*(4), 461–475.

Kondo, M. C., Andreyeva, E., South, E. C., MacDonald, J. M., & Branas, C. C. (2018). Neighborhood interventions to reduce violence. *Annual Review of Public Health*, *39*, 253–271.

Kondo, M. C., Hohl, B., Han, S., & Branas, C. (2016). Effects of greening and community reuse of vacant lots on crime. *Urban Studies*, *53*, 3279–3295.

Kondo, M. C., South, E. C., Branas, C. C., Richmond, T. S., & Wiebe, D. J. (2017). The association between urban tree cover and gun assault: A case-control and case-crossover study. *American Journal of Epidemiology*, *186*(3), 289–296.

Kuo, F. E., Sullivan, W. C., Coley, R. L., & Brunson, L. (1998). Fertile ground for community: Inner-city neighborhood common spaces. *American Journal of Community Psychology*, *26*(6), 823-851.

Lachowycz, K., & Jones, A. P. (2014). Does walking explain associations between access to greenspace and lower mortality? *Social Science & Medicine*, *107*, 9–17.

Lalor, K. (2013). Children, violence, community and the physical environment: Foreword to the special issue. *Children, Youth and Environments*, *23*(1), 1–7.

Landsdowne, J. (2011). The links between social support and improved health outcomes. Vancouver : The Smart Fund, Vancouver Coastal Health.

Lopez, R. P. (2012). *The built environment and public health* (1st ed.). John Wiley & Sons, Jossey-Bass.

Lösel, F., & Farrington, D. P. (2012). Direct protective and buffering protective factors in the development of youth violence. *American Journal of Preventive Medicine*, *43*(2 suppl), S8–S23.

Maas, J., Verheij, R. A., Groenewegen, P. P., de Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health*, *60*(7), 587-592.

Marmot, M. (2006). Status syndrome: A challenge to medicine. *Journal of the American Medical Association*, *295*(11), 1304–1307.

Menard, S. (2002). Short and long term consequences of adolescent victimization. Youth Violence Research Bulletin. US Department of Justice. https://www.ojp.gov/pdffiles1/ojjdp/191210.pdf

Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., Benjet, C., Georgiades, K., & Swendsen, J. (2010). Lifetime prevalence of mental disorders in U.S. adolescents: Results from the national comorbidity survey replication–adolescent supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, *49*(10), 980–989. https://doi.org/10.1016/j.jaac.2010.05.017

Merikangas, K. R., He, J. P., Burstein, M. E., Swendsen, J., Avenevoli, S., Case, B., Georgiades, K., Heaton, L., Swanson, S., & Olfson, M. (2011). Service utilization for lifetime mental disorders in US adolescents: Results of the National Comorbidity Survey-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, *50*(1), 32–45.

Mitchell, R., Astell-Burt, T., & Richardson, E. A. (2011). A comparison of green space indicators for epidemiological research. *Journal of Epidemiology and Community Health*, *65*, 853–858.

Mitchell, R., & Popham, F. (2007). Greenspace, urbanity and health: Relationships in England. *Journal of Epidemiology and Community Health*, *61*(8), 681–683.

Mitchell, R., & Popham, F. (2008). Effect of exposure to natural environment on health inequalities: An observational population study. *The Lancet*, *372*(9650), 1655–1660.

Mitchell, R. J., Richardson, E. A., Shortt, N. K., & Pearce, J. R. (2015). Neighborhood environments and socioeconomic inequalities in mental well-being. *American Journal of Preventive Medicine*, *49*(1), 80–84.

National Executive Training Institute, (NETI). (2005). *Training curriculum for reduction of seclusion and restraint*. National Association of State Mental Health Program Directors (NASMHPD), National Technical Assistance Center for State Mental Health Planning (NTAC). https://www.hsri.org/publication/the-ntac-training-curriculum-for-the-reduction-of-seclusion-and-restraint

Reed, E., Lawrence, D. A., Santana, M. C., Welles, C. S., Horsburgh, C. R., Silverman, J. G., Rich, J. A., & Raj, A. (2014). Adolescent experiences of violence and relation to violence perpetration beyond young adulthood among an urban sample of Black and African American males. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, *91*(1), 96–106.

Remington, P. L., & Brownson, R. C. (2011). Fifty years of progress in chronic disease epidemiology and control. *Morbidity and Mortality Weekly Report*, *60*(04), 70–77.

Roehler, D. R., Heinze, J. E., Stoddard, S. A., Bauermeister, J. A., & Zimmerman, M. A. (2018). The association between early exposure to violence in emerging adulthood and substance use in early-adulthood among inner-city individuals. *Emerging Adulthood*, *6*(4), 235–242.

Saar, M., & Palang, H. (2009). The dimensions of place meanings. *Living Reviews in Landscape Research*, *3*, 3–24. https://doi.org/10.12942/lrlr-2009-3

Sampson, R. J. & Raudenbush, S. W. (2001). Disorder in urban neighborhoods—Does it lead to crime?. U.S. Department of Justice, National Institute of Justice. https://www.ojp.gov/pdffiles1/nij/186049.pdf

Schilling, E. A., Aseltine, R. H., Jr., & Gore, S. (2007). Adverse childhood experiences and mental health in young adults: A longitudinal survey. *BMC Public Health*, *7*, 30. https://doi.org/10.1186/1471-2458-7-30

Sherer, P. M. (2004). Park power! *Land & People*. The Trust for Public Land.

Shonkoff, J. P., Phillips, D. A. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. National Academies Press.

South, E. C., Hohl, B. C., Kondo, M. C., MacDonald, J. M., & Branas, C. C. (2018). Effect of greening vacant land on mental health of community-dwelling adults a cluster randomized trial. *JAMA Network Open*. *1*(3), e180298.

Taylor, A. F., Kuo, F. E., & Sullivan, W. C. (2001). Coping with add: The surprising connection to green play settings. *Environment and Behavior*, *33*(1), 54–77. https://doi.org/10.1177/00139160121972864

The Baltimore Sun. (2012, March). Girl's shooting stuns Darley Park residents, by Scott Calvert. https://www.baltimoresun.com/news/breaking/bs-md-ci-darley-park-20120308-story.html

The Baltimore Sun. (2017a). Baltimore has now had 343 homicides in 2017, sets record for killings per capita, by Kevin Rector. https://www.baltimoresun.com/news/crime/bs-md-ci-per-capita-homicides-20171227-story.html

The Baltimore Sun. (2017b). A 97-year-old vet is murdered in his pajamas as Baltimore struggles to contain the killings, by Peter Herman. https://www.washingtonpost.com/local/public-safety/a-97-year-old-vet-is-murdered-in-his-pajamas-as-baltimore-struggles-to-contain-the-killings/2017/08/08/84dd7c64-7644-11e7-9eac-d56bd5568db8_story.html?noredirect=on%&utm_term=.592cf495b3f4

The Trace. (2018). What's the homicide capital of America? Murder rates in U.S. cities, ranked by Francesca Mirabile and Daniel Nass. https://www.thetrace.org/2018/04/highest-murder-rates-us-cities-list/

Timperio, A., Salmon, J., Telford, A., & Crawford, D. (2005). Perceptions of local neighbourhood environments and their relationship to childhood overweight and obesity. *International Journal of Obesity*, *29*(2), 170–175.

Triguero-Mas, M., Dadvand, P., Cirach, M., Martinez, D., Medina, A., Mompart, A., Basagaña, X., Gražulevičienė, R., & Nieuwenhuijsen, M. (2015). Natural outdoor environments and mental and physical health: Relationships and mechanisms. *Environment International*, *77*, 35–41.

U.S. Census Bureau. (2010). https://www.census.gov/programs-surveys/decennial-census/data.html

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). Office of Policy, Planning and Innovation. *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. Prepared by SAMHSA's Trauma and Justice Strategic Initiative.

Van den Berg, M., Wendel-Vos, W., van Poppel, M., Kemper, H., van Mechelen, W., & Maas, J. (2015). Health benefits of green spaces in the living environment: A systematic review of epidemiological studies. *Urban Forestry & Urban Greening*, *14*(4), 806–816.

Venkatesh, S. A. (2001). *American project*. *The Rise and Fall of a Modern Ghetto*. Harvard University Press.

Wagenfeld, A., Roy- Fischer, C., & Mitchell, C. (2013). Collaborative design: Outdoor environments for veterans with PTSD. *Facilities*, *31*(9/10), 391–406.

Weir, L. A., Etelson, D., & Brand, D. A. (2006). Parents' perceptions of neighborhood safety and children's physical activity. *Preventive Medicine*, *43*(3), 212–217.

Wolfe, M. K., & Mennis, J. (2012). Does vegetation encourage or suppress urban crime? Evidence from Philadelphia, PA. *Landscape and Urban Planning*, *108*(2–4), 112–122.

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