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## Green Leisure: Resistance and Revitalization of Urban Neighborhoods

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### ABSTRACT

Many cities have addressed urban population shrinkage by adopting strategies to re-purpose vacant lots in ways that leave them beautified and groomed. This study investigates leisure behavior resulting in beautified and groomed vacant lots that resist dominant discourses – referred to as green leisure. We applied a mixed-methods research design with property owners who purchased vacant lots through the Chicago Large Lot Program. Our focus group findings (n = 25) indicated that participants framed their activities as resistance tied to (a) vacant lot beautification, (b) providing places to socialize, (c) efficacy, and (d) neighborhood transformation. Using survey data (n = 197), results from a path model show that behavioral investment in greening – as measured by a Cues to Care Action Scale – is influenced by social normative beliefs, collective-efficacy, self-efficacy, and perception of gardening as leisure. Our findings lend support to policies that encourage resident-based private ownership of vacant land to revitalize urban neighborhoods.

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Beautification; collective efficacy; urban greening; urban leisure; vacant lots

## Introduction

Green leisure is a concept developed herein which refers to voluntary behaviors by individuals or groups aimed at making positive changes to the landscape that resist dominant discourses. Building on Shaw's (2001) framework of leisure as resistance, the features of green leisure as resistance were empirically examined by investigating the outcomes of Chicago's Large Lot Program within high-vacancy, predominantly African American neighborhoods. The resident-led greening program encourages residents to purchase a vacant lot on their block for a dollar and take control of their own beautification and greening. The paper integrates literature from urban development, landscape planning, and leisure research to connect leisure behavior to municipal development policy.

Evidence from previous research shows that greening behavior functions to resist the dominant stigma of neighborhood blight by making transformative changes to the local landscape to signal that neighbors' care about the safety, quality of life, and well-being of each other (Branas et al., 2011; Garvin et al., 2013; Kondo et al., 2016). We view

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resistance as a central theme of green leisure and, in addition to Shaw's (2001) work, draw upon Hoy (2004) who defined resistance as "any acts against the present order that assert a positive sense of oneself and one's own truth about the world" (p. 94). Residents' simple acts of greening a vacant lot resist the present (dis)order and demonstrate that their neighborhood can change for the better (Drake & Lawson, 2014). In this study, self-efficacy and collective efficacy were used as indicators of resistance, illustrating residents' confidence about their abilities to resist neighborhood stigma of blight and decay that otherwise reproduce public hostility about communities of color. We expected that resident-led greening would be associated with the leisure time domain. The purpose of this paper is to investigate the voluntary behaviors of residents greening their vacant lots within a leisure context. We consider the implication of green leisure within a policy context to tackle the complex problems associated with high-vacancy urban neighborhoods.

### Urban vacancy and greening strategies

Urban vacancy is a widespread global issue (Bowman & Pagano, 2004). The average amount of vacant land in U.S. cities was estimated at 17% and has been increasing over the previous two decades (Newman et al., 2016). Associated with urban vacancy are issues related to crime, loss of place and community, and lack of social connectedness (Shinew et al., 2004). Municipalities have struggled to develop policies to re-purpose vacant lots including strategies that transform them into attractive green spaces with potential to change neighborhood culture (Branas et al., 2011).

Given the success of urban greening programs in many cities, attention has been paid to potential benefits of greening as a strategy to revitalize neighborhoods. Specifically, urban greening has reduced crimes and vandalism, while improving residents' awareness of safety, place attachment, and sense of community (Garvin et al., 2013; Kondo et al., 2016). Greening has been studied as both a behavior and an outcome across a diversity of disciplines (Anderson & Minor, 2017). For this study, we examined greening as *behavior to change conditions of a site in ways that improve its beauty and function* (Gobster et al., 2007). In the context of vacant lots in marginalized neighborhoods, greening encompasses grooming activities like mowing, pruning, planting flowers and vegetables, removing litter, and generally reflecting a sense of stewardship and demonstrating the lot is cared for (Nassauer & Raskin, 2014). The framework of "Cues to Care" (Li & Nassauer, 2020) is relevant to residential blocks with high vacancy and holds promise in their ability to address concern for the welfare of oneself and others through visible changes on a landscape. Municipal greening initiatives could have important implications for leisure research as the amount of time, activity, and intentions of such behavior could put leisure at the center of policies to address urban vacancy (Baudry & Eudes, 2016).

Greening as a kind of leisure behavior is premised on gardening and yard work as being an enjoyable and fulfilling activity. Investing in urban greening as a leisure activity may cause residents to build a sense of stewardship as they take care of their lots and engage residents of their block (White, 2011). Given the nature of leisure behaviors as perceived freedom of choice and self-determination (Kelly & Freysinger, 2000),

several urban greening strategies and vacant lot remediation programs have emerged as part of policies to encourage individual and community gardens (Shur-Ofry & Malcai, 2019). During difficult historical moments, such as World Wars I and II, the Great Depression, and most recently the Covid-19 pandemic, gardens played important roles in response to such crises (Mees, 2020; Turner et al., 2011). Roles for gardening in times of crisis and fear have been extended beyond the functional outcomes of food production to increasing senses of efficacy, neighborhood belonging, and well-being in nature (Ferris et al., 2001; Milligan et al., 2004; Spilková, 2017; Wakefield et al., 2007).

In 2014, Chicago implemented the Large Lot Program to enable residents who own property in high-vacancy neighborhoods to purchase up to two city-owned vacant lots on their block for \$1 per lot. Six years into this policy, the impacts of Chicago's policy have been evaluated and align with many positive outcomes commonly associated with impacts of both leisure behavior and community gardens, particularly social interactions and investment in beautifying places (Shinew et al., 2004; Stern & Lester, 2021; Stewart et al., 2019). Urban greening strategies that transfer vacant land from public to private "resident-based" ownership hold potential to combat urban decay, invest in current residents, and take advantage of the diverse characteristics of any given block (Dolley, 2020). That is, each garden or newly developed green space is distinctively embedded in a broader set of localized historical and cultural confluences that hold meanings and identities shared by each neighborhood that could lead to effective urban policies (Glover, 2003; Johnson & Glover, 2013). The social dynamics of communities, as indicated by residents' beliefs about the actions adopted by people on their block, carry potential to explain why residents choose to engage in behavior that benefits local environments, referred to herein as social normative beliefs (Schwartz, 1977).

### **Green leisure as resistance**

Green leisure extends Shaw's (2001) framework of leisure as resistance and integrates it with research on urban greening (Vogt, 2018). Several factors come together in interdependent ways to explain green leisure. Firstly, green leisure leaves a physical mark on the landscape. The activity associated with green leisure results in noticeable and desirable changes on the land, no matter the extent or degree of modesty in the change (Anderson & Minor, 2017). Both the process and outcomes of creating visible socio-ecological connections contribute to green leisure (Grimwood, 2017). Secondly, those engaged in green leisure do so because of the fulfillment and positive value of the behavior and leads them to prioritize activities related to caring for their yard, lots, and other landscapes of their lives (Sampson et al., 2017; Shearman, 2015). Green leisure, like any leisure, is an "activity engaged in during free time, which people want to do" (Elkington & Stebbins, 2014, p. 5). Thirdly, the visible changes of the landscape communicate with others in ways that resist dominant discourses related to one's block or other significant places (of home, family, neighborhood, community) to assert an ethic of care and revitalization (Baudry & Eudes, 2016; White, 2011). Glover (2003) found that the impact of a community garden provided "tangible benefits" to resist a public discourse of being blighted and deteriorating. From disciplines outside of leisure, several scholars have supported Glover's (2003) perspective of the communicative function of

greening as sending messages of transformation of the neighborhood (Foo et al., 2013; Nassauer & Raskin, 2014). Finally, green leisure results in an enhanced sense of efficacy for individuals and groups (Glover, 2003; Hite et al., 2017; Teig et al., 2009). As indicated by Shaw (2001), an outcome of leisure resistance is personal and collective empowerment which is concomitant with an increased confidence in one's ability – either as an individual or group – to achieve desired goals. In our study, perceptions of gardening that build community and influence social dynamics yield tangible changes to revitalize socio-ecological connections and resist dominant discourses.

There are multiple ways that behavioral investments in places relate to leisure or greening, yet are *not* green leisure. Westphal (2003) identified various kinds of passive experiences that involve exposure to nature, yet such experiences would not be considered green leisure due to the absence of any change to the landscape and lack of resistance. Engagement with nature is characterized by Hurly and Walker (2019) as a universal human need for nature linked to affective, cognitive, and developmental dimensions. Although such needs may be satisfied in leisure contexts, such as a walk in an arboretum (Izenstark & Ebata, 2017), factors such as a physical change to the landscape to communicate with others are not present, and would not be considered green leisure. With desirable consequences to leave a visible change on the land, green leisure complements a longstanding body of leisure research that supports a “leave no trace” ethic whereby people are encouraged to take ownership of nature-based settings and self-manage their impact on the environment (Marion, 2014; Vagias et al., 2014; van Riper et al., 2020). Finally, urban greening implemented by municipalities or nonprofit organizations without a sense of ownership of nearby residents does not shift social power, result from leisure behavior, or have consequences for efficacy, and thus, would not qualify as green leisure (Anderson & Minor, 2017; Carmichael & McDonough, 2018).

Green leisure is an extension of leisure scholarship that has highlighted leisure as a site for resistance when leisure behavior becomes a context for political practice related to power relations in society (Shaw, 2001). Over recent decades, there has been considerable interest in leisure as a form of resistance (Acevedo & Stodolska, 2019; Carrington, 1998; Day, 2000; Du, 2008; Freysinger & Flannery, 1992; Henderson & Gibson, 2013; Jessup et al., 2013). Although much of this work is associated with the dynamics of gender-based power structures, a few studies have investigated racial and ethnic inequalities that persist across various leisure and cultural activities.

Participants in urban greening initiatives on vacant lots are often racial and ethnic minorities who live in stigmatized neighborhoods (e.g., Glover, 2003; Shinew et al., 2004; White, 2011). These neighborhoods are stereotyped by dominant public narratives as disreputable areas associated with problems of crime, disorder, and racial isolation (Sampson & Raudenbush, 2004). Responding to the charge of degeneration of residential blocks, urban greening challenges the existing power structures and resists the public stigma by collectively engaging in transforming the social meaning of vacant land. *Where the stigma frames vacant lots as having a past better than the present, transformed vacant lots reflect a place with a future in which residents provide care and attention to it* (Lawson, 2005). Challenging existing power structures as part of collective leisure was discussed by Shaw (2001) in the context of leisure as a collective resistance:

Specifically, resistance is not seen only in individual terms. Rather, since resistance is seen as a challenge to power relations and ideologies, it is conceptualized as collective as well as individual. In other words, individual empowerment, arising out of resistance to constraining material and ideological conditions, has the potential to empower others in similar situations, and to reduce systemic inequities. (p. 189).

Shaw (2001) acknowledged that some acts of resistance may be unconscious but emphasized that resistance is usually a conscious choice by the participant. For Foucault (1982), resistance is a refusal of being determined by outside forces and the conscience formation of one's own identity (Hoy, 2004). In the context of urban greening, residents are keenly conscious of reconfiguring the meanings of their block and desire acknowledgment of the place's broader political, economic, and social significance (Foo et al., 2013). Therefore, urban vacant lots have the potential to act as places for symbolic contestation of the worth of their neighborhood as more than just abandoned property (Lawson, 2005).

### **Green leisure tied to self- and collective efficacy**

Self-efficacy is derived from social cognitive theory that plays a significant role in human functioning as it directly influences people's motivation and behavior (Bandura, 1993). Compared to self-efficacy as an individual dimension of the efficacy construct, collective efficacy is an organizational dimension that comprises the shared beliefs of group members concerning their collective power to produce desired results (Bandura, 2000). Bandura (2000) claimed that the product of shared knowledge and skills of individual group members are not the only factors that determine collective efficacy. Rather, collective efficacy involves both individual factors and "coordinative and interactive group dynamics" (p. 76).

At the scale of block or neighborhood, collective efficacy represents "the linkage of mutual trust and the willingness to intervene for the common good" (Sampson et al., 1997, p. 919). Moving from an emphasis on an individual to a social dimension shows attention to residents' joint capacity to take coordinated action on issues that affect their lives (Collins et al., 2014; Morenoff et al., 2001). A great deal of research explored a range of factors associated with collective efficacy among residents, including social cohesion and informal social control (Collins et al., 2014; Comstock et al., 2010; Sampson et al., 1997; Teig et al., 2009). Several studies have focused on demonstrating how perceived collective efficacy can be enhanced through engaging in local events, positively influencing group goal attainment such as the increased safety and security in urban neighborhoods (e.g., Collins et al., 2014). This implies that residents' participation in social events allows them to build mutual trust with other neighbors, leading to empowerment through transformation and re-shaping the meanings of community settings.

The study of efficacy constructs is of particular importance to understand green leisure in urban neighborhoods for two reasons. First, engaging in collaborative green leisure positively influences residents' sense of their future capabilities as a group. As described by Glover (2003), a symbol of victory and accomplishment was embedded in the community garden of his research, and thus increased members' sense of collective efficacy through its development. Likewise, residents' engagement in transforming a vacant lot into desirable green space and re-purposing meanings of the place can

promote collective efficacy and community building (Foo et al., 2013). Second, a lack of efficacy may serve as one of the significant constraints to green leisure. For example, a pervasive feeling of apathy and learned helplessness may hinder the neighborhood from fully participating in activities to green vacant lots. However, this does not necessarily reflect a lower sense of self-efficacy for individual residents, as collective efficacy is not simply determined by the sum of group members' capacities and their sense of self-efficacy.

Although green leisure may connect an individual to a given place, its communicative aspects build relationships between the individual and the larger community. Teig et al. (2009) emphasized the reciprocity that residents have exchanged through actions and support in gardening. Even if the context for green leisure is someone acting alone to improve a vacant lot, the noticeable improvements send a message of caring for a landscape that is visibly shared and mutually connects a larger collective of neighbors to one person's actions (Glover, 2003; Grimwood, 2017).

## Research questions and hypotheses

Given the paucity of research focused on integrating urban greening and leisure literature, this study explores the intervening mechanisms of green leisure and its roles in revitalizing vacant lots and their associated block in Chicago, IL. Building on the concepts of behavioral investment, social normative beliefs, leisure as resistance (reflected by self-efficacy and collective efficacy), and perceptions of gardening as leisure, we address the following research questions:

1. To what extent is greening a vacant lot aligned with qualities of leisure as resistance?
2. How do individual perceptions of gardening as leisure influence self-efficacy, collective efficacy, social normative beliefs, and behavioral investments in greening behavior?

Using a two-phase mixed-methods research design, our Phase I implemented exploratory focus groups. We then developed a hypothesis-driven approach for Phase II using a multi-mode survey to investigate the relationship between a range of factors, including individual perceptions of gardening as leisure, self-efficacy, collective efficacy, social normative beliefs, and behavioral investment in greening. As shown in Figure 1, the specific hypotheses are as follow:

Hypothesis 1 (H1): Perception of gardening as leisure is positively associated with self-efficacy.

Hypothesis 2 (H2): Self-efficacy is positively associated with collective efficacy.

Hypothesis 3 (H3): Collective efficacy is positively associated with social normative beliefs.

Hypothesis 4 (H4): Social normative beliefs are positively associated with cues to care.



Figure 1. The hypothesized path model.

**Table 1.** Sociodemographic profile of the selected study sites.

|                            | East Garfield Park | Englewood | Woodlawn | City of Chicago |
|----------------------------|--------------------|-----------|----------|-----------------|
| Total population           | 20,656             | 26,121    | 24,150   | 2,717,534       |
| Households income (median) | \$21,482           | \$19,854  | \$23,986 | \$48,522        |
| College graduates (%)      | 12.7%              | 6.2%      | 23.3%    | 36.5%           |
| Black residents (%)        | 91.3%              | 95%       | 84.7%    | 30.9%           |
| Vacant housing (%)         | 17.7%              | 36.3%     | 24.7%    | 13.2%           |

Note. All data are from 2015. Source: Agency (2018) and United States Census Bureau, 2018.

## Methods

Our mixed-methods research design addressed green leisure in the context of repurposing vacant lots purchased under the Chicago Large Lot Program. We applied a developmental mixed-method approach which allowed the findings from the first phase of the focus groups to influence the language and kinds of questions asked in the subsequent mixed-mode survey (Leech & Onwuegbuzie, 2009). In developmental mixed-methods studies, researchers take advantage of rich interpretations of data by returning to the findings of the first method to implement a more integrated data analysis of both datasets compared to independent analyses of each method on its own (Greene, 2007). The three neighborhoods selected as study sites are characterized by predominantly African American, low-income, less-educated neighborhoods (Table 1). The study was carried out with the cooperation of the City of Chicago's Department of Planning and Development and various neighborhood organizations.

## Participants

Our study investigated new owners of vacant lots previously owned by the City of Chicago purchased in winter 2014–15 under the Chicago Large Lot Program. Each lot was sold for a dollar, and the owners were required to comply with regulations, pay taxes, and mow the property. The program limited the purchase to existing property owners of the block of the vacant lot. This resulted in 318 owners of 424 vacant lots in the East Garfield Park, Englewood, and Woodlawn neighborhoods. Working with the City of Chicago and neighborhood organizations, we collected data in two phases: (1) three focus groups with 25 new Large Lot owners and (2) a mixed-mode survey of 318 new owners of Large Lots. Three focus group sessions were undertaken in each neighborhood, including six participants in East Garfield Park (3 females and 3 males), 8 participants in Englewood (8 females), and 11 participants in Woodlawn (9 females and 2 males). The average length of residence for focus group participants was 20 years in the range of 1.5–57 years (the median was 13 years). The survey yielded a total of 197 respondents with a response rate of 71% (of 278 valid addresses). Table 2 provides a socio-demographic profile of survey participants; as highlights, 59.2% were female, 73.9% were African American, and 33% had income less than \$50,000.

## Phase I: Focus groups

### Data collection

The questions of the focus groups were directed at understanding owners' visions and obstacles associated with their newly purchased lots. The questions included: "What



**Table 2.** Sociodemographic characteristics of survey participants.

| Variable                                    | N (%)       |
|---|-------------|
| Gender                                      |             |
| Male  | 113 (40.8%) |
| Female                                      | 78 (59.2%)  |
| Race and ethnicity                          |             |
| African American                            | 122 (73.9%) |
| White/Caucasian                             | 26 (15.8%)  |
| Hispanic/Latino/Puerto Rican/Hispanic-White | 12 (7.3%)   |
| Pacific Islander                            | 1 (0.6%)    |
| Asian American                              | 1 (0.6%)    |
| Other                                       | 3 (1.8%)    |
| Income                                      |             |
| Less than \$20,000                          | 22 (11.2%)  |
| \$20,000-\$49,999                           | 43 (21.8%)  |
| \$50,000-\$99,999                           | 58 (29.4%)  |
| \$100,000-\$149,999                         | 21 (10.7%)  |
| Greater than \$150,000                      | 6 (3.0%)    |
| Preferred not to answer                     | 47 (23.9%)  |
| Age (M = 60.68, SD = 13.47)                 |             |
| 30 or younger                               | 2 (1.1%)    |
| 31-40                                       | 21 (11.8%)  |
| 41-50                                       | 36 (20.2%)  |
| 51-60                                       | 49 (27.5%)  |
| 61 or older                                 | 70 (39.3%)  |
| Education level                             |             |
| Some high school                            | 9 (4.8%)    |
| High school graduate                        | 30 (16.1%)  |
| Some college                                | 53 (28.5%)  |
| Two-year college                            | 17 (9.1%)   |
| Four-year college                           | 36 (19.4%)  |
| Post-college                                | 6 (3.2%)    |
| Graduate degree                             | 35 (18.8%)  |

activities occur on the vacant lots on your block? What have been the effects of vacant lots in your neighborhood? What have you done with your lot since you have purchased it? What do you plan to do with it?" Each focus group was recorded and transcribed verbatim.

### Data analyses

The authors analyzed the transcripts according to the specific topics of *leisure*, *efficacy*, and *neighborhood change* using NVivo 12. We coded text that was associated with experiences and activities related to leisure, such as their comments that brought out meanings tied to joy, beauty, or fulfillment even if the word "leisure" was not specifically used. Contexts in which text could be coded for leisure included various stories of bringing family together, increasing social well-being, teaching and playing with children and positive engagement with their new lot. Regarding efficacy, we coded text that was linked to the participants' beliefs in their capacity to execute various kinds of individual and collective action directed at neighborhood transformation, as well as their shared expectations and hopes for positive changes in their neighborhood. Related to block and neighborhood change, we coded text related to physical and policy changes that have affected life on their block and in their neighborhood. Whenever the current time is compared to a past or anticipated future, neighborhood change may be implied. Focus

group discussions often evoked reflections about something that needs to be maintained, stabilized, or otherwise kept in some condition which would imply that forces of change need resisting and/or neutralizing. Similar statements were grouped together and through a constant comparison method, lived experiences of leisure, neighborhood change, and efficacy were identified. Inter-rater reliability of coders exhibited an acceptable level of agreement across the first two authors at 77% (MacQueen et al., 1998).

## **Phase II: Survey**

### **Data collection and measurement**

We administered a mixed-mode survey (mail-back and online) that built on the findings from focus groups and previous studies. The questionnaire consisted of 24 questions and was divided into five sections, corresponding to respondents' history with their new lot, lot purchase process, intentions and behavior associated with their lot, neighborhood conditions, and socio-demographic characteristics.

Measures were developed, in part, to further explore and quantify the relationships found in the focus groups. [Table 3](#) contains a list of the variables assessed. First, the Cues to Care Action Scale (CCAS) was developed by the authors based on "Cues to Care" relevant to neighborhoods of high vacancy itemized by Nassauer and Raskin (2014). The CCAS was a summated scale measured by a suite of 11 cues to care actions with response categories of either "yes" or "no" to indicate whether they had undertaken the activity on their lots (Stewart et al., 2019). Second, the social normative beliefs scale contained three items related to respondents' views on the environmental stewardship activities adopted by their neighbors (Schwartz, 1977). Third, perceived collective efficacy was measured by four items referring to the respondent's neighbors on their block while perceived self-efficacy was measured by four items linked to their individual capabilities in changing their block. According to Goddard et al. (2004), measuring individual perceptions of group members' collective efficacy has stronger validity compared to aggregating measures of individual group members' perceived self-efficacy in that it accounts for group dynamics and perceptions of the group's ability to function as a collective. Finally, drawing from Glover (2003), perception of gardening as leisure was a single item that assessed the extent to which respondents perceived these activities to be a chore or a hobby.

### **Data analyses**

We tested a path model using R Studio 1.2.5042 to assess the extent to which Cues to Care Action scale was influenced by the perception of gardening as leisure, self-efficacy, collective-efficacy, and social normative beliefs ([Figure 1](#)). A two-step approach was implemented to analyze the data (Anderson & Gerbing, 1988). The first step involved estimating a measurement model of the relationships among the latent variables. A confirmatory factor analysis (CFA) was conducted to evaluate the measurement properties of all variables of interest. The reliability of the scales loading onto each factor was assessed by calculating internal consistency (Cronbach's alpha) and composite reliability (CR) ([Table 3](#)). Fit statistics were used

**Table 3.** Survey items, mean values, standard deviations, internal consistencies, and factor loading scores.

| Survey items   | N (%)      | M (SD)      | $\lambda$ |
|--|------------|-------------|-----------|
| Cues to Care Action scale <sup>1</sup> ( $\alpha = .70$ )                                |            | 4.20 (2.25) |           |
| Mowed the grass  | 172 (88.2) | –           | –         |
| Cleaned up litter, debris  | 167 (85.6) | –           | –         |
| Installed fencing  | 98 (50.3)  | –           | –         |
| Removed shrubs or trees  | 96 (49.2)  | –           | –         |
| Filled in sunken areas   | 61 (31.3)  | –           | –         |
| Planted flowers  | 53 (27.2)  | –           | –         |
| Planted shrubs or trees  | 45 (23.1)  | –           | –         |
| Made area for sitting, play  | 44 (22.6)  | –           | –         |
| Planted vegetables   | 31 (15.9)  | –           | –         |
| Made area for parking  | 27 (13.8)  | –           | –         |
| Other  | 25 (12.8)  | –           | –         |
| Perception of gardening as leisure <sup>2</sup>  |            |             |           |
| In your household, do you think gardening is typically a chore or a hobby                | –          | 3.89 (1.01) | 0.738     |
| Self-efficacy <sup>3</sup> ( $\alpha = .87$ , CR = .87)                                  |            |             |           |
| I can take actions that will revitalize the natural areas around where I live            | –          | 4.15 (0.97) | 0.716     |
| I am capable of learning what is needed to protect the environment                       | –          | 4.43 (0.91) | 0.857     |
| I believe that my actions will make a difference to beautify my community                | –          | 4.47 (0.86) | 0.843     |
| I can acquire the skills necessary to maintain natural areas in my neighborhood          | –          | 4.27 (1.07) | 0.763     |
| Collective efficacy <sup>3</sup> ( $\alpha = .79$ , CR = .81)                            |            |             |           |
| This community is capable of protecting the environment                                  | –          | 3.72 (1.32) | 0.576     |
| Members of my neighborhood can learn what is needed to revitalize their homes            | –          | 3.89 (1.09) | 0.770     |
| Acting together, the people living here can beautify this neighborhood                   | –          | 4.38 (0.86) | 0.793     |
| I am confident that my neighbors are capable of maintaining this community               | –          | 3.84 (1.23) | 0.745     |
| Social normative beliefs <sup>4</sup> ( $\alpha = .75$ , CR = .77)                       |            |             |           |
| Built or maintained a community garden or natural area in my neighborhood                | –          | 2.17 (1.27) | 0.683     |
| Helped to control flooding (e.g., built a rain garden) from rainwater in my neighborhood | –          | 1.72 (1.11) | 0.796     |
| Wrote a letter or email to support environmental issues that affected my home            | –          | 1.84 (1.12) | 0.678     |

<sup>1</sup>For each survey item, yes = 1, no = 0; index was summated to range from 0 to 11.

<sup>2</sup>Measured on a five-point response scale ranging from a very undesirable chore to a very enjoyable hobby.

<sup>3</sup>Measured on a five-point response scale ranging from strongly disagree to strongly agree.

<sup>4</sup>Measured on a five-point response ranging from never to often.

to assess model fit following Kline (2015). In this process, all survey items with factor loading scores below .40 were excluded.

## Findings

### Focus groups

Many of the Large Lot owners' responses focused on creative uses of the vacant land to develop a new identity and vision of their neighborhood. With the median length of time living in their neighborhood of 13 years, participants expressed the concern and care for their neighborhood. The lot became an easy point of entry for residents to discuss their aspirations to transform narratives of their block. Although the purchased lots are privately-owned space, the owners tend to use their lots as "quasi-public spaces" (Byers, 1998, p. 189), which are accessible to other neighbors as leisure settings (Johnson & Glover, 2013). Several key inter-related themes of the focus group were identified from the data including green leisure as resistance tied to (a) vacant lot beautification, (b) providing places to socialize and for kids to play, (c) efficacy, and (d) neighborhood transformation.

### ***Green leisure as resistance linked to vacant lot beautification***

Prior to the neighborhood's involvement with greening the lots, the vacant lots "hadn't been maintained in years" with "a lot of trash, weed, and dog poop" as described by a participant. Accordingly, they suffered heavily from "dumping," "illegal parking," and "a lot of prostitution."

Although cleaning up the lot could be a "labor-intensive job," many of the participants acknowledged that the act of greening and beautifying the lot could be a site of resistance against the aforementioned "unwanted activities" occurring in their neighborhood. This is exemplified by the following comment:

I'm into beautification, and I'm interested in having a lot that is developed so that when people walk by, it makes you want to stop and reflect. So whatever's on, whatever you're thinking about doing negative, you will not do. (Woodlawn, P8)

Other participants agreed with this communicative aspect of lot beautification stating:

When people start seeing that change, their conduct changes. (Woodlawn, P5)

If you're growing something, folks are gonna pay attention to it, and they tend to respect it. (Woodlawn, P6)

Focus group participants understood that public images of their neighborhood were tied to crime, neglect, decay and other symbols of blight. Yet these quotes illustrate greening and beautifying the vacant lot that resists such images of neglect, and rather communicate with others in ways that bring a positive behavioral change. Greening activities as leisure served to empower owners to affect change in the behavior of other people on their block. Lot beautification encouraged them to resist the neighborhood stigma and send a counter message of care and beauty.

### ***Green leisure as resistance linked to providing places to socialize and for kids to play***

Participants suggested that gardening in the vacant lot promotes common everyday interactions with other neighbors. One participant shared her story of communicating with other neighbors while engaging in green leisure as below:

When the first time I was cutting the grass, all these people were stopping me and going "what's going on?" People wanted to talk to me, and it was sweet. (East Garfield Park, P2)

Some participants described the private social events going on within a lot such as "having a picnic in the garden with family in the morning" (Woodlawn, P4). A number of participants intended for public leisure-based use of their private lots.

Several participants commented about the roles of the lots in providing the children in the neighborhood with a safe space for "*clean fun*" experience and social gatherings. One participant addressed the lack of leisure opportunities for young people in the neighborhood, and this awareness affected her engagement in using the vacant lot to make leisure possible for the kids in the neighborhood:

We've been having what you call a kid zone where we brought the Woodlawn family together to just have a festival. The children in the community don't get a chance to go around, to go to zoos or to amusement parks or museums. And we just wanted them to

have a good time of bonding and just kind of clean fun in the neighborhood. (Woodlawn, P9)

Many of the participants were aware of the struggles for their neighbors' kids that constrain leisure activities, and they attempted to use the lots as a place for the kids to develop leisure-related knowledge, skills, and experience. Some of the lots were used as a playground or community garden as the following quotes illustrate:

It's hard for a lot of little young kids to go places now or to be in front because they outside in the front, police come and tell them they gotta move. So that area [the lot] would be used something for them to hang in. (Englewood, P8)

They see the children in a garden now and how excited they are about seeing how things grow, they've never seen what a butternut squash is ... And it's just a heartwarming thing. (East Garfield Park, P5)

The participants' actions for the "common good" resist some stereotypes often associated with an under-served neighborhood and communities of color – that is, that they do not care about education and that they do not intervene in neighborhood problems. In contrast to these stereotypes, we observed residents' empathy, care, and concern for the children in the neighborhood who may have a limited number of safe leisure spaces in which they can socialize with other people and establish healthy friendships. The scarcity of safe leisure spaces tends to cause young people to engage in anti-social behaviors and deviant leisure activities. Furthermore, one participant pointed out that a beautified lot served purposes beyond leisure settings or esthetically pleasing places:

Kids need something to see ... wake up and see something that they can get a hold of it right now instead of going down the block and doing some foolishness. (Woodlawn, P6)

The participant perceived the lot as a significant source of communicating implicit messages to children about positive behaviors and attitudes.

### ***Green leisure as resistance linked to self- and collective efficacy***

Large Lot owners participating in the focus groups were aware of the dominant discourse of their neighborhoods – how their neighborhoods are being described and perceived by others as a "breeding ground for unwanted activities" (Englewood, P4). Despite this acknowledgment, a majority of participants have resided in the same neighborhood for more than a decade and even for three, four generations. The reasons participants remained in the face of such neighborhood stigma may vary, but participants generally resided in the neighborhood *by choice*, not because of a lack of other options as might be the stereotype. At times, participants projected a felt need to defend that they remained in the neighborhood, and reflected on their expectations for neighborhood revitalization which had been transmitted across generations, as illustrated by the following:

I remember [when] I was a child, my father always said, "never leave this neighborhood because it's gonna change." We always knew we wouldn't, we won't, we won't leave the neighborhood. (Woodlawn, P4)

Along with transmitted personal and collective beliefs about making changes, we learned the public memory of earlier neighborhood revitalization efforts in the form of shops and block clubs that would organize residents to make improvements through gardening, refurbishing, and function as a kind of political representation. While generations have changed, the participants discussed the potential of the Large Lot Program as a catalyst for re-invention and re-bonding of neighborly relations:

It kinda bonded us like I'm learning more about y'all. Where y'all live, y'all blocks, what y'all, like I feel like if nothing else, this particular action that we did, you know, haphazardly just got together and did it. (Englewood, P1)

Although we examined variabilities in the levels of efficacy in different individuals, the common understanding of the participants was a visible positive change in the neighborhood, which can lead to more enhanced confidence and efficacy about their ability to transform the neighborhood. This was well documented by one participant in Englewood, where more participants appeared to have a higher sense of efficacy compared to the other two neighborhoods:

I think if you guys come back and see after you give us some time, then you'll be able to see pictures of "wow, and that would be a nice piece on the news or something" ... [see] more of a transformation. (Englewood, P4)

The above quotes suggest that efficacy – the belief that residents as an individual as well as a group of people “have the ability at this point to sort of determine what happens” (East Garfield Park, P3) – plays a key role in promoting resistance toward the dominant narrative of the disrepute and downfall of the neighborhoods.

### ***Green leisure as resistance linked to transforming the neighborhood***

Green leisure has an importance beyond the individual enjoyment to be derived from participation. Many participants in the study connected the activities in the lot with broader social meanings and values. One participant, for instance, spoke about how beautifying the land can lead to improving her neighborhood's reputation and changing the narrative:

I even have people come up to me they moved into the neighborhood because of how the lot was beautified. Uhm, that people feel like good things are possible, that not just bottom feeders live here, that people who care are actually engaged on the ground, and so it changes the culture. (Woodlawn, P3)

This quote also indicates that green leisure as resistance in Chicago neighborhoods is not dialogue contained within the neighborhood, but signals to people outside any given block to notice and “hear” their messages. In a similar way, the contribution of green leisure to transforming the vacant lot has provided neighborhoods with opportunities for self-expression. The following comments were made about how green leisure has allowed the residents to assert their own cultural identity as a Black neighborhood, rather than being represented by others:

That's not my vision, that's [another organization's] vision. My vision is from a black cultural aspect of what this neighborhood was ... So I would be very open to talking “This is what was done here.” (Woodlawn, P12)

It allows us to tell our own story and it is a story so unlike the ones being told about Englewood. And it's time for us to take ownership of our community. (Englewood, P2)

Across three different neighborhoods, the common observation was the participants' hopeful perspectives to transform the narrative of the neighborhood despite the difficulties encountered.

### Survey results

Our research questions examined the extent to which lot owners' responses to the Cues to Care Action Scale would be influenced by a chain of variables, and we observed that all four hypotheses were supported.

Both the measurement model ( $\chi^2 = 72.03$ ,  $df = 41$ ,  $TLI = .96$ ,  $CFI = .95$ ,  $RMSEA = .062$ ,  $SRMR = .063$ ) and structural model ( $\chi^2 = 106.02$ ,  $df = 63$ ,  $TLI = .94$ ,  $CFI = .95$ ,  $RMSEA = .059$ ,  $SRMR = .068$ ) showed acceptable model fit. With perceptions of gardening as leisure being the exogenous variable, we examined the extent to which survey participants perceived greening their lots as being an enjoyable leisure activity ( $M = 3.89$ ,  $SD = 1.01$ ). Consistent with focus group findings, we found that two-thirds of survey participants (66%) considered gardening as a "very enjoyable" or "enjoyable hobby," compared to just 8% of respondents who reported gardening as either "very undesirable" or "undesirable chore." The remainder of participants (25%) reported a "neutral" position in response to this question.

Exhibited in both Figure 2 and Table 4, social normative beliefs had significant, albeit weak, predictive power on the cues to care action scale for lot greening ( $\beta = .16$ ;  $R^2 = .03$ ; H4). collective efficacy was positively correlated with the reported actions of the neighborhood ( $\beta = .33$ ;  $R^2 = .11$ ; H3). in line with other literature on efficacy constructs (e.g., Goddard et al., 2004), self-efficacy also influenced collective efficacy ( $\beta = .41$ ;  $R^2 = .17$ ; H2). We also found that participants' perception of gardening as an enjoyable hobby rather than an undesirable chore was positively related to higher levels of self-efficacy to take actions to improve the vacant lots of the neighborhood ( $\beta = .41$ ;  $R^2 = .17$ ; H1).

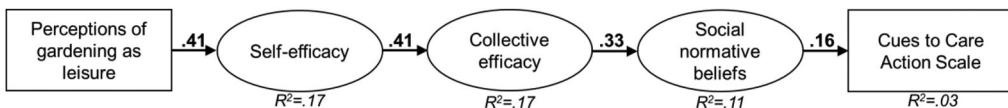


Figure 2. Path model with variables influencing Cues to Care Action Scale.

Table 4. Structural regression modeling results.

| Dependent variables      | Predictor                          | $\beta$ | SE  | $p$ -value | $R^2$ |
|--------------------------|------------------------------------|---------|-----|------------|-------|
| Self-efficacy            | Perception of gardening as leisure | .41     | .08 | <.001      | .17   |
| Collective efficacy      | Self-efficacy                      | .41     | .09 | <.001      | .17   |
| Social normative beliefs | Collective efficacy                | .33     | .09 | <.001      | .11   |
| Cues to Care Action      | Social normative beliefs           | .16     | .17 | .042       | .03   |

## Discussion

The primary objective of this study was to understand the intervening mechanisms of green leisure pursuits. Taken together, the study provides optimism for the applicability of green leisure as a strategy to resist the stigma of urban decay and assert a narrative for neighborhood revitalization. The study contributes insight concerning urban greening as resistance through a lens of leisure by focusing on evidence associated with Chicago's Large Lot Program.

Although our research was conducted at the initial stage of the program, most of the participants had already engaged in green leisure, such as cleaning up the lot, planting a garden, and making spaces to play and interact with neighbors. While greening the vacant lot could be seen as a chore, the combination of the findings from the focus groups and survey suggest that participants' behavior in greening their lots led to fulfillment and left a positive impact on their lives. Whereas the focus groups brought out their resistance and desire for transformation of their block and neighborhood, the survey brought out a narrative that began with gardening as leisure and ended with neighborhood efficacy to invest in vacant lot beautification. Findings from both methods were meaningful to address the research questions and hypotheses.

The first research question asks the extent to which greening a vacant lot aligns with qualities of leisure as resistance. Focus group findings indicated that resistance played an important role in creating their own story about their block and neighborhood. Participants framed greening activities in ways that suggest they were empowered to create a social dynamic for positive changes on their block. In doing so, they perceived greening as a strategy for collective resistance to the dominant reputation that their neighborhood is blighted and could not change. A visible effect of their behavior was an increased sense of efficacy that change happens when they work together. Such hope was not a recent awareness but had persisted for a long time given the mean age of our research participants being 61 years. This finding is closely aligned with Bandura's (2000) assertion that collective efficacy should be understood as "social dynamics" rather than a bidirectional relationship. The participants were also attempting to transmit such values to their children and other children in their neighborhood through leisure opportunities and modeling behaviors (Bandura, 1986). According to Bandura (1986), parents foster modeling not only by expressing it through their behaviors but also in unintentional ways by drawing attention to them. By observing patterns of behavior and their consequences, children's behaviors can be influenced by what parents are doing. Modeling involves more than just behavioral imitation, but also the transmission of "values, attitudes, and patterns of thought" (p. 47) that align with the behavior. In this respect, our study participants' engagement with green leisure – consciously or not – suggested a teaching strategy for the younger generations on the block.

The second research question asks the extent to which individual perceptions of gardening as leisure influence self-efficacy, collective efficacy, social normative beliefs, and investment in greening behavior. Findings from both the focus groups and survey analyses provided complementary insight to support the connections between gardening as leisure resistance that was associated with increased self-efficacy, and through social engagement of neighbors, resulted in collective action for change. In line with other recent studies on leisure as resistance (e.g., Acevedo & Stodolska, 2019; Jessup et al.,



2013), the participants framed leisure activities as working toward empowerment. What stood out in the focus groups was the extent to which shared, communal, public leisure provision was valued in the private lot. Unlike dominant interpretations of a disadvantaged neighborhood, many participants expressed care toward their neighborhood's well-being by opening their private lot to their neighbors.

Although public spaces such as urban local parks and green spaces tend to be used as leisure spaces for residents, other attributes such as the presence of gangs and personal safety concerns could be a substantial barrier to park use for groups of lower socioeconomic status and racial/ethnic minorities (McCormack et al., 2010; Rigolon et al., 2018). Because of such barriers, park development for under-served neighborhoods needs supplementing with creative strategies to provide outdoor leisure opportunities (Marcus, 2003). In their discussion of various kinds of quasi-public places to foster a sense of community, Johnson and Glover (2013) suggested several possible arrangements in which private owners could choose to allow other neighbors to use privately-owned spaces for neighborhood leisure but not for undesirable activities. Sampson et al.'s (1997) understanding of collective efficacy as "the willingness to intervene on behalf of the common good" (p. 918) explains such neighborhood interventions to address problems in the neighborhood.

Our path model also helped disentangled the complicated set of relationships that could influence green leisure. First, when people perceive greening as enjoyment rather than a labor-intensive job, people would be more likely to have a higher self-efficacy to take action on greening the lot and reviving the neighborhood (H1). The higher self-efficacy led to a stronger sense of collective efficacy for neighborhood transformation (H2). Results from this research indicated that social interactions with neighbors and beliefs about others' greening behaviors were inspired by hopes for transformation of neighborhood culture (H3). The views of other people, particularly neighbors, helped to explain why there were behavioral investments in beautifying places (Niemiec et al., 2020). For some participants, vacant lot greening was motivated by promises kept across generations, and for others it was about considering their relationships with neighbors to bring purpose to rekindling their home spaces. The results of the path model complemented those of the focus group. The CCAS was our final construct and used as an indicator of urban greening behavior. Although statistically significant, the relationship between collective efficacy and reported behavior was the weaker of the relationships tested by the model (H4).

Despite all hypotheses being supported due to the significant findings related to green leisure as resistance and urban neighborhood revitalization, the study was limited by using data obtained in the period of the initial stage of the program. Thus, our study revealed evidence that may be more hopeful than actual in terms of the initial signs of neighborhood transformation. To understand the sustainability of these changes, follow-up interviews and surveys in the same blocks could investigate the durability of changes and long-term impacts of the Large Lot Program. Also, we used a single-item indicator to measure "perceptions of gardening as leisure," alongside our other constructs that included multiple survey items. Another statistical limitation for this study was that leisure as resistance was not directly measured. Rather, we measured leisure as resistance using self-efficacy and collective efficacy, and given the support from our focus groups, judged our strategy to measure resistance as a reasonable assessment. While theoretical relevance between resistance and efficacy has been stated in this paper, future research

studies may enable a more direct examination of leisure as resistance. An additional limitation of this study could be the idiosyncrasies of Chicago's Large Lot Program that had an extensive pre-planning stage that engaged specific neighborhoods, and thus, the relationships we found could be artifacts of Chicago's pre-planning process. As part of this limitation, blocks and neighborhoods are distinct geographic scales. Although there is promising evidence that supports a lot-by-lot greening hypothesis that builds connection between these scales (Gobster et al., 2020), further research on such spatial contagion is warranted. Finally, future research should be designed to compare with "control sites" where lot purchases had not been made but associated with similar socio-demographic characteristics (see Branas et al., 2011, for their difference-in-differences analysis).

## Conclusions

Across the variety of urban greening strategies, each comes with its context to influence the relative power of individuals and neighborhood groups (Westphal, 2003). Given the diverse characteristics of each neighborhood, policy choices that rely on residents' engagement in green leisure have potential to increase neighborhood collective efficacy. By actuating leisure as resistance to neighborhood stigma and marginalizing public discourse, the Chicago Large Lot Program has left many residents with hope for a transformed culture of their block and neighborhood. This study has implications that emphasize the possibility of vacant lot re-purposing programs led by residents as property owners without the need for city governments or nonprofits to care for lot maintenance and upkeep. With green leisure as an underlying force of change, residents could be empowered in a history-making that resists dominant discourses of urban decline and revitalizes their neighborhoods. In other words, municipalities whose policies recognize the empowering capacities of leisure could facilitate neighborhood revitalization.

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