

Article

Citizen Science in Sweden's Stigmatized Neighborhoods

Terence Fell ^{1,*}, Tove Rydenstam ², Benti Geleta Buli ², Abby C. King ^{3,4}  and Katarina Bälter ^{2,5}

¹ Division of Political Science and Economy, Mälardalen University, 72123 Västerås, Sweden

² Division of Public Health Sciences, Mälardalen University, 72123 Västerås, Sweden; tove.rydenstam@mdh.se (T.R.); benti.geleta.buli@mdh.se (B.G.B.)

³ Department of Epidemiology and Population Health, Stanford University School of Medicine, Stanford University, Stanford, CA 94305, USA; king@stanford.edu

⁴ Stanford Prevention Research Center, Department of Medicine, Stanford University School of Medicine, Stanford University, Stanford, CA 94305, USA

⁵ Medical Epidemiology and Biostatistics, Karolinska Institute, 17177 Stockholm, Sweden

* Correspondence: terence.fell@mdh.se; Tel.: +46-73-6620811

Abstract: Based on the synthesis of outside versus inside perspectives, this paper weighs the positive attributes of the so-called deprived place against its negative media image. Applying the concept of territorial stigmatization, small-scale citizen science was conducted to gain a unique understanding of the Swedish neighborhood from within. With the United Nations' Sustainable Development Goal 11 in mind, this approach enables researchers to reach otherwise difficult to access young urban outcasts and probe the potential to overcome their community's lack of political influence. An overlap between local media narratives and urban outcasts' perceptions of "drug and crime" and "football and school" was revealed. Yet, this first-generation study also painted a somewhat different picture of the stigmatized neighborhood, supplying new insights about places that matter most for marginalized young males. In this Swedish case, their pictures revealed that the local corner market, football court and youth club act as an antidote for the effects of stigmatization. This Our Voice citizen science initiative proved to be a good measure of two communities' abilities to withstand stigmatization, which is either tainted by false perceptions from the outside or weakened by crime from within. Finally, attempting to bypass structural discrimination, citizen scientists' findings and researchers' conclusions were made available to students, colleagues and guests at a poster presentation hosted by Mälardalen University and to concerned politicians from Eskilstuna City Hall as well as the broader public via a local Swedish television station.



Citation: Fell, T.; Rydenstam, T.; Buli, B.G.; King, A.C.; Bälter, K. Citizen Science in Sweden's Stigmatized Neighborhoods. *Sustainability* **2021**, *13*, 10205. <https://doi.org/10.3390/su131810205>

Academic Editor: Corrado Battisti

Received: 13 August 2021

Accepted: 10 September 2021

Published: 13 September 2021

Keywords: citizen science; urban outcasts; city; community; engagement; stigmatization

1. Introduction

It is a well-known fact that social processes such as spatial segregation, subsequent policies and media coverage stigmatize specific places and discredit their already marginalized residents [1,2]. Recent Swedish studies [3–7] focusing on cities outside of Stockholm confirmed the ubiquity of spatial segregation. Their findings suggest that the stigmatization of poor places is widespread [8]. They also suggest that the stigma may be associated with public perception. However, these studies cannot tell us in which ways stigma is "an obstacle on the path to civic participation" [9]. This article's contribution is embedded in its ambition to fill this gap in international research.

By now, citizen science is a proven and well-established method for collecting data concerning the UN's seventeen sustainable development goals (SDGs). From a search of citizen-science-related articles published in the Sustainability journal between 2020 and 2021, it is obvious that most pertain to good health and well-being (SDG 3), quality education (SDG 4), clean water and sanitation (SDG 6), affordable and clean energy (SDG 7) and life on land (SDG 15) [10–15]. Despite this extensive use of the citizen science method, it is, with SDG 11 (Sustainable cities and communities) in mind, seldom applied to penetrate

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

the social and physical boundaries of stigmatized places. Thus, the stigma of place is considered herein to be a barrier in the way of achieving the United Nations' Sustainable Development Goal (SDG) 11.

With this in mind, there is a need to test new methods that include the perceptions of marginalized and politically disenfranchised residents. In particular, the article connects to the work by Doron [16] and Crang [17], which contrasted photography and interview as a means of investigating stigmatized places. In this Swedish case, the focus was on empowering young, marginalized males as citizens to capture, through the lens of their smartphones, how they perceive the neighborhoods in which they live. Using Wacquant's [18] definition of "urban outcasts", these young males are portrayed as dispossessed and deprived metropolitans [19], living in a contradiction between their social reality and public perception [18]. As citizen scientists, however, these individuals have the opportunity to supply knowledge to the research community that allows them to inform politicians and other concerned actors on how to bridge the outside–inside neighborhood perception gap. By depicting their neighborhoods' social and physical contexts, young urban outcasts have a voice [20]. In fact, citizen scientists often report that they feel more a part of their communities in terms of social engagement and participation [5]. In essence, this "view from within" is applied in this article as a counter perspective to a negative media-based public perception. The citizen science method has been shown to have the advantage of spreading civic culture, bringing otherwise invisible issues into the light of day and empowering, via representation, an otherwise politically weak community [21]. From this situation of inclusive citizenship, researchers and citizen scientists can address the United Nations' SDG 11. The point of this approach is that citizen scientists should be involved without having the researchers advocate for them.

However, countering the massively negative picture of stigmatized places among outsiders not living in those places, such as many politicians, are "calls for the voices of the marginalized to be heard in policy making" [22] (p. 53). This was one of the aims of the Neighbourhood Sustainable Lifestyle and Activity (NESLA) project (2018–2020), which had a particular focus on letting local youths identify the facilitators and barriers in the way of their health, lifestyles and sense of safety. In particular, young male residents were engaged to depict two stigmatized places, Fröslunda and Skiftinge, from within.

Contributing to the production of territorial stigmatization [19], The Swedish police [23] annually identifies and sorts Sweden's 60 most deprived neighborhoods into one of three special status categories. Being categorized as either "deprived" [24], "at risk" [4] or "specially deprived" [25] is telling the world that these places are characterized by specific negative neighborhood effects such as a low socioeconomic status (SES), high exposure to gang-related criminality and (religious as well as nationalist) radicalization [2,25]. Specially deprived places are on a trajectory to becoming what are sometimes viewed by the police as "no-go zones" [23].

In this context, and in line with Wacquant and his colleagues, "special cases" such as Stockholm's Rinkeby, Tensta and Fittja are viewed as anti-ghettos, that is, poor, multi-ethnic and culturally fragmented places [8]. The two stigmatized neighborhoods in focus here are Skiftinge and Fröslunda in the middle-sized city of Eskilstuna. Both have deprived status, are anti-ghettos, are home to urban outcasts and constitute a large part of the city's urban periphery (see Figure 1). Here gangs of young males and their criminality add to an already negative media picture and public perception of these neighborhoods, prompting officials to implement draconian measures. For instance, the political majority in the city of Eskilstuna state that:

Young men who, instead of taking advantage of the opportunity to study, work and live a good life, choose to sell drugs, or challenge the municipality's monopoly on violence will face the full force of the law. If they need to be locked up, so be it. However, if they want to choose a new path and return to society, they are welcome back [26] (p. 8).



Thus, the point this article alludes to is that the media, police, politicians and other outsiders often paint an unfair and stigmatizing picture of poor places, without nuances, possibly ignoring otherwise important positive aspects of their social and physical contexts.

The aim of this article is twofold. First, extrapolating on the NESLA project's findings, the potential of resident depiction as a citizen science method and as a means to describe the social and physical reality of a stigmatized place "from within" is probed, that is, whether this method adds to or confirms the public perception of these so-called deprived neighborhoods. Second, against the background of a city-wide negative media image, and based on this synthesis of outside versus inside perspectives, an otherwise absent synergy is created between citizen science and territorial stigmatization where the attributes of place are weighed against its residents' ability to engage in and sustain their community. Moreover, their perceptions of the social and physical context that influences their lives are transmitted by researchers (the authors) to outside actors such as politicians, bureaucrats, colleagues and the media. Arguably, the methodological strength of this approach is that it contributes to reducing the imbalance between theoretical and empirical work in the field.

1.1. Eskilstuna and Its Stigmatized Neighborhoods

The city of Eskilstuna is an archetypical middle-sized city in Sweden but deviates in two ways: first, it is home to several stigmatized neighborhoods where a majority of residents (63%) have a foreign background (Table 1), which, second, correlates with the fact that 26% of the city's denizens are foreign-born [27]. The municipality spans 1250 km² located between two of Sweden's largest lakes, Lake Mälaren and Lake Hjälmaren. To the east, Lake Mälaren connects to the Baltic Sea through the Swedish capital, Stockholm, which is located about 100 km to the east. The biggest city in the municipality, with about two-thirds of the municipality's 100,000 inhabitants, is also named Eskilstuna.

Table 1. SES in stigmatized neighborhoods. Source: Statistics Sweden [27].

| | Skiftinge | | Fröslunda | | Eskilstuna | |
|--------------------------------------|-----------|-----|-----------|-----|------------|-----|
| | N | % | N | % | N | % |
| Population by origin of birth (2017) | | | | | | |
| Born in Sweden | 1766 | 37 | 2805 | 37 | 69,294 | 66 |
| Foreign background ¹ | 3071 | 63 | 4805 | 63 | 35,415 | 34 |
| All | 4837 | 100 | 7610 | 100 | 104,709 | 100 |
| Education (2017) | | | | | | |
| Lower Secondary | 630 | 24 | 1304 | 33 | 8965 | 16 |
| Upper Secondary | 1210 | 47 | 1758 | 44 | 28,806 | 50 |
| Tertiary | 732 | 28 | 941 | 24 | 19,333 | 34 |
| All | 2572 | 100 | 4003 | 100 | 57,104 | 100 |
| Income (2016) | | | | | | |
| Annual mean income of labor | | 74 | | 63 | | 100 |

¹ Residents with a foreign background were either born in another country or have parents that were both born in another country (Statistics Sweden: SCB).

Built between 1965 and 1974 and having a high priority in Swedish housing politics at the time, both the Fröslunda and Skiftinge suburbs were part of the Swedish "million homes programme" (MHP). The program's political aim was to eradicate overcrowded households. As a result, and until the mid-1990s, a lot of suburbs had no green areas and many buildings and apartments were substandard [28]. Since the neoliberalization of the Swedish housing market in the mid-1990s, and evident in their deprived status [23], the SES of households in Fröslunda and Skiftinge, like many other MHP neighborhoods, has declined considerably.

1.2. Depicting Two Swedish City Suburbs

When we compare SES, communities in both ethnically diverse places appear similar (Table 1). Once a model MHP neighborhood (see Figure 2), Fröslunda, with 7600 inhabitants,

is the larger of the two (Table 1) and can be found directly south of the city center (Centrum in Figure 1).

Fröslunda borders another of the city's "deprived" neighborhoods (Lagersberg) and an old industrial zone (Vilsta). Until the end of the 1990s, it was known for being home to a majority of Eskilstuna's Finnish community, one of the biggest outside of Finland and Stockholm.



Figure 2. Fröslunda civic center 2020.

Today, residents of Fröslunda come mostly from Somalia or Syria and have, as of yet, little political influence in terms of legal citizenship and under-average participation (Table 2). While the Fröslunda neighborhood and its center have not changed physically (Figure 2), its local commerce, however, has deteriorated dramatically.

In line with the general “white flight” process in Sweden, most of the neighborhood’s Finnish and Swedish residents have moved out and with them many old businesses, including a florist, café, pizzeria and the local supermarket. One reason for this is evident in the caption of Figure 3, which portrays a typical scene in Fröslunda in 2019. In this case, it captures police disrupting drug dealing in the civic center near the “soon to be closed” supermarket. The local youth club, a focal point in our study, is in a school building close by. Now, two years later (2021), giant blue placards have replaced shop signs, proclaiming plans for the renewal of the neighborhood (Figure 4). This kind of project is a contradiction in terms. On the one hand, it is well-meaning. On the other, it symbolizes a sublime reinforcement of the stigma of place, that is, current negative public perception of Fröslunda as an unsafe and hostile place.

On the opposite side of the city and north of the E20 highway (Figure 1), Skiftinge with its ca. 5000 residents has the same deprived status as Fröslunda. Its community deviates from that of Fröslunda in the sense that it has lived longer in Sweden, is predominantly Middle Eastern and has a higher proportion of legalized citizens (Table 2). It also boasts a popular hypermarket. However, Skiftinge’s civic center, with a small shop, pizzeria and a youth club called Palatzet, the second focal point of this research, is smaller than Fröslunda’s and more enclosed. Also, a product of the MHP, it is surrounded by high-rise buildings (Figure 5).

The pictures in Figures 2–5 were taken by the NESLA research group and display a typical view of two territorially stigmatized Swedish city suburb neighborhoods as often experienced by passers-by, or as portrayed in the media. It is against the background of

this common public image that urban youths are given the possibility as citizen scientists to depict their neighborhood.



Figure 3. Police disrupt drug dealing near the ICA supermarket in Fröslunda center 2019.



Figure 4. Signs about making Fröslunda's civic center "pleasant and safe" (2021).



Figure 5. Part of Skiftinge’s civic center, graffiti and typical high-rise buildings.

1.3. Theoretical Implications of Citizen Science

One key point of the citizen science method applied in this article is that the observations and impressions of people at a given place matter just as much as what is said in statistics about material and social facts that constitute the usual kinds of social-science-based analysis and mapping. This is taken into account when addressing the theoretical implications of citizen science in territorially stigmatized places. Larsen and Delica [19] (p. 542) defined territorial stigmatization “quite simply as a negative public image of specific places, which enforces a symbolic dispossession of their inhabitants, which in turn not only recasts them as social or urban outcasts but also deprives them of their collective representation and identity.” Jensen and Christensen [24] (p. 77), referring particularly to the Swedish context, defined territorial stigmatization as “... social and media discourses which demonize the terms of living in a way that causes fear and insecurity both internally and outside of these areas”. Although most Swedes will never visit Stockholm’s most infamous places, those “living in the country’s remotest villages recoil in fear and loathing at the mere mention of Rinkeby, Tensta and Fittja” [8] (p. 1273). The implication for citizen science is that the young males recruited as citizen scientists are urban outcasts, that is, not just deprived of social mobility, representation and identity but also feared and demonized in the media. From this, a second key point is that it is not just local facts and impressions that account for the directions of policy making and planning but even the image that is co-produced by various media such as a local newspaper.

There are two schools of thought regarding the consequences of territorial stigmatization. The first maintains that urban outcasts are resigned to social degradation, while the second maintains that urban outcasts are aware of and resist it [24]. Irrespective of these consequences, citizen science can potentially give the “urban outcast” a voice, overcoming

a lack of a collective identity, resignation [18] and weak citizenship (Table 2). Thus, visualizing these places from within, that is, from the perspective of the urban outcast, is a way to challenge, confirm and/or appease adverse public perceptions concerning the image of Eskilstuna's urban periphery. In line with the focus of the UN's SDG 11, citizen science is also a way to circumvent the obstacles in the way of setting the stage for practical solution building. Two territorially stigmatized places (anti-ghettos) were identified where young urban outcasts' citizenship, that is, living in a particular locale without regard to legal status, can be activated by having them share, through photo taking and audio-narratives, their physical and social realities.

Two strands in citizenship theory have implications for citizen science (see, among others, [20,22,29–31]). The oldest implies that citizen science is conducted in places where the discrimination and marginalization of their residents is normalized [29,31]. The more recent strand adds to the first by highlighting the fact that the marginalization of citizen scientists, their families and community is also a consequence of exclusive legal citizenship rules [22,30,32–34]. Citizen science can help to bypass the problems identified in both strands by empowering residents to document their immediate surroundings. Subsequently, researchers can gain knowledge from young urban outcasts' pictorial documentation that can begin to counteract their family's and community's lack of influence in local politics (Table 2).

However, in ethnically diverse neighborhoods, it is noteworthy that the image of a “close-knit community life among the poor is romantic”, according to Putnam [35] (p. 207), “since this group tends to be socially isolated, even from its neighbours”. Wacquant [18] (p. 116) explains why:

In response to spatial defamation, residents engage in strategies of mutual distancing and lateral denigration; they retreat into the private sphere of the family; and they exit from the neighbourhood (whenever they have the option).

A Danish study of the Aalborg East neighborhood [24], and suggestive of a pride of place [32], suggested that potential citizen scientists from either Fröslunda or Skiftinge will either feel “sadness and anger” or “shame and guilt” with which Wacquant [18] associated spatial defamation. Irrespective of their driving force, it can be argued that small groups of resident citizen scientists can overcome this social isolation barrier [36] and visualize the context of their neighborhood. Because territorial stigmatization has deprived citizen scientists of collective representation and identity [19], the NESLA project's aim was to empower young urban males living in these under-resourced communities to portray both the positive and negative attributes of those aspects of their social and physical realities. From this, and by adding a media- and politics-based public perception element, we can determine if the claim of fear and prejudice is warranted.

2. Choice of Citizen Science Technique for Data Collection

This version of citizen science (see below) applied here gathers data in a unique way. First, it only requires a small number of active participants (ca. 10–12), which is typically sufficient to paint a picture of their neighborhood [21]. Second, it applies the latest and now widely available technologies (smartphones) and digital tools (apps), allowing easy and smooth access to otherwise difficult to obtain data. In the present study, young males (between 16 and 18 years of age) were instructed to install the mobile app called the Stanford Healthy Neighborhood Discovery Tool (Discovery Tool for short) on their smartphones, go for a walk in their neighborhood, take pictures and record audio narratives regarding the different features of the local environment that they portray in their pictures.

Inspired by Winter, Goldman Rosas, et al. [21] and similar projects comprising Stanford University's Our Voice Global Citizen Science Research Initiative [37], the Neighborhood Sustainable Lifestyle and Health among Adolescents (NESLA) study applied the following modus operandi:

1. Using the Discovery Tool, young males collected data consisting of their self-rated community influence, barriers and facilitators that they perceived lead to either a

bad or a good social and physical context, as well as their reflections on the collected data. Thereafter, all photos were reviewed together with a project researcher where the citizen scientists had the opportunity to reflect on their documentation and share additional information for 10–30 min (September to December 2018).

2. Researchers analyzed the data and categorized it collectively (January to March 2019).
3. Researchers arranged a “citizen science poster presentation” at Mälardalen University’s annual Political Science Day on the 8 April in 2019. They also presented citizen scientists’ pictures to local politicians and bureaucrats in the local government’s Special Committee on Segregation on the 7 May 2019 as a basis for a dialogue on how to improve the situation of residents in Fröslunda and Skiftinge.

In initiating this work, the authors contacted leaders at local youth clubs in four neighborhoods in two middle-sized cities (Fröslunda and Skiftinge in the city of Eskilstuna as well as Bäckby and Råby in the city of Västerås), gaining permission to visit them. The Västerås study [5] also applied the citizen science method but focused instead on the relationship between neighborhood context and young residents’ (both male and female) physical activity.

The youth club in Sweden is neighborhood-based and opens weekdays at 1800 hrs. for local youths under 18 years, but it can also attract youths from adjacent neighborhoods. The youths were first reluctant to get involved; however, when we became the focus of the youth club leaders’ attention, they too became interested. A voucher to the local cinema proved to be a major incentive for recruitment. A total of 23 young males with a mean age of 16.6 (± 1.03) years were recruited onsite at the local youth clubs in Fröslunda (11) and Skiftinge (12).

Eligibility criteria for participation included being between 16 and 18 years old and possessing a smartphone compatible with the Discovery Tool (i.e., iPhone 5, or later versions, or Android 2.3). The initial aim of the NESLA project was to include young males and females in the Eskilstuna study, but it became apparent that young females usually did not attend the youth club in Fröslunda, and the few young females present at the youth club in Skiftinge declined to take part in the study. This fact that young females could not be recruited is not downplayed here. The authors are aware that the focus of this citizen science activity will be less representative. For instance, it is conceivable that young men are more interested in sports (a unique and central point in the coming analysis) than young women are.

The information collected using the Discovery Tool app is innovative in as much as it includes geo-coded photographs and audio narratives, data on positive or negative attributes of the neighborhood (portrayed as a happy and sad smiley face in the app), GPS-tracked walking routes and an eight-item survey capturing citizen scientists’ age, gender, perceived health and education level as well as perceived level of influence in their community. In total, 117 photos were taken, and data signifying whether the photo was perceived as a positive or negative feature of the local environment were added to 91 of these. A review of all photos together with a project researcher where the citizen scientist had the opportunity to reflect on their documentation lasted for 10–30 min.

Photo and audio files were analyzed thematically by three researchers (T.F., T.R., B.G.B.). Audio files were transcribed verbatim, and additional comments that emerged during the group discussion between citizen scientists and researchers were manually transferred to electronic format. The researchers coded the raw data into main categories based on each photo’s theme and from keywords in associated audio files and written comments. If a recording included more than one element, it was coded into more than one category. The research group agreed on three social and eight physical elements.

As a means to the end of gaining a comparable outside perspective, the dominant city newspaper, *Eskilstuna Kuriren*, was selected to portray events in and around the citizen scientists’ neighborhoods. A total of 100 articles posted online over a nine-month period spanning between October 2020 and June 2021 were reviewed to gain a quick snapshot of the public’s perception of Skiftinge and Fröslunda.

3. Results

3.1. The Political Character and Public Perception of Fröslunda and Skiftinge

It is pivotal to make the point that spatial segregation does not just deprive stigmatized neighborhoods of social diversity; it also limits local commerce there. This reflects on the citizenry, particularly their political engagement. For instance, in relation to voting in the latest general election (2018), it is evident that very few adult urban residents living in these locales engage in the formal political structure (Table 2). This is explained mostly by the low level of legal citizenship. Only one-third of adult residents in both places have formal citizenship. Of the two neighborhoods, Fröslunda has the lowest proportion of formal citizenship (26%). Because of this, and evident in the under-average voter turnout in both places, only one-quarter of the total adult community vote in elections compared with over 60% in the city as a whole (Table 2) [38,39].

Table 2. Legal citizenship and voter turnout in the 2018 general election. Source: Statistics Sweden [40].

| | Population | | Swedish Citizenship | Voter Turnout |
|-------------|------------|-----|---------------------|---------------|
| | N | % | % | % |
| Skiftinge | 4837 | 5 | 42 | 72 |
| Fröslunda | 7610 | 7 | 26 | 70 |
| Both Places | 12,447 | 12 | 33 | 71 |
| Eskilstuna | 104,709 | 100 | 72 | 85 |

Before contrasting the limited voice of the urban outcast with its mainly negative media image, it is important to determine who is being empowered and by how much. The authors show here that perceptions of community influence vary depending on place. Almost half (48%) of the youth citizen scientists agreed with the statement “I can influence decisions that affect my community” (see Table 3). Note, however, that while eight (out of twelve) boys in Fröslunda agreed with this statement, only three (out of eleven) agreed in Skiftinge (Table 3). The higher estimate of influence reported by boys in Fröslunda relative to Skiftinge suggests that citizen science may be more emancipatory for young males in Skiftinge.

Table 3. Young males’ self-rated community influence ($n = 23$).

| | Agree | Neutral | Disagree | Total |
|-----------|---------|---------|----------|----------|
| Skiftinge | 3 (28) | 4 (36) | 4 (36) | 11 (100) |
| Fröslunda | 8 (67) | 1 (8) | 3 (25) | 12 (100) |
| Total | 11 (48) | 5 (22) | 7 (30) | 23 (100) |

3.2. Fröslunda and Skiftinge in the Public’s Perception

Of a total of 100 articles in the local newspaper (*Eskilstuna Kuriren*) concerning or pertaining to Skiftinge, almost half (45%) were negative, a minority (15%) were positive and the rest (40%) were neutral [41]. The negative articles described either criminal activity (35 articles) or conflicts about new housing plans (10 articles). The positive articles concerned issues of commerce and infrastructure (15 articles), rarely ever community issues. Neutral articles concerned, for instance, aspects of housing such as which companies plan to build new homes, etc. Examples of criminality described in Skiftinge pertained to using surveillance cameras in a bid to combat crime [42], an arson attack on a local pizzeria [43], police brutality [44], assault and battery [45], threatening police officers [46] and multiple arson attacks on automobiles [47]. An example of specific crimes that influence public perception is the murder of a local 35-year-old man in a suspected drug-related incident. When interviewed by the local TV station concerning the murder, one resident said that

“there is an uneasy feeling in the neighbourhood; many older residents don’t dare go out (author translation)” [48].

In Fröslunda, the picture is more positive. Although over half (60%) of the articles were negative and resembled the character of those that describe Skiftinge [41], several articles (10 articles) focused on the success of the local football team (Syrianska Eskilstuna FC) and the improvement of the international English (primary) school (six articles), which mirrors an overall positive trend in that neighborhood since 2019 [23]. Nevertheless, when the name Skiftinge or Fröslunda becomes synonymous with the vice and violence portrayed by *Eskilstuna Kuriren* and the local TV station (SVT), “a taint of place becomes superimposed onto the stigmata of poverty and ethnicity” [9] (p. 116).

This taint of place is compounded by gang-related crime, which has led representatives of the city’s political majority to act. In the annual plan for Eskilstuna [26], leading politicians express the need to implement draconian measures that they believe will deal with “a growing insecurity” among the city’s denizens. They frame insecurity as “a threat against [denizens’] individual liberty and democracy” and associate the “threat” with gangs of young male urban outcasts in what they call “prioritized neighbourhoods” [26], of which Fröslunda and Skiftinge are just two. Among the draconian measures presented by the political majority are:

... increased targeted police surveillance of criminals and drug-dealing in combination with an expanded camera surveillance ... The police are building a new and modern police station and the municipality is pushing through plans for the construction of a new detention centre ... [26] (pp. 9–10).

This, in essence, is the political response to the current public perception of young male urban outcasts and their crime as portrayed in the media. Thus, marginalized residents in these neighborhoods are now becoming even more stigmatized [22,30]. Moreover, the tone of the city’s political majority is hardening.

Drug-dealers and people that create insecurity will be banished to allow residents to retake their neighbourhoods. This will be accomplished by cooperating with local commerce and the police. We also want an increased investment in security guards, especially in those neighbourhoods where the need is greatest [26] (p. 9).

As the above quotes imply, the pronounced ambition of politicians is that local communities in these anti-ghettos can return to some vestige of normality. However, these measures do not include cooperating, or engaging, with residents or representatives of the community, which is the aim of this citizen science. Researchers already know that this “politics of public perception” may miss the mark if it is not calibrated locally by the residents that constitute the community of Fröslunda and Skiftinge [24].

3.3. The Social Neighborhood from Within

After being briefed by the researchers, citizen scientists began their walks from the local youth club (situated near the civic center) in Fröslunda and Skiftinge, gradually fanning out individually or in pairs (not all young males owned a smartphone, and thus sharing was not uncommon), moving deeper into, and documenting, their neighborhoods.

Although based on relatively modest amounts of data, perceptions of their social context appeared to differentiate citizen scientists in Skiftinge from those in Fröslunda (as seen in Tables 4 and 5). From their pictures and audio narratives, the research team interpreted the perception of the social context as mostly positive in the former, whereas a more nuanced picture was painted in the latter. This is an interesting finding and shows that young male residents of Fröslunda are concerned about groups of older males and crime to a larger extent than residents of Skiftinge. Conversely, citizen scientists’ pictures and audio narratives reveal that the youth club in both neighborhoods is very popular and the hub in young males’ social context. A citizen scientist from Skiftinge expressed this sentiment as follows:

Palatzet [the local youth club] is the best place around. Many young people come here instead of going down the “wrong road”. We learn a lot here; we learn how to meet others (Authors’ translation: see Figure 6).

Table 4. Photos of young males’ perceptions of social context in Skiftinge, 2018.

| Coded Elements | Perception | | | | | |
|----------------|------------|-----|-------------|----|---------|----|
| | Total | | Facilitator | | Barrier | |
| | N | % | N | % | N | % |
| Youth club | 4 | 80 | 4 | 80 | 0 | 0 |
| Gangs of men | 1 | 20 | 0 | 0 | 1 | 20 |
| Crime | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5 | 100 | 4 | 80 | 1 | 20 |

Table 5. Photos of young males’ perceptions of social context in Fröslunda, 2018.

| Coded Elements | Perception | | | | | |
|----------------|------------|-----|-------------|----|---------|----|
| | Total | | Facilitator | | Barrier | |
| | N | % | N | % | N | % |
| Youth club | 7 | 46 | 7 | 46 | 0 | 0 |
| Gangs of men | 4 | 27 | 0 | 0 | 4 | 27 |
| Crime | 4 | 27 | 0 | 0 | 4 | 27 |
| Total | 15 | 100 | 7 | 46 | 8 | 54 |

This sentiment is shared in the comments to photos taken by other citizen scientists in the study. This finding is corroborated by earlier research. The youth club can, according to Kay and Bradbury [49], provide marginalized young males with strong individual benefits such as creating opportunities to increase social connectedness in a range of contexts, including more empathy for other social and ethnic groups in and outside of neighborhoods such as Fröslunda and Skiftinge.

Flipping the neighborhood coin and matching other studies [50,51], it is also evident that young males in both neighborhoods are repeatedly exposed to social incivilities such as derogatory or demeaning language and street harassment. For instance, when prompted to describe his photos of a local football court, one citizen scientist from Fröslunda said:

When we play in the football court older boys come and take over, they steal our ball too. They are bigger than us, like 20 years old or so and they smoke weed in front of us. We do not want them here (Authors’ translation; Figure 7).

Another type of social incivility concerns the schoolyard behind the youth club in Fröslunda, as shown in another citizen scientist’s comment:

I do not like this place because of peer pressure, older boys smoke and do illegal stuff here and I do not like that. So that’s negative (Authors’ translation; Figure 8).

Commenting on their pictures, citizen scientists from Fröslunda revealed their exposure to these types of social incivilities. This, according to Schreck and Miller [52], is problematic because young males in places such as Fröslunda and Skiftinge are not just treated like urban outcasts but are also exposed to delinquents, or share spaces with them, and are likely to witness actual crime, hear about the victimization of others or even be threatened with retaliation. Citizen scientists’ comments also refer directly to other negative aspects of the social context in Fröslunda and confirm that older youths, their crimes, bullying and peer pressure are commonplace and interconnected (as in Tables 4 and 5). Other negative attributes of the social context such as exposure to drug use may also have adverse effects on young males in both neighborhoods [53]. However, even if drug dealing is prevalent, it does not, in contrast to their equivalents in Fröslunda and public perception in general, seem to be an issue for young males in Skiftinge (Table 5).



Figure 6. Inside the Patatzet youth club in Skiftinge.



Figure 7. Small football court where conflicts between young and older boys occur.



Figure 8. Behind the primary school in Fröslunda where older males smoke weed.

3.4. The Physical Neighborhood from Within

Besides the usual symbolic features of the neighborhood's physical reality such as buildings, parks (green areas), amenities, street lighting, etc. [53–55], some features described by the citizen scientists were specific to the Swedish context such as Swedish-style bicycle lanes [5]. Other research shows that, all told, this kind of infrastructure also generates or influences residents' perceptions of walkability and safety [21,56].

To begin with and concerning positive perceptions of the physical context in both places, citizen scientists' pictures of both neighborhoods focus foremost on amenities, sports facilities and parks, which they describe positively (as in Tables 6 and 7). To reiterate, the ubiquitous ICA supermarket was forced to close in 2019 (see Figure 3) and was replaced by a small, but much appreciated, corner market (Matnära). The appreciativeness of the corner market is commented on by one young male in Fröslunda. He said:

In this shop, we usually buy things after we play football; it is cool. It is the closest shop, and it is very cheap; it is a good shop. It is a very good place here (Authors' translation; Figures 7 and 11).

The prominence of the small corner market in young males' pictures of the neighborhood's physical context is explained in two ways: first, because it has "fresh and lower priced food more easily available", and second, because it manifests the neighborhood's resistance to crime and decline [57] (p. 1225). In other words, the loss of the ICA supermarket in 2019 was not a crucial blow to residents', and particularly young males', pride of place because the corner market now symbolizes Fröslunda's resistance to stigmatization (as in Figure 11).

Table 6. Photos of young males' perceptions of physical context in Skiftinge, 2018.

| Coded Elements | Perception | | | | | |
|-------------------------------|------------|-----|-------------|----|---------|----|
| | Total | | Facilitator | | Barrier | |
| | N | % | N | % | N | % |
| Amenities | 14 | 29 | 13 | 27 | 1 | 2 |
| Sport facilities | 6 | 13 | 6 | 12 | 0 | 0 |
| Parks, playground/outdoor gym | 8 | 17 | 7 | 15 | 1 | 2 |
| Street lighting | 11 | 23 | 3 | 6 | 8 | 17 |
| Parking spaces | 5 | 10 | 4 | 8 | 1 | 2 |
| Aesthetics | 2 | 4 | 1 | 2 | 1 | 2 |
| Bike and walkability | 2 | 4 | 2 | 4 | 0 | 0 |
| Public transport | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 48 | 100 | 36 | 74 | 12 | 26 |

Table 7. Photos of young males' perceptions of physical context in Fröslunda, 2018.

| Coded Elements | Perception | | | | | |
|-------------------------------|------------|-----|-------------|----|---------|---|
| | Total | | Facilitator | | Barrier | |
| | N | % | N | % | N | % |
| Amenities | 16 | 33 | 15 | 30 | 1 | 2 |
| Sport facilities | 16 | 33 | 16 | 33 | 0 | 0 |
| Parks, playground/outdoor gym | 13 | 26 | 13 | 26 | 0 | 0 |
| Street lighting | 1 | 2 | 1 | 2 | 0 | 0 |
| Parking spaces | 0 | 0 | 0 | 0 | 0 | 0 |
| Aesthetics | 2 | 4 | 2 | 4 | 0 | 0 |
| Bike and walkability | 0 | 0 | 0 | 0 | 0 | 0 |
| Public transport | 1 | 2 | 1 | 2 | 0 | 0 |
| Total | 49 | 100 | 48 | 98 | 1 | 2 |

What is striking, but still expected [58], in the pictures and comments of the young citizen scientists, particularly those taken and documented in Fröslunda, is the role that the football court plays in young males' lives, particularly as a major pastime in the summer. One citizen scientist from Fröslunda said:

At the court we play football, and it feels good, very positive. Anyone can come here and play any time they want. We also come here to socialize. It feels great here (Authors' translation; Figure 9).

Flipping the neighborhood context coin once again, physical incivilities such as bad upkeep, broken windows, boarded-up buildings and graffiti become evident and commonplace [59]. However, despite its positive appeal, citizen scientists in Fröslunda expressed, instead, the need to enlarge the size of the local football court to avoid conflicts that can be linked to already mentioned social incivilities: One said:

I think the football court is very good. I have been playing here all summer. I think it is better to build a bigger court here. There are too many of us, and we cannot play more than five aside . . . Therefore, I think they should make it much bigger (Authors' translation; Figure 9).

This problem, articulated spontaneously by many citizen scientists in Fröslunda, indicates in varying ways that access to outdoor sports facilities can be linked to conflicts or social incivilities such as being harassed by older males or fighting over how many can play in the football court at any given time. Following the same thread, citizen scientists' perceptions of parks (green areas) and playgrounds in Skiftinge also seem ambivalent (Table 7), not because of drug dealing, muggings or overcrowding [32] but because of limited access to football courts.

Moreover, citizen scientists in Skiftinge focus on other attributes of the physical context that concern playgrounds and walkability, which they perceived as problematic, especially if street lighting is unavailable, poor or sparse.

Here at the playground, there is hardly any illumination. There are many streetlights, but few of them work. Children and families passing by here feel insecure, including me (Authors' translation; Figure 10).

Thus, well-illuminated streets, as has been shown in other studies [55], can be a major facilitator of young males' and other residents' sense of security in both Fröslunda and Skiftinge. However, they also show that street lighting easily becomes a "negative" when it is not maintained along, for example, Skiftinge's numerous bicycle lanes, particularly during Sweden's long winter (Table 7). Considering also that the ubiquity of sports facilities such as football courts, parks and playgrounds is unique in and around Eskilstuna's urban periphery, citizen scientists reveal the interconnectivity of different aspects of the neighborhood's social and physical contexts.



Figure 9. The football court in Fröslunda as a place to socialize.



Figure 10. Poor illumination in Skiftinge.



Figure 11. The corner market in Fröslunda.

3.5. The Social and Political Impact of Citizen Science

Citizen science is not only about empowerment but also about shedding light on otherwise invisible issues such as the importance of the local corner market, football courts and the youth club (youth space). In addition, some forms of citizen science, including what has been termed in the Our Voice Research Initiative as citizen science “by the people” [37] or “co-created” citizen science by others [60], are also about impacting decision makers in the city hall. The level of impact depends partly on the ability of the concerned researchers, or residents themselves in many cases, to present urban outcasts/citizen scientists’ “view from within” and partly on the willingness of decision makers to widen their view on, for instance, maintaining and expanding the neighborhood’s youth space. The results of this study were presented first to students, journalists, civil servants and politicians at a poster presentation hosted by Mälardalen University, then to politicians at Eskilstuna city hall, and third, to the city’s denizens via the media.

The citizen science poster presentation took place at Mälardalen University’s annual “Political Science Day” on 8 April 2019. Here attendees took photos of posters with their smartphones and discussed the issues they related to with the researchers. Some of the comments indicated that some attendees seemed to harbor prejudices about these neighborhoods. For example, two female students said that they would not visit these places on their own, and it was obvious that the pictures on display did nothing to change their minds. Second, the same posters were presented by the research team to the Special Committee on Segregation (Segregationsgruppen) at the Eskilstuna city hall in the form of a PowerPoint presentation on the 7 May 2019. Here the researchers began to actualize those aspects of public perception that were deemed to be unfair, in relation to the accounts of the small group of young male citizen scientists. For instance, the social reality of the Skiftinge neighborhood as captured by the young citizen scientists raises some questions related to the public’s fear of crime there. Young residents’ anxiety about gangs in Fröslunda, which was a major factor when the local ICA supermarket closed in 2019, was also discussed. Some members of the Special Committee were moved by the pictures, as reflected in their statements and comments. For instance, referring to planned cutbacks in the budget for the youth clubs, one member of the committee felt that “Eskilstuna’s political leadership was on the wrong track”. Most of the members of the Committee tended to agree with the citizen scientists’ description of the situation in both neighborhoods and felt that improving lighting along the pointed-out pedestrian paths and bicycle lanes was something they could achieve in the short term. Nevertheless, even when prompted by the researchers, most politicians were not inclined to discuss issues related to the city’s law and order strategy. In other words, presentations by researchers alone of the citizen scientists’ pictures and narratives do not necessarily mean that they will have an impact on all of their intrinsic issues. Third, the researchers also focused on reaching other denizens of Eskilstuna via the local media. The heading used in the local Swedish television channel was that “Football courts create opportunities in deprived neighbourhoods” [61].

While it is likely premature to expect that the initial publicity and media messages delivered through the citizen science poster presentations will have a major measurable impact on local politics or policies, the few positive responses from the Special Committee on Segregation suggest that another way of presenting the results procured from the resident-engaged citizen science method may be needed. For instance, it is imperative that the city’s political majority is aware that improving the social and physical context of, and by maintaining a vibrant youth space in, stigmatized places [26] could improve security and reduce crime. In addition, the four-step Our Voice citizen science method explicitly includes the citizen scientists themselves as interpreters of their data and as co-creators of presentations and similar communications to local decision makers and stakeholders. Unfortunately, due to citizen scientists’ young age, circumstances and unavailability, there was not sufficient time to train the youth citizen scientists in ways to present their own data to relevant decision makers and policy makers in their community. Such community-centered communication approaches to “owning”, interpreting and sharing their data

with key stakeholders have otherwise been shown to be effective in fostering realistic improvements in local infrastructures and social environments in diverse under-resourced communities globally [62].

4. Discussion and Conclusions

Previous Our Voice citizen science research conducted by Stanford University in collaboration with universities in other countries indicates that roughly 10–20 citizen scientists are sufficient to capture a neighborhood narrative and develop resident consensus around specific issues [36,63,64]. Fulfilling this criterion, the authors tapped into a local knowledge base and “pride of place” [32]. When considering the ethnic makeup of the young males recruited in the NESLA project, the superficial similarities of both their communities as depicted in Table 1 quickly faded away. Citizen science on the small scale of this first-generation study may not capture fully the social relationships and cultural milieus of the community within which these young male urban outcasts live and interact [65,66]. It does, however, begin to paint a somewhat different picture of the neighborhood’s social reality that challenges public perceptions and can supply political and public health scientists as well as decision makers with new insights about the issues that matter for youths in marginalized local communities. Thus, citizen science is an excellent method for calibrating the focus of the UN’s SDG 11 to achieve more sustainable cities and communities.

The type of community engagement inspired by the citizen science method used in this study reached otherwise difficult to access groups and may be useful as a countermeasure to spatial defamation [18]. It may also contribute to confirming, invalidating and/or appeasing public perception, that is, the views or prejudices of other “citizens, potential employers and bureaucrats” [67]. Using this method, citizen scientists revealed that the main difference between both stigmatized places was that young males in Skiftinge were concerned more about their physical context than their counterparts in Fröslunda, where the overwhelming positive perception of shops, football courts, parks and playgrounds contrasts with a problematic social context. Also absent from young males’ accounts of Skiftinge was any reference to physical incivilities other than the usability of poorly illuminated bicycle lanes and other outdoor spaces. Public transport was not described as an issue in citizen scientists’ accounts of either place.

From this, the first conclusion is that the potential of resident visualization as a method of citizen science is evident when it adds to our knowledge of Skiftinge’s social reality, which is tainted by an ambivalent perception of some aspects of its physical context. Second, in Fröslunda, the Somali community’s ability to withstand negative public perception and territorial stigmatization is weakened by everything from older males’ crime, social incivilities, drug use and bullying to peer pressure. Third, the data suggest that a negative local context can be enriched to a certain extent by the further availability of, for instance, youth clubs, food stores, football fields and courts, street lighting and parks. All of these aspects are considered to be important attributes of residents’ social and physical reality but are seldom mentioned in the media or the city’s annual plans. Fourth, an overlap can be found between social reality and public perception from which it can be concluded that the negative “crime and drug” and positive “football and school” narratives portrayed in *Eskilstuna Kuriren* and the local Swedish TV station are also evident in young males’ perceptions of their neighborhood. Thus, as citizen scientists, these young urban males confirm these aspects of public perception. It is noteworthy that current public perception implies that Fröslunda and Skiftinge are now vulnerable to being cordoned off by the police [18] or being actively devalued further “in order to redevelop, gentrify, or privatize public housing or land” [19]. This is partly evident in the most recent annual plan (2021) for Eskilstuna where security, crime and the production of new housing are mentioned.

How far did this small-scale first-generation citizen science reach in its ambition to focus on alternatives to top-down data collection by the municipalities and then influence policy makers? Citizen science is a good way to bypass structural discrimination by

empowering marginalized groups, which it did accomplish. Besides this, citizen scientists' data and the researchers' findings were only used in a limited form to inform decision makers about otherwise hidden issues with the aim of creating a wider debate about future plans to develop these neighborhoods. Thus, moving into the future, more extensive citizen science activities can be used to increase empowerment and, more importantly, achieve a greater policy impact. Particularly, citizen scientists, both young and old, ought to be included specifically in the process of neighborhood development and generally in city planning. This should include everything from identifying the most urgent community challenges in their neighborhoods to advocating for new measures and interacting with local policy makers directly.

The authors will continue to endeavor to improve the aspects of the citizen science method applied herein. To this end, there is an apparent need to change the current strategy to include a more precise recording and documentation of the decision makers' reactions to the citizen scientists' pictures. Moreover, the method needs to link better with those public agencies that make decisions that influence the everyday lives of citizen scientists. For instance, since it is difficult to determine the impact that newspaper articles and TV appearances have on public opinion, it would be more appropriate to present citizen scientists' data to the political majority, residents and the public. If the citizen scientists themselves could participate in such presentations and outreach, other research projects in this area suggest that greater local impacts could occur [62].

Author Contributions: All authors made a substantial contribution to the conception and design of the work as well as the acquisition, analysis and interpretation of data for the work. They were also involved in drafting and reviewing the work critically. In detail: conceptualization, writing, editing and original draft presentation, T.F.; methodology and formal analysis, T.R., B.G.B., T.F., A.C.K. and K.B.; software, supervision and validation, A.C.K. and K.B. We give our final approval of this version to be published. We agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All authors have read and agreed to the published version of the manuscript.

Funding: The NESLA study was funded by a grant from the Samhällskontraktet, Mälardalens högskola, Sweden.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to the fact that all respondents were over the age of 16 years. Therefore, parents' consent to participate in this study was not required.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data reporting stated results can be acquired by contacting the corresponding author.

Acknowledgments: We wish to acknowledge Ann W. Banchoff at Stanford University for valuable support and input to the study relating to Our Voice citizen science methods. We would also like to acknowledge Salestina Byary, Gustaf Renström and Melisa Koyuncu, the three undergraduate students that assisted the research team at the youth clubs in Fröslunda and Skiftinge, as well as the citizen scientists who participated in this work.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Andersson, R.; Bråmås, Å. The Stockholm Estates: A Tale of the Importance of Initial Conditions, Macroeconomic Dependencies, Tenure and Immigration. In *Housing Estates in Europe: Poverty, Ethnic Segregation and Policy Challenges*; Open Access Urban Book Series; Springer: Cham, Switzerland, 2018; pp. 361–387.
2. Andersson, R.; Musterd, S.; Galster, G. Port-of-Entry Neighbourhood and its Effects on the Economic Success of Refugees in Sweden. *Int. Migr. Rev.* **2019**, *53*, 671–705. [[CrossRef](#)]
3. Fell, T.; Guziana, B.; Elander, I. Klass, rumslig segregation och livskvalitet i två svenska städer. *Statsvetensk. Tidskr.* **2019**, *121*, 65–93.
4. Gustavsson, E.; Elander, I. Sustainability potential of a redevelopment initiative in Swedish public housing: The ambiguous role of residents' participation and place identity. *Prog. Plan.* **2016**, *103*, 1–25. [[CrossRef](#)]

5. Rydenstam, T.; Fell, T.; Buli, B.G.; King, A.C.; Bälter, K. Using citizen science to understand the prerequisites for physical activity among adolescents in low socioeconomic status neighborhoods-The NESLA study. *Health Place* **2020**, *65*, 102387. [\[CrossRef\]](#) [\[PubMed\]](#)
6. Thörn, C.; Holgersson, H. Revisiting the urban frontier through the case of New Kvillebäcken, Gothenburg. *City* **2016**, *20*, 663–684. [\[CrossRef\]](#)
7. Ekholm, D.; Dahlstedt, M. Forming the association-like organisation: On civil society, welfare provision and sport as a means of social inclusion. *Int. J. Sociol. Leis.* **2019**, *2*, 219–238. [\[CrossRef\]](#)
8. Wacquant, L.; Slater, T.; Pereira, V.B. Territorial Stigmatization in Action. *Environ. Plan. A Econ. Space* **2014**, *46*, 1270–1280. [\[CrossRef\]](#)
9. Wacquant, L. Ghettos and Anti-Ghettos: An Anatomy of the New Urban Poverty. *Thesis Elev.* **2008**, *94*, 113–118. [\[CrossRef\]](#)
10. Moczek, N.; Voigt-Heucke, S.L.; Mortega, K.G.; Fabó Cartas, C.; Knobloch, J. A Self-Assessment of European Citizen Science Projects on Their Contribution to the UN Sustainable Development Goals (SDGs). *Sustainability* **2021**, *13*, 1774. [\[CrossRef\]](#)
11. Echeverria, A.; Ariz, I.; Moreno, J.; Peralta, J.; Gonzalez, E.M. Learning Plant Biodiversity in Nature: The Use of the Citizen–Science Platform iNaturalist as a Collaborative Tool in Secondary Education. *Sustainability* **2021**, *13*, 735. [\[CrossRef\]](#)
12. Kocman, D.; Števanec, T.; Novak, R.; Kranjec, N. Citizen Science as Part of the Primary School Curriculum: A Case Study of a Technical Day on the Topic of Noise and Health. *Sustainability* **2020**, *12*, 10213. [\[CrossRef\]](#)
13. Koffler, S.; Barbiéri, C.; Ghilardi-Lopes, N.P.; Leocadio, J.N.; Albertini, B.; Franco, T.M.; Saraiva, A.M. A Buzz for Sustainability and Conservation: The Growing Potential of Citizen Science Studies on Bees. *Sustainability* **2021**, *13*, 959. [\[CrossRef\]](#)
14. Veeckman, C.; Temmerman, L. Urban Living Labs and Citizen Science: From Innovation and Science towards Policy Impacts. *Sustainability* **2021**, *13*, 526. [\[CrossRef\]](#)
15. Wuebben, D.; Romero-Luis, J.; Gertrudix, M. Citizen Science and Citizen Energy Communities: A Systematic Review and Potential Alliances for SDGs. *Sustainability* **2020**, *12*, 10096. [\[CrossRef\]](#)
16. Doron, G.M. The Dead Zone and the Architecture of Transgression. *City* **2000**, *4*, 247–263. [\[CrossRef\]](#)
17. Crang, M. Urban morphology and the shaping of the transmissible city. *City* **2000**, *4*, 303–315. [\[CrossRef\]](#)
18. Wacquant, L. *Urban Outcasts: A Comparative Sociology of Advanced Marginality*, 1st ed.; Polity: Cambridge, UK, 2008; pp. 1–360.
19. Larsen, T.S.; Delica, K.N. The production of territorial stigmatisation. *City* **2019**, *23*, 540–563. [\[CrossRef\]](#)
20. Lister, R.; Smith, N.; Middleton, S.; Cox, L. Young People Talk about Citizenship: Empirical Perspectives on Theoretical and Political Debates. *Citizsh. Stud.* **2003**, *7*, 235–253. [\[CrossRef\]](#)
21. Winter, S.J.; Goldman Rosas, L.; Padilla Romero, P.; Sheats, J.L.; Buman, M.P.; Baker, C.; King, A.C. Using Citizen Scientists to Gather, Analyze, and Disseminate Information About Neighborhood Features That Affect Active Living. *J. Immigr. Minority Health* **2016**, *18*, 1126–1138. [\[CrossRef\]](#)
22. Lister, R. Inclusive Citizenship: Realizing the Potential. *Citizsh. Stud.* **2007**, *11*, 49–61. [\[CrossRef\]](#)
23. The Swedish Police. *Kriminell Påverkan i Lokalsamhället: En Lägesbild för Utvecklingen i Utsatta Områden*; Nationella Operativa Avdelning (NOA), Underrättelseenheter: Stockholm, Sweden, 2019; pp. 1–9.
24. Jensen, S.Q.; Christensen, A.D. Territorial stigmatization and local belonging. *City* **2012**, *16*, 77–89. [\[CrossRef\]](#)
25. Urban, S. *Integration och Grannskap: Hur Kan Staden Hålla Samman?* Studentlitteratur: Lund, Sweden, 2018; pp. 1–131.
26. Eskilstuna Municipality. *Annual Plan for the Eskilstuna Municipality Group: Agreed on by the City Council on the 26th of November 2020*; Service Administration Communication: Eskilstuna, Sweden, 2021; pp. 1–67.
27. Statistics Sweden. Swedish and Foreign-Born Population by Region, Age and Sex: Year 2000–2020. Available online: http://www.statistikdatabasen.scb.se/pxweb/en/ssd/START_BE_BE0101_BE0101E/InrUtrFoddaRegAIKon/ (accessed on 24 June 2021).
28. Edgren-Schori, M. Social Exclusion: En Kunskapsöversikt Och Begreppsanalys. Ph.D. Thesis, Akademitryck, Stockholm, Sweden, 2000; pp. 1–238.
29. Bickford, S. Constructing Inequality: City Spaces and the Architecture of Citizenship. *Political Theory* **2000**, *28*, 355–376. [\[CrossRef\]](#)
30. Burke Wood, P. *Citizenship, Activism and the City: The Invisible and the Impossible*; Routledge: London, UK, 2017; pp. 1–136.
31. Gilbert, L.; Phillips, C. Practices of Urban Environmental Citizenships: Rights to the City and Rights to Nature in Toronto. *Citizsh. Stud.* **2003**, *7*, 313–330. [\[CrossRef\]](#)
32. Driskell, D.; Fox, C.; Kudva, N. Growing up in the New New York: Youth Space, Citizenship, and Community Change in a Hyperglobal City. *Environ. Plan. A Econ. Space* **2008**, *40*, 2831–2844. [\[CrossRef\]](#)
33. Young, I.M. Residential segregation and differentiated citizenship. *Citizsh. Stud.* **1999**, *3*, 237–252. [\[CrossRef\]](#)
34. van Steden, R.; van Caem, B.; Boutellier, H. The ‘hidden strength’ of active citizenship: The involvement of local residents in public safety projects. *Criminol. Crim. Justice* **2011**, *11*, 433–450. [\[CrossRef\]](#)
35. Putnam, R. *Our Kids. The American Dream in Crisis*; Simon & Schuster: New York, NY, USA, 2015; pp. 1–400.
36. Hinckson, E.; Schneider, M.; Winter, S.J.; Stone, E.; Puhon, M.; Stathi, A.; Porter, M.; Garneder, P.; Lopes dos Santos, D.; King, A.C. Citizen science applied to building healthier community environments: Advancing the field through shared construct and measurement development. *Int. J. Behav. Nutr. Phys. Act.* **2017**, *14*, 133. [\[CrossRef\]](#) [\[PubMed\]](#)
37. King, A.C.; Winter, S.J.; Chrisinger, B.W.; Hua, J.; Banchoff, A.W. Maximizing the promise of citizen science to advance health and prevent disease. *Prev. Med.* **2019**, *119*, 44–47. [\[CrossRef\]](#) [\[PubMed\]](#)
38. Dahrendorf, R. *The Modern Social Conflict. An Essay on the Politics of Liberty*; University of California Press: Berkeley, CA, USA, 1988; pp. 1–237.

39. Heisler, B.S. A comparative perspective on the underclass. *Theory Soc.* **1991**, *20*, 455–483. [CrossRef]
40. Statistics Sweden. Elected Candidates in the Election to the Riksdag by Sex, Foreign/Swedish Background and Those Who Left office. Number and Percent. Term of Office 2002–2006–2014–2018. Available online: https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START_ME_ME0107_ME0107C/ME0107T42/ (accessed on 24 June 2021).
41. Eskilstuna Kurrien. Eskilstuna Kurrien Archive. Available online: <https://ekuriren.se/sok?searchText=Skiftinge> (accessed on 28 June 2021).
42. Eskilstuna Kurrien. Övervakningskameror Sätts in Mot Brott i Skiftinge. Available online: <https://ekuriren.se/artikel/overvakningskameror-satts-in-mot-brott-i-skiftinge/4lq68o1j> (accessed on 21 October 2020).
43. Eskilstuna Kurrien. Brand på Pizzeria i Skiftinge Misstänks Vara Anlagd. Available online: <https://ekuriren.se/artikel/brand-pa-pizzeria-i-skiftinge-misstanks-vara-anlagd/lqnnxypl> (accessed on 17 December 2020).
44. Eskilstuna Kurrien. Polis Frias, Mulade och Slapade Misstänkt i Snön. Available online: <https://ekuriren.se/artikel/polis-frias-mulade-och-slapade-misstankt-i-snon/r96zo65r> (accessed on 8 February 2021).
45. Eskilstuna Kurrien. Grovt Misshandlad Flydde in på ICA Maxi. Available online: <https://ekuriren.se/artikel/grovt-misshandlad-flydde-in-pa-ica-maxi/jpk51gmr> (accessed on 10 March 2021).
46. Eskilstuna Kurrien. Hotade Polis—“du är Färdig—du är Slut”. Available online: <https://ekuriren.se/artikel/hotade-polis-du-ar-fardig---du-ar-slut/lwpgknn1r> (accessed on 10 April 2021).
47. Eskilstuna Kurrien. 16 Bränder på 90 Minuter—Polis och Räddningstjänst Överösta av Larm. Available online: <https://ekuriren.se/artikel/16-brander-pa-90-minuter--polis-och-raddningstjanst-overosta-av-larm/jv9gqwel> (accessed on 16 May 2021).
48. Falk, A. Skiftingebon: “Många Äldre Stannar Hellre Hemma”. Available online: <https://www.svt.se/nyheter/lokalt/sormland/manga-aldre-stannar-hellre-hemma> (accessed on 30 June 2020).
49. Kay, T.; Bradbury, S. Youth sport volunteering: Developing social capital? *Sport Educ. Soc.* **2009**, *14*, 121–140. [CrossRef]
50. Bracy, N.L.; Millstein, R.A.; Carlsson, J.A. Is the relationship between the built environment and physical activity moderated by perceptions of crime and safety? *Int. J. Nutr. Phys. Act.* **2014**, *11*, 1–13. [CrossRef]
51. Markowitz, F.E.; Bellair, P.E.; Liska, A.E.; Liu, J. Extending social disorganization theory: Modeling the relationships between cohesion, disorder, and fear. *Criminology* **2001**, *39*, 293–319. [CrossRef]
52. Schreck, C.J.; Miller, J.M. Sources of Fear of Crime at School. *J. Sch. Violence* **2003**, *2*, 57–79. [CrossRef]
53. Mason, P.; Kearns, A.; Livingston, M. “Safe Going”: The influence of crime rates and perceived crime and safety on walking in deprived neighbourhoods. *Soc. Sci. Med.* **2013**, *91*, 15–24. [CrossRef] [PubMed]
54. Foster, S.; Wood, L.; Christian, H.; Knuiman, M.; Giles-Corti, B. Planning safer suburbs: Do changes in the built environment influence residents’ perceptions of crime risk? *Soc. Sci. Med.* **2013**, *97*, 87–94. [CrossRef] [PubMed]
55. Peña-García, A.; Hurtado, A.; Aguilar-Luzón, M.C. Impact of public lighting on pedestrians’ perception of safety and well-being. *Saf. Sci.* **2015**, *78*, 142–148. [CrossRef]
56. Carver, A.; Timperio, A.; Crawford, D. Playing it safe: The influence of neighbourhood safety on children’s physical activity. A review. *Health Place* **2008**, *14*, 217–227. [CrossRef] [PubMed]
57. Altschuler, A.; Somkin, C.P.; Adler, N.E. Local services and amenities, neighborhood social capital, and health. *Soc. Sci. Med.* **2004**, *59*, 1219–1229. [CrossRef]
58. Skinner, J.; Zakus, D.H.; Cowell, J. Development through Sport: Building Social Capital in Disadvantaged Communities. *Sport Manag. Rev.* **2008**, *11*, 253–275. [CrossRef]
59. Leyden, K.M. Social capital and the built environment: The importance of walkable neighborhoods. *Am. J. Public Health* **2003**, *93*, 1546–1551. [CrossRef] [PubMed]
60. Anderson, A.A.; Williams, E.; Long, M.; Carter, E.; Volckens, J. Organizationally based citizen science: Considerations for implementation. *J. Sci. Commun.* **2020**, *19*, 1–11. [CrossRef]
61. Swedish Television. Fotbollsplanen Viktig “Möjliggörare” i Utsatta Områden. Available online: <https://www.svt.se/nyheter/lokalt/vastmanland/fotbollsplanen-viktig-mojliggorare-i-utsatta-omraden-enligt-ungdomarna-sjalva> (accessed on 8 July 2019).
62. King, A.C.; Odunitan-Wayas, F.A.; Chaudhury, M.; Rubio, M.A.; Baiocchi, M.; Kolbe-Alexander, T.; Montes, F.; Bahcoff, A.; Sarmiento, O.I.; Bälter, K.; et al. Community-Based Approaches to Reducing Health Inequities and Fostering Environmental Justice through Global Youth-Engaged Citizen Science. *Int. J. Environ. Res. Public Health* **2021**, *18*, 892. [CrossRef]
63. King, A.C.; King, D.K.; Banchoff, A.; Solomonov, S.; Ben Natan, O.; Hua, J.; Gardiner, P.; Goldman Rosas, L.; Rodriguez Espinosa, P.; Winter, S.J.; et al. Employing Participatory Citizen Science Methods to Promote Age-Friendly Environments Worldwide. *Int. J. Environ. Res. Public Health* **2020**, *17*, 1541. [CrossRef] [PubMed]
64. Odunitan-Wayas, F.A.; Hamann, N.; Sinyanya, N.A.; King, A.C.; Banchoff, A.; Winter, S.J.; Hendriks, S.; Okop, K.J.; Lambert, E.V. A citizen science approach to determine perceived barriers and promoters of physical activity in a low-income South African community. *Glob. Public Health* **2020**, *15*, 749–762. [CrossRef] [PubMed]
65. Chavis, D.M.; Wandersman, A. Sense of community in the urban environment: A catalyst for participation and community development. *Am. J. Community Psychol.* **1990**, *18*, 55–81. [CrossRef]
66. Tisdale, S.; Pitt-Catsuphes, M. Linking Social Environments With the Well-being of Adolescents in Dual-Earner and Single Working Parent Families. *Youth Soc.* **2011**, *44*, 118–140. [CrossRef]
67. Wacquant, L. Urban Desolation and Symbolic Denigration in the Hyperghetto. *Soc. Psychol. Q.* **2010**, *73*, 215–219. [CrossRef]