

20.10 Perceived safety of neighbourhood

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Perceived safety of neighbourhood	Social Justice and Social Cohesion
<p>Description and justification</p>	<p>Neighborhood safety is generally understood as an environmental demand (environmental press) in that perceived or actual low safety of a neighborhood environment could exceed person's physical or psychological capacity to manage the demands of the environment (Jin-Choi & Matz-Costa, 2018). Such adversity is particularly challenging for vulnerable groups like women, children, or elders. As a dimension of social capital, relations with neighbors and social support from interactions with neighbors are strongly related to the subjective sense of community, and mediate the relationship between neighborhood factors and residents' well-being.</p> <p>Research on neighborhood effects has explored relationships between burdensome physical conditions (e.g., living in deteriorating neighborhoods, public drug use, public drinking, loitering, street harassment, poor lighting, homeless sleeping in public, abandoned cars, trash, overgrown trees) and perceptions of psycho-social conditions (e.g., trust, support, sense of well-being) (Kruger, 2008; Loukaitou-Sidaris, 2006). Along these lines, neighborhood safety has been highlighted as a significant indicator for both the social capital of a community, and the health and well-being of its members, thereby a major factor in the implementation, and potential success of any collective initiatives like NBS.</p> <p>Indeed, McCabe (2014) brings forth evidence on how community gardens as community-based multi-prolonged initiatives effectively stabilize distressed neighborhoods, and positively associate with reduced violence, greater perception of residents' safety, lowered stress levels, improved relations with police, and greater empowerment as residents take pride and ownership in the development of their neighborhoods. Furthermore, Bogar and Beyer (2015) conducted a systematic study of existing research on relationships among urban green space, violence, and crime in the United States, and found overwhelmingly</p>

	<p>positive associations between urban green space and neighborhood safety that withstand methodological idiosyncrasies and a limited understanding of causal pathways. Notably, Sreetheran and van den Bosch (2014) systematically reviewed the combination of characteristics that evoke fear of crime in urban green spaces and delineated their complex interaction by putting forward a social-ecological framework to promote a thorough understanding of the cumulative effect of the complex interaction between environmental factors (such as vegetation character, density, and maintenance), individual aspects (e.g., age, gender, education level, minority status, ethnic background) and social attributes (like social cohesion, trust, frequency of visit) on people's fear towards crime or perceived personal safety in urban green spaces.</p> <p>In accordance with the research investigated by the authors, gender is a significant and strong predictor of fear of crime in urban green spaces in that females have significantly higher fear levels than their male counterparts. Of all social attributes explored, social incivilities (e.g., the presence of youth gangs, beggars, homeless persons) were found to have a significant impact on fear of crime in urban green spaces. As the most investigated environmental attribute, vegetation density and maintenance was reported as a major cue evoking fear of crime in urban green spaces (Sreetheran & van den Bosch, 2014).</p>
Definition	Self-reported perceptions of neighborhood/community crime and safety.
Strengths and weaknesses	<ul style="list-style-type: none"> +reliable indicator of challenges to neighborhood/community resources for a shared sense of trust, and for an individual sense of well-being +perception of safety with respect to green spaces (parks, trees etc.) can inform NBS on best approaches so as to meet community's capacity to manage the demands of environment +consistently adds to the information on a community's shared notion of trust and solidarity -measurement scales usually limit the investigation to neighborhood crime, conflict, and violence, whereas physical conditions related to housing (e.g., garbage, insects, and inadequate heat) and neighborhood (e.g., noise, crime, abandoned buildings, dark streets and sidewalks, and low accessibility to shops) hazards play an important role into a shared sense of community safety as well

Measurement procedure (P) and tool (T)

- ☒ *Quantitative P*: Scale inventory/Questionnaire (survey procedure, paper-and-pencil administration, computer-based administration)
 - T: 8 items *Conflict and Violence Scale* from "Social Cohesion and Inclusion" module of the *Integrated Questionnaire for the Measurement of Social Capital (SC-IQ)* ([Grootaert et al., 2004](#)) adapted to purposed of NBS research
 - T: 7-items from *Criminal Victimization and Perceptions of Community Safety Survey* ([Smith et al., 1999](#)) adapted to the purposes of NBS research
- ☒ *Qualitative P*:
 - T: case study methodology – structured interviews, case study analysis
 - T: participatory data collections methods, such as collaborative participatory data collection, bodies as tools for data collection, photo elicitation
- ☒ Public participation geographic information system (PPGIS) methods/approaches

Scale of measurement

- SC-IQ ([Grootaert et al., 2004](#)) – 8 items representing *Conflict and Violence Scale* from "Social Cohesion and Inclusion" module (neighbourhood level)

1. In your opinion, is your neighborhood generally peaceful or marked by violence?

1 Very peaceful 2 Moderately peaceful 3 Neither peaceful nor violent 4 Moderately violent 5 Very violent

2. Compared to ... years ago*, has the level of violence in your neighborhood increased, decreased, or stayed the same? [* ENUMERATOR: TIME PERIOD CAN BE CLARIFIED BY SITUATING IT BEFORE/AFTER ...e.g., the park was built]

1 Increased a lot 2 Increased a little 3 Stayed about the same 4 Decreased a little 5 Decreased a lot

3. In general, how safe from crime and violence do you feel when you are alone at home?

1 Very safe 2 Moderately safe 3 Neither safe nor unsafe 4 Moderately unsafe 5 Very unsafe

4. How safe do you feel when walking down your street alone after dark?

1 Very safe 2 Moderately safe 3 Neither safe nor unsafe 4 Moderately unsafe 5 Very unsafe

5. In the past 12 months, have you or anyone in your household been the victim of a violent crime, such as assault or mugging?

1 Yes

2 No → go to question 7.

6. How many times?

7. In the past 12 months, has your house been burglarized or vandalized?

1 Yes

2 No

8. How many times?

- Criminal Victimization and Perceptions of Community Safety Survey ([Smith et al., 1999](#)) – 7 items (neighbourhood and city level), to be adapted so as to best fit in with objectives of final survey

1. How fearful are you about crime in your neighborhood?

1. Very fearful 2. Somewhat fearful 3. Not very fearful – Skip to 3 4 .Not at all fearful – Skip to 3 5. Don't know – Skip to 3

2. Over the last 12 months, have your fears increased, decreased, or stayed the same?

1. Increased 2. Decreased 3. Stayed the same 4. Don't know

3. How fearful are you about crime in your city?

1 Very fearful 2. Somewhat fearful 3. Not very fearful – Skip to 5 4 .Not at all fearful – Skip to 5 5. Don't know –

Skip to 5

4. Over the last 12 months, have your fears increased, decreased, or stayed the same?

1. Increased 2. Decreased 3. Stayed the same 4. Don't know

5. The following questions are more neighborhood specific. Do any of the following conditions or activities exist in your neighborhood? (Read each category then enter the appropriate code for each category – 1, yes; 2, no; 3, don't know)

...Abandoned cars and/or buildings

...Rundown/neglected buildings

...Poor lighting

...Overgrown shrubs/trees

...Trash

...Empty lots

...Illegal public drinking/public drug use

...Public drug sales

...Vandalism and Graffiti

...Prostitution

...Panhandling/begging

...Loitering/"hanging out"

...Truancy/youth skipping school

...Transients/homeless sleeping on benches, streets

NOTE: Do any of the categories in 5 contain an entry of 1 (yes)?

Yes - continue with questions 6 and 7

No

6. Do any of the conditions you just mentioned make you feel less safe in your neighborhood?

1. Yes 2. No 3. I don't know

7. Which of the conditions just mentioned affects your feeling of safety the most?

...Abandoned cars and/or buildings

...Rundown/neglected buildings

...Poor lighting

...Overgrown shrubs/trees

...Trash

...Empty lots

...Illegal public drinking/public drug use

...Public drug sales

...Vandalism and Graffiti

...Prostitution

...Panhandling/begging

...Loitering/"hanging out"

...Truancy/youth skipping school

...Transients/homeless sleeping on benches, streets

...Don't know

Data source	
Required data	✓ Essential: NBS characteristics for each city/site, more specifically objectives (short-, medium-, and long-term) and challenges
Data input type	Quantitative (quantitative and qualitative, if case study methodology and/or participatory data collection are opted for)
Data collection frequency	Before NBS implementation and/or aligned with timing of targeted (especially long-term) objectives
Level of expertise required	<input checked="" type="checkbox"/> Methodology and data analysis requires high expertise in psycho-social research <input checked="" type="checkbox"/> Quantitative data collection requires no expertise <input checked="" type="checkbox"/> Qualitative data collection through case study methodology and PPGIS requires high expertise in psycho-social research <ul style="list-style-type: none"> ○ Basic training needed if participatory data collection is opted for
Synergies with other indicators	SC1 Bonding social capital SC2 Bridging social capital SC3 Linking social capital SC4.2 Solidarity between neighbours SC4.3 Tolerance and respect SC5.2 Actual/real safety SC6 Place attachment (sense of place): Place identity SC9 Empowerment: Perceived control and influence over NBS decision-making SC12 Social desirability HW10 Prevalence, incidence, morbidity of chronic stress HW11 Mental Health Wellbeing: Depression and Anxiety HW12 Restoration-Recreation: Enhanced physical activity and meaningful leisure HW13 Levels of aggressiveness and violence HW15 Exploration behaviour in children
Connection with SDGs	Goal 3. Ensure healthy lives and promote well-being for all at all ages Goal 6. Ensure availability and sustainable management of water and sanitation for all Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Opportunities for participatory data collection	Participatory methods (e.g., collaborative participatory data collection, GIS with top-down goals of understanding neighborhood dynamics, location-based PPGIS) may be applied to collect community-relevant information about factors that play a role in members' perception of safety;

data can further inform NBS implementation and expansion.

Additional information

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20.11 Number of violent incidents, nuisances and crimes per 100 000 population

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Safety, including indicators of crime	Social Justice and Social Cohesion
Description and justification	The number of violent incidents, reportable nuisances and other crimes is a primary indicator of feelings of personal safety (ISO, 2018). For simplicity, the crime rate of a given metropolitan area can be assessed before and after NBS implementation to determine the impact of NBS actions on local crime. Individual surveys are necessary to directly assess citizens' feelings of personal safety, but the crime rate can provide an easily quantifiable metric of actual crime in a given area.
Definition	Number of violent incidents, nuisances and crimes per 100 000 population
Strengths and weaknesses	+ Simple and easy to use indicator - All the crimes might not be reported
Measurement procedure and tool	The crime rate is defined as the number of violent incidents, annoyances and crimes per 100 000 population. It is calculated as: $\frac{\text{Total number of crimes reported}}{(\text{City's total population}/100\,000)}$