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## 13.4 Place attachment (Sense of Place): Place identity

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Place attachment (Sense of Place): Place Identity		Place Regeneration
Description and justification	Environmental psychology's place theory by a lot of criticism aimed at confusion re terminologies and concepts used in descr attachment, and at its lack of development	lated to

(Counted, 2016). Place attachment is sometimes used interchangeably with "sense of place" - a personal identification with a location or landscape on an emotional level as an individual or as a member of a community (Wolf, Krueger, & Flora, 2014). A number of studies have confirmed the expectation grounded in social identity and self-categorization theories that the greater the identification with the place, the greater the desire to express positive attitudes in relation to environmental transformations that could, in turn, give a more positive character to that place (Bernardo & Palma-Oliveira, 2012, 2016). Psychometric measures for assessing place attachment behaviors have been developed on the foundation conferred by a general agreement among theorists on the definition of place attachment as an "affective bond or link between people and specific places" (Hidalgo & Hernandez, 2001, as guoted in Counted, 2016). Measurements of emotional/symbolic attachments to places provide a means for people to articulate natural resource values (Williams & Vaske, 2003) that contribute to NBS initiatives, actual implementation, and expected success. Jorgensen and Stedman (2001) advanced an attitude-based conception of sense of place (SOP) conceived as a complex psychosocial structure that organizes self-referent cognitions (*place identity*), emotions (*place attachment*) and behavioral commitments (place dependence). This multidimensional construct makes for theoretical support in instances where self-evaluations contrast significantly for certain attitude objects. For example, a person may feel favorable toward their lakeshore property, but consider it peripheral to their identity and a poor place to perform certain behaviors (Jorgensen & Stedman, 2001). Research aimed at exploring the relationship between green space (density, maintenance, proximity) and place attachment has yielded mixed results. On one hand, there are studies (e.g., Kim & Kaplan, 2004, Mohapatra & Mohamed, 2013, Xu, Matarrita-Cascante, Lee, & Luloff, 2019) which contend that natural features of the physical environment and open spaces (e.g., neighborhood parks) play a particularly important role in place attachment and the sense of community. Conversely, there is research data (Kimpton, Wickes, & Corcoran, 2014) that does not support the suggestion that physical features like green space (e.g., living next to green spaces, living in a green community) influence how attached residents feel towards their community. Instead, Kimpton et al. (2014) report that community socio-structural characteristics such as social ties, ethno-racial diversity, affluence or economic disadvantage are strong predictors of place attachment.

	Brown, Raymond and Corcoran (2015) advance data and suggestions for future research founded on public participation GIS (PPGIS) and related crowd-sourcing mapping methods. The authors also highlight the need for an operationalization, measurement and calibration of the concept of place attachment that would render it suited to predict certain events or outcomes like place-protective or place-enhancement behaviors if the concept is to have any utility for land usage or decision support in the future.
Definition	<ul> <li>Jorgensen and Stedman (2001):</li> <li>SOP is an individual's favorable or unfavorable attitude toward spatially demarcated object. SOP can be inferred from responses of a cognitive, affective or conative nature.</li> <li><i>Place identity</i> can be regarded as an individual's cognitions, beliefs, perceptions or thoughts that the self is invested in a particular spatial setting.</li> <li><i>Place attachment</i> can be defined in terms of an individual's affective or emotional connection to a spatial setting.</li> <li><i>Place dependence</i> can be considered as the perceived behavioral advantage of a spatial setting relative to other settings.</li> </ul>
Strengths and weaknesses	<ul> <li>+ reliable indicator of psychosocial resources that boost individual self-esteem, a sense of belonging to one's community, and communication about environmental values and policies (<u>Williams &amp; Vaske, 2003</u>)</li> <li>+ can inspire and encourage individuals to actively protect green places/NBS, and engage in pro-environmental behavior (<u>Wolf et al., 2014</u>)</li> <li>+ oriented towards inclusiveness, high potential to further trust within community, and to inculcate a community sense of pride</li> <li>-abuse of terminologies, and confusion related to concepts related to people-place relations, which leads to methodological gaps and challenges (<u>Counted, 2016</u>)</li> </ul>

Measurement procedure (P) and tool (T)	<ul> <li>Quantitative P: Scale inventory/Questionnaire (survey procedure, paper-and-pencil administration, computer-based administration)</li> <li>T: Place Identity Scale (Williams &amp; Vaske, 2003) comprising 6 items that measure place dependence and place identity as dimensions of place attachment</li> <li>T: Sense of Place (SOP) inventory (Jorgensen &amp; Stedman, 2001) - 12 items developed to measure the three dimensions of an attitude-based place attachment experience, namely: place identity, place attachment, and place dependence</li> <li>Qualitative P:</li> <li>T: case study methodology – structured interviews, case study analysis</li> <li>T: participatory data collections methods, such as collaborative participatory data collection, bodies as tools for data collection, photo</li> </ul>
	bodies as tools for data collection, photo elicitation
Scale of measurement	<ul> <li>Place Identity Scale (<u>Williams &amp; Vaske, 2003</u>) Items are presented in a 5-point "strongly disagree" (1) to "strongly agree" (5) format with a neutral point of 3.</li> <li>1. I feel "X" is a part of me.</li> <li>"X" is very special to me.</li> <li>I identify strongly with "X".</li> <li>I am very attached to "X".</li> <li>Visiting "X" says a lot about who I am.</li> <li>"X" means a lot to me.</li> <li>Sense of Place (SOP) inventory (Jorgensen &amp; Stedman, 2001)</li> <li>Place Identity Items:</li> <li>Everything about my [] is a reflection of me.</li> <li>My [] says very little about who I am.</li> <li>I feel that I can really be myself at my []</li> <li>My [] reflects the type of person I am.</li> </ul> Place Attachment Items: <ol> <li>I feel relaxed when I'm at my []</li> <li>My [] is my favorite place to be.</li> <li>I really miss my [] when I'm away from it for too long.</li> </ol> Place Dependence Items: <ol> <li>My [] is the best place for doing the things that I enjoy most.</li> <li>For doing the things that I enjoy most, no other place can compare to my []</li> </ol>

	<ul> <li>3. My [] is not a good place to do the things I most like to do.</li> <li>4. As far as I am concerned, there are better places to be than at my []</li> </ul>
Data source Required data	<ul> <li>Essential: NBS characteristics for each city/site, more specifically objectives (long-term) and challenges</li> <li>Desirable: Data on symbolic/affective meanings assigned to NBS (case studies, participatory data collection methods)</li> </ul>
Data input type	Quantitative (quantitative and qualitative, if case study methodology and/or participatory data collection are opted for)
Data collection frequency	After NBS implementation or aligned with timing of targeted (especially long-term) objectives
Level of expertise required	<ul> <li>Methodology and data analysis require high expertise in psycho-social research</li> <li>Quantitative data collection requires no expertise</li> <li>Qualitative data collection through case study methodology requires high expertise in psycho-social research         <ul> <li>Basic training needed if participatory data collection is opted for</li> </ul> </li> </ul>

Synergies with other indicators	SC1 Bonding social capital SC4.1 Trust in community SC4.2 Solidarity between neighbors SC4.3 Tolerance and respect SC5.1 Perceived safety SC5.2 Actual/real safety SC11.1 Positive environmental attitudes motivated by contact with NBS SC11.2 Environmental Identity SC12 Social desirability HW3 General Wellbeing and Happiness HW12 Restoration-Recreation: Enhanced physical activity and meaningful leisure
Connection with SDGs	Goal 3. Ensure healthy lives and promote well-being for all at all ages Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable Goal 13. Take urgent action to combat climate change and its impacts Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Opportunities for participatory data collection	Participatory methods (e.g., collaborative participatory data collection) may be applied to collect community-relevant information on symbolic and emotional bonds with NBS/green spaces.
Additional inform	ation
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