
Public Spaces as Community Anchors: The Relationship Between Use, Quality, and Social Cohesion

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ABSTRACT

Ever since their inception, public spaces have provided nearby residents with opportunities to interact and engage with others, shaping community life and fostering social connections. This study aimed to determine the factors by which public spaces serve as community anchors through the analysis of participants' usage patterns, perceived quality of spaces, and sense of community. Through a community-based survey administered at local parks and trailheads, the research found that higher-quality, diverse, and accessible public spaces lead to longer visit durations, increased social interaction, and a stronger sense of community. For example, long-term and frequent users reported stronger social belonging, while individuals with access to multiple public space options reported spending more time overall in public spaces. On the other hand, individuals who worked more hours or those visiting with families showed a weaker sense of community, highlighting that public spaces can only go so far to aid an individual's community interaction, as life circumstances will often take precedence. Overall, these results demonstrate that community strength and cohesion are closely tied to well-designed public spaces that can serve the diverse yet crucial needs of residents.

METHODS AND MATERIALS

Survey Administration

Data was collected through a survey that was administered across the multiple parks and trailheads of Forsyth County, Georgia. The survey was conducted over several weeks, and locations were visited at varied times of the day/week, ensuring that participants' responses would also be varied. Individuals at the location were approached, briefly informed about the study and its purpose, and then requested to participate in a survey. People who agreed were asked to scan a QR code that took them to an online survey, which could be completed at the individual's own convenience. All participation was voluntary and anonymous, unless the respondent asked to be emailed the results of the study, in which case participants provided an email address. Over 140 people participated in the study, which took place over the course of Summer and Fall 2025.

Survey Design

The online survey was designed to collect data pertaining to respondents' demographics, public space usage patterns, perceptions of their spaces and communities, and overall sense of community. The survey consisted of 37 questions, all relating either to the individual themselves, their usage of public spaces, the characteristics of their preferred public space, or their community. Participants first reported basic background information, specifically about daily routines/schedules, while maintaining anonymity. Then, several questions about the respondent's most preferred public spaces were asked, including questions relating to visit frequency, reasons for selecting the space, usual companions, etc. Respondents then rated several aspects of their public space and local area using a 1-10 agreement scale. Statements that made claims about attractiveness, amenities, variety, and cultural connection were rated from 1-10, 10 being the most agreement and 1 being complete disagreement. For simplicity's

sake, all 10-point rating items were categorized into 3 composite measures: quality, usage/variety, and interaction/community. Each composite score represents the average rating that respondents gave to the questions' topics. Lastly, the 12-item Sense of Community Index (SCI-1) was administered. These are 12 True/False questions that aim to assess an individual's belonging, influence, and connection to their community. It results in a score from 1 to 12 that directly corresponds to an individual, which can be referred to as that individual's sense of community score.

Data Analysis

In terms of analysis, responses for questions were sorted into groups, while mean values for SCI scores were calculated for each group, using the scores from all participants who fell into that specific group. In this manner, comparisons could be made, such as the average SCI score of "morning" visitors versus the average score of "evening" visitors. Comparisons such as these were what demonstrated a link between certain behaviors of individuals or characteristics of spaces and a sense of community. Additionally, cross-question comparisons were also made, in which groups from one question, such as "visitor companions", were compared against groupings from another, such as "time spent per visit." This method of comparison enabled the identification of relationships that existed between usage patterns, space characteristics, and personal preferences/circumstances.

Ethical Considerations

Participation was completely voluntary, as they were informed of the study and its purpose before being requested to participate in the survey. Participation was also completely anonymous, as personally identifiable information was recorded, unless respondents specifically agreed to be emailed the results of the study. Informed consent was obtained from all participants.

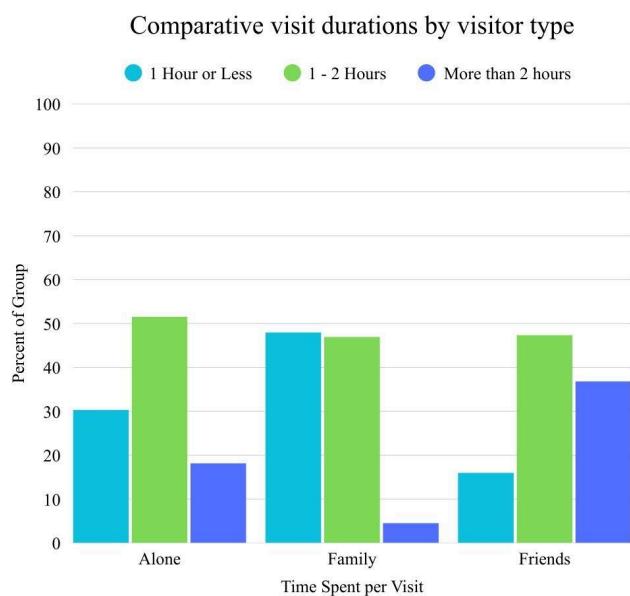
RESULTS AND DISCUSSION

The Appeal of Public Spaces

The main reason people use public spaces is their perceived quality. High-quality spaces encourage longer stays, greater use of amenities, and more community interaction. However, studies show that while initial visits are motivated by quality or social features, over time, proximity becomes key in determining continued use. As users develop regular routines, convenience often outweighs quality. These findings are consistent with other studies, such as Giles-Corti et al., who also determined that quality and proximity are primary drivers of public space usage (Giles-Corti et al.).

Variety and diversity are also extremely important to users, in terms of both options offered and the number of spaces in the overall area. Spaces with diverse uses, like recreational centers or large parks, draw longer and better perceived visits than single-amenity spaces, such as trailheads or simple playgrounds. Single-use spaces do not have wide appeal, as many respondents report an inadequate amount of public areas, forcing them to visit these single-use spaces. On the other hand, people actively spend more time in public spaces when a wide range of spots exist nearby, even if the spots don't perfectly match the user's preferences. All of these findings suggest that communities value areas with a diverse range of public spaces and uses at those spaces, appealing to all sorts of residents.

In such a diverse and populated area, everyone has their own preferences regarding public spaces. Some are dedicated to one singular park, while others are open to visiting different spots each time. Some barely visit once a month, while others go daily. Generally, a user spends between 1 and 2 hrs per visit, and also visits at least weekly. However, users with families tend to spend less time per visit, while those who come with friends spend much more time each visit. More effort must be put into attracting families, as they may have other commitments to attend to, while those with friends are able to take full advantage of leisure opportunities already. Those who come alone tend to have the longest visits of all, indicating that these public spaces might serve as an individual's primary way of connecting with the community.



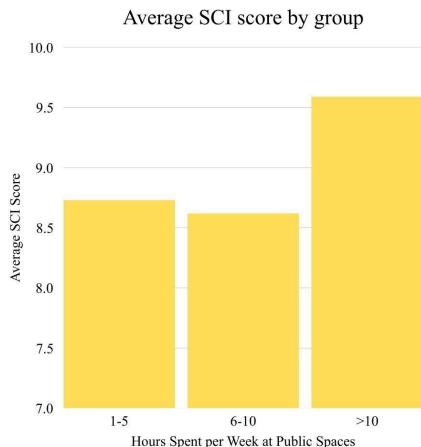
(Left) Time spent in public spaces by visitor type. Respondents who visit with friends stay significantly longer, with 36.84% reporting visits over two hours, while only 4.55% of those with families stay more than two hours. About 50% of all groups spend 1-2 hours per visit.

Additionally, 50% of respondents only began using their preferred public space in the past 5 years, hinting at a recent growth in this area's population. These findings highlight the importance and value of diversity, quality, and accessibility of public spaces across an area to any community, especially one that is growing quickly. Similar to the results found in this study, Li, Dang, and Song argue that the most effective public space is determined by its accessibility, inclusivity, and ability to promote sociability (Li, Dang, and Song). Users of a space must feel welcome and satisfied, else

they will not visit.

Factors of Community Belonging

When looking at an area's sense of community, we must first examine it at the individual level. An individual's sense of community depends heavily on their personal lifestyle. However, it is also greatly influenced by their usage of public spaces. Respondents' sense of community was measured using the Sense of Community Index (SCI-1), which uses 12 true or false questions to ascertain an individual's sense of community score from 0 to 12 points. The SCI-1 captures an individual's relation to and cohesion to the community they live in, but does not ask anything specifically about public spaces; a higher score signifies a better sense of community.

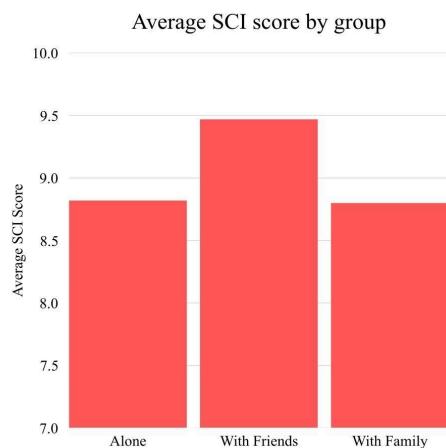


(Left) - Average SCI Score by visitor type. Visitors who spend more than 10 hours per visit have an average score of 9.59.

The average score of all participants was 8.95, which can be used as a benchmark to compare with other, more specific averages. It was found that those who spend more time per week at public spaces had increased SCI Scores, which clearly shows that public spaces and usage do influence communities and social perception greatly. These results are clearly reciprocated in Francis et al., where public spaces are shown to be intrinsically linked to a sense of community, even if the spaces are not used (Francis et al.). Increased daily working hours correlate to lower SCI scores, and people who come with friends typically have greater SCI scores than those who come with family. Both these facts show that individuals

often must prioritize their personal responsibilities before interacting and bonding with the community.

(Right) - Average SCI Score by Daily Working Hours. Those who work more than 10 hours a day have an average score of 8.64, below the overall respondent average of 8.95.

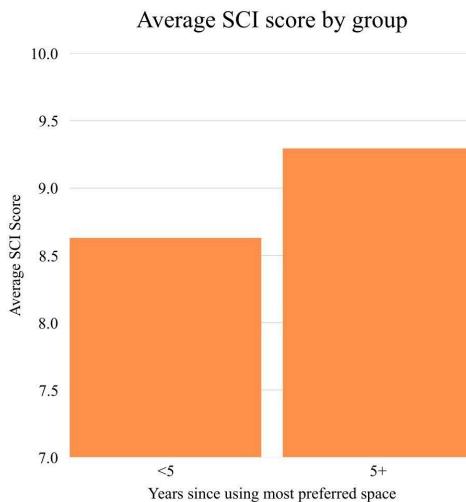


(Left) - Average SCI Score by visitor type. Those with friends have the highest average score at 9.47, while those with family have an average score of 8.80.

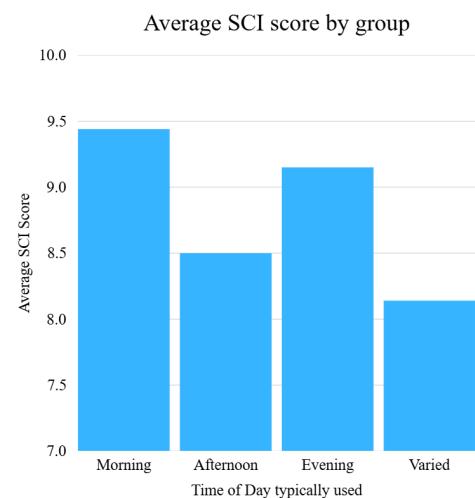


On a general note, recent users of a public space typically have lower sense of community scores than long-time users, showing that many residents are integrating themselves into the community, perhaps having recently moved to the area. Even the time of day that one typically visits the space affects the individual's sense of community, as

morning users have higher scores on average than evening or varied users. It could be possible that morning users are often like-minded individuals who consistently interact with other morning users, creating a heightened social cohesion between all of them. All these facts show that integration into the community most greatly requires time on the user's part. Anyone can feel a sense of belonging and identity, as long as they put in the time and effort to make it happen.

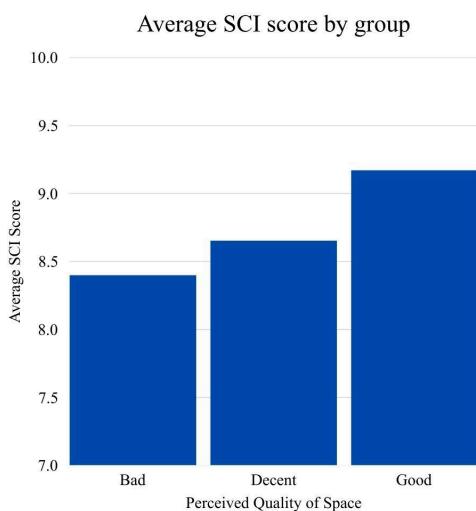


(Left) - Average SCI Score by Years of Usage. Those using their space for <5 years have an average score of 8.625, while the other group has an average score of 9.295.



(Right) - Average SCI Score by Time of Day used, with Morning users having an average score of 9.44, while afternoon users have an average SCI of 8.50, and varied at 8.14.

People's sense of community is also affected by the quality and characteristics of the public spaces themselves. For instance, users who feel their local area offers better-quality spaces/uses typically have higher SCI scores. According to Kim and Kaplan, a space's attractiveness, amenities, and other social qualities can greatly shape nearby residents' sense of communities, supporting this study's findings that well-designed public spaces foster stronger social cohesion within a community (Kim and Kaplan).



(Left) - Average SCI score by perceived space quality. Quality ratings were based on respondents' averaged attractiveness and comfort ratings (1–10). The average quality ratings were categorized as Bad (1–4.9), Decent (5–7.9), and Good (8–10).

Limitations

The study has several limitations that should be considered during the interpretation of the results. Primarily, the survey was only conducted in public spaces, more specifically, parks and trailheads, located in Forsyth County, Georgia. This may limit the generalizability of the study's findings as different communities/urban areas possess different characteristics and demographics. A study that utilizes the same survey and data analysis, but is conducted in a separate part of the country, may yield different results than this one. Data was collected during specific time periods and seasons, which may not accurately represent public space usage patterns or community cohesion over various times of the year.

Additionally, the study relied on self-reported survey responses, which may have led to respondent bias. Self-reported responses can often be influenced by social desirability bias, which is the desire to be perceived favorably rather than responding accurately, or additional inaccuracies when recalling information through memory. As participants were directly sourced from the public spaces themselves, community residents who were not present during times when the survey was administered are not represented in the data. This could have skewed results toward more active users of public spaces who generally engage more frequently with their community.

CONCLUSION

This study demonstrates how public spaces can offer great benefits to the community and its residents. They should not be seen as just places to pass time, but instead should be viewed as the bloodline of a community that, when given the chance, would gladly utilize it. Areas that would like to enhance and support the community's social cohesion should focus on the accessibility, quality, diversity, and needs of the individual users regarding public areas. As proximity and quality are the main factors of public space usage, neighborhoods should focus on investing in equally spread-out public spaces of good quality, as opposed to one central facility. Many residents desire vastly different uses out of their public spaces, so offering several options keeps more people engaged and active in the community for longer periods. However, not all residents can be pleased, as many individuals will naturally prioritize their personal circumstances and preferences over visiting public spaces.

Lastly, although one's sense of community is influenced by almost all aspects of our lives, public spaces are one of the most prominent factors that determine a sense of community and social cohesion. As the study found, a person's sense of community goes hand in hand with public space usage and quality. An individual's perception of their community begins and ends with the people they interact with and where in the community they feel a sense of belonging, aka public spaces. Simply by virtue of visiting public spaces more, respondents average higher scores on the Sense of Community Index.

A key limitation of this study is its localized scope and reliance on self-reported data. Further research should take a broader scope by examining additional regions across the country or focus on how specific design features further strengthen community ties. As the suburbs of American cities continue to grow rapidly, the need for public spaces also increases. These spaces help to integrate and support people who have all types of requirements and interests. Our neighborhoods may already possess decent public spaces, but that doesn't mean there isn't any room for improvement. By creating diverse, well-maintained, and accessible public spaces, our community can thrive as people spend time not just by themselves, but forming lasting ties with one another.

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