

Field mapping Anne canal

Aneta Grůzová, Minami Tsuchikura, Hannah Maria Korjus, Birte Scholz

To investigate how different age groups use the Anne Canal across space, time, and activity types, in order to support evidence-based planning that promotes health, reduces user conflicts, and protects ecological values.

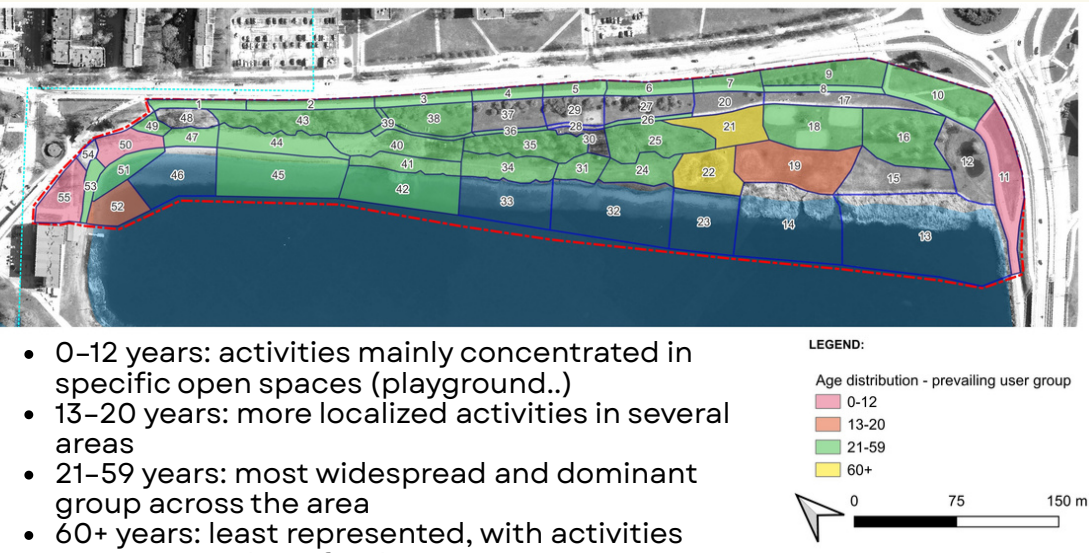
RESEARCH QUESTIONS

Q1 - Aim: How is Anne Canal used by different age groups based on activity types across weekdays and weekends?

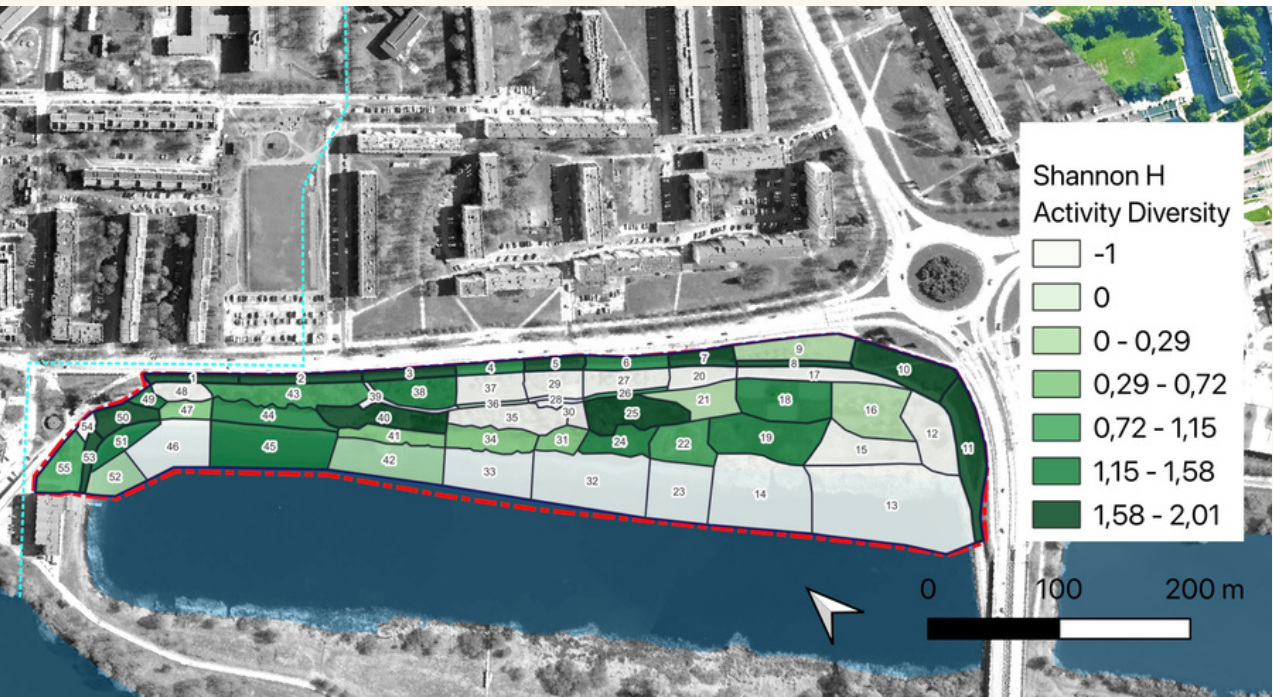
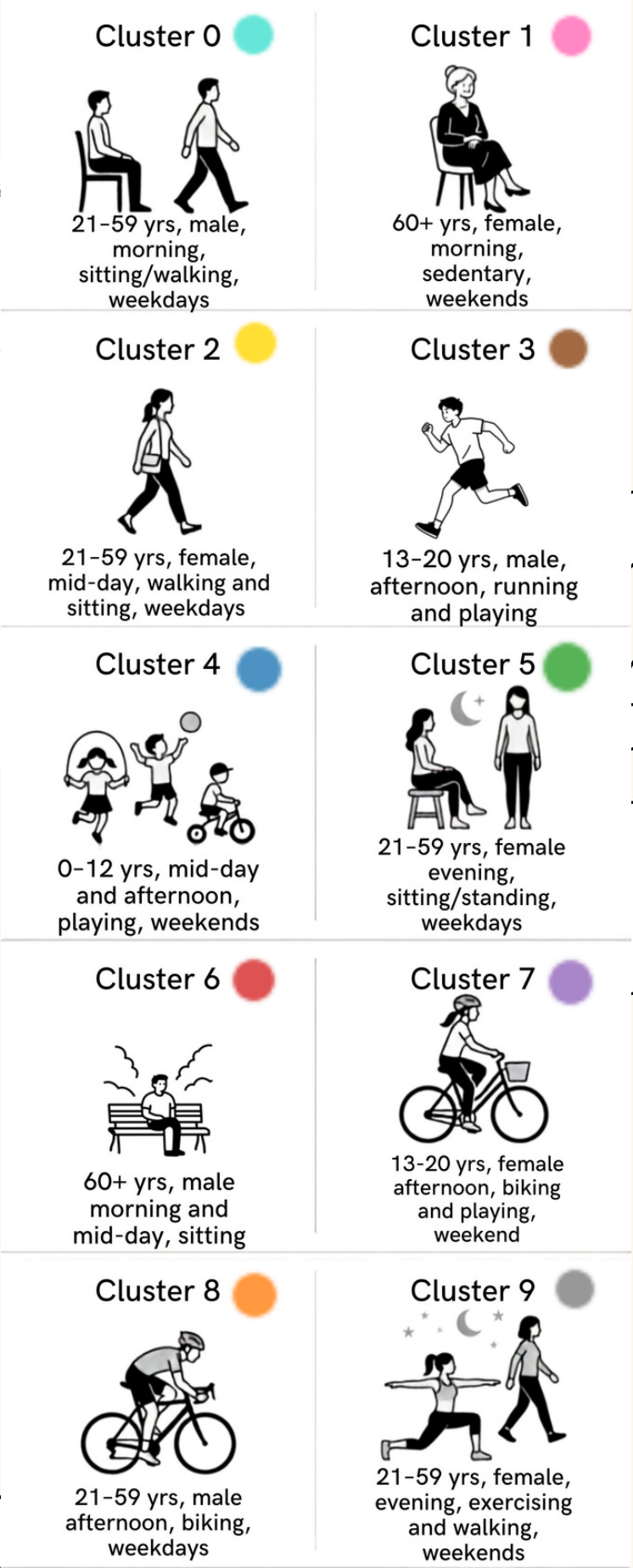
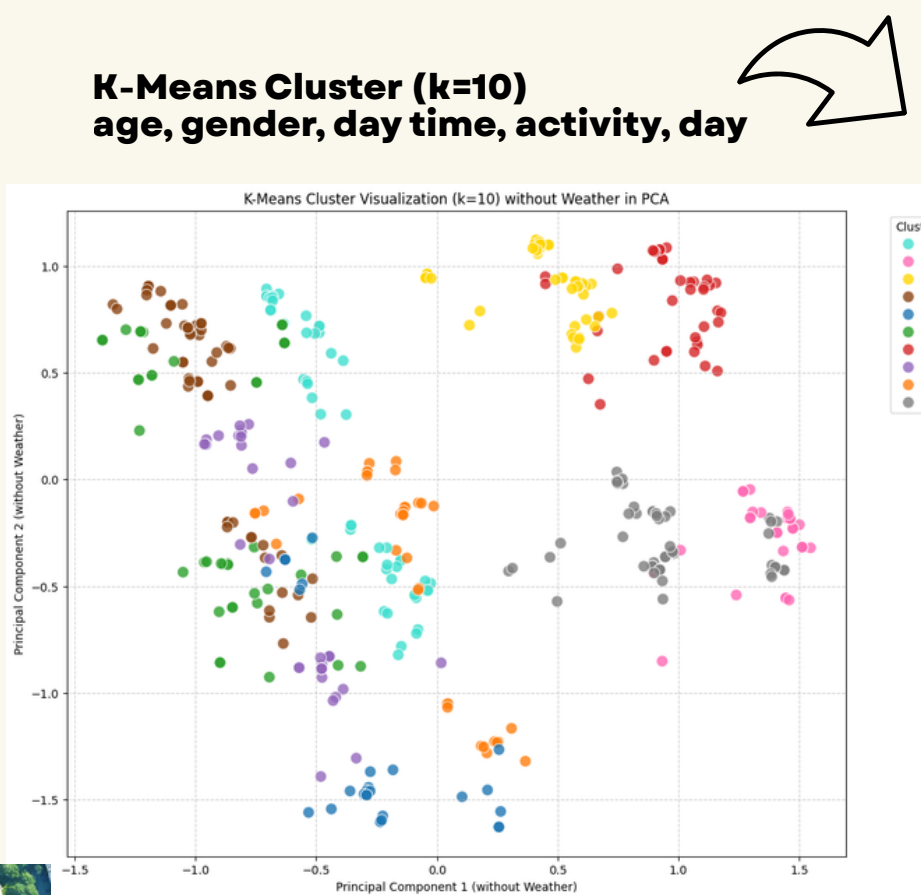
Q1.1 - How does the diversity of activities (Shannon H') vary across different polygons within the study area?

Q1.2 - Do polygons with specific functions exhibit higher or lower activity diversity (Shannon H') compared to others?

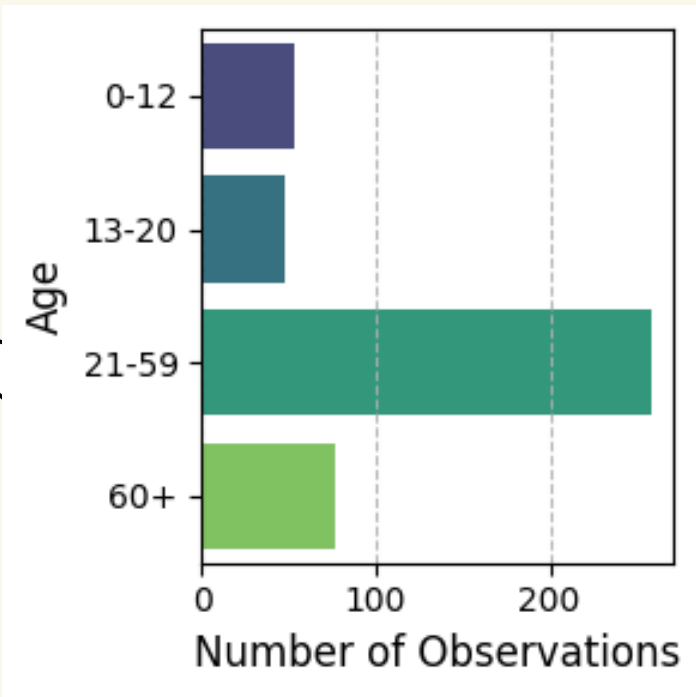
RESULTS



The map shows the spatial distribution of activities among four age groups. The 21-59 age group is the most prevalent, while the other groups appear more locally concentrated.



The Shannon H' index visualization map illustrates the diversity of use by gender and activity observed in different polygons along the Anne Canal in Tartu. The color gradient represents the Shannon H' values: darker blue areas indicate higher activity diversity, while lighter shades or white areas indicate lower diversity or no diversity. This map helps identify which areas are used for a wider variety of activities and which may need improvements to enhance usability and diversity.



DISCUSSION



Anne Canal, Tartu, Estonia

Field mapping at Anne Canal looks at activity types, age groups, where activities take place, and differences between weekdays and weekends. Activity diversity is measured using the Shannon Diversity Index (H'). In this study, H' is used to understand differences in recreational use between polygons and their functions. The analysis shows uneven distribution of age groups, conflicts between quiet and high-intensity activities, age-specific peaks, limited demographic diversity, and infrastructure that does not always match actual use. These findings can support age- and activity-specific design, better distribution of users, weekday-based management, and community participation.

Shannon, C. E. (1948). A Mathematical Theory of Communication. Bell System Technical Journal, 27(3), 379-423.