**What defines a 'Biophilic Citizen'?**

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**Introduction**

'Biophilia' is described as the innate desire to connect with nature and living things. Wellington, New Zealand is considered to be 1 of 13 'Biophilic' cities worldwide, but how do we measure the degree to which residents experience the natural environment? This study aimed to design a metric in which we can quantify the level of biophilia exhibited by Wellington residents.

**Methods**

An online survey, based on similar scales, was designed and Victoria University summer school classes were anonymously surveyed (N=65). We chose 2 science classes and 2 commerce classes. We hypothesised:

1: That the Biophilia Scale would positively correlate with a related and proven scale, the Connectedness to Nature (CTN) scale.

2: That science students would score higher on the Biophilia scale than commerce students.

Unlike previous scales, our survey included open-ended questions, such as "How do you connect with nature? (Consider the places you go and how you spend your time)") and "Why is your local environment important to you?" It also included knowledge based questions such as "In your neighbourhood how many different bird species do you know?"

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**Results**

1: Statistical tests showed a significant positive correlation (.393) between the Biophilic Citizen scores and the previously developed CTN, administered to participants at the same time, thus confirming our first hypothesis.

2: On average the science students scored higher than the commerce students. However, statistical tests failed to show a significant difference between the Biophilic Citizen scores of the two groups.

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**Conclusion**

This project allowed us to develop and validate the 'Biophilic Citizen Index' as shown by the positive correlation with the CTN scale. This shows we are on track and further refinement of the questions is now possible. It can now be further developed and used to better understand how urban residents experience the natural environment the world over, gather baseline qualitative information relating to biophilia levels, and monitor changes that may occur through the work undertaken through the 'Biophilic Cities Initiative', such as Wellington’s ‘Our Living City’ program.

**Recommendations**

Further refinement is needed, both in the calibration of the scale through weighting of questions and developing a data analysis methodology to draw qualitative data from the open-ended questions. This could complement the quantitative data drawn from the scale to provide a suite of data that could be used to inform planning and policy work in the future, especially in 'Biophilic' cities.

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**References:**