The Economic Value of Green Infrastructure: An application of the Contingent Valuation Method

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Introduction: The Motivation of the Study and Aims

- Limited economic evidence of the value of green spaces and of their contribution.
- Green spaces are being lost to other property development
- These issues are being addressed by VALUE, through the European INTERREG IVB programme for North West Europe.
- VALUE is aiming to demonstrate the economic value of GREEN INFRASTRUCTURE in cities and regions.

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Introduction: The Motivation of the Study and Aims

- VALUE : The main aim of the project is to demonstrate the economic value of green infrastructure and to show how to target green investments to maximise comparative benefits to communities.

- This paper discusses some of the initial results of the research, which assessed the economic value of green infrastructure by employing contingent valuation method and focuses on the decision of interviewees' "willingness to pay" for street tree investments.

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Approach: The Contingent Valuation Method

- CVM can estimate the value, both for users and for non-users, of the good or service in question.
- They can generally be seen as a procedure to convert (qualitative or quantitative) changes in (environmental) goods or services into monetary terms (in particular 'Willingness to Pay' (WTP) or 'Willingness to Accept' .

Example of WTP questions:

- How much extra each month would you be willing to pay for the improvement at the street as shown in the picture?
- How much extra from the council tax do you think should go towards improvements at the street as shown in the picture?

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Case Study Areas: Manchester – Whitworth Street

- It is connected to one of the major transport routes (Oxford Road) into the city centre from the South.
- The overall aim of the VALUE investment in the Manchester Oxford Road Corridor is to highlight the need for strategic green infrastructure investments on major road corridors.
- Whitworth Street in Manchester is over a mile long, while the eastern end (between London Road and Oxford Road) passes small areas of green, the western end (Oxford Road to Deansgate) has no directly accessible green space.

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Survey

- The universe for this project was defined as “any adult (aged 16+) who lives, works or walks along Whitworth Street”.

Category	Interviews achieved	% of sample
Resident	140	27
Employee	47	9
Business owner/senior manager	25	5
Commuter	91	18
Passing through	108	21
Visiting family/friends	45	9
Customer of shop/restaurant/ other business	45	9
Some other reason	11	2
Total	**512**	

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Status Quo

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Small Trees

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Small Trees with Grass

VALUE

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Large Trees

VALUE

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Large Trees with Grass

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Status Quo

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Status Quo

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Willingness to Pay for Small Tree Investment

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Small Trees with Grass

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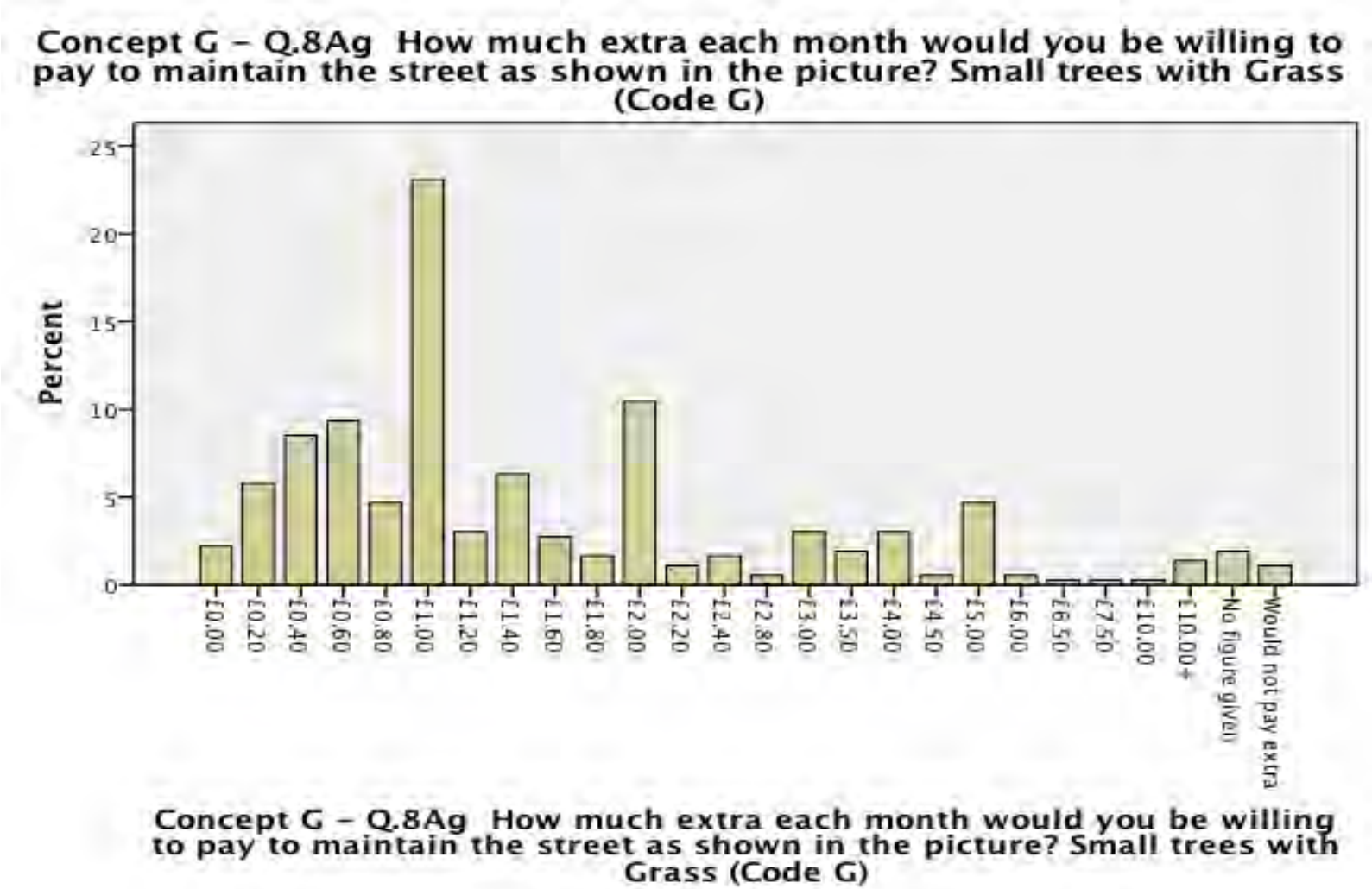
Willingness to Pay for Small Trees with Grass



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Large Trees

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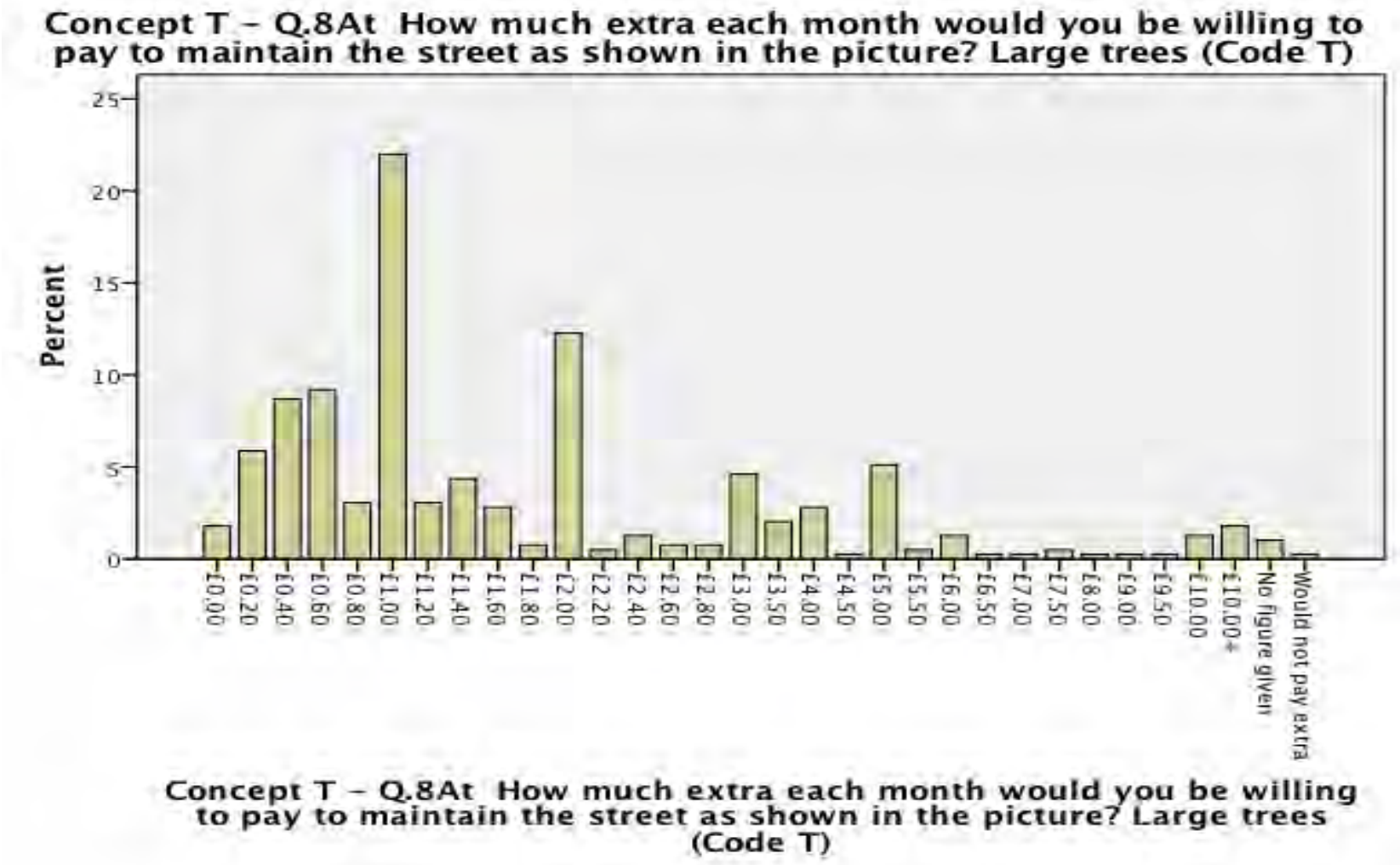
Willingness to pay for Large Trees Investment



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Large Trees with Grass

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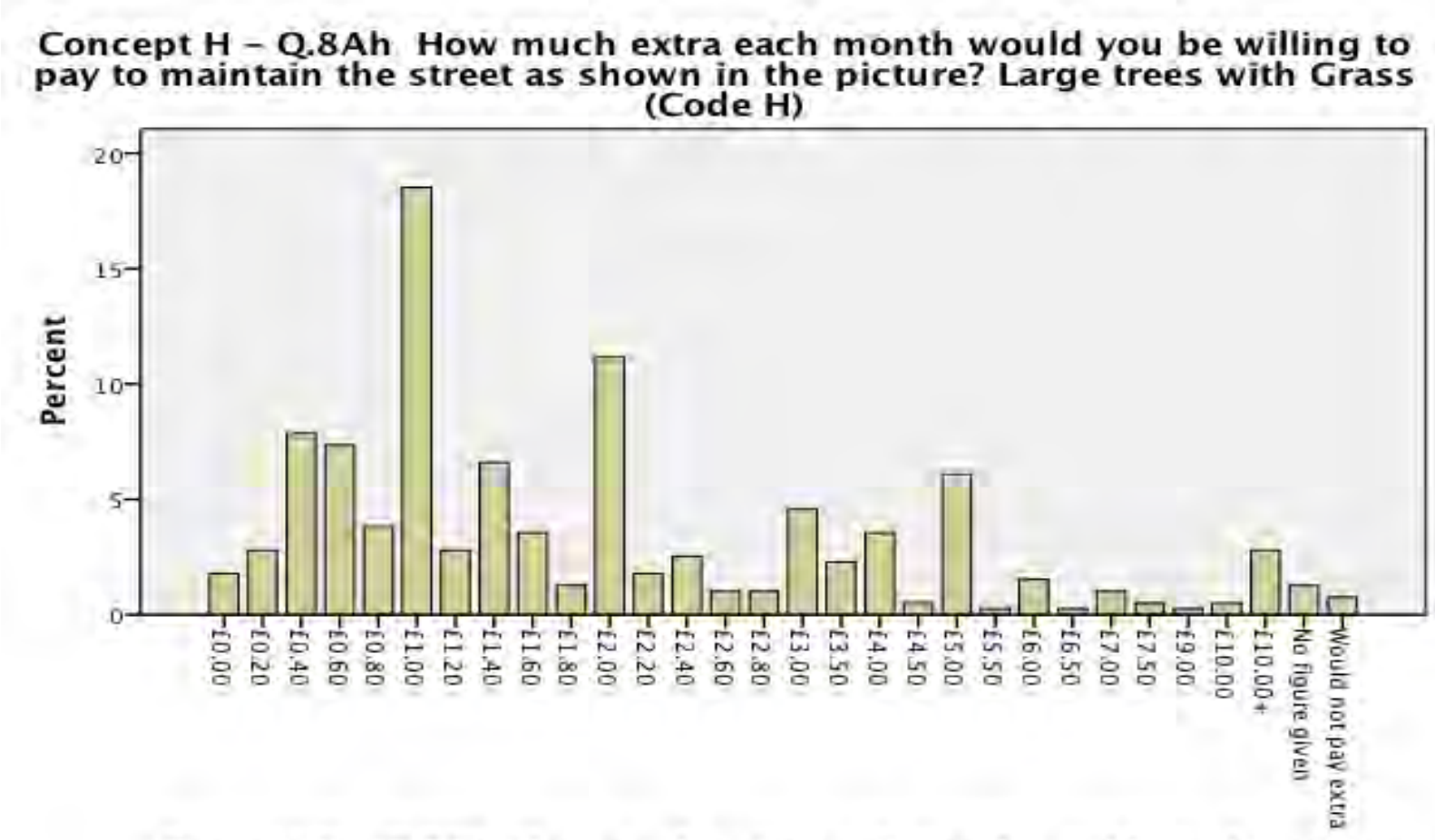
Willingness to pay for Large Trees and Grass Investment



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Living Period and WTP

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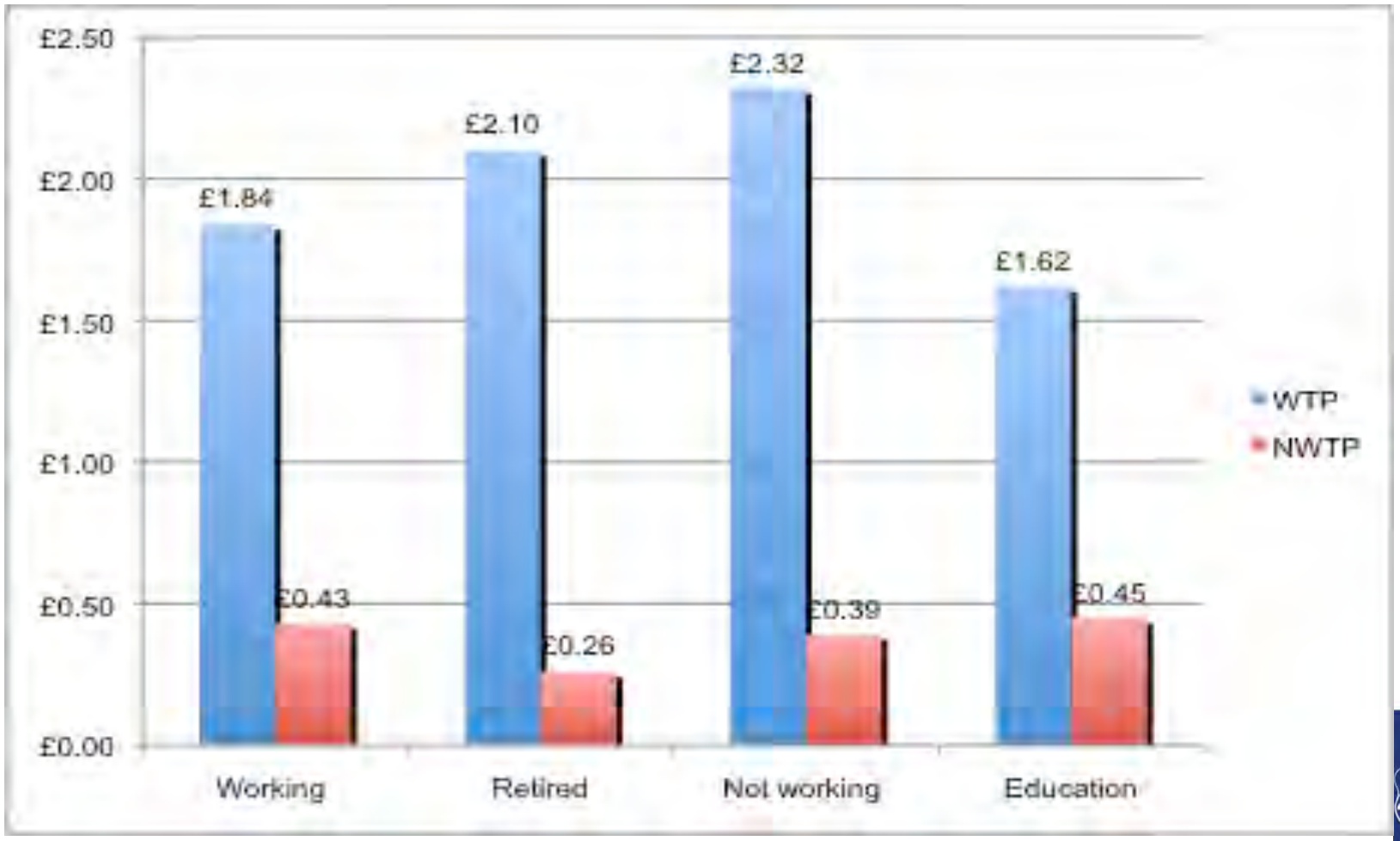
Working Status and WTP



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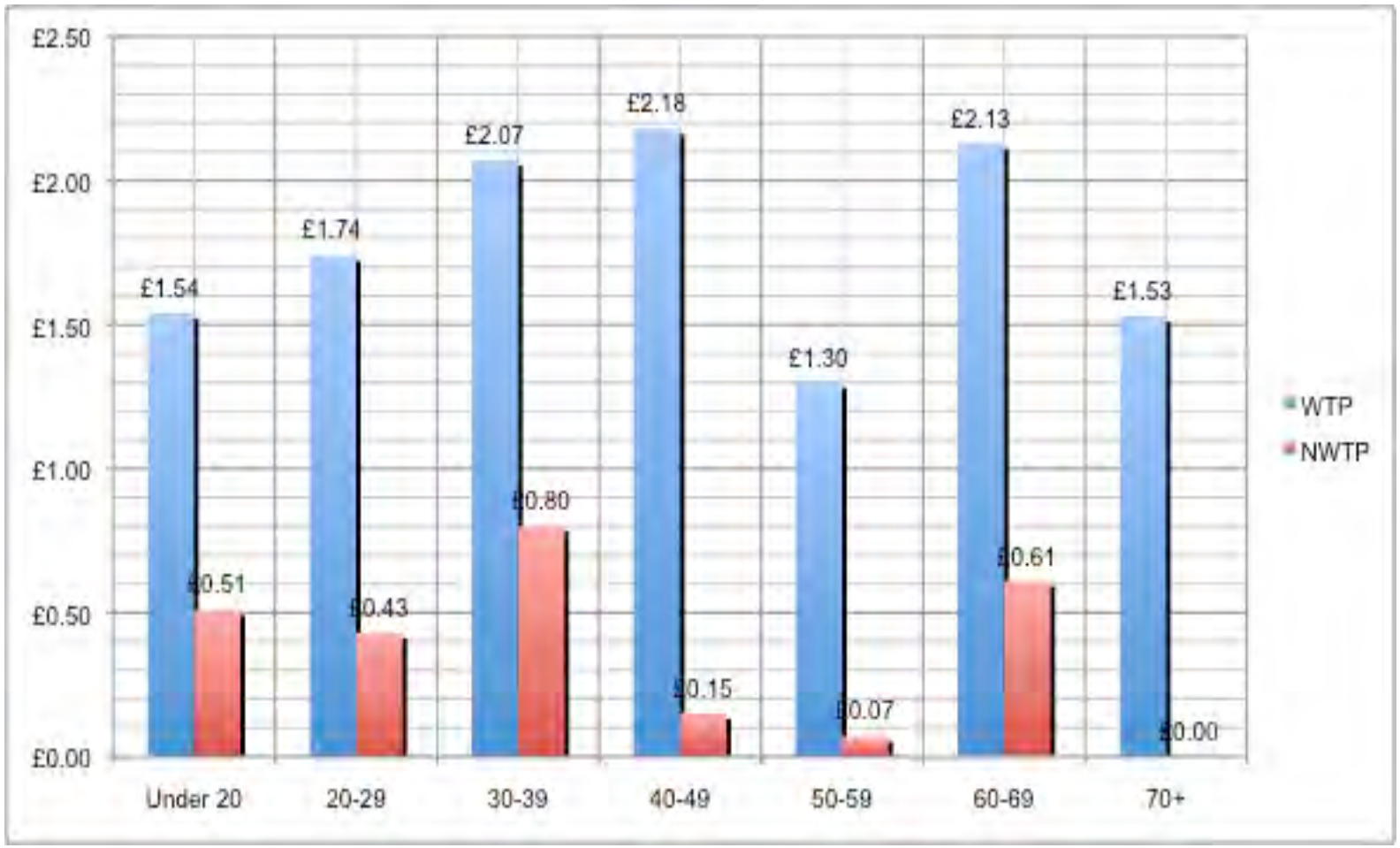
Age and WTP



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Conclusions

The study provides an interim report of the "economic impact" of Green Infrastructure as part of a larger research context.

This overall research context seeks to promote transnational actions that will enhance the economic and social performance of cities, towns and rural areas; including the economic potential of local and regional asset.

Economic evidence of the value of green infrastructure can be explained by WTP.

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