

# Preference-based quality of life increment in children with bilateral cochlear implantation. A general population survey.

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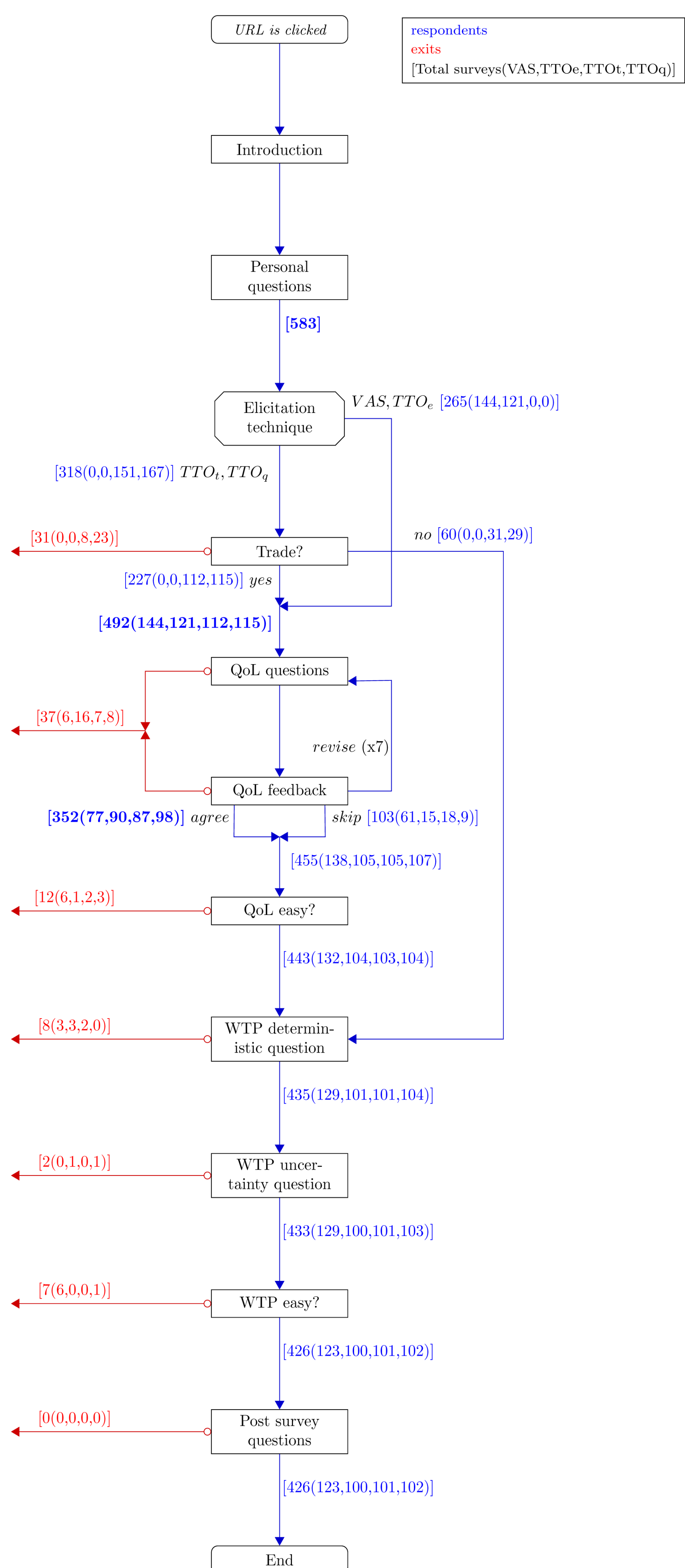
## 1 Introduction

- ◆ Bilateral cochlear implantation (BCI):
  - No study has been able to prove beyond all doubt that it is cost-effective
  - Not universally covered even in developed countries.
  - The parameter that most affects the cost-effectiveness is the **increment in quality of life (QoL)** with respect to unilateral implantation (UCI).
- ◆ Objective: to measure the QoL increment of pediatric BCI, in order to use this result in cost-effectiveness analyses.

## 2 Methods

- ◆ Online self-administered survey
- ◆ Respondents: students of our university (UNED)
- ◆ Two vignettes describing children with BCI vs. UCI
- ◆ Four elicitation methods
  - Visual analog scale (VAS)
  - Time trade-off giving up time (TTOt)
  - Time trade-off giving up QoL (TTOq)
  - Time trade-off via equivalence (TTOe)
- ◆ Feedback: VAS ↔ TTO(e)
  - and warnings for absurd responses.

## 3 Responses obtained for each elicitation technique

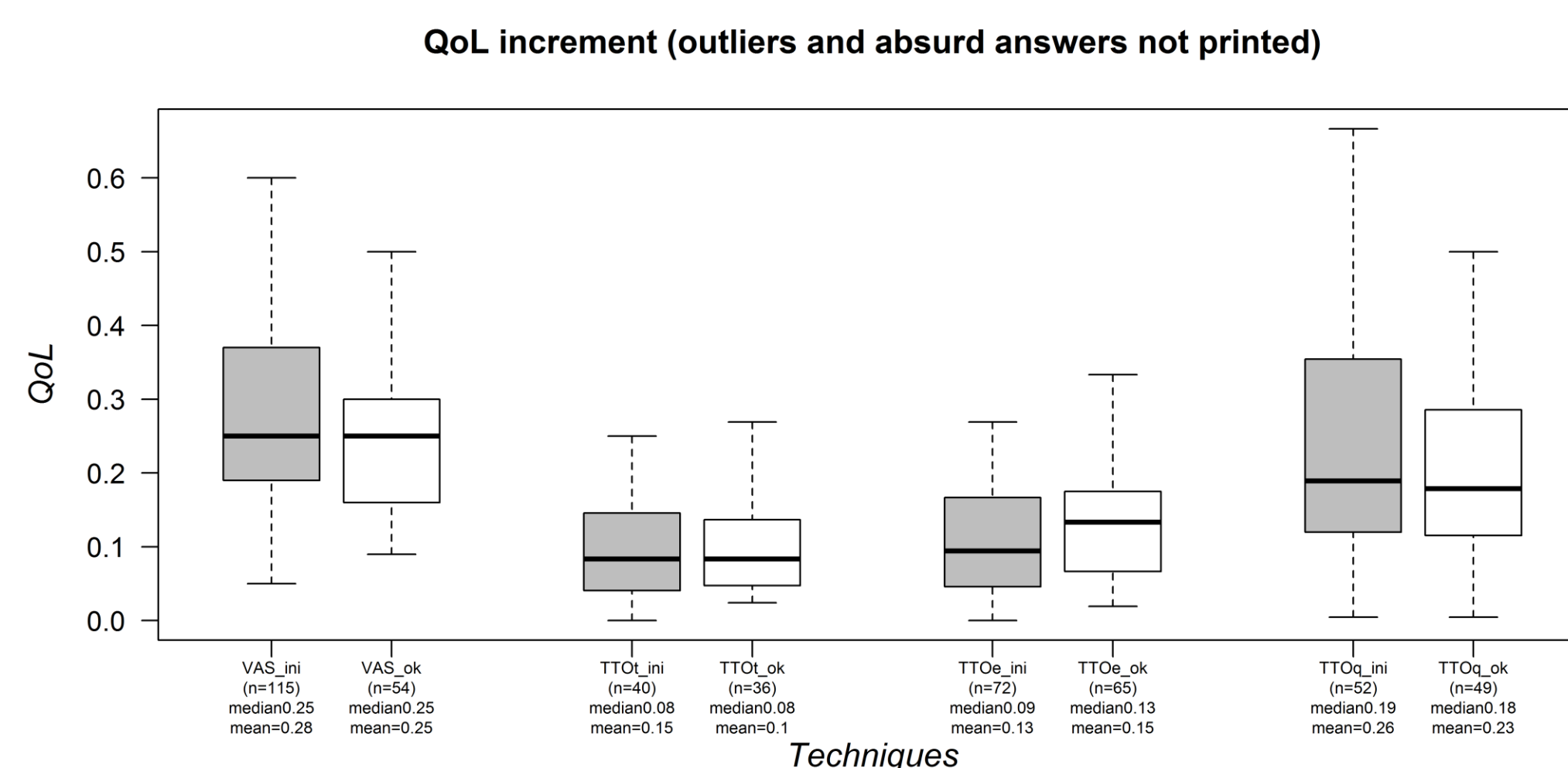


## 4 Results

Incentive	Students invited	Respondents	Response rate	% over total responses
No incentive	866	126	14,55%	21,61%
€100 (raffle)	867	149	17,19%	25,56%
€300 (raffle)	1732	308	17,78%	52,83%
<b>Total</b>	<b>3465</b>	<b>583</b>	<b>16,83%</b>	<b>100,00%</b>

Elicitation technique	Question proposed	Process completed	Agreed with result	Absurd answers	% absurd answers	ΔQoL (initial)	ΔQoL (confirmed)
VAS	144	138	77	23	16,67%	0.28	0.25
TTOt	121	105	90	65	61,90%	0.15	0.10
TTOe	112	105	87	33	31,43%	0.13	0.15
TTOq	115	107	98	55	51,40%	0.26	0.23
<b>Total</b>	<b>492</b>	<b>455</b>	<b>352</b>	<b>176</b>	<b>38,68%</b>		

## 5 Results



## 6 Conclusion

- ◆ Different techniques return different estimates for the QoL increment
  - The result of VAS is within the limits of previous studies
  - TTOe seems to be the most neutral method
  - TTOt seems to be biased towards low QoL estimates.
  - TTOq seems to be biased in the opposite direction.
- ◆ In general the results we have obtained are higher than in previous TTO studies
  - due to exclusion of non-traders and the feedback process.

## 7 Acknowledgments

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