



Understanding olive growers' intention to participate in *Xylella fastidiosa* control in Apulia, Italy

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Background

- Successful control of an epiphytotic requires full commitment of stakeholders involved
- Research primarily aims at improving epyphytotic management

But studies have shown how their decisions are biased by heuristics (social and physical environment)!

The assumption is that



when individual growers make decisions...



...it is based on rigorous scientific evaluations



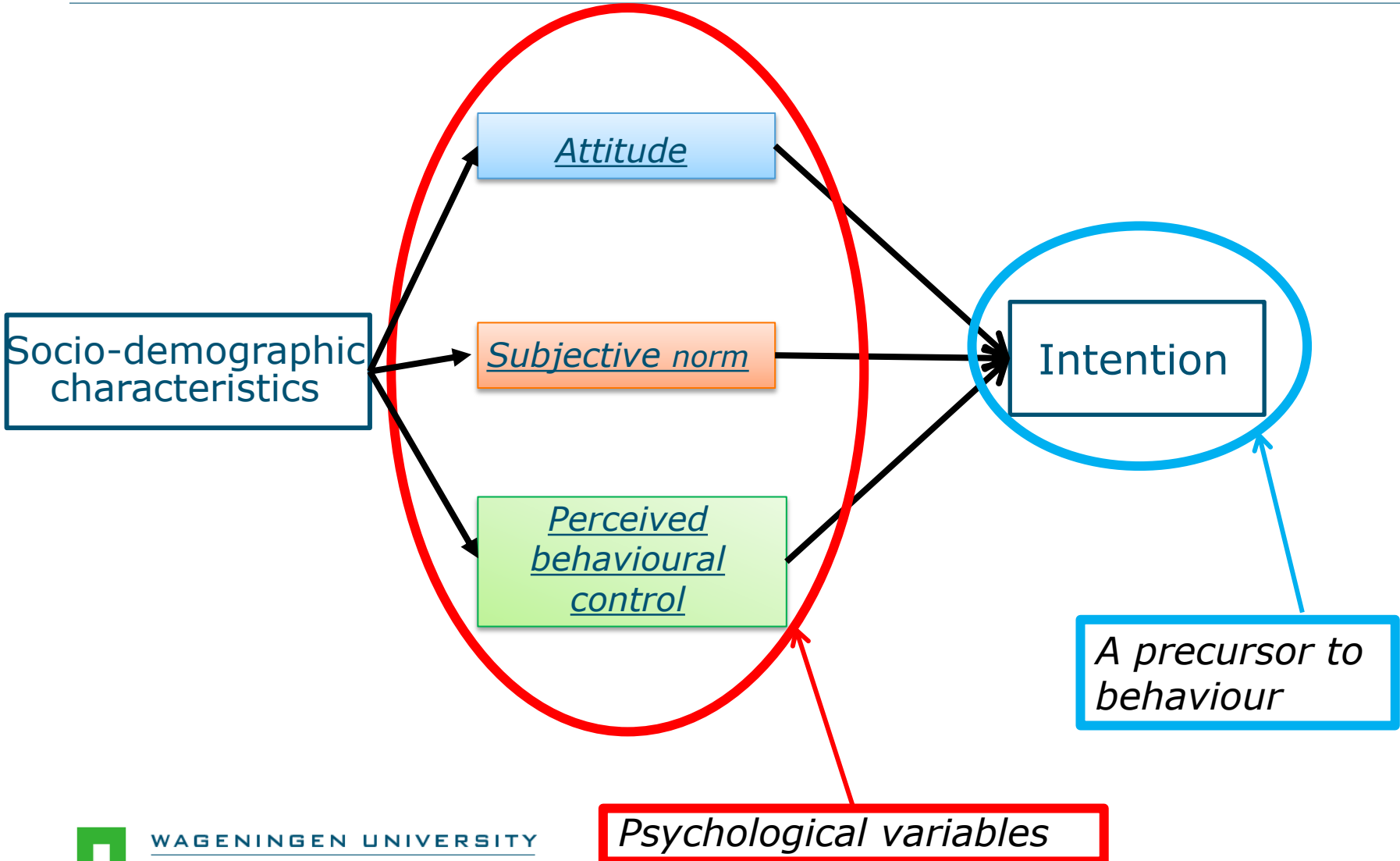
Aim

- Evaluating the role of farmers' behaviour in the management of epiphytotics
- Case: olive growers uptake of *Xylella fastidiosa* control measures in southern Italy
- Focus: situation in Lecce region summer 2016



Theoretical framework

Theory of Planned Behaviour by Ajzen (1991)



Intention to..

1. Ordinary pruning of all non-infected trees
2. Extraordinary pruning of infected trees
3. Uprooting infected trees and neighbouring hosts within 100 meters
4. *Phytosanitary measures to reduce vector population*
5. *Superficial tillage and weeding to reduce vector population*

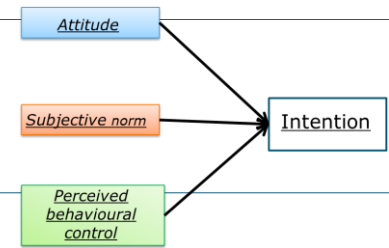


Methodology

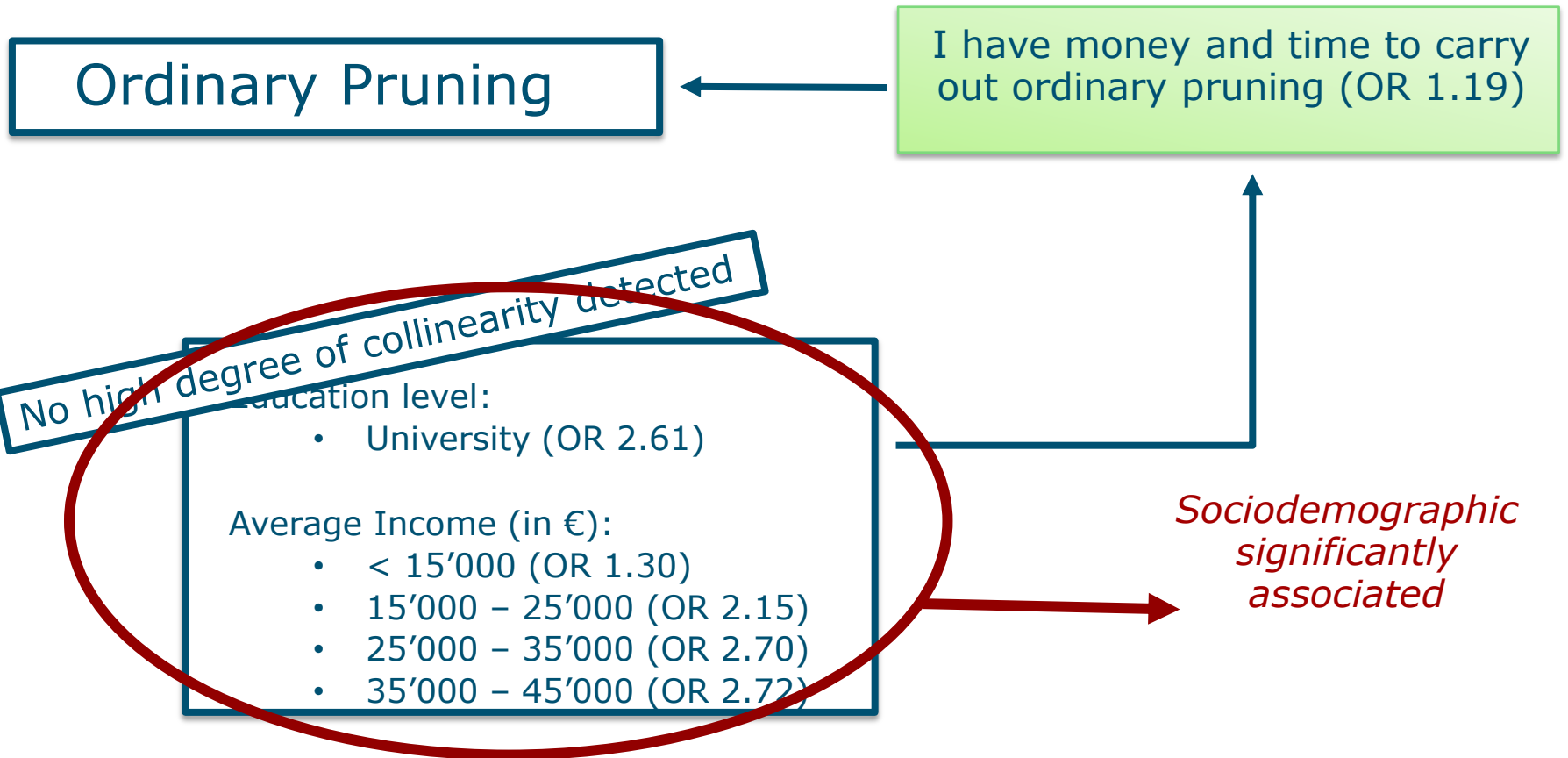
- Face to face questionnaires, July 2016
- Statements using a 5-point Likert scale to measure intentions and psychological variables
 - E.g. *this year, I will prune my olive trees as a preventive measure against OQDS*
- Elicit information on 18 farmers' sociodemographic characteristics (age, sex, income,...)
- Logit regression analysis; influence of psychological and sociodemographic variables on behavioural intentions
- 96 respondents



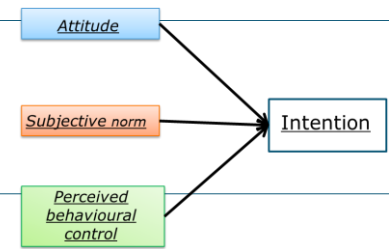
Results - Ordinary pruning -



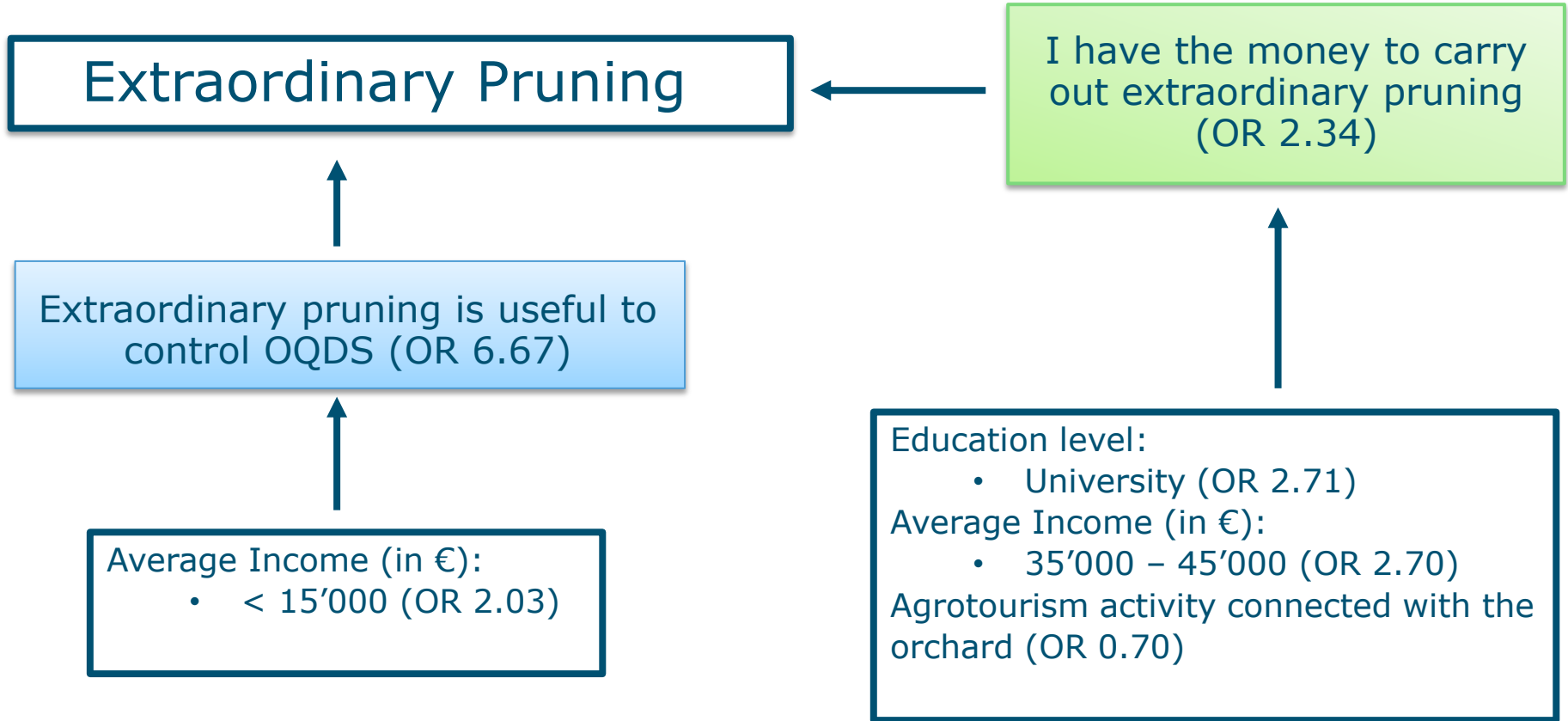
Majority in favour of ordinary pruning → 84% positive



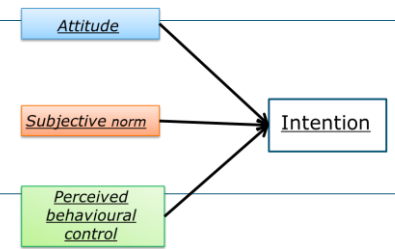
Results - *Extraordinary pruning* -



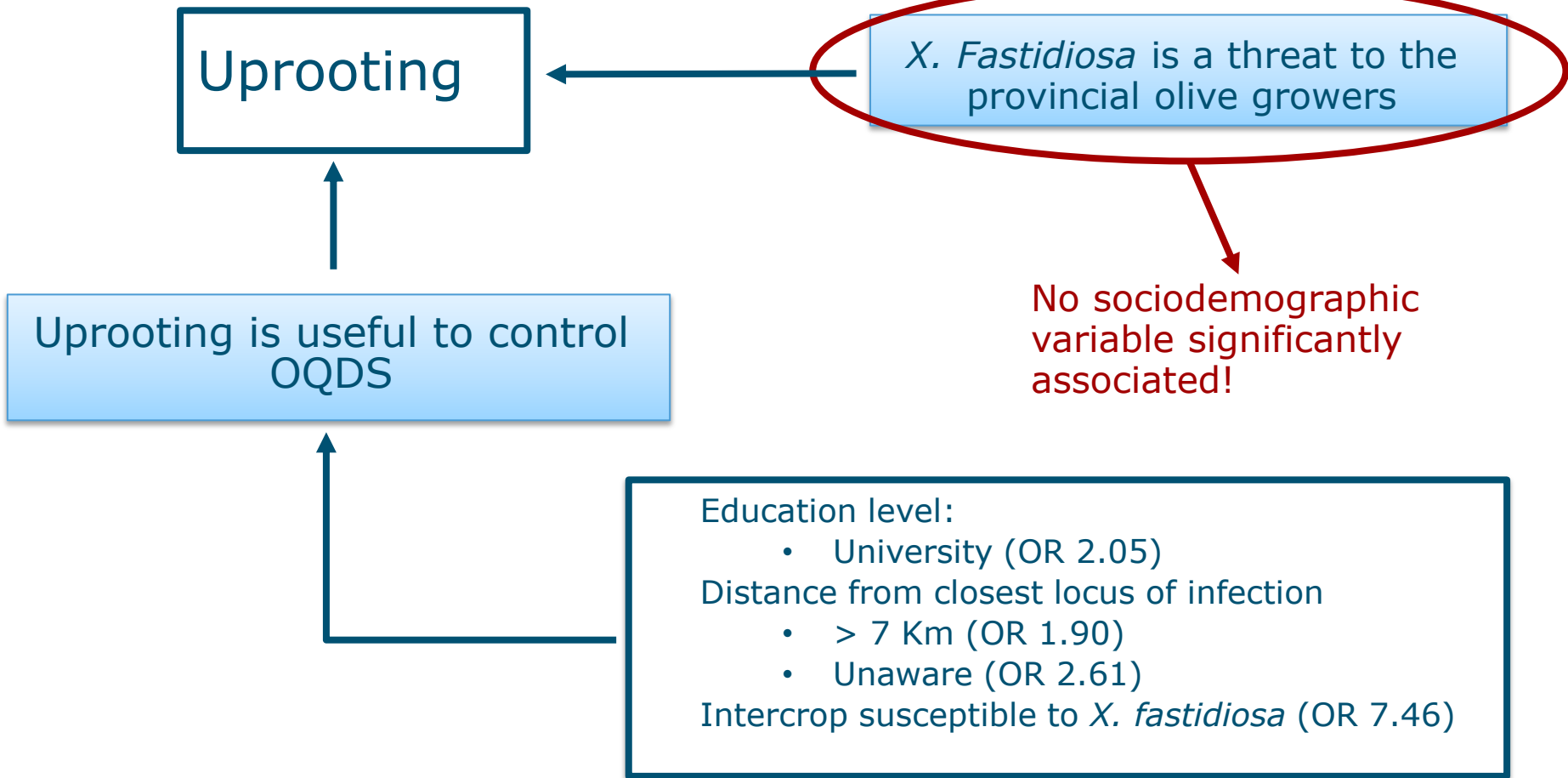
Majority in favour of extraordinary pruning → 86% positive



Results - Uprooting-



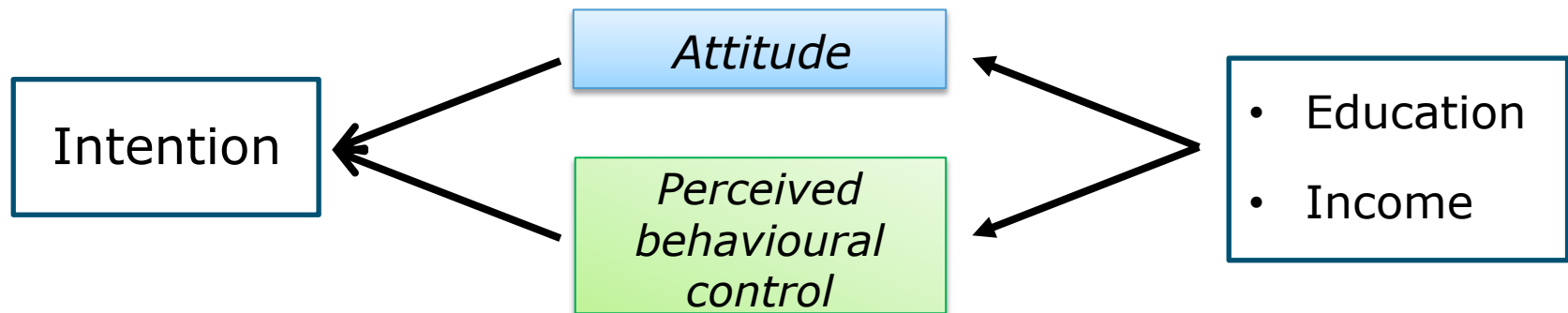
Without compensation 30% positive;
with compensation 37% positive



Conclusion

TPB approach useful to :

- Understand farm level management → Emphasis on the actors and their evaluation of disease management
- Design targeted intervention → information on the applicability of suitable strategies



E.g. Information campaigning and incentives for low income farmers to foster uptake of control measures





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