



**ICRH**

INTERNATIONAL CENTRE FOR REPRODUCTIVE HEALTH

*Improving sexual and reproductive health  
through research, training and adapted interventions*



# Uptake of the Human Papillomavirus vaccine in Kenya: testing the Health Belief Model through structural equation modeling on cohort data

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# Background: HPV vaccine acceptance studies

Use health behavior theories:

- Constructs ~ acceptance/intention

Limitations:

- Cross-sectional
- Personal level: HBM – TRA/TPB
- Outcome: acceptance (vs. uptake)



# HPV vaccination program in Kenya

Test the health belief model

- Severity
- Susceptibility
- Benefits
- Barriers
- Self-efficacy
- Cues to action



# Research questions

- Predictive value of the HBM ~ HPV vaccination in Kenya?
- Importance of external triggers?
- What is the validity of adding willingness to vaccinate to the HBM as mediator of uptake?



# Methodology: longitudinal study

## Baseline:

- Women with eligible daughter
- Willingness + HBM

## Vaccination:

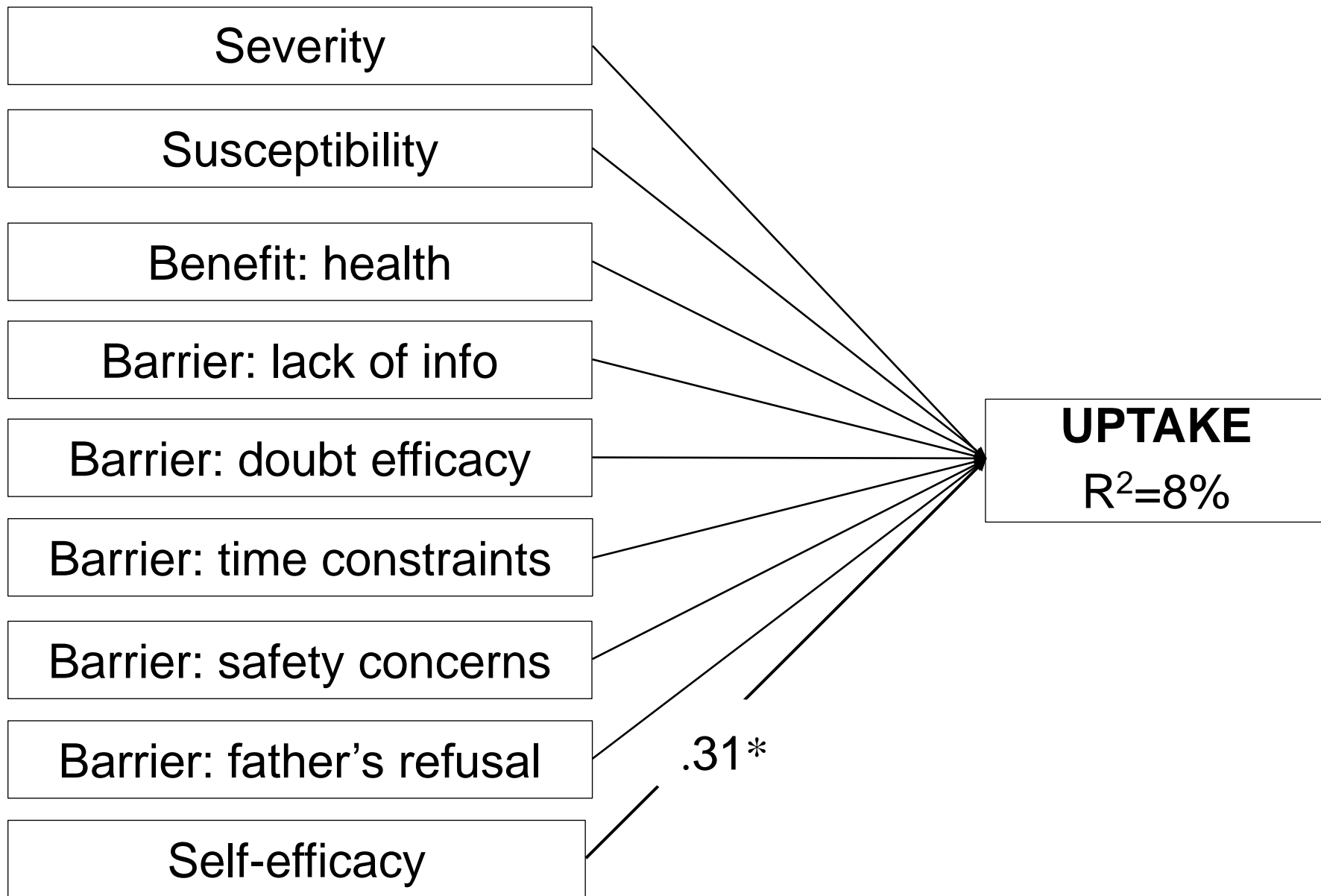
- School-based promotion
- Hospital-based vaccination

## Follow-up:

- Same women
- uptake + information
  - Well-informed? (subjective)
  - Individual & school level

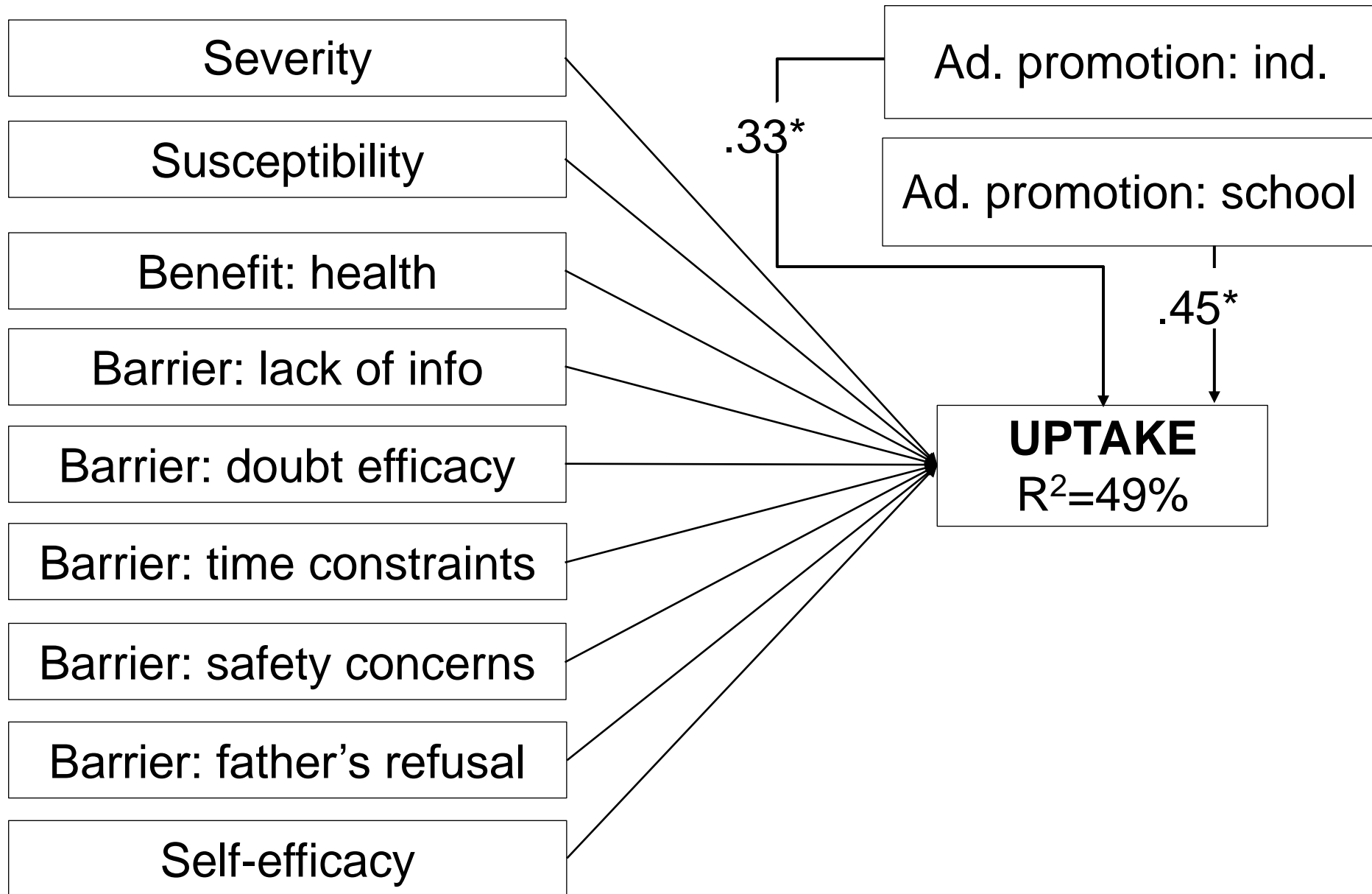


# Results: structural equation modeling (n=255)



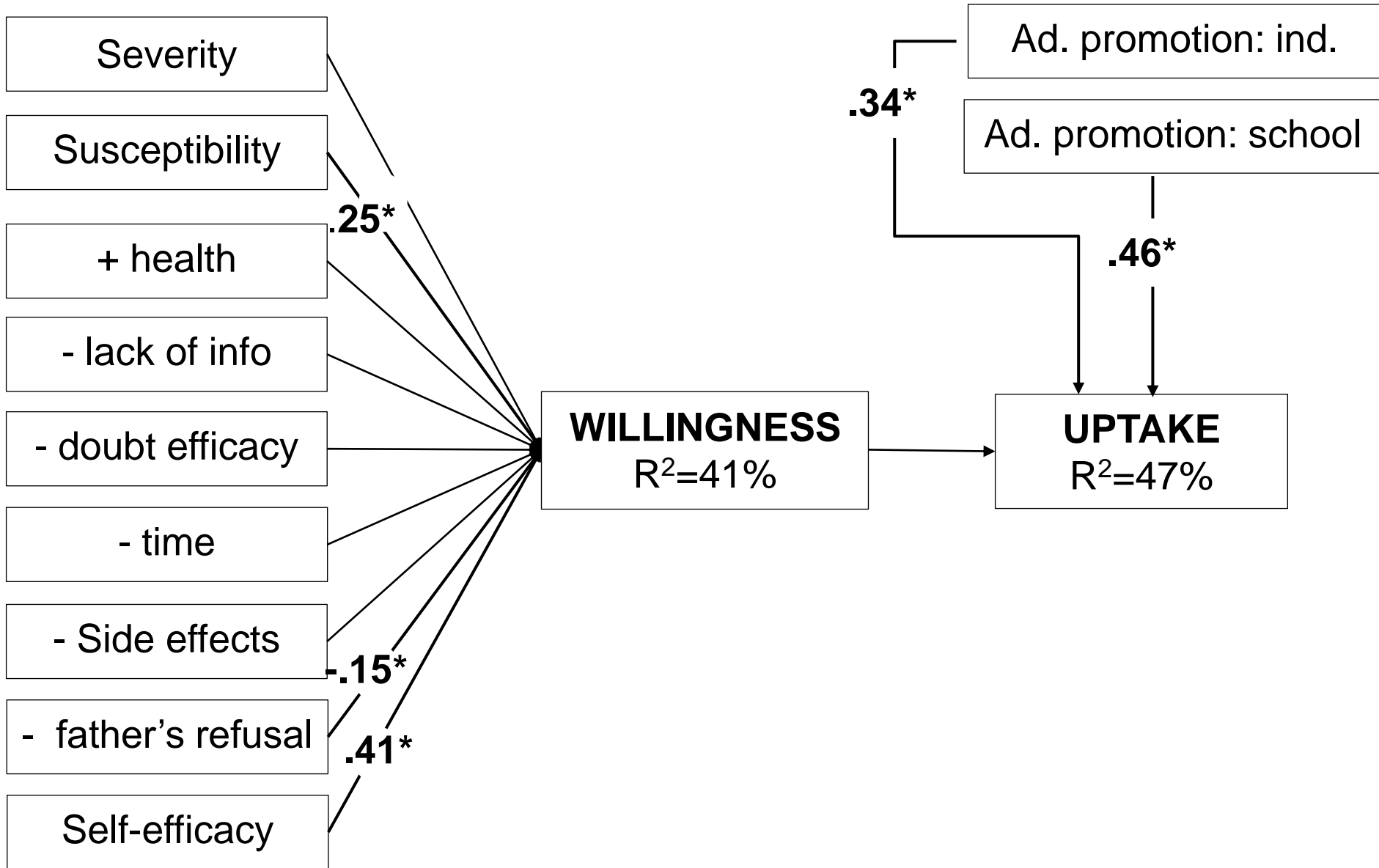


# Results: structural equation modeling (n=255)





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# Limitations

- Skewed data
- Adequate promotion was measured at follow-up



# Conclusions

- HBM did not predict HPV vaccine uptake
- Willingness to vaccinate was not related with vaccine uptake
- Feeling well-informed strongly correlated uptake



# Hypothesis

Adoption of new health behaviors might be more determined by how environmental cues are perceived than by personal beliefs



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## Thank you

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# Methodology

## Structural equation modeling

- Test and refine theoretical models
- Path analysis - Multiple effects

