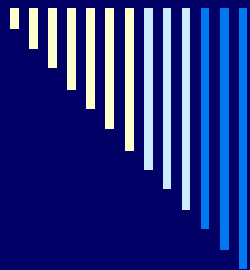


# **The impact of wildlife tourism experiences on visitors' learning for sustainability**

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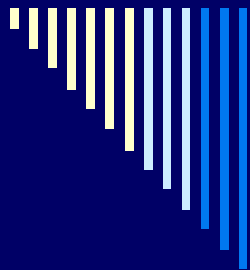
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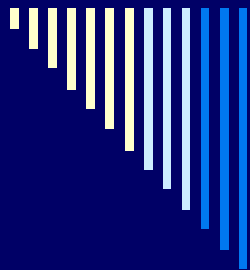
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## **The impact of wildlife tourism experiences on visitors' learning for sustainability**

- To what extent do wildlife tourism experiences elicit positive and lasting changes in human behaviour? What aspects of the experience are most effective in achieving this?
  - Few studies have attempted to detect the impact of wildlife tourism upon changes in visitors' long-term environmental behaviour and broad patterns of visitor environmental learning across different sites and experiences
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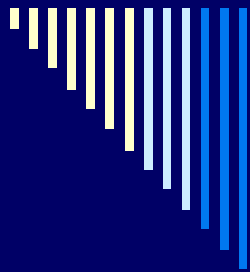
- This study aimed to explore how key visitor attributes interact with aspects of a wildlife tourism experience to produce long-term changes in visitors' environmental knowledge, attitudes and adoption of environmentally sustainable behaviour
- Relationships between three sets of variables were investigated:
  - Key visitor attributes (e.g., prior knowledge, interests, attitudes, behaviour and motivations)
  - Salient aspects of the experience (interaction with staff, discussion with companions, emotional engagement, contact with animals)
  - Learning outcomes immediately following the visit (short-term) and four months later (long-term)



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## Method

- Procedure
    - Pre- and post-visit questionnaires; follow-up web surveys
    - Four marine wildlife tourism sites (aquarium, marine theme park, turtle nesting/hatching, whale watching)
  - Participants
    - 1286 completed pre-visit questionnaires
    - 907 completed post-visit questionnaires
    - 240 completed follow-up web surveys
  - Instruments
    - Incorporated a range of measures, some drawn from previous research and some developed specifically for this study
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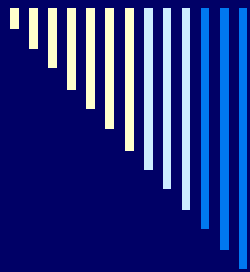


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## Method

- Data analysis

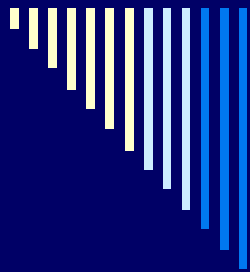
- Factor analyses were performed within each of the three sets of variables to explore the constructs underlying the data – new composite variables were constructed to reflect these (Visitor Attributes – Environmental awareness, Lifestyle practices, Environmental advocacy; Visitor experiences – Experiential engagement, Reflective engagement)
  - Structural equation modelling was used to explore the relationships between visitor attributes, visitor experiences, and short- and long-term learning outcomes
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## Results

- Visitor attributes (measured pre-visit)
    - Motivation – visitors rated the importance of four categories: to learn and discover new things, to spend social time with friends and family, to have an enjoyable experience, and to relax and recover from the stresses of life – motivation to learn was the only one significantly related to visitor experience and learning outcomes
    - Environmental interest, Pre-visit knowledge and Pre-visit environmental behaviour – factor analysis identified three factors: Environmental Awareness, Lifestyle Practices and Environmental Advocacy.
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## Results

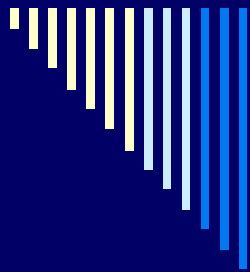
- Demographic variables (measured pre-visit)
    - Under 30s were the least environmentally conscious and over 60s the most.
    - Females reported higher scores on Lifestyle Practices and Environmental Advocacy than males.
    - Australian visitors recorded higher scores on Lifestyle Practices than overseas visitors – this was due to three practices in particular: conserving water, recycling and picking up other people's litter.
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## Results: Visitor experiences (measured immediately after the visit)

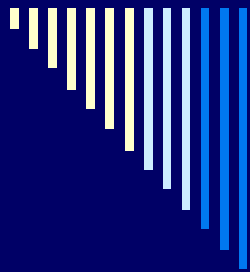
- Factor analysis identified two factors:
    - Experiential engagement - excitement of seeing live animals, good view of the animals, plenty of activity, engaging experience, enjoyable experience, sense of wonder or awe
    - Reflective engagement - emotional connection with the animals, reflecting on new ideas, discussing new information, feeling sad or angry about environmental problems
    - Females rated both types of experience higher than males; visitors aged over 60 rated both types of experience higher than younger visitors.
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## Results: Learning outcomes

- Short-term (measured immediately after the visit)
    - Participants' perceptions of impact on their general knowledge, beliefs, interest in and concern for the particular animals they had seen, their concern for wildlife in general, and their understanding of and attitudes toward conservation issues
    - Pre-post differences in self-rated knowledge about wildlife conservation
    - Pre-post differences in environmental attitudes and behavioural intentions
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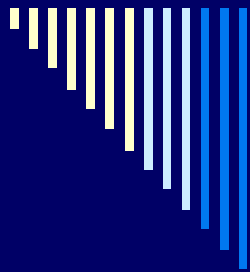
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## Results: Learning outcomes

- Long-term (measured four months after the visit)
  - Pre-follow up differences in environmental behaviour
  - Coded qualitative responses regarding
    - behaviour change \*
    - attitude change
    - new knowledge that had resulted from the visit

(highest ratings given to those who could cite specific new actions they had taken, new attitudes they held, or new knowledge or understandings they had retained as a result of the wildlife tourism experience)

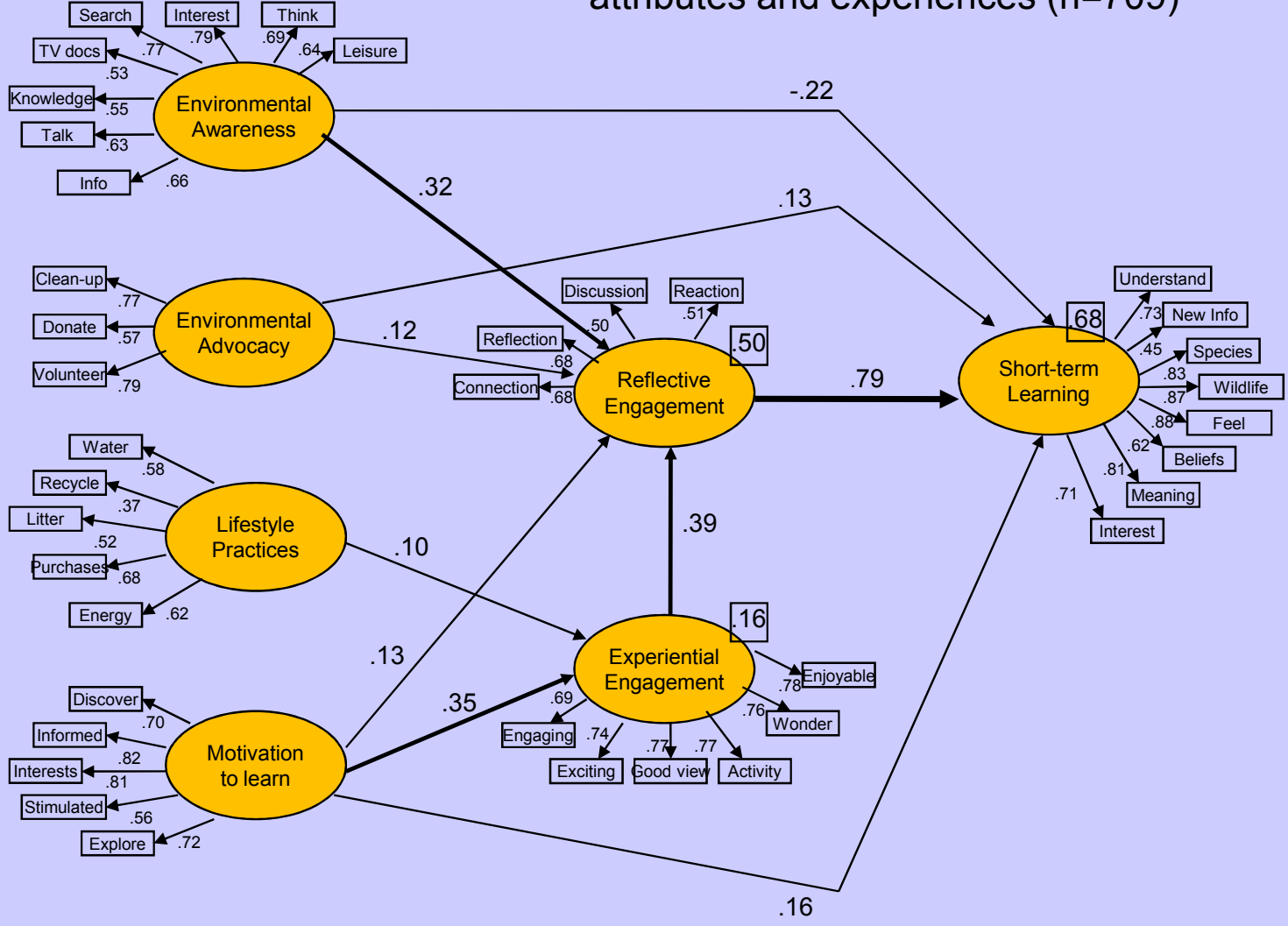
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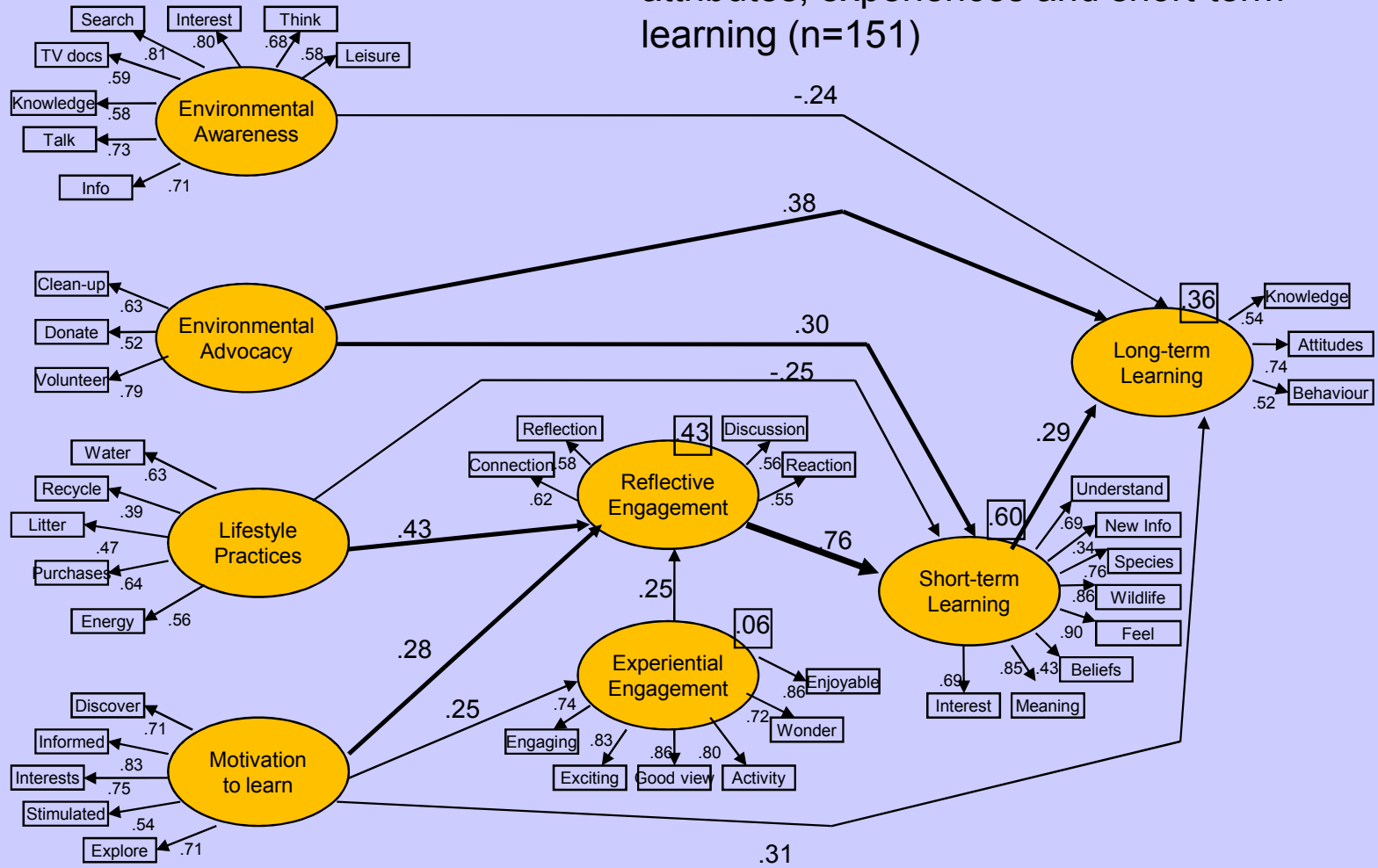
## Results: Learning outcomes

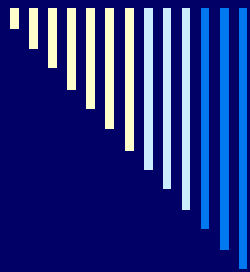
- Long-term (measured four months after the visit)
  - Behaviour: 7% of respondents reported new actions they had taken in support of the environment, as a result of the wildlife tourism experience
  - Attitudes: 5% of respondents reported having questioned values, changed attitudes or developed a stronger desire to protect wildlife
  - Knowledge: 39% of respondents stated some new knowledge or understanding they had gained, and still retained, as a result of the experience
- Short-term (measured immediately after the visit)
  - Participants' perceptions of their learning correlated significantly with the follow-up measures

# Predicting short-term learning from visitor attributes and experiences (n=709)



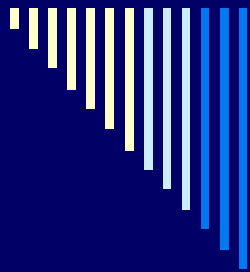
# Predicting long-term learning from visitor attributes, experiences and short-term learning (n=151)





## Discussion

- Best predictors of long-term learning:
  - Visitor attributes (pre-visit commitment to environmental issues; strong motivation to learn) - preaching to the already converted?
  - Visitor experiences (engaging in a reflective experience) contributed significantly to short-term learning which in turn contributed to long-term learning outcomes
- Optimise learning by encouraging visitors to:
  - emotionally connect with the animals
  - respond emotionally
  - reflect on new ideas
  - discuss ideas with companions



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## Discussion

- Further research is needed to identify actions providers can take to increase long-term learning
    - short-term learning outcomes were strongly influenced by emotional factors and short-lived, especially in terms of long-term attitude and behaviour change
    - need to consider the influence of post-visit action resources that reinforce and maintain the immediate effects of the experience
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