

# Informing TWA's Dark Sky Tourism Products & Strategy

March 2021



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A night sky photograph featuring the Milky Way galaxy. The galaxy's bright core and spiral arms are visible against a dark, star-filled background. In the foreground, the dark silhouettes of trees and mountains are visible. A car with its headlights on is parked in the lower center, and a small blue light is visible in the lower right. The overall scene is a serene night landscape.

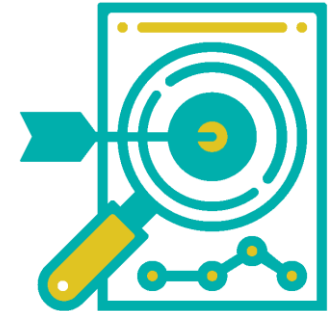
# Scope of Engagement

# Research Objectives

Tourism WA, in collaboration with Astrotourism WA, are conducting research to inform the **strategic development and marketing of Western Australia as a Dark Sky Tourism destination.**

This research explored the current perceptions, knowledge and attitudes to Dark Sky Tourism, looked into **drivers and barriers** to partaking in Dark Sky Tourism, along with discovering any **cross-activity opportunities** to inform **product development and marketing strategy.**

Initial quantitative research was conducted in February 2020 to inform the development of key target segments, and to inform the next phase. This report presents the findings of the **second stage of research**, focusing on **objects 4 to 6** below.



## The specific objectives of this engagement are:

01

Understand the potential market size for Astrotourism

02

Identify meaningful and differentiated Astrotourism segments

03

Recognise and profile each segment to enable prioritisation

04

Explore current perceptions, knowledge and attitudes to Dark Sky Tourism

05

Uncover the key motivations and barriers to identify opportunities and levers for growth

06

Discover aligned experiences for cross-activity opportunities

# Methodology

After the segmentation workshop took place on the 17<sup>th</sup> of March 2020, a decision was made to run quantitative research on those who have the highest interest and knowledge of astronomy. This segment was called 'Astro Enthusiasts'.

To target this sample of Astro Enthusiasts in the quantitative research stage, key screening statements were identified, and used to reach the target audience.

## Four key questions were identified:

- I like to **share my thoughts** on the topic of space with others
- I have a good level of knowledge in **astronomy**
- I have a good level of knowledge in **astrology**
- I know of **Astrotourism towns** in my state

To qualify for the Stage 2 survey, respondents **could not disagree** with any of these statements.

A total **n=751 Astro Enthusiasts** qualified and completed the survey.

The 15 minute online survey was conducted between the 8<sup>th</sup> and 24<sup>th</sup> of February 2021. The data (including screen out data) was weighted by age, gender and region to reflect 2016 ABS Census statistics.



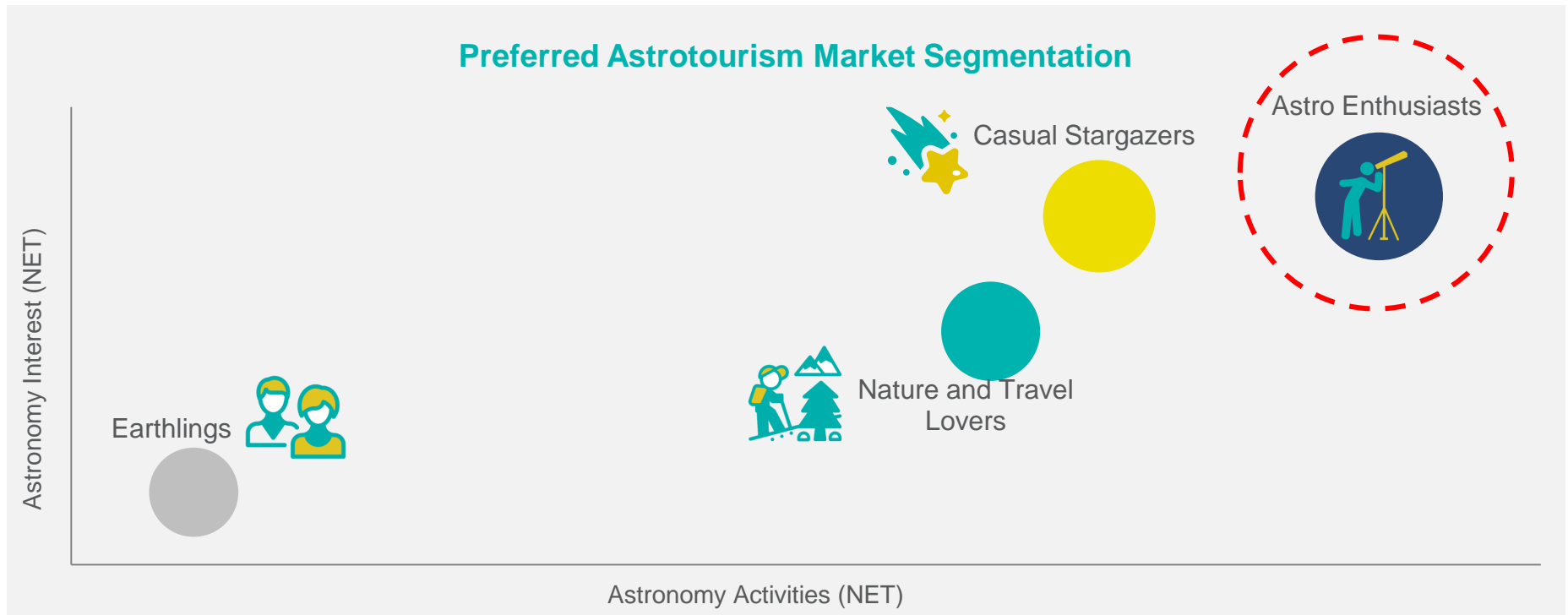
n= & % (weighted)	Location							
	NSW		VIC		WA		Total	
	n=	%	n=	%	n=	%	n=	%
18 to 34	72	40%	75	40%	80	40%	227	40%
35 to 54	82	37%	85	37%	87	39%	254	38%
55+	93	23%	90	23%	84	21%	270	23%
Male	120	57%	122	58%	113	53%	355	57%
Female	130	43%	128	42%	138	47%	396	43%
<b>Total</b>	<b>250</b>	<b>100%</b>	<b>250</b>	<b>100%</b>	<b>251</b>	<b>100%</b>	<b>751</b>	<b>100%</b>

# Stage 1: Segmentation recap

The first stage of the research undertaken at the start of 2020 was to inform key decisions and priorities. This was done by understanding the potential market and building a picture of the different types of potential Astrotourism targets in order to better prioritise, attract and target them. Two segmentation models were created with the below **four segment model** being the recommended approach.

## Overview of the Astro Enthusiasts segment in stage 1:

- Highest level of interest in astronomy related topics
- Have done, or more likely to do astronomy related activities in the future
- Most frequent users of astronomy-related equipment
- Planning or open to astro-related travel
- Youngest segment
- Represent 35% of the market



Base: n=1,003

Astronomy Interest: SUM of mean scores across all statements at Q2.

Astronomy Activities: SUM of mean scores across all activities at Q4 (where 4 is having done an activity, 3 is planning to, 2 is not thought about but open and 1 is not interested).

# Stage 1: A summary of the four segments



## Astro Enthusiasts

- Highest level of interest in astronomy related topics
- Have done, or more likely to do astronomy related activities in the future
- Most frequent users of astronomy-related equipment
- Planning on or open to astro-related travel
- Youngest segment



## Casual Stargazers

- High interest in astronomy, particularly broader topics
- Prefer travelling to cities than regional areas
- High ownership, but low usage of camping gear
- Less likely to be open to astro-related travel
- Lowest household income



## Nature & Travel Lovers

- Very high interest in travel (regional / remote areas)
- Enjoy being out in nature, hiking and escaping the city
- Very low ownership and usage of astronomy-related products
- Surface level interest in space / astronomy
- Lack knowledge in more specific astronomy topics



## Earthlings

- No usage of astronomy related products
- Very low interest in anything astronomy-related
- Low interest in travel
- Have not / do not plan to do any astronomy activities
- Older skew, with 38% retired

**Target Audience and focus of this report**

# Executive Summary





# Executive Summary – Branding and Communications

## Insight

## Implication

## Thought Starter

### Awareness and Interest

Interest in Dark Sky Tourism (54% high interest) outpaces current familiarity (40% aware of the term). This extends to specific Dark Sky Tourism activities.

There are clear knowledge gaps relating the Dark Sky Tourism terminology and the concept more broadly. Addressing these gaps could help drive growth for Dark Sky Tourism.

**Focus on building awareness familiarity with the concept. Aligning the concept with popular events, locations and experiences in current communications and centralizing the information are potential quick wins.**

### Positioning

Astro Enthusiasts look for opportunities to relax and explore in nature when on holiday, and the Dark Sky Tourism is soon as a unique and different way to realise these benefits.

Key benefits offer a compelling value proposition to complement interest in astronomy and unique experiences among the target audience, particularly as they grapple with life after-COVID.

**Position Dark Sky Tourism as an opportunity to switch off, relax and engage in new and unique experiences, as a value add to engaging with core astronomy hobby.**

### Target Audience

Awareness, interest and engagement with Dark Sky Tourism is consistently higher among males, those aged 34-54 and families (particularly young families). Those 55 or older represent the weakest opportunity.

Within the key segment of Astro Enthusiasts, this audience (i.e. males, 35-54 year olds and families) represents the strongest and most immediate opportunity for TWA.

**Prioritize reaching this key audience with marketing and communications. These groups are likely to look to social media and other passive channels for information rather than official tourism sources.**

# Executive Summary – Product

## Insight

## Implication

## Thought Starter

### Activities of Interest

Astro Enthusiasts are typically interested in a broad range of Dark Sky Tourism activities. They are more active and inquisitive on holidays generally.

A well-rounded experience would likely strengthen the appeal and perceived benefits of Dark Sky Tourism.

**Promote the range of wide activities and experiences available within the Dark Sky Tourism category, and how it can complement or enhance general travel.**

### Influential activities

**Dining** under the stars, **viewing wildlife** and **visiting natural attractions** are compelling activities and are most likely to be cited as activities that influence travel decisions.

Broadening the offering of natural attractions such as the Staircase to the Moon and Hybrid Solar Eclipse (both with strong interest levels) could increase appeal and ability of Dark Sky Tourism to drive tourism.

**Feature key natural attractions, wildlife opportunities and 'accessible' activities (i.e. dining) and build experiences around these influential activities.**

### Product Packaging

Nature-based, astronomy-based and more traditional tourism-based activities appeal to different audiences, though there is significant overlap among those with higher interest overall.

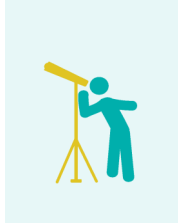
Developing and marketing multiple products and experiences affords TWA the opportunity to grow the potential audience (by diversifying the offering) and frequency of engagement (through more experiences on offer).

**Group activities and packages to align with key themes:**

- **Nature-based (e.g. natural attractions, wildlife)**
- **Astronomy-based (e.g. photography, stargazing, observatory)**
- **Traditional tourism-based activities (e.g. dinner under the stars, accommodation, performance, hot springs)**

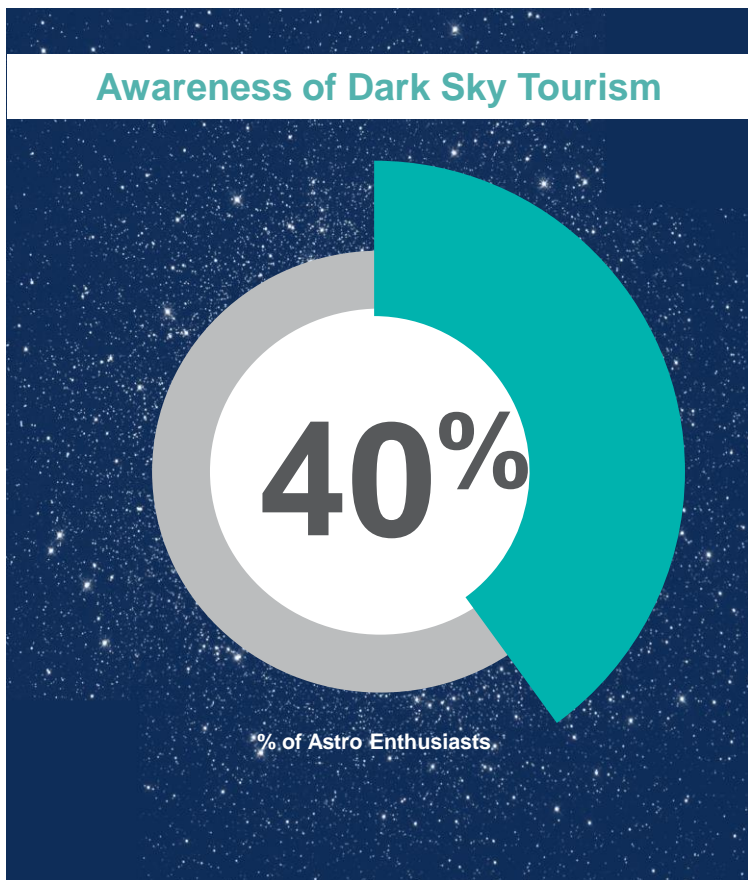


# Awareness and Perceptions of Dark Sky Tourism

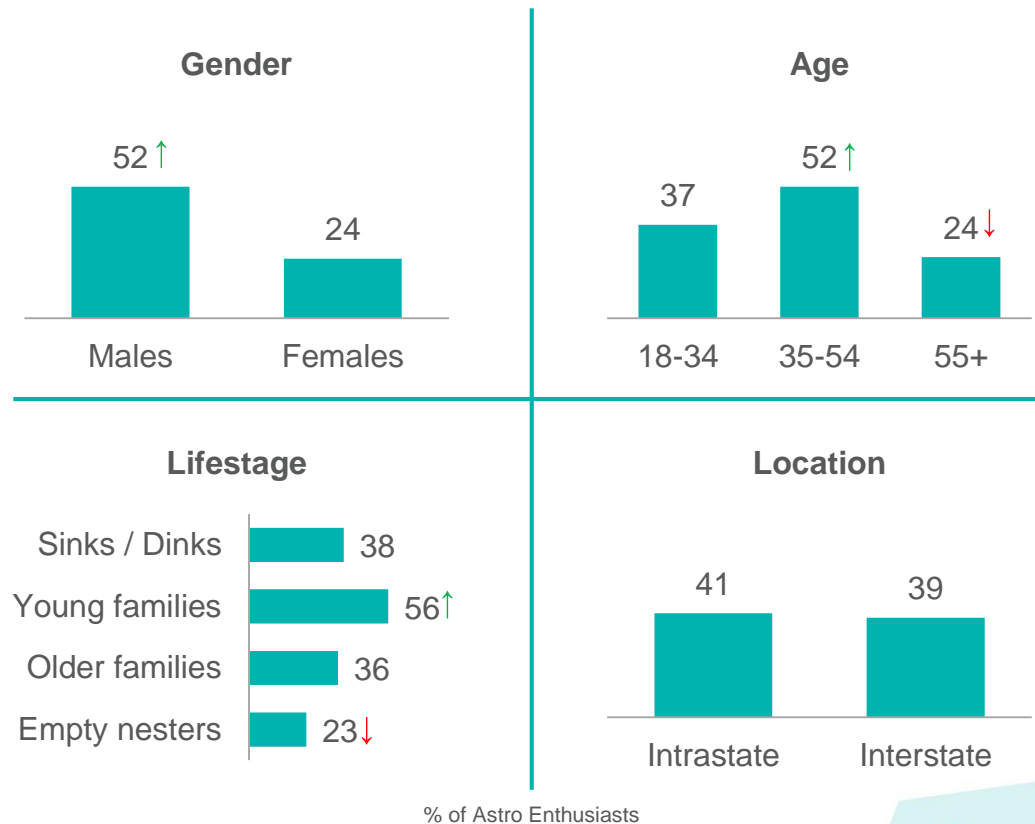


# Four in Ten Astro Enthusiasts are aware of the term **Dark Sky Tourism**

Awareness of *Dark Sky Tourism* is higher among males, those aged 35 to 54 and young families. Awareness is largely consistent among interstate and intrastate audiences.



### % Awareness by Audience

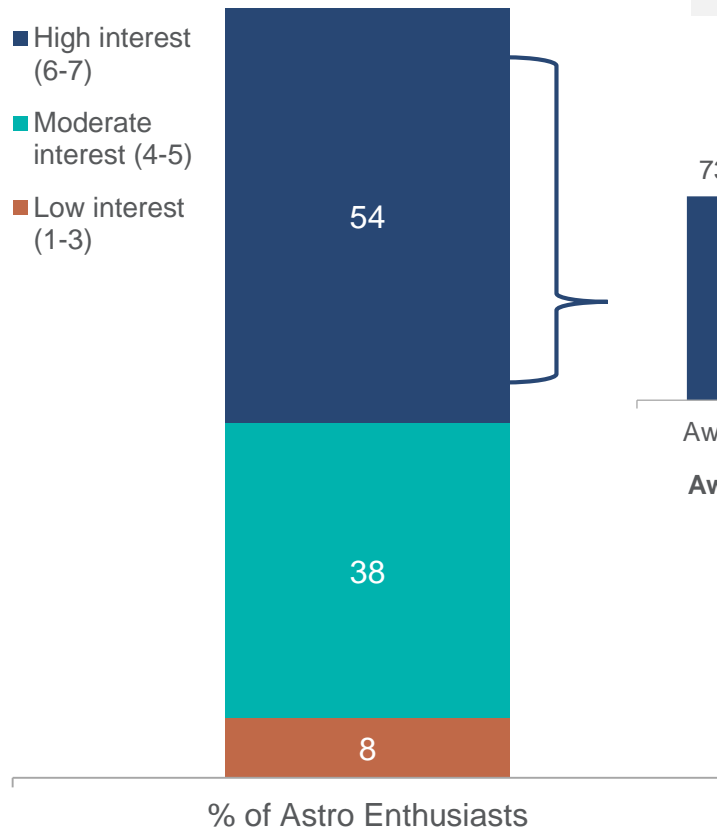


n=751  
Q9: Before today, had you heard of the term dark sky tourism?  
↑ Significant difference between segments at 95% confidence

# There is substantial interest in Dark Sky Tourism among the target segment of Astro Enthusiasts

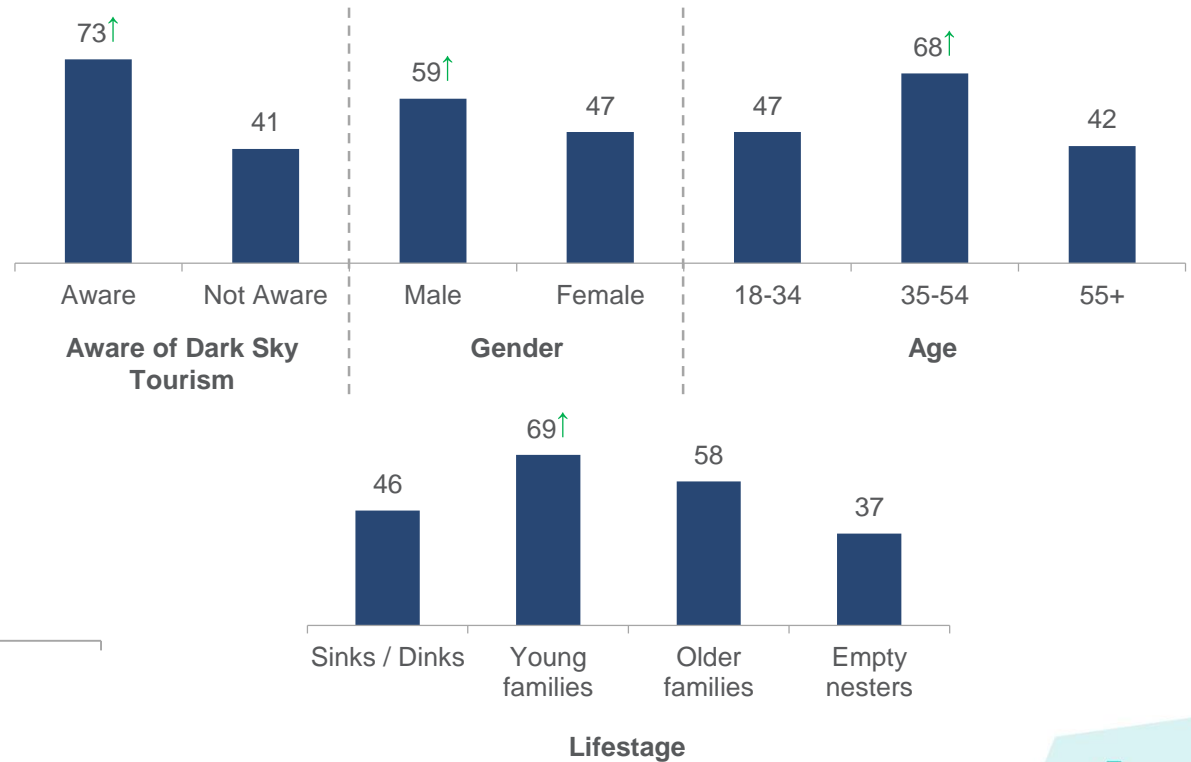


## Interest in Dark Sky Tourism (1-7)



In line with awareness, high interest is stronger among males, those 35-54 and families. Positively, solid interest among those not currently familiar with Dark Sky Tourism suggests there is opportunity to grow the category.

## Interest in Dark Sky Tourism by Audience | % High Interest



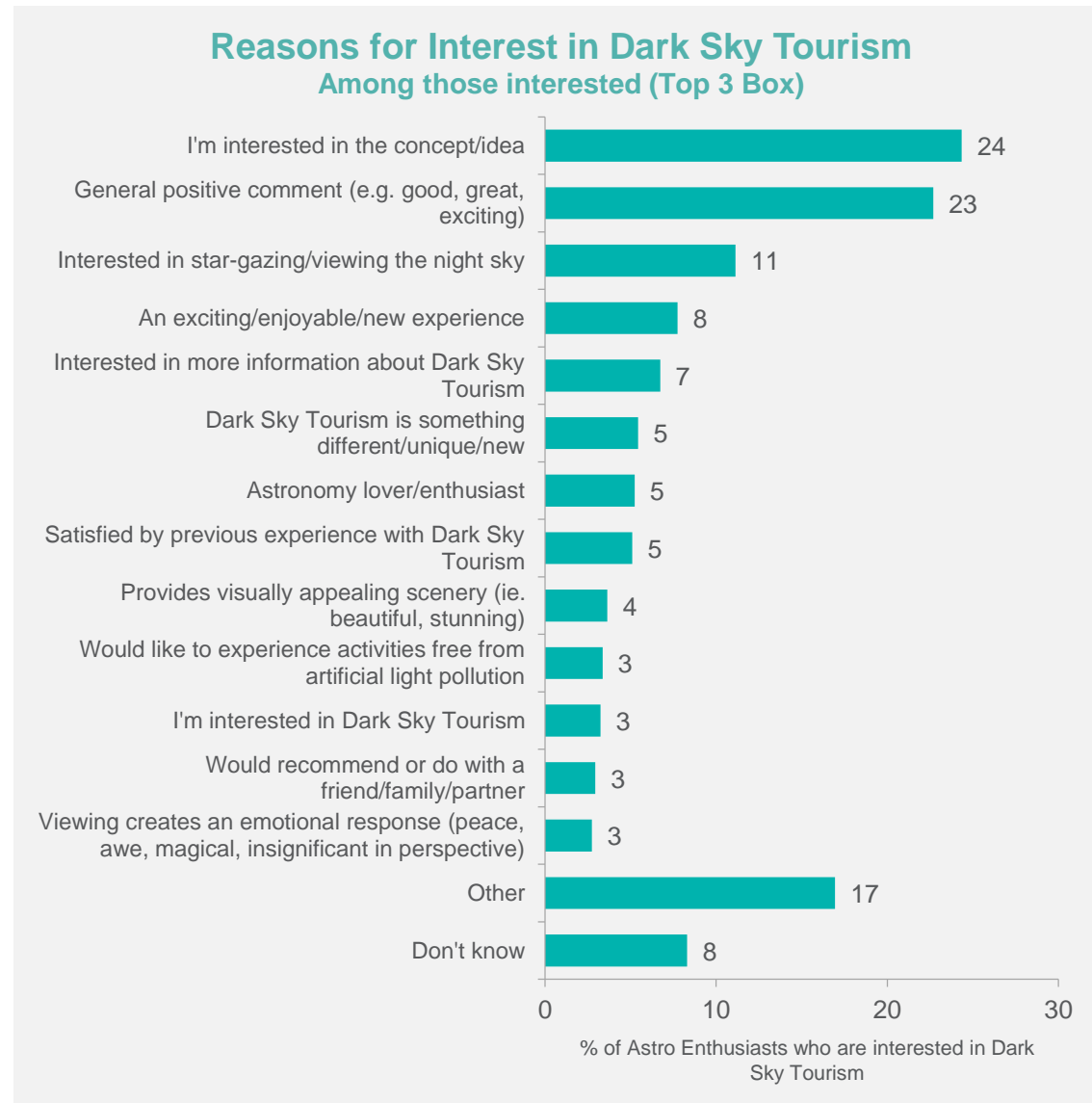
n=751  
 Q10: Based on what you know, overall, how interested are you in dark sky tourism?  
 ↑ Significant difference between segments at 95% confidence

# There is strong interest and positivity towards the concept of Dark Sky Tourism

“ I think it would be a good experience especially since we have all been mostly inside for the good part of the last year. – Sydney ”

“ I’ve never heard of this but I will look into it and see where I can go to find this information online. – Victoria ”

“ I really love astrology and astronomy and find the stars really interesting. It’s also not something I can look at in my daily life as I live very close to the city with a lot of light pollution. – WA ”



n=539

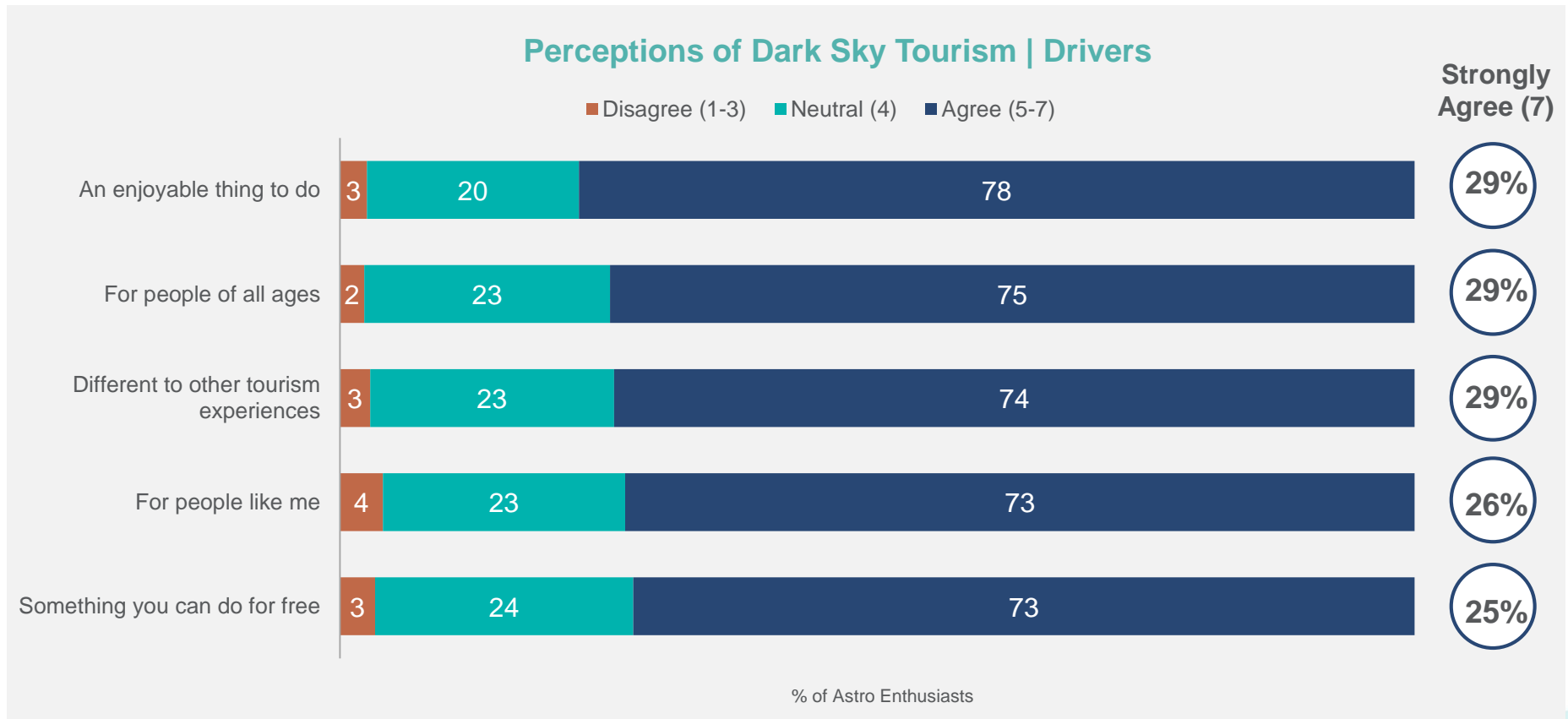
Q11: What are the reasons you gave that score? How would you describe your level of interest to a friend?

↑ Significant difference between segments at 95% confidence

Note: responses less than 3% have not been charted.

# Dark Sky Tourism is seen as **enjoyable, accessible, affordable** and **different** to other experiences

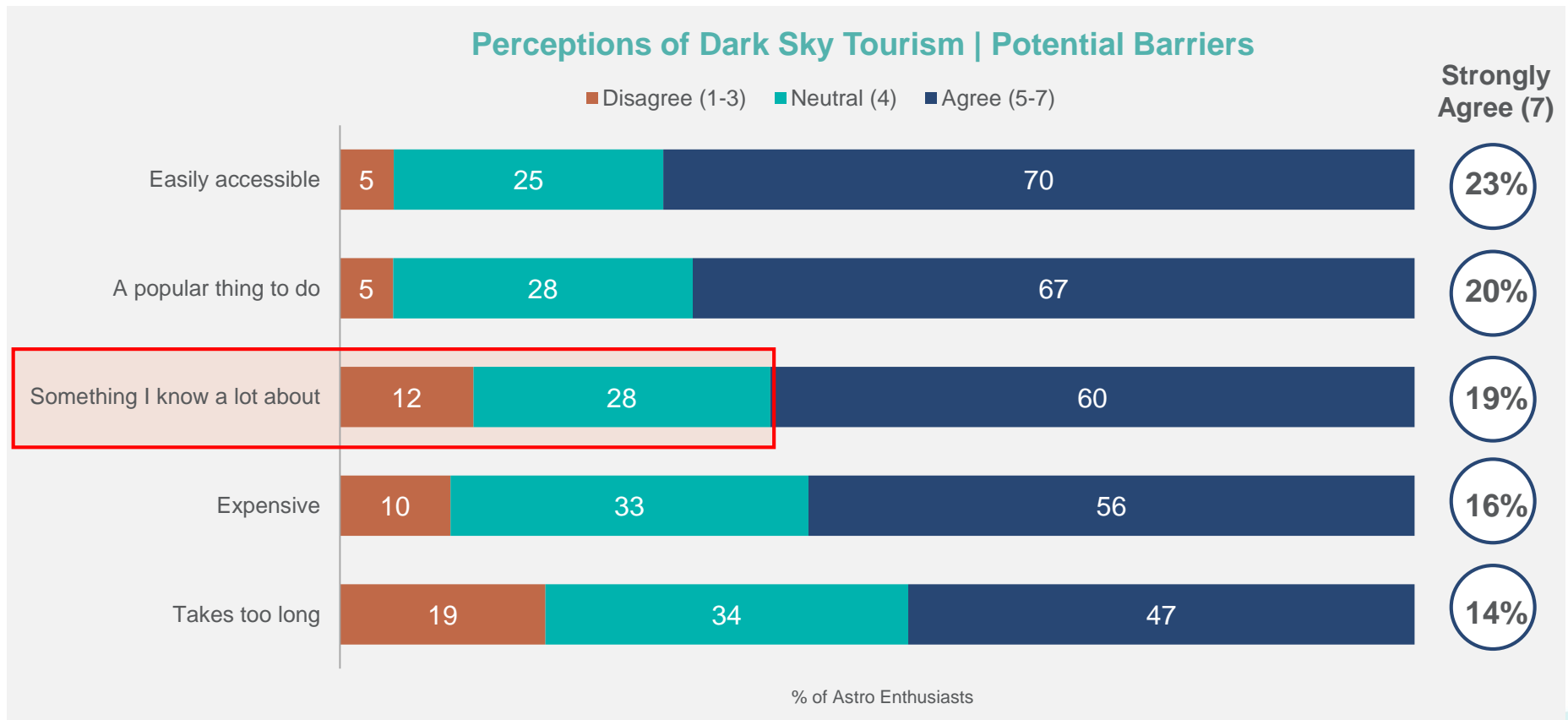
In line with interest, those aged between 35-54 and families (particularly young families) have stronger positive perceptions of Dark Sky Tourism. Males are more likely to say it is an 'enjoyable thing to do' compared to females.



n=751  
Q12: Based on your understanding, to what extent do you agree or disagree that dark sky tourism is?

# Lack of knowledge could be a barrier to engagement, with lower agreement compared to other perceptions

Compared to other perceptions, the target audience was slightly less likely to agree that Dark Sky Tourism is easily accessible or popular. Younger audiences (i.e. those under 55 years) are more likely to perceive Dark Sky Tourism as expensive and time consuming, potentially reflecting greater familiarity with the concept and experiences. High neutrality in these areas could be driven by lack of familiarity with the experience.



n=751

Q12: Based on your understanding, to what extent do you agree or disagree that dark sky tourism is?



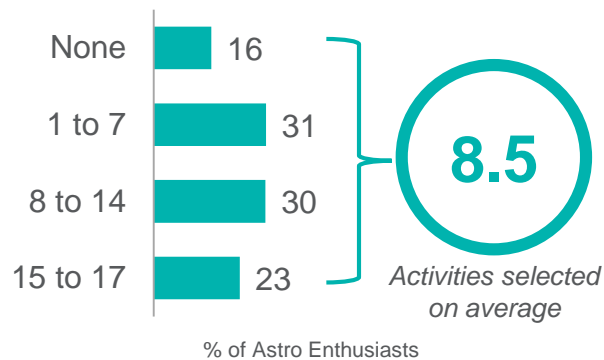
# Dark Sky Tourism Events and Activities



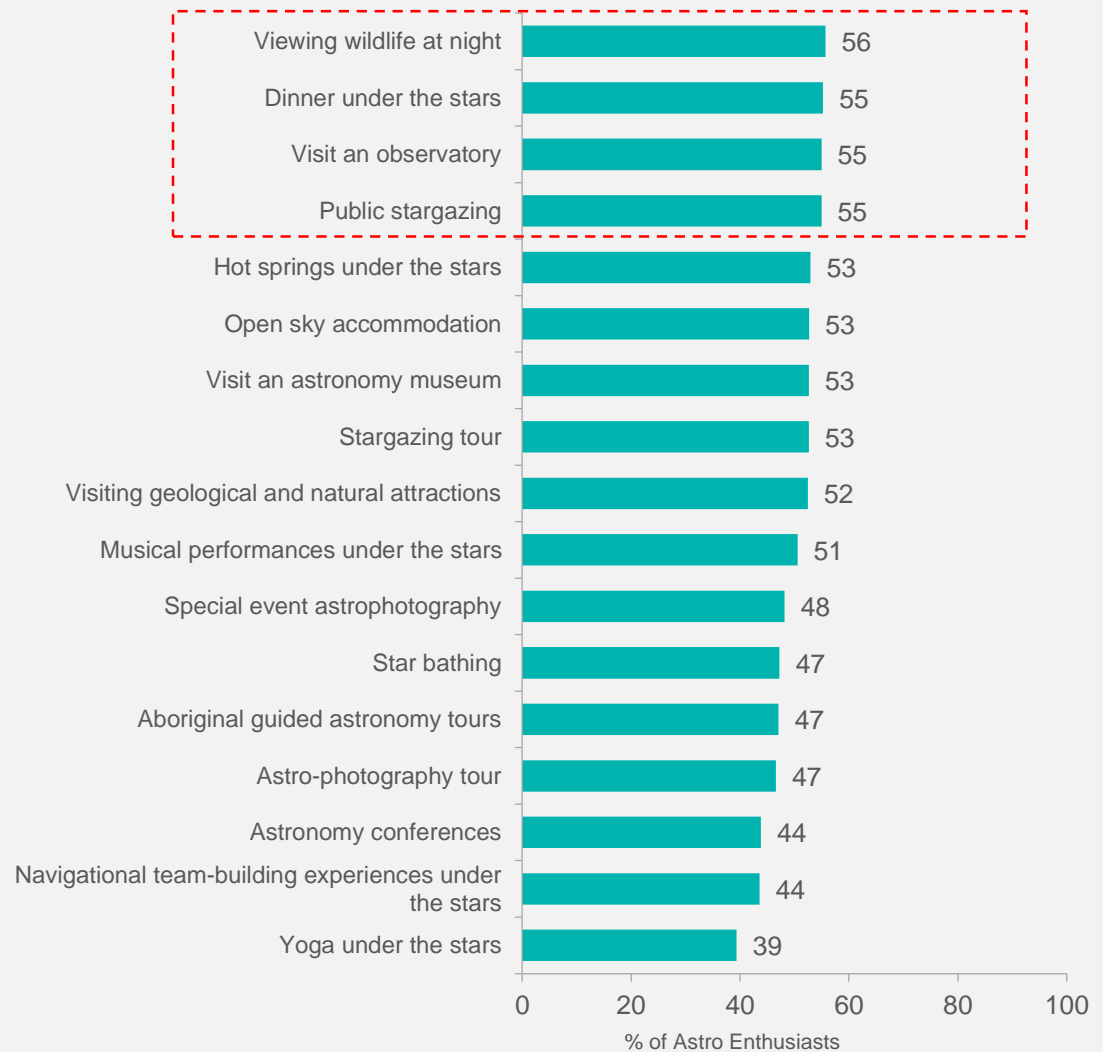
# The target market is interested in a broad range of Dark Sky Tourism activities

Viewing wildlife at night, dinner under the stars, visiting an observatory and public stargazing have the highest interest levels, with significant crossover between activities that align with astronomy interests (e.g. visiting an observatory or museum) and tourism (e.g. dinner, open sky accommodation).

**Number of Activities selected as 'High Interest'**



## Interest in Dark Sky Tourism Activities | High Interest 6-7



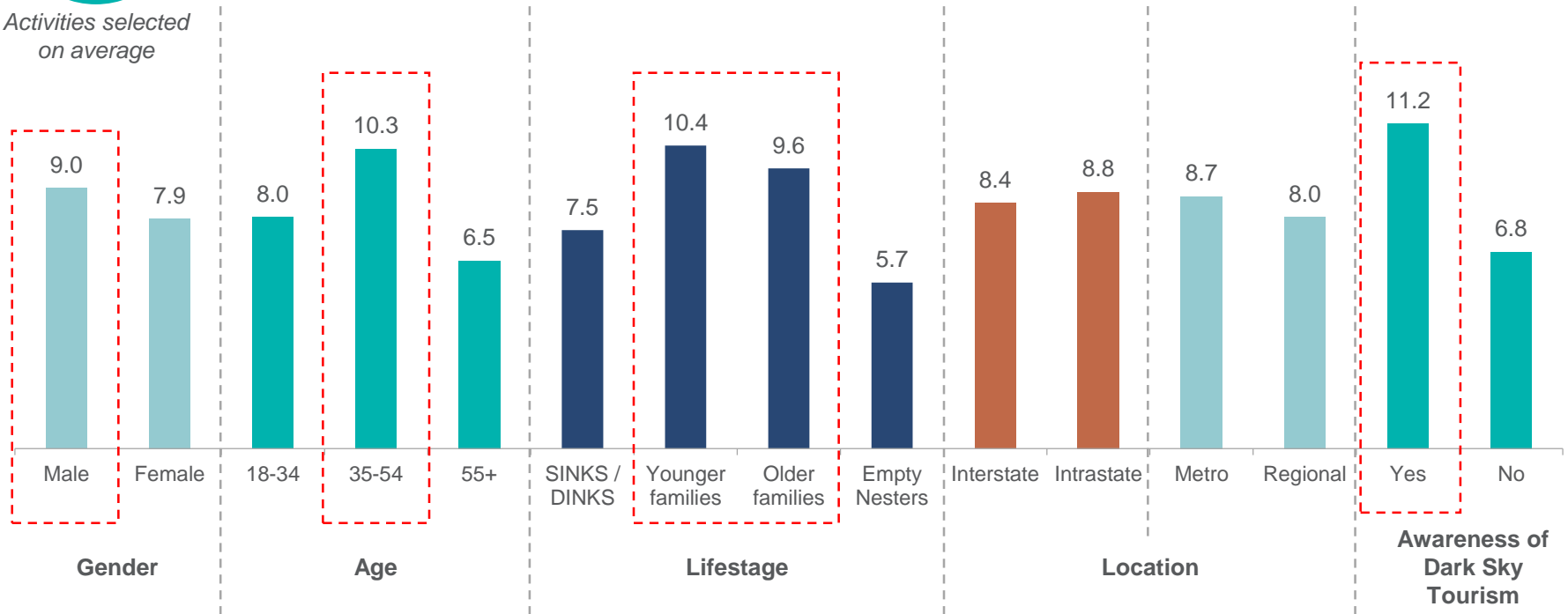


# Males, those aged 35-54 and families are typically interested in a greater number of Dark Sky Tourism **activities**

8.5

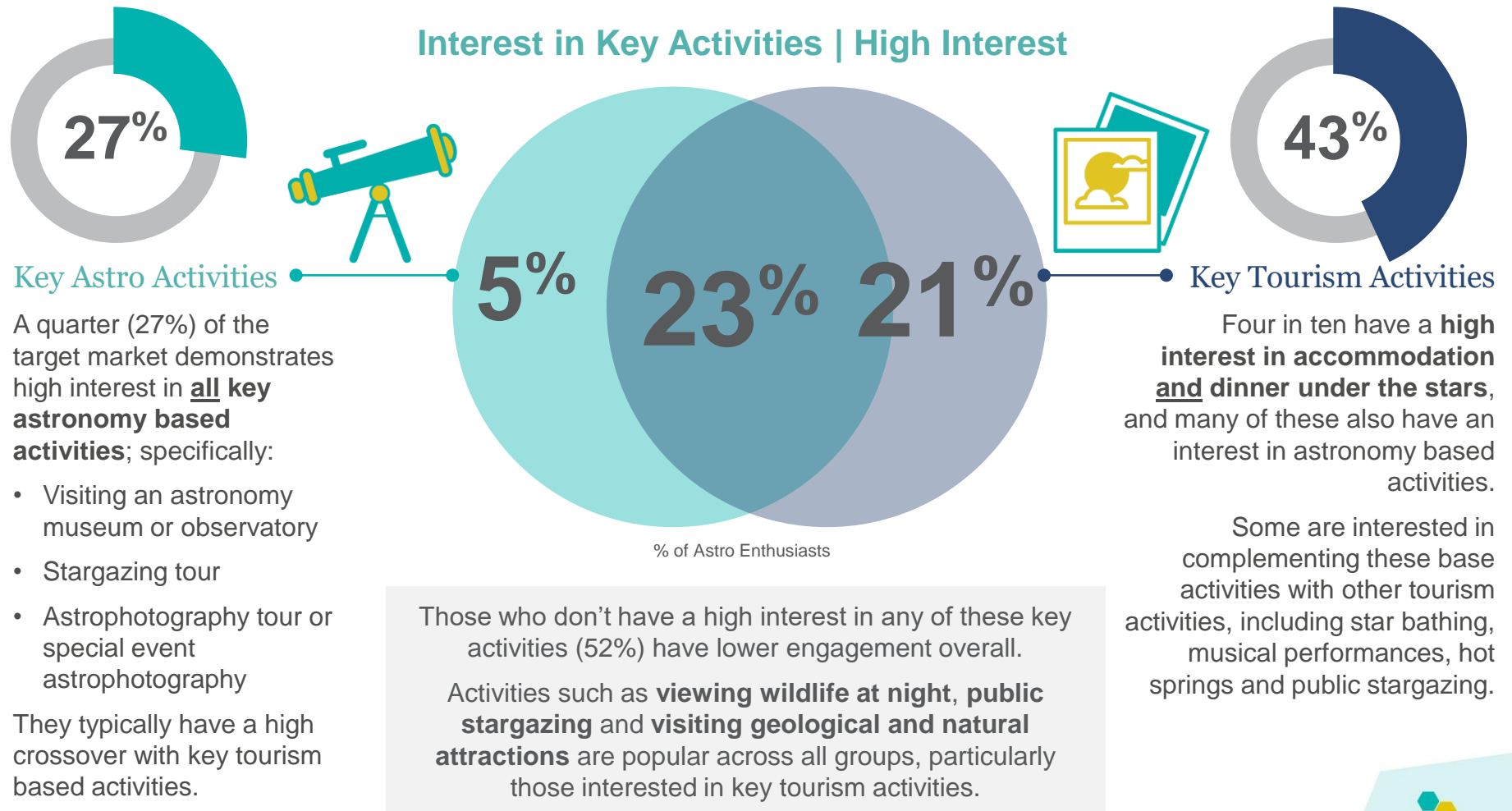
Average Number of Activities with High Interest (of 17 activities)

Activities selected on average



n=751  
Q13: Below is a series of dark sky tourism experiences you could do. How interested are you in each of these?

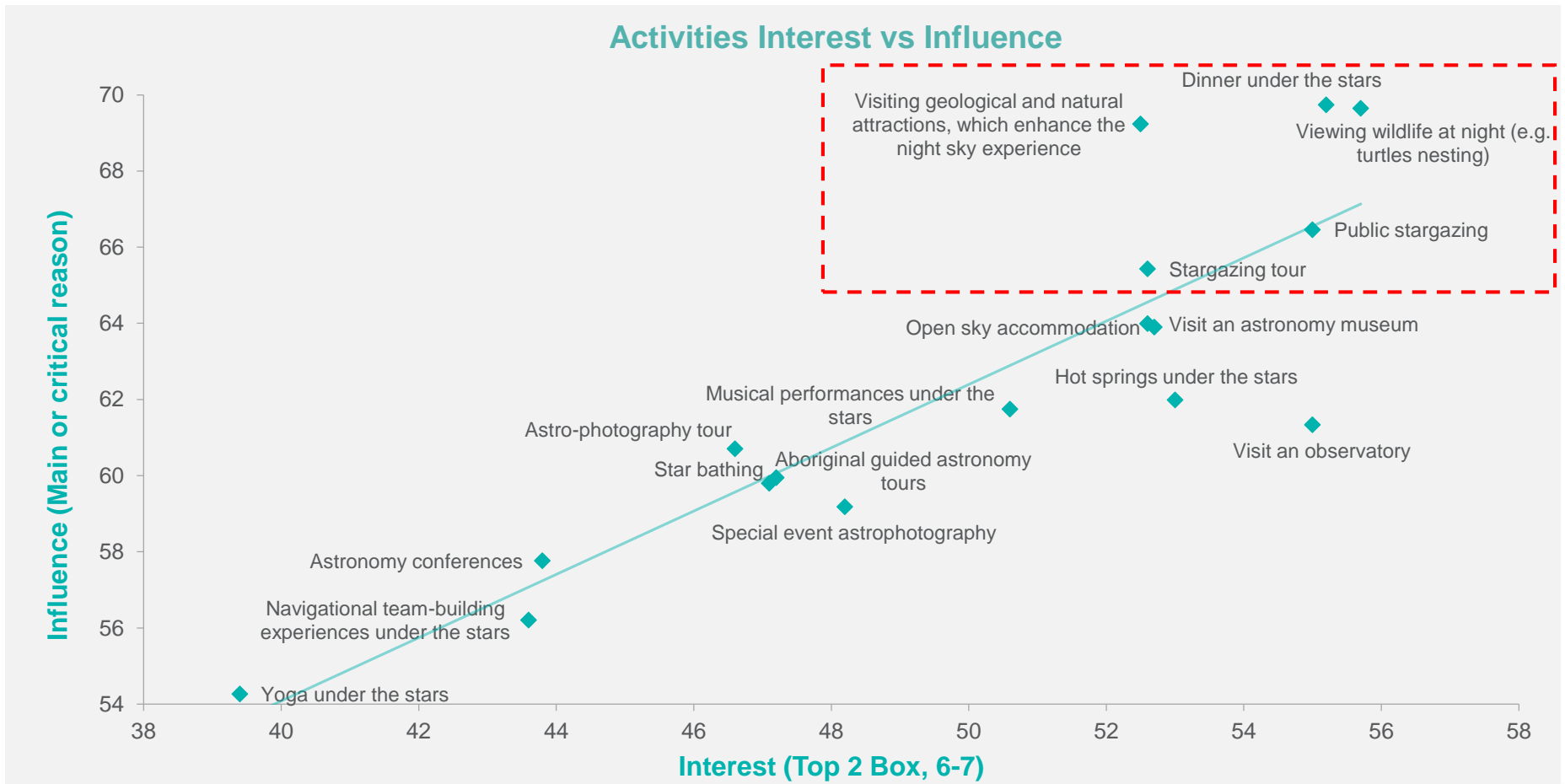
# There is an opportunity for **specific tourism packages** to align with key activities, tailoring specific astronomy, nature and tourism experiences





# Dining under the stars, viewing wildlife and visiting natural attractions are **compelling** activities

Although there is an interest in activities such as visiting an observatory, partaking in astrophotography and navigational team-building experience, they are less likely to influence the planning of a holiday.

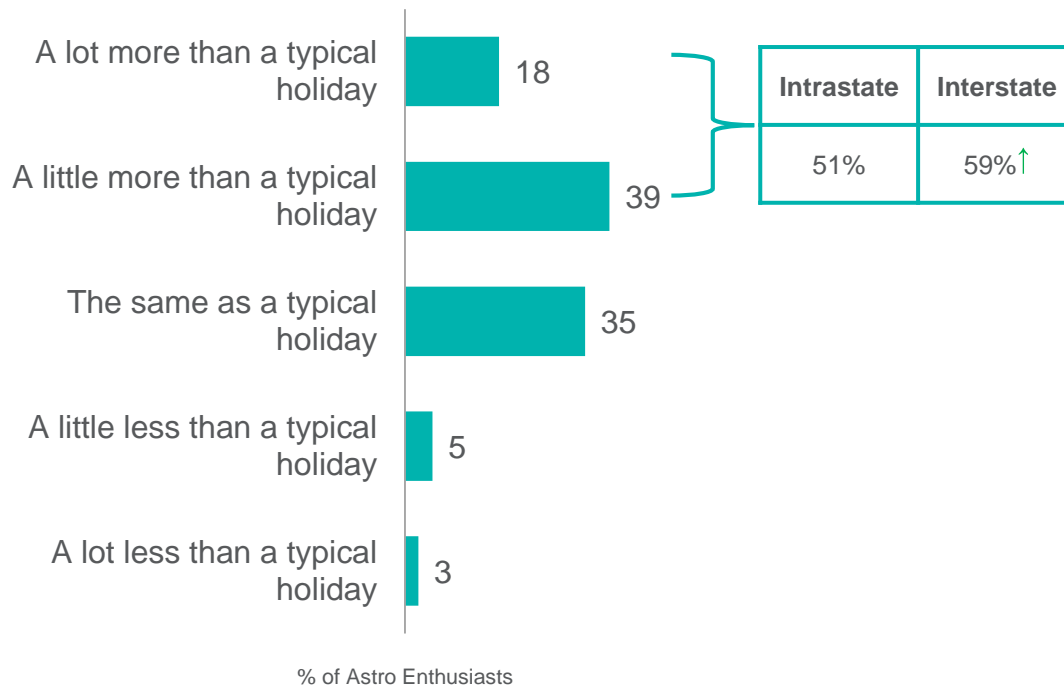


n=751  
Q13: Below is a series of dark sky tourism experiences you could do. How interested are you in each of these?  
Q14: And what impact would each of these activities have on you planning where to go for a holiday?

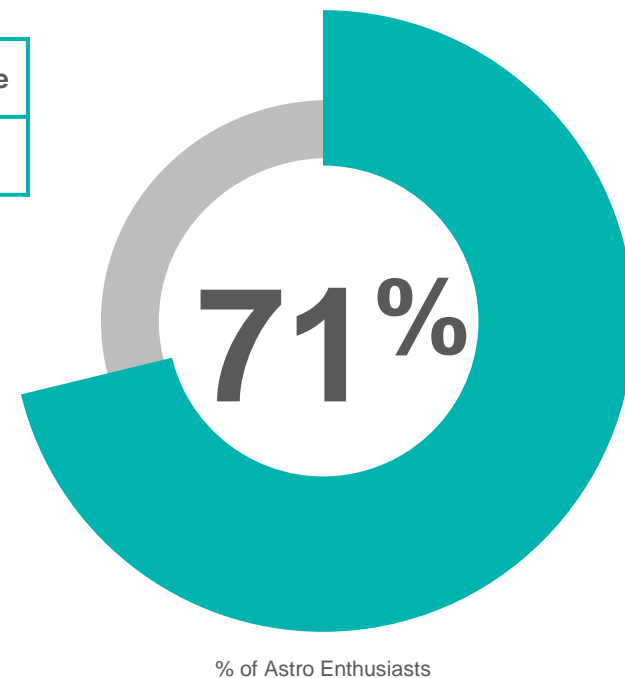
# Spend does not appear to be a significant barrier, with the majority of the target market anticipating spending the same or more that a typical holiday

Interstate audiences are more likely to expect to spend more than intrastate audiences on Dark Sky Tourism, as are those living in metro areas. Males, families and those under the age of 55 also have higher spend expectations.

**Expectations of Dark Sky Tourism Spend**



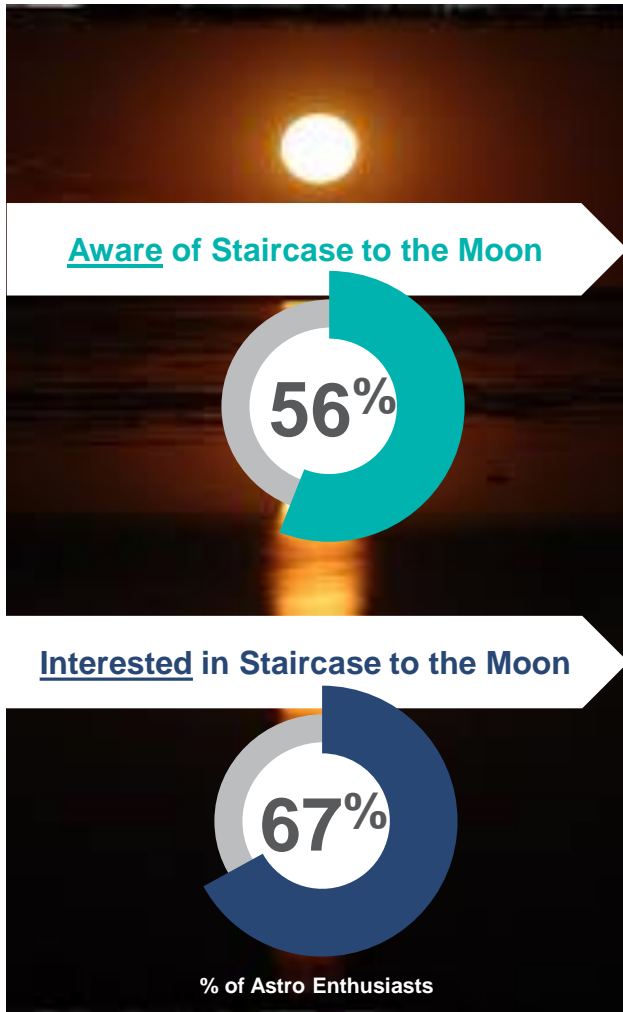
**Perceptions of Dark Sky Tourism Spend**  
*It's worth paying for - % Agree*



n=751  
 Q12: Based on your understanding, to what extent do you agree or disagree that dark sky tourism is?  
 Q15: Thinking about a typical holiday in Australia, if you were traveling for dark sky tourism activities, experiences or events would you plan on spending...?  
 ↑ Significant difference between segments at 95% confidence



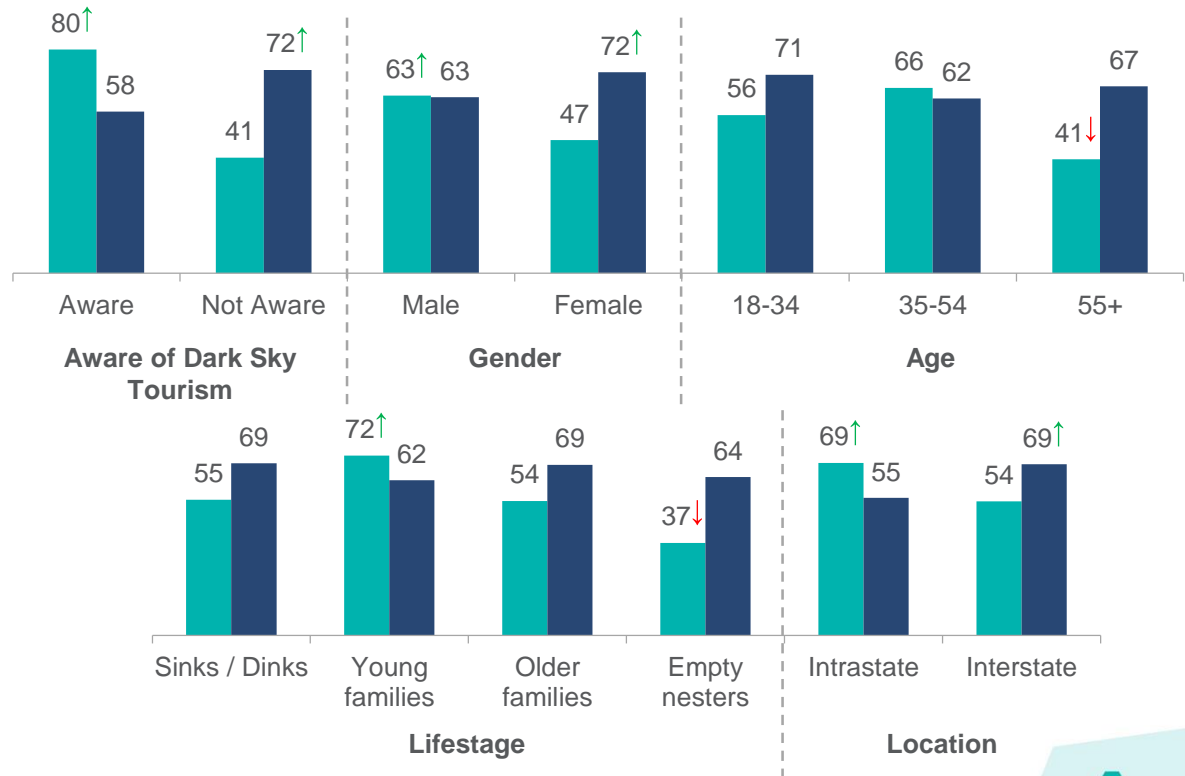
# Two thirds of Astro Enthusiasts are interested in the Staircase to the Moon once aware



Though awareness is lower among interstate audiences, interest is stronger once informed. Geographical and natural phenomena such as the Staircase to Moon also present an opportunity to engage new audiences (i.e. those unfamiliar with Dark Sky Tourism, as well as females).

## Awareness and Interest by Audience

■ Aware ■ Interested



n=751

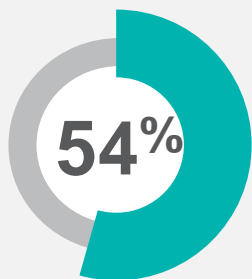
Q18: Have you heard about The Staircase to the Moon, a natural phenomenon visible from Broome, WA as well as other areas of the Kimberly and Pilbara?

↑↓ Significant difference between segments at 95% confidence

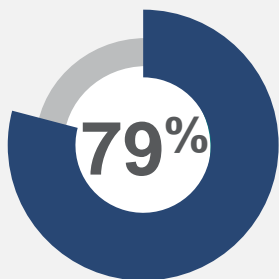


# Even more compelling is the **Hybrid Solar Eclipse**, especially amongst ‘younger’ males

## Aware of Hybrid Solar Eclipse



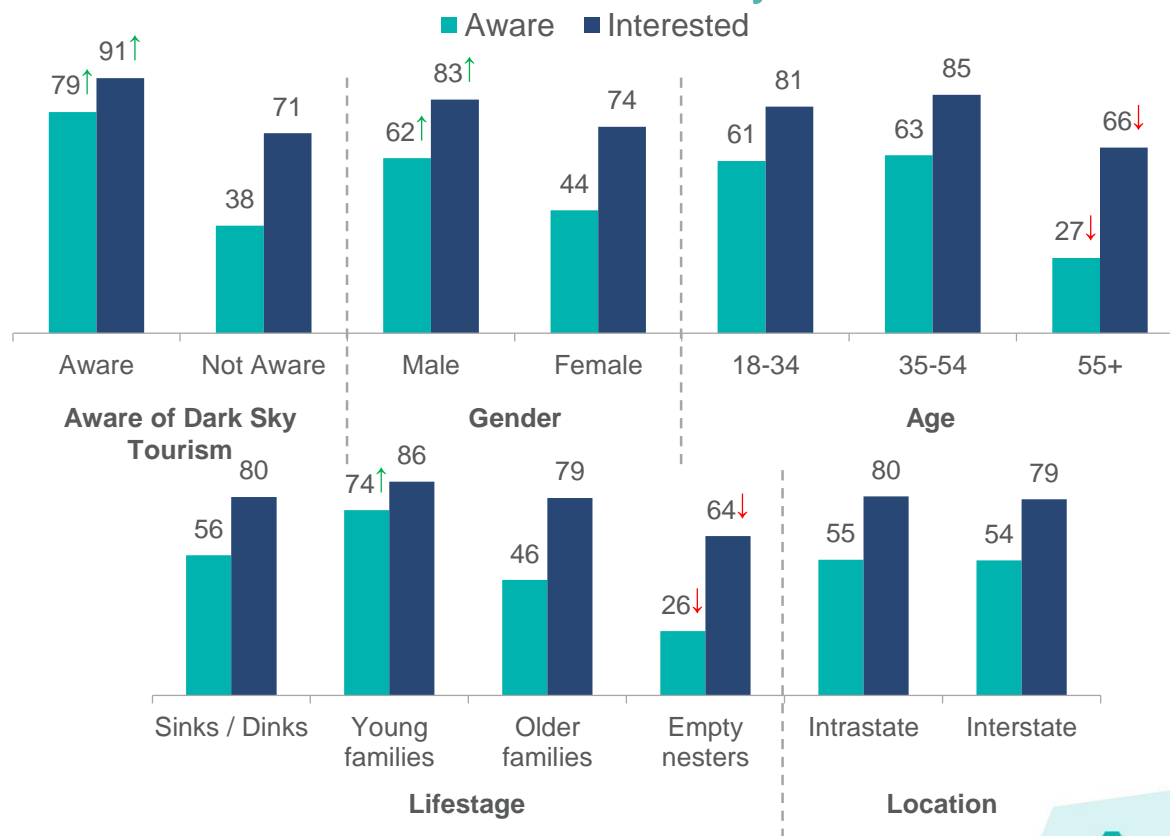
## Interested in Hybrid Solar Eclipse



% of Astro Enthusiasts

Awareness and interest aligns with the core marketing opportunity for Dark Sky Tourism, specifically young males and young families. Intrastate and interstate audiences show similar awareness and interest levels, though prior intent to visit WA falls behind VIC, NSW and QLD among interstate audiences.

## Awareness and Interest by Audience



n=751

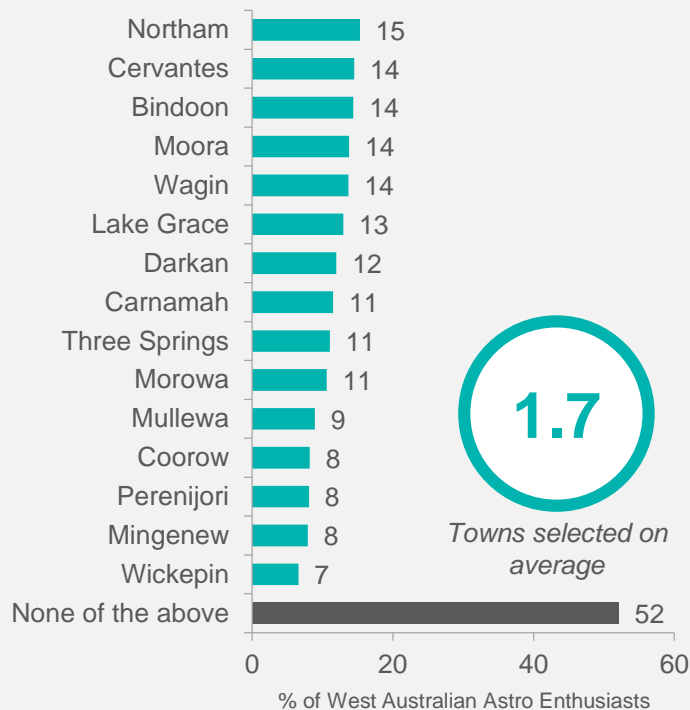
Q19: Have you heard about the Hybrid Solar Eclipse, visible from Exmouth, WA in 2023?

↑↓ Significant difference between segments at 95% confidence

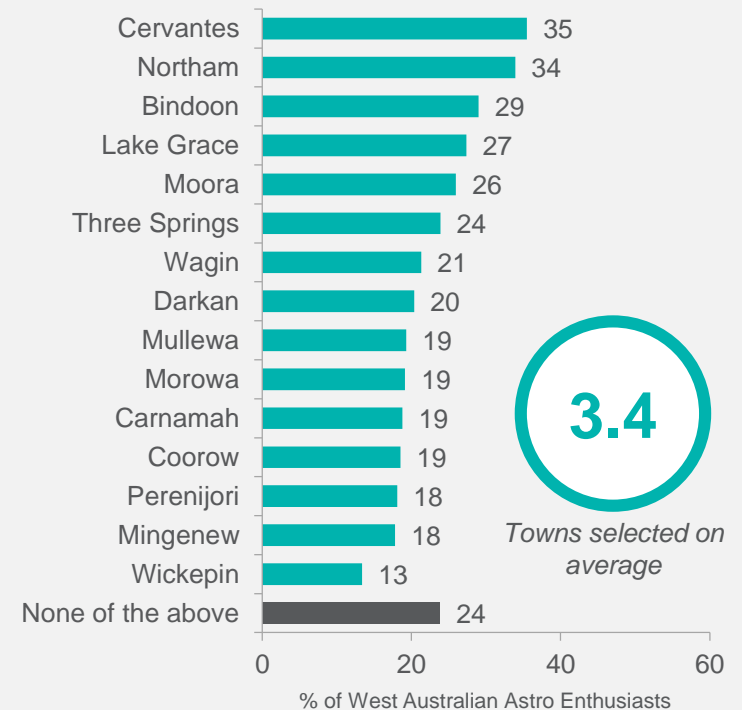


# Awareness of **towns** is limited, though higher interest levels represent tourism opportunities for Cervantes, Northam, Bindoon, Lake Grace and Moora

Awareness of Dark Sky Tourism Towns



Interest in Dark Sky Tourism Towns



Base: Western Australians n=251

Q20. A number of towns in WA are helping to protect dark night skies so people experience starry night skies at their very best. Were you aware of dark sky tourism being offered at any of the following towns?

Q21. Which of the following WA towns would you be interested in visiting for dark sky tourism activities, experiences or events?

A night sky with the Milky Way galaxy visible, over a field of sheep. The sky is dark blue and black, filled with stars and the bright band of the Milky Way. The foreground shows a field of sheep grazing in a field of tall grass. The horizon is dark with some distant lights.

# Exploring Travel Behaviours and Preferences among Astro Enthusiasts

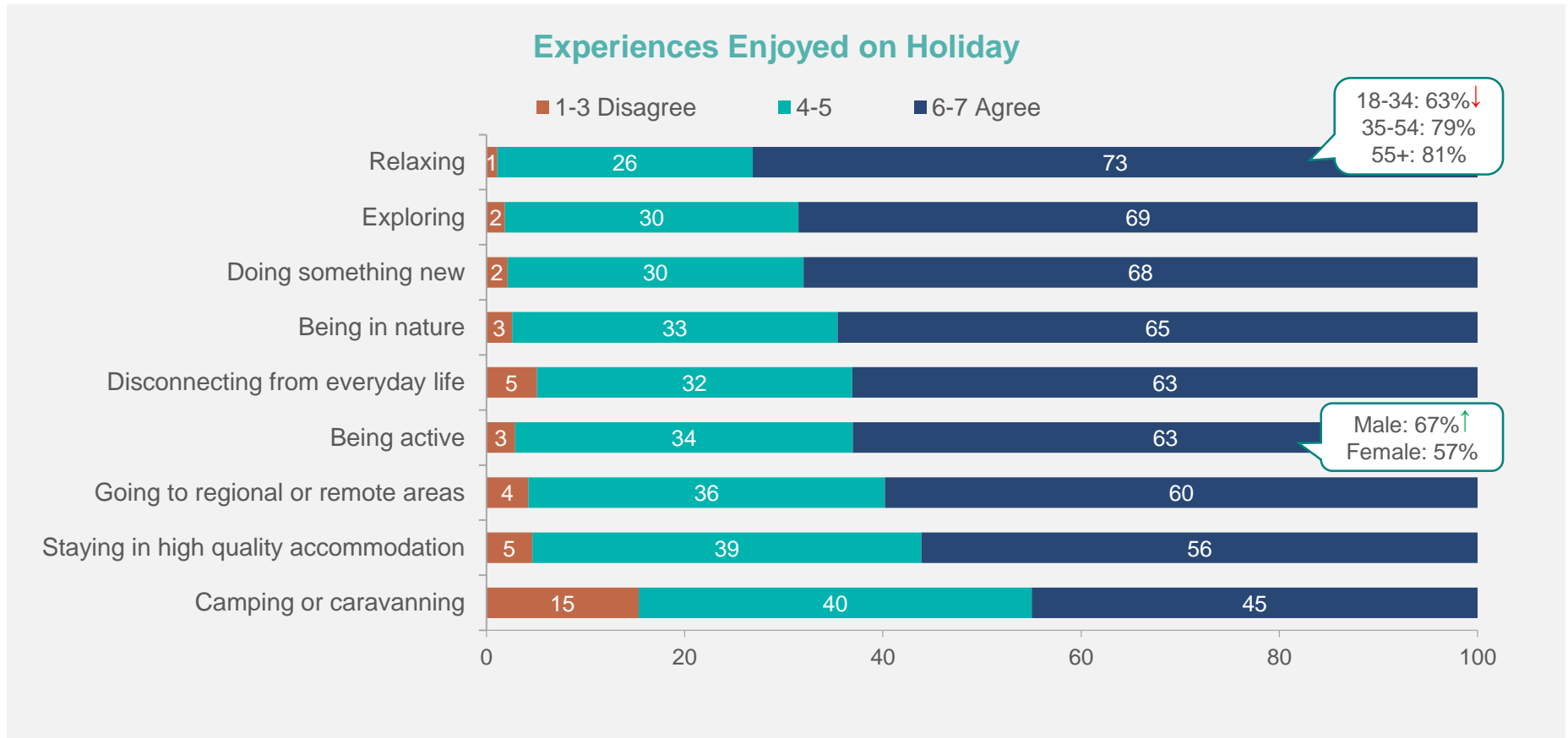
# Astro Enthusiasts with high interest in Dark Sky Tourism are typically **more active** on holidays



# Astro Enthusiasts look for opportunities to relax and explore in nature when on holiday



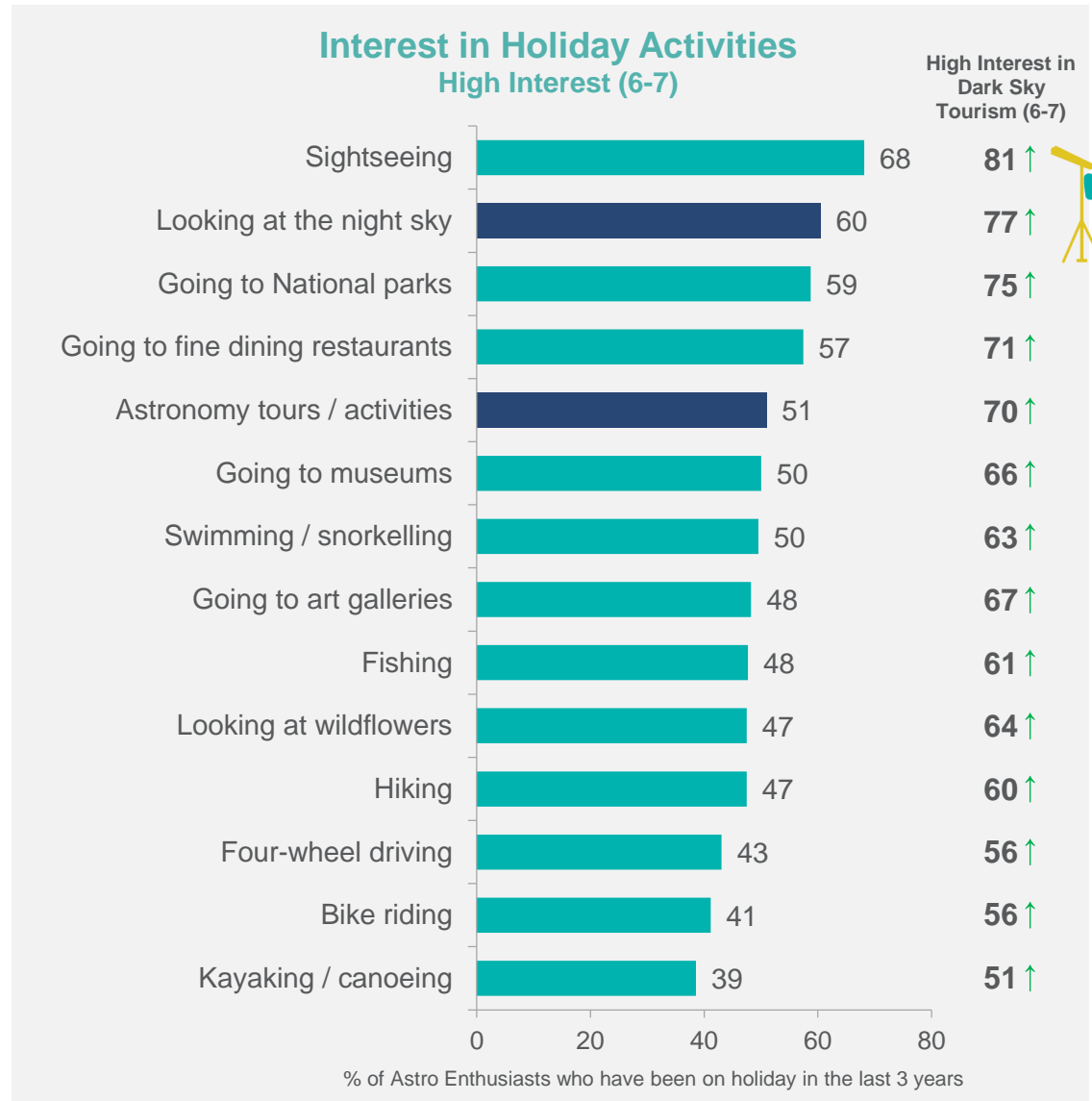
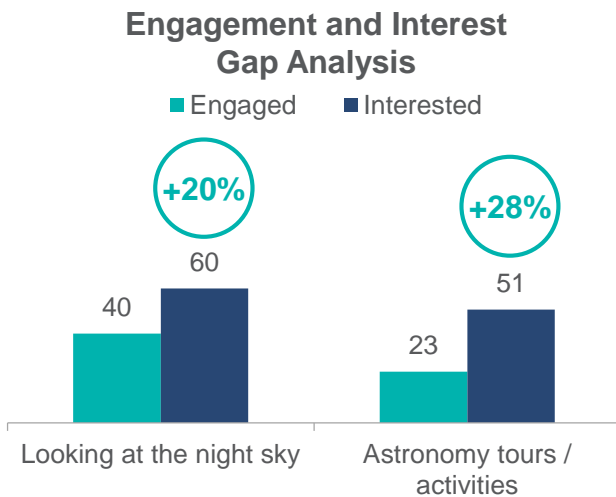
Those with a high level of interest in Dark Sky Tourism are more likely to enjoy all holiday experiences, with the ability to relax (85% agree), explore (83% agree) and do something new (82% agree) considerably more appealing among this audience.



n=707  
 Q3: To what extent do you agree or disagree that you enjoy doing the following when on holiday  
 ↑↓ Significant difference between segments at 95% confidence

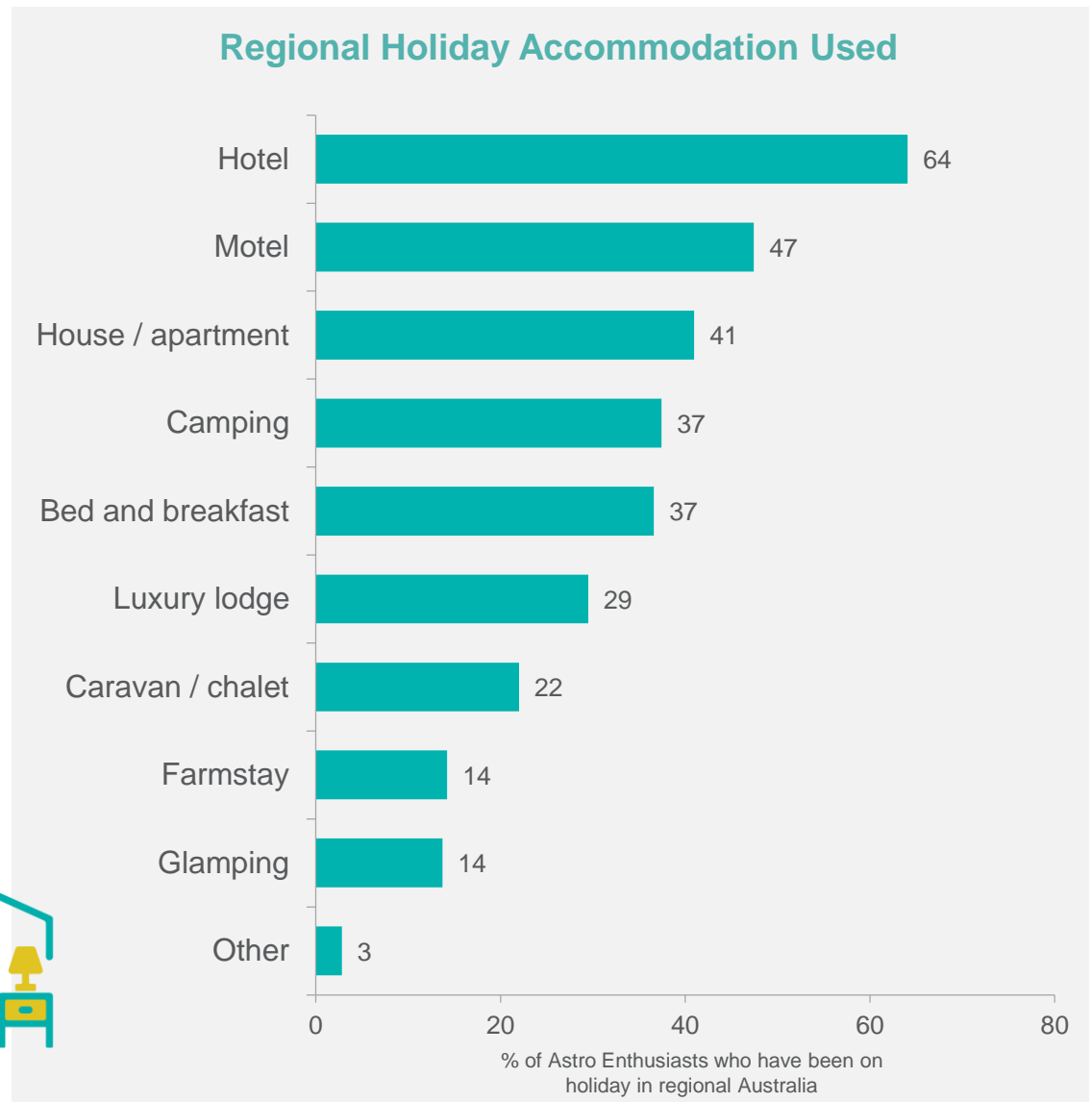
# Interest in key Dark Sky Tourism activities extends well beyond recent experience

Six in ten Astro Enthusiasts are interested in looking at the night sky on holiday, though only four in ten have managed to do so in the last three years. Similar trends are observed for astronomy tours and activities.



# Hotels, motels and homes are most commonly used by regional travellers

This is broadly consistent across demographics, and regardless of interest and engagement with Dark Sky Tourism.



n=417

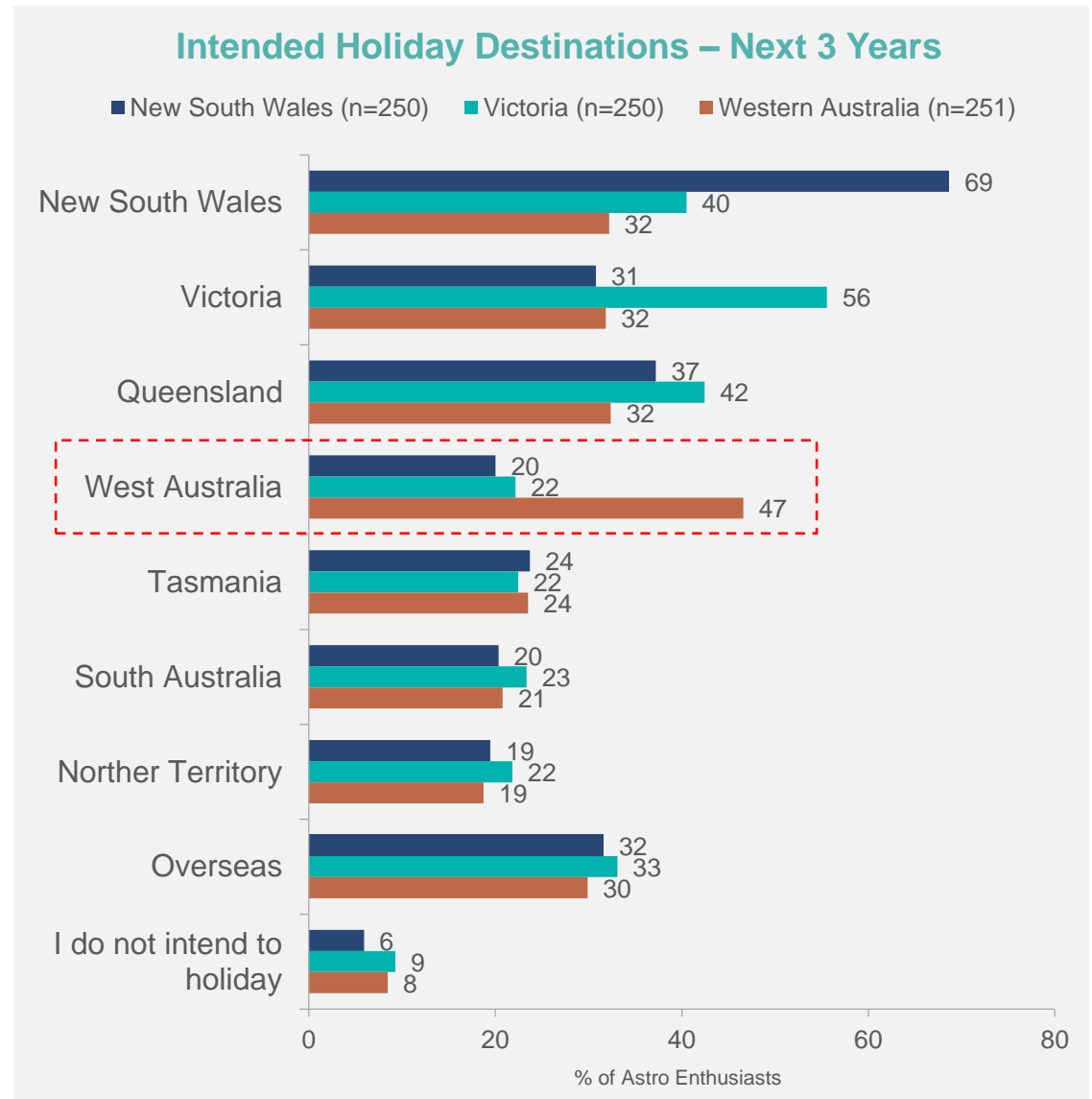
Q7. Which of the following types of accommodation have you stayed in whilst on holiday in regional Australia in the last 3 years?

↑ Significant difference between segments at 95% confidence



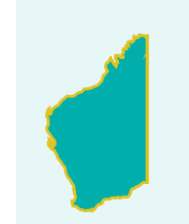
# West Australia's Dark Sky Tourism Opportunity

At a broader level, WA faces **strong competition** from the East Coast, even among its own residents

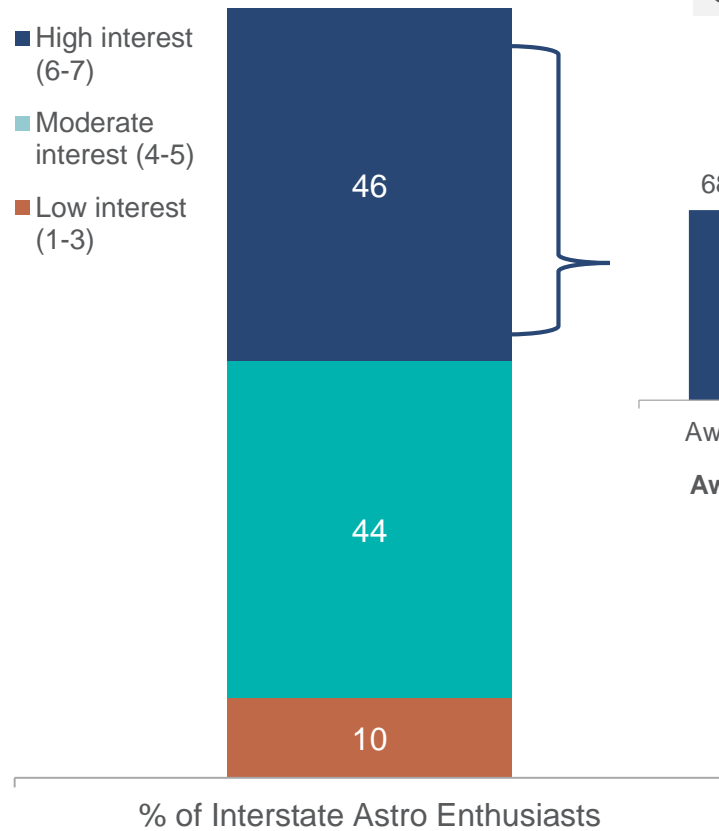




# Interest in visiting WA for Dark Sky Tourism remains strong, compared to overall interest

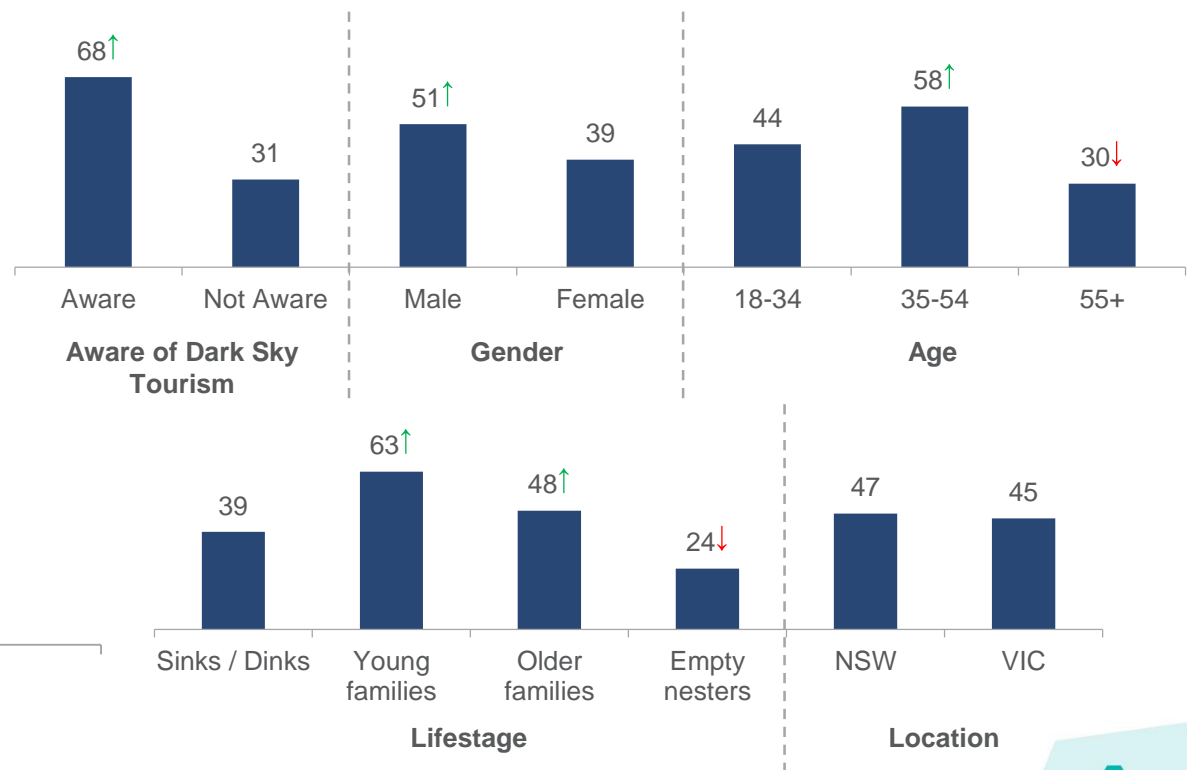


## Interest in visiting WA for Dark Sky Tourism (1-7)



54% of the interstate target market cited a high interest in Dark Sky Tourism overall, with figures softening only slightly to 46% when prompted specifically with interest in WA. Interest is consistent among NSW and VIC overall, though drops slightly in regional areas, particularly in regional VIC (18% high interest).

## Interest by Audience | % High Interest



n=500  
 Q16: How interested are you in visiting Western Australia for dark sky tourism activities, experiences or events?  
 ↑↓ Significant difference between segments at 95% confidence

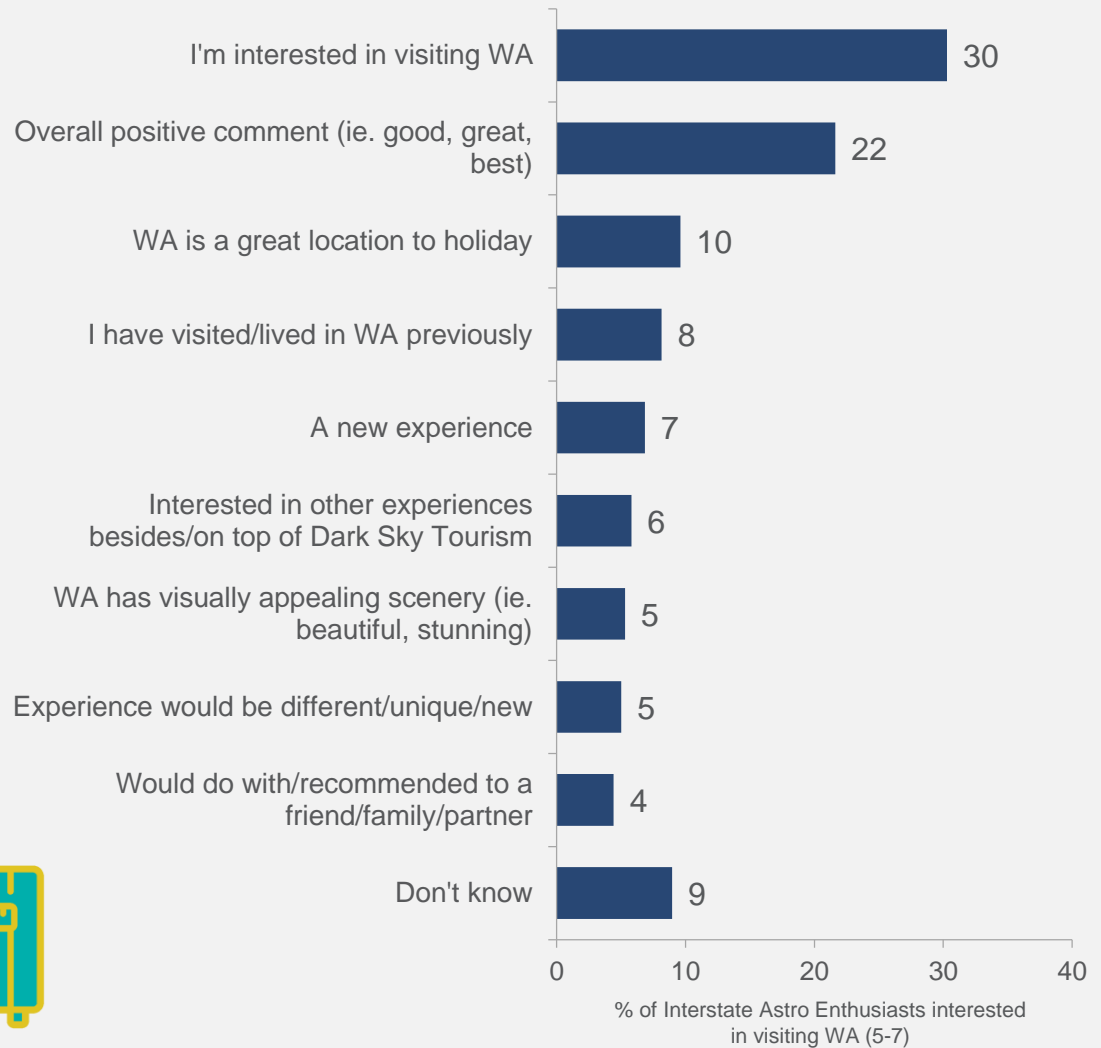
# A general interest in visiting WA drives interest in the state's Dark Sky Tourism offering

“ Love to visit the West's vast area to explore as it would be great for star watching/gazing. – Regional VIC ”

“ WOW, Western Australia would have the best night sky because of minimal light pollution. I've never been to WA but would love to. I think it would be so interesting! ” – Regional NSW



## Reasons for Interest in Visiting WA

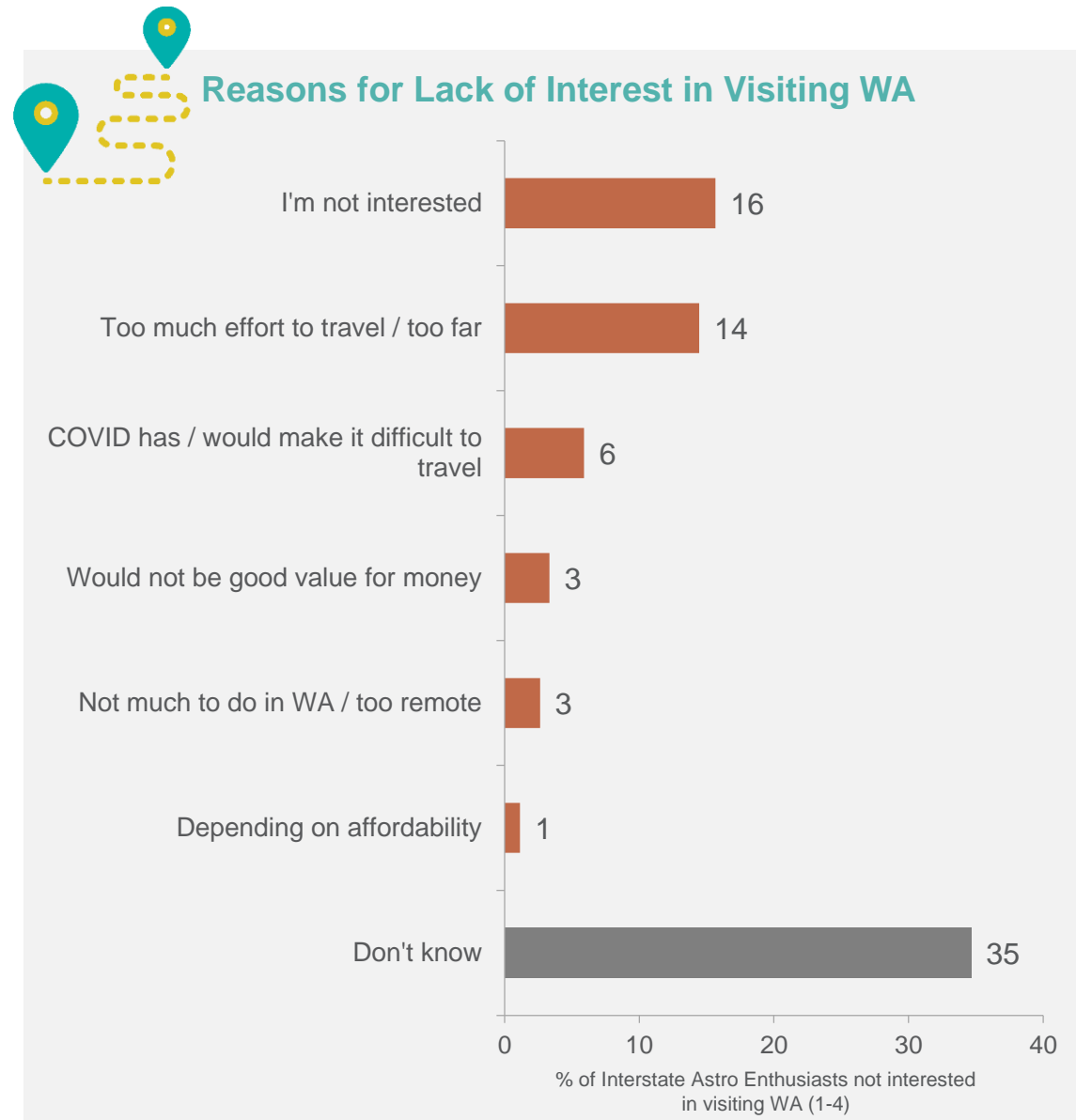


# Lack of interest in WA in general along with **perceived access challenges** are key barriers

For a third of NSW regional Astro Enthusiasts uninterested in visiting, WA represents too much of an effort, mostly due to its distance away and the state size to get around.

“ *It is a large state, and everything is a far distance to travel.* ”  
 – Metro NSW

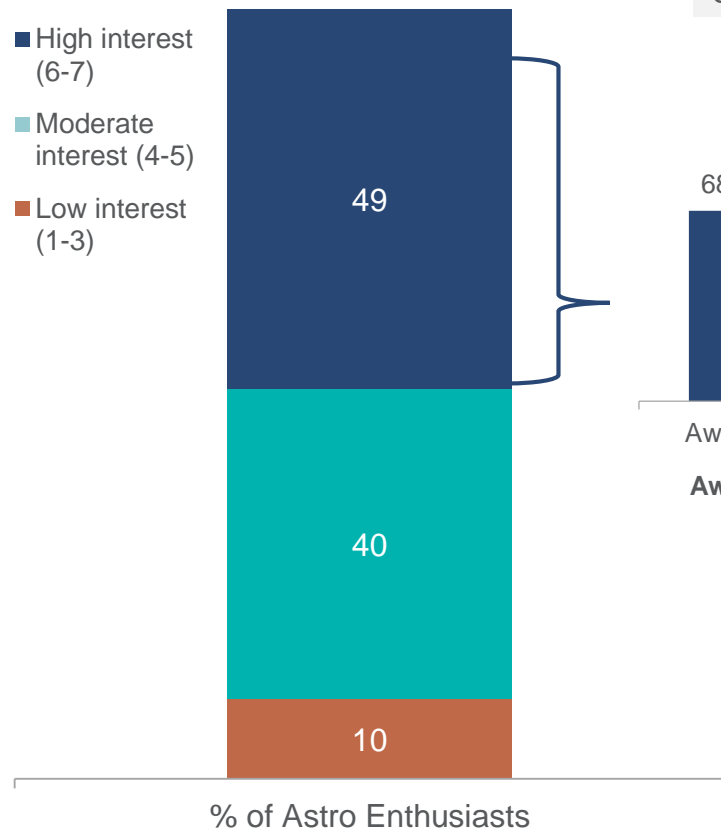
“ *Not really sure what else I would do there. It’s a long way to go to see what I can see just about anywhere in Australia.* ”  
 – Regional NSW





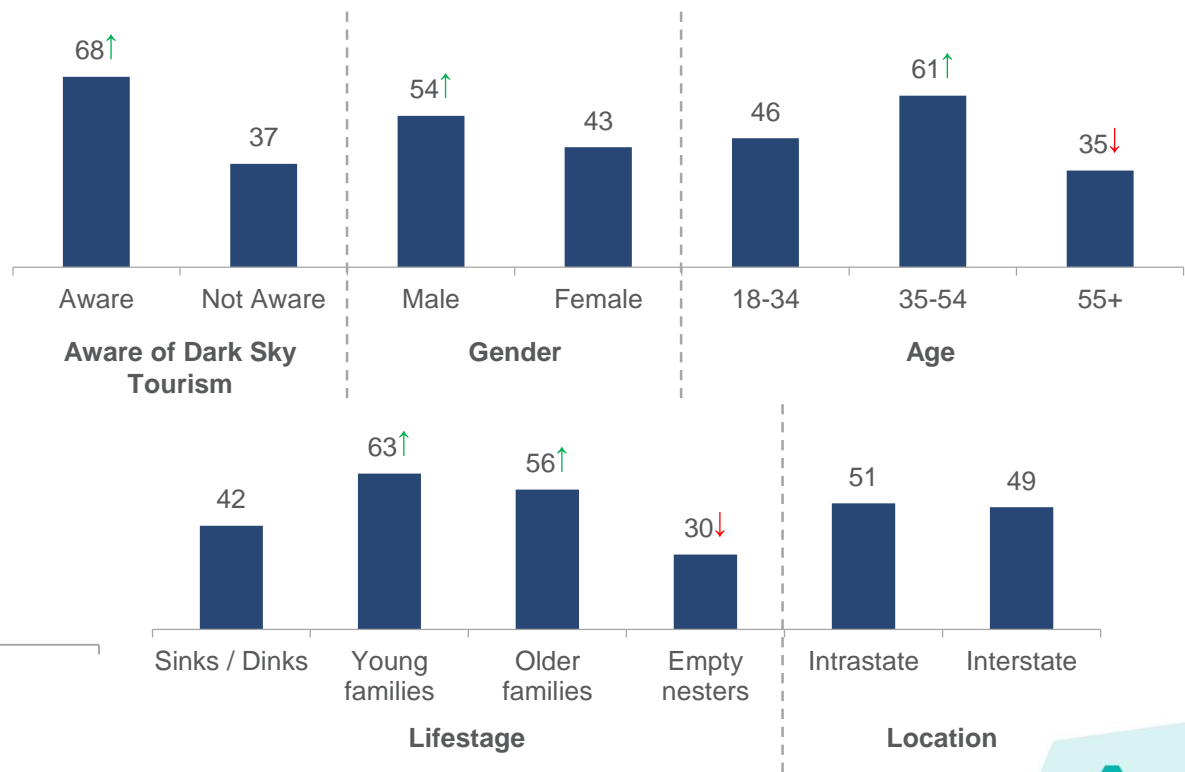
# Intrastate and interstate Astro Enthusiasts are equally interested WA's Dark Sky Tourism

## Interest in Hearing About Activities, Experiences or Events in WA (1-7)



Among the interstate market, only 27% of those who have a high interest in hearing about events and experiences in WA intended to travel to WA in the next three years prior to this, suggesting Dark Sky Tourism represents an opportunity to strengthen WA's tourism proposition among the target market.

## Interest by Audience | % High Interest



n=751

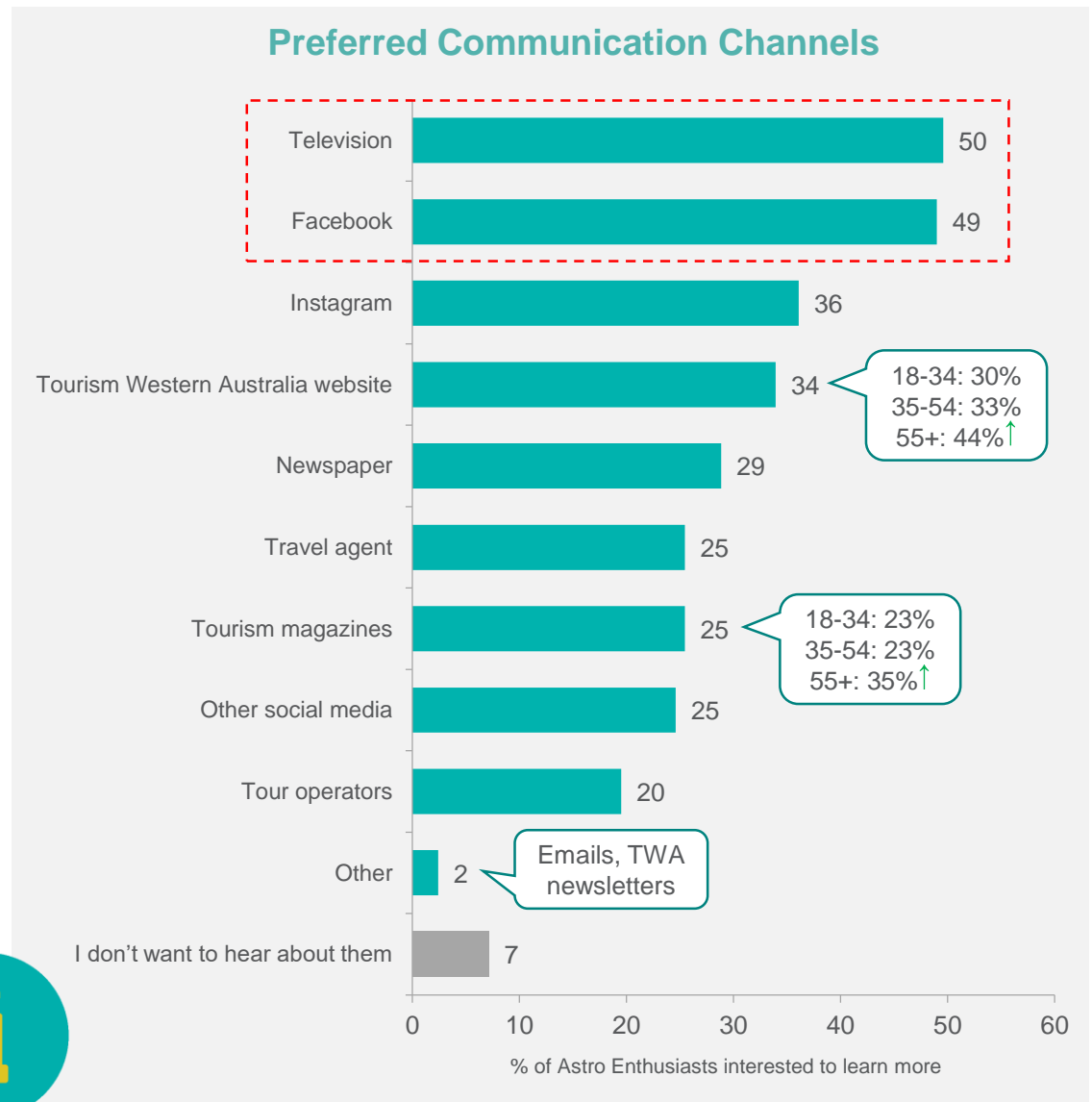
Q22: How interested are you in hearing about other dark sky tourism activities, experiences or events available in Western Australia?

↑↓ Significant difference between segments at 95% confidence

# Passive channels such as TV and social media are preferred, reflecting category knowledge gaps

TV and Facebook are the preferred channels, though they appeal to distinct audiences:

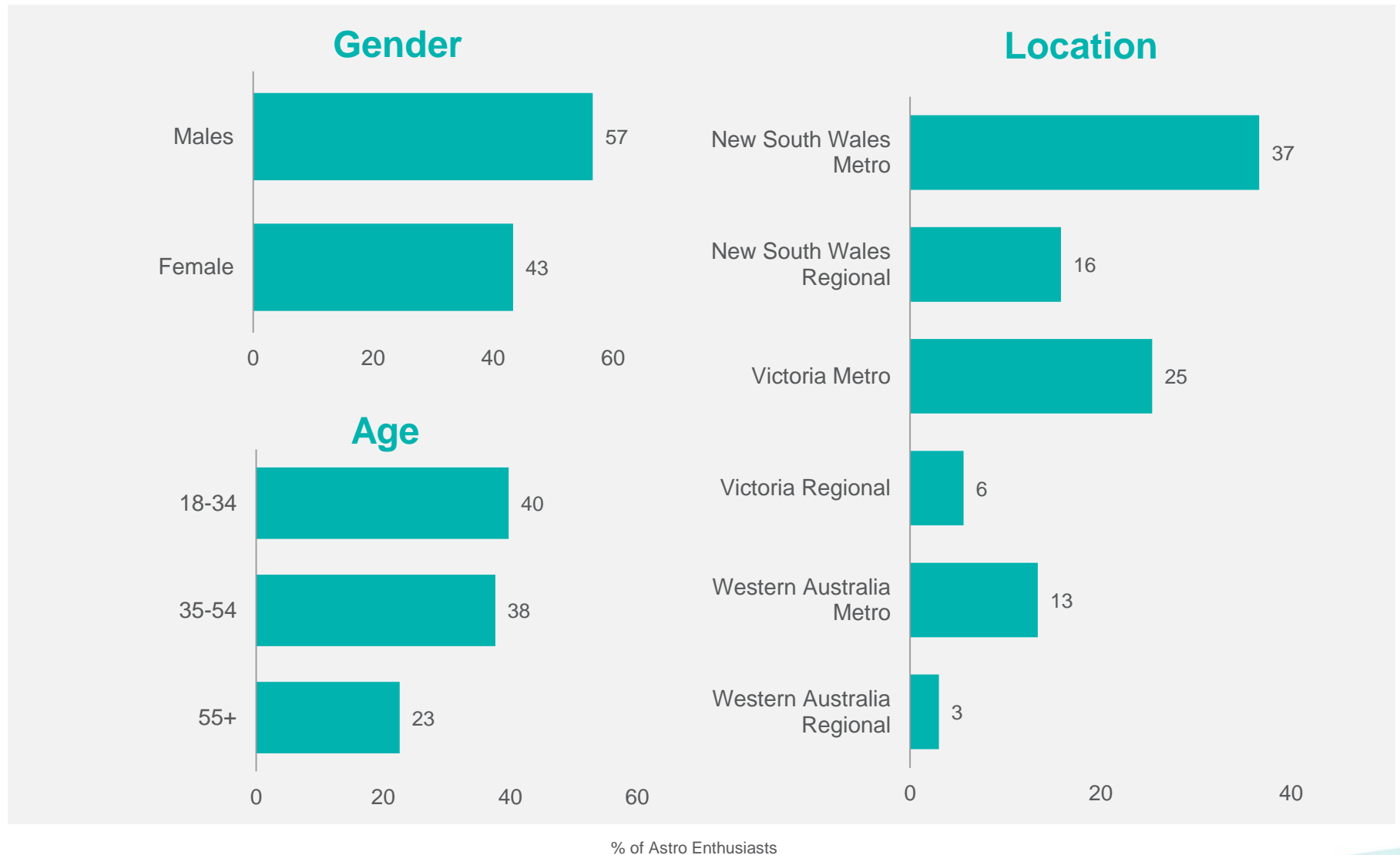
- Television is the preferred channel for those aged 35 or older (18-34: 39%↓, 35-54: 57%, 55+: 57%).
- Facebook is the preferred channel for younger audiences (18-34: 51%, 35-54: 55%, 55+: 36%↓), followed by Instagram (18-34: 41%, 35-54: 46%, 55+: 9%↓).
- Those 55 or older are also more likely to want to hear from TWA and official tourism sources.



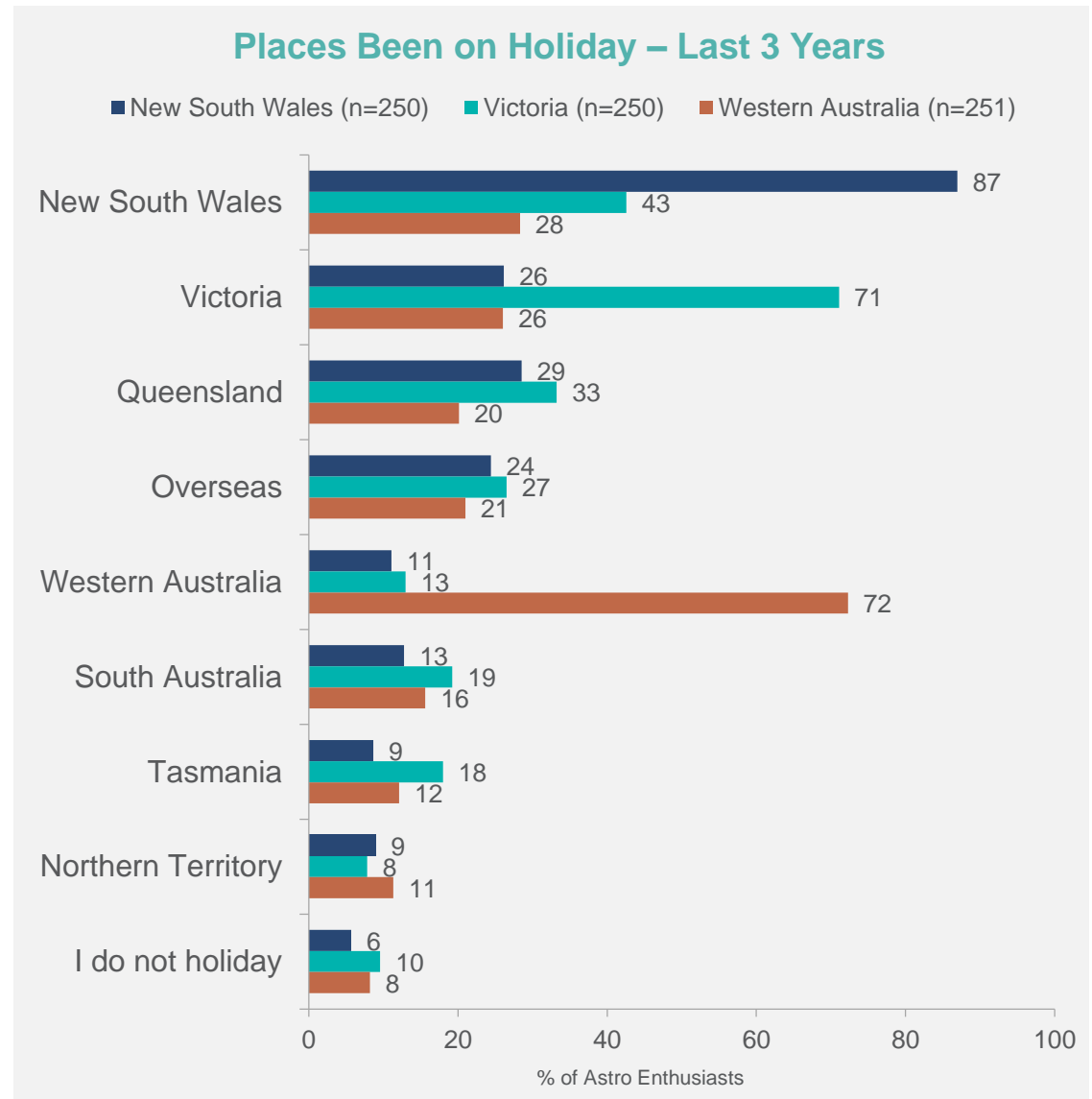


# Appendix

# Weighted sample breakdown



# Destinations visited in the last 3 years

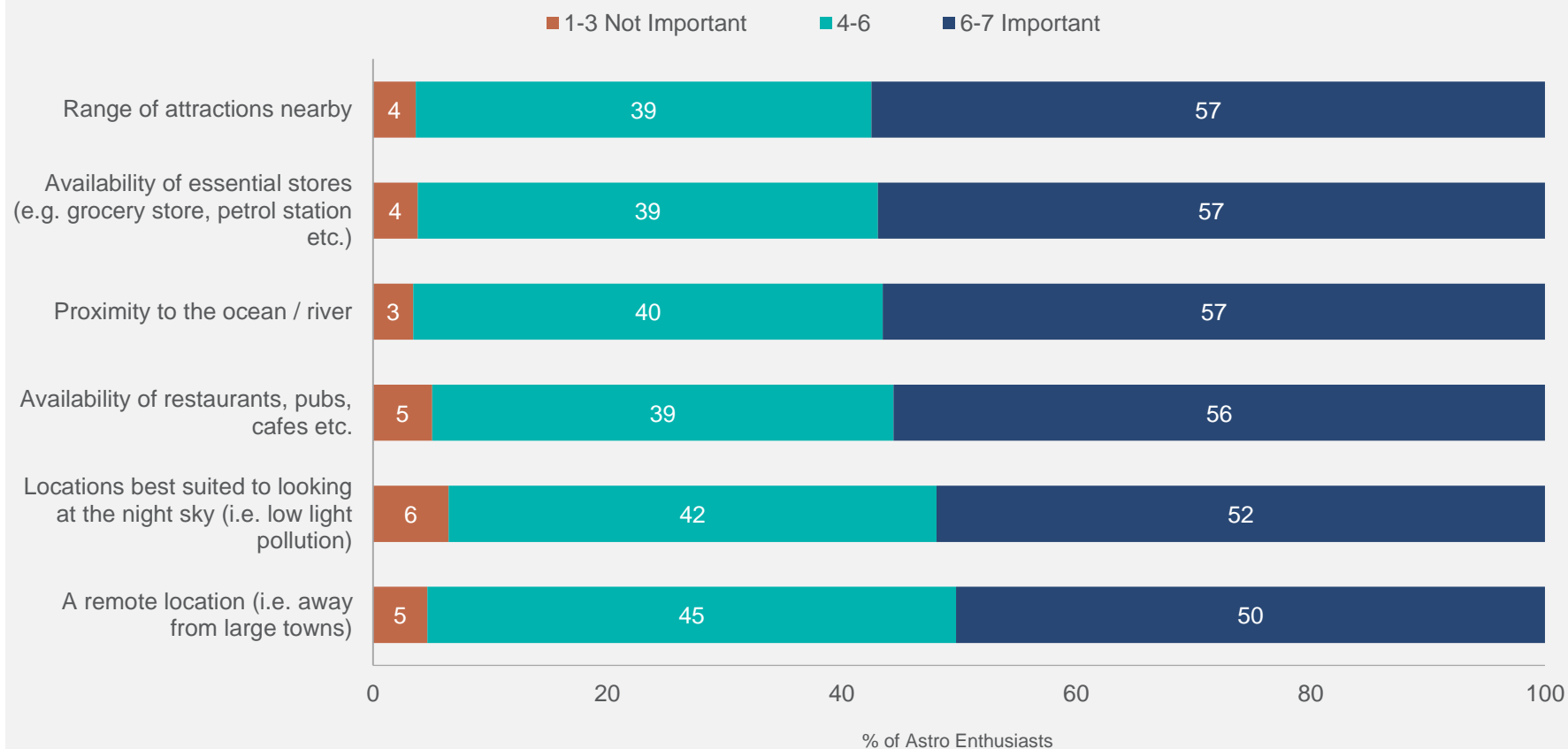




# There are **no standout factors** when choosing a holiday, all are considered important



## Factors Influencing Choosing a Holiday in Regional Australia

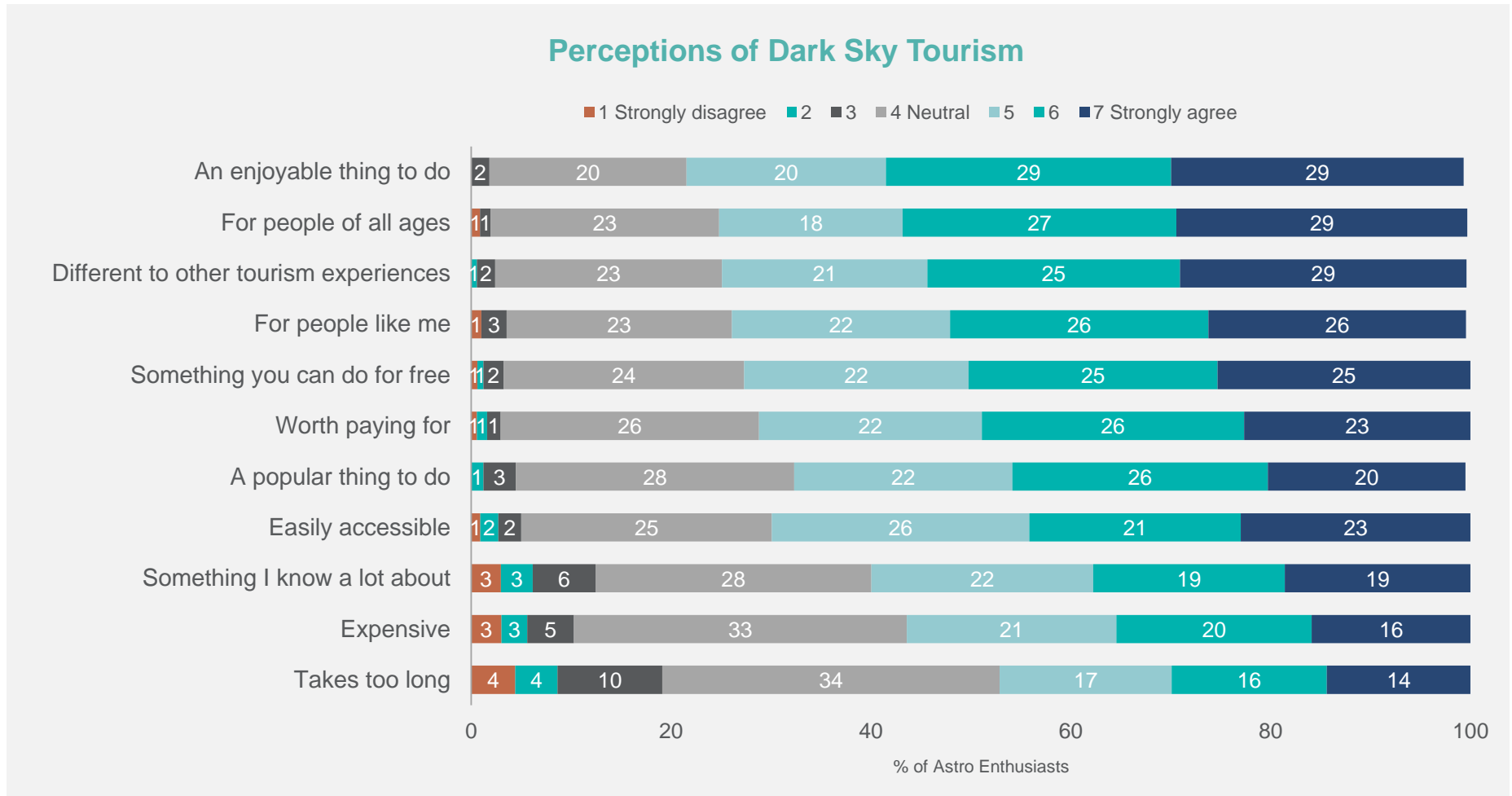


n=707

Q6: How important are each of the following when choosing a holiday destination in regional Australia

↑ Significant difference between segments at 95% confidence

# Perceptions of Dark Sky Tourism – All Statements



n=751

Q12: Based on your understanding, to what extent do you agree or disagree that dark sky tourism is?

↑ ↓ Significant difference between segments at 95% confidence

