

# Visitors' Perception of Belonging at Museums Victoria: Supplementary Materials

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## B: Condensed Background Reading

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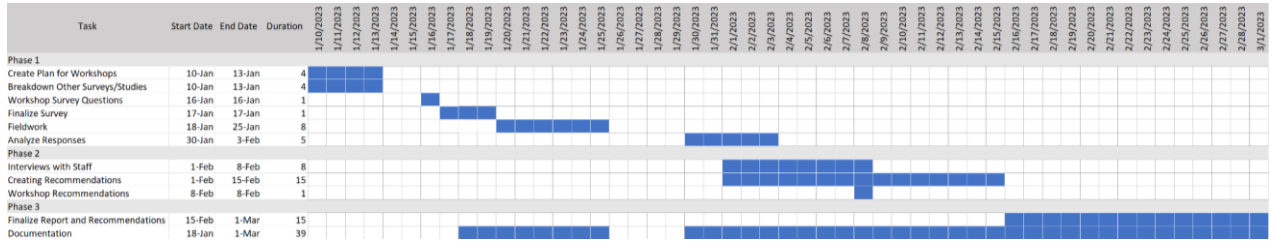
*MuseumNext: Museums, Health & Wellbeing Summit 2023 - Virtual Conference*. (n.d.). *MuseumNext*. Retrieved February 19, 2023, from <https://www.museumnext.com/events/museums-health-wellbeing-summit/>

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# C: Gantt Chart



## D: Survey Materials

### Survey Outline

#### RECORD

##### 1. Which museum are you attending today?

1. Melbourne Museum
2. Immigration Museum
3. Scienceworks

#### PREAMBLE

##### READ OUT

Museums are often concerned about the benefits of visitors regarding educational takeaways and experiences. Our survey and project is concerned about the psychological effects and other experiences felt by the visitors while in the museum and it should take less than 10 minutes to complete.

#### CONSENT STATEMENT PAGE

##### READ OUT//Terminate if 2

We are university students from America conducting a questionnaire as part of our project on visitor perception of museums. Names and other identifying information will not be collected and the data will be aggregated in order to ensure anonymity of participant answers. Participation in this study is voluntary and you may choose to end your participation at any time. For every question, there is the option to not answer. Respondents must be 18 years or older to participate.

Do you consent? \*We will check the box for them once verbal consent is given

1. Yes
2. No **TERMINATE**

#### DEMOGRAPHICS QUESTIONS PAGE

##### ASK ALL/READ OUT

##### 2. What type of visitor are you?

###### GROUP AS

1. Adult visiting with children
2. Adult visiting on own
3. Adult visiting with other adults
4. Multi-generational group

##### ASK ALL

##### 3. Have you visited [name of museum] before today?

1. Yes
2. No, this is my first visit
3. Not sure

ASK IF Q3 = 1

4. When was your last visit? OE

ASK IF Q3 = 1

5. How many times in the past year, including today, have you visited [name of museum]?

1. Just once
2. 2-3 times
3. 4-5 times
4. 6+ times

ASK ALL

6. Why are you visiting the museum?

1. To see something specific: \_\_\_OE
2. Something to do on school holidays/on the weekend
3. Visiting Melbourne
4. Other: \_\_\_OE

MUSEUM SPECIFIC

READ OUT

I am going to read out a series of statements and I would like you to tell me the level of your agreement with each. Look at the card and say the number that corresponds with your response, and please remember we are students, not from the museum, so please give honest answers.

ASK ALL

7. The museum is an important organization in Melbourne and in Victoria.

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

ASK IF Q1 = 1 //MELBOURNE MUSEUM

8. I feel that the museum caters for people of all ages.

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Strongly Disagree										Strongly Agree
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ASK IF Q1 = 2 //IMMIGRATION MUSEUM

9. I can see from my visit today that the museum celebrates people from many different cultures.

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

ASK IF Q1 = 3 // SCIENCEWORKS

10. I feel that children who visit Scienceworks are more likely to take up science as a career.

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

NO FOLLOW-UP QUESTIONS PAGE // RANDOMIZE QUESTIONS

ASK ALL

11. I do not see people like me in the museum.

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

ASK UNLESS Q2 = 2

12. Being in the museum connects me to the people I am with.



0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

**ASK ALL**

**13. The museum gives me an escape from everyday life for a while.**

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

**BREAK/READ OUT**

Thank you so much, we are now just over halfway through. The following questions will be following the same format as before, but will now ask for an explanation for your answer as well. Please continue to answer honestly.

**GENERAL QUESTIONS WITH EXPLANATION //RANDOMIZE QUESTIONS**

**ASK ALL**

**15. Being in the museum today connects me to something bigger than me.**

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

**ASK ALL**

**16. Can you give an example of what makes you think or feel this way? OE**

**ASK ALL**

**17. What I am seeing and doing in the museum is not important to me.**

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

ASK ALL

18. Can you give an example of what makes you think or feel this way? OE

ASK ALL

19. Being in the museums gives me a sense of being part of a community.

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

ASK ALL

20. Can you give an example of what makes you think or feel this way? OE

ASK ALL

21. I do not feel that I belong in the museum.

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

ASK ALL

22. Can you give an example of what makes you think or feel this way? OE

ASK ALL

23. I feel better because of my visit to the museum today.

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

**ASK ALL**

**24. Can you give an example of what makes you think or feel this way? OE**

**FINAL OE QUESTIONS**

**ASK ALL**

**25. We have been asking about things such as feeling comfortable, connected, and being part of something as a result of a visit to the museum. Do you think that providing a sense of belonging and well-being is the role of a museum?**

GROUP AS

1. Yes
2. No
3. Not Sure

**ASK ALL**

**26. Why is that? OE**

**ASK ALL**

**27. What could this museum do to better achieve that for visitors? OE**

**ASK ALL**

**28. What is one thing the museum can do to make visiting a more inclusive and welcoming experience for you? OE**

**DEMOGRAPHIC QUESTIONS**

**ASK ALL**

**29. What is your age?**

1. 18-29
2. 30-39
3. 40-49
4. 50-59
5. 60+

**ASK ALL/READ OUT**

**30. Do you live in...?**

1. Greater Melbourne
2. Regional Victoria
3. Outside Victoria

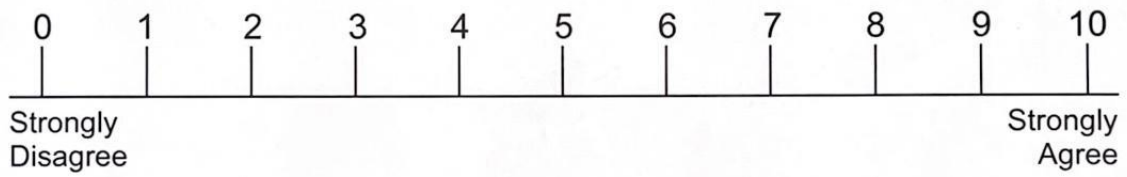
4. International

**Survey Rating Card**



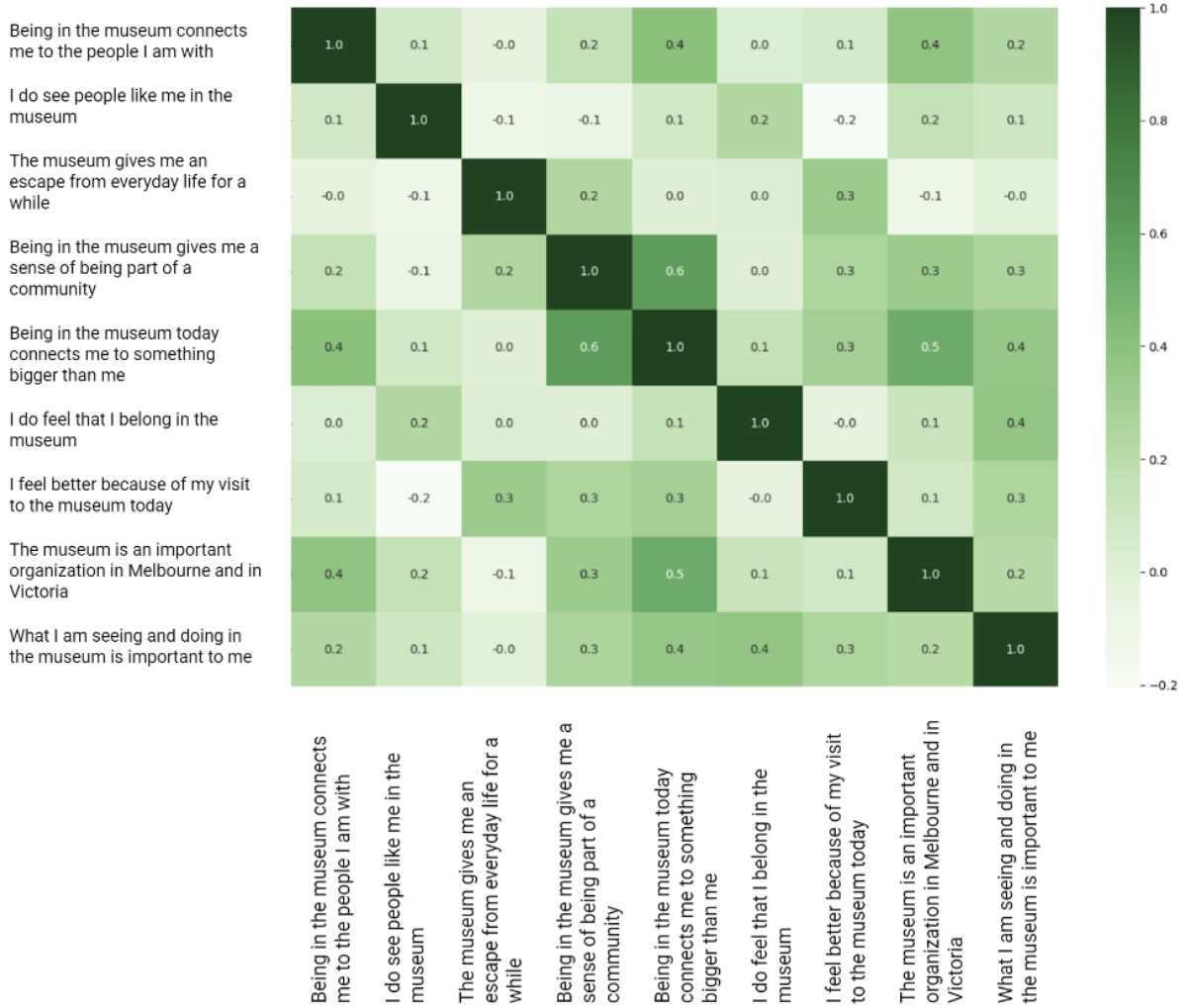
**AGREEMENT SCALE**

*just say the number*



# E: Statistical Findings

## Statement Ratings Correlation Matrix



## t-Test: Community vs Belonging

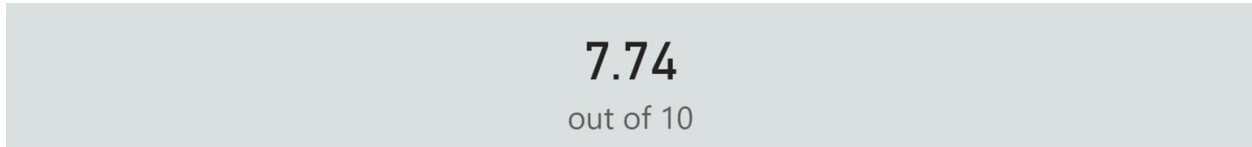
	I do feel that I belong in the museum.:	Being in the museum gives me a sense of being part of a community.:
Mean	8.774059	6.74477

Variance	5.091593	6.905172
Observations	239	239
Pearson Correlation	0.126287	
Hypothesized Mean Difference	0	
df	238	
t Stat	9.68202	
P(T<=t) one-tail	3.31E-19	
t Critical one-tail	1.651281	
P(T<=t) two-tail	6.62E-19	
t Critical two-tail	1.969982	

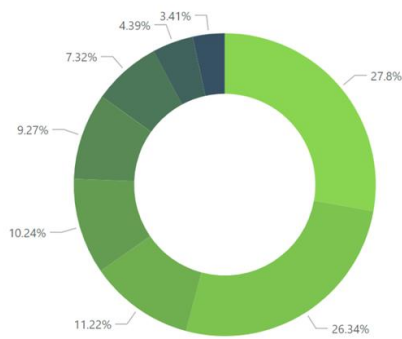
## F: Informative Figures

### Being in the museum connects me to something bigger than me

All MV Museums



Reasoning behind rating:

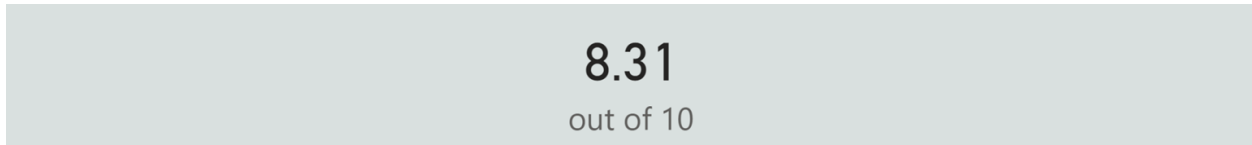


- Common humanity and a connection to different cultures
- Connection to a sense of history and past
- The museum does not play that role
- Connection to children/family
- Connection to learning and education
- Connection to the future/the future of technology

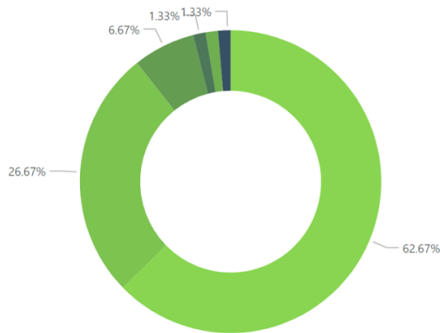
Which museum did you attend today?

- Immigration Museum
- Melbourne Museum
- Scienceworks

Immigration Museum



Reasoning behind rating:



- Common humanity and a connection to different cultures
- Connection to a sense of history and past
- Connection to learning and education
- The museum does not play that role
- Connection to a larger universe
- Connection to children/family
- Connection to nature
- Connection to the future/the future of technology

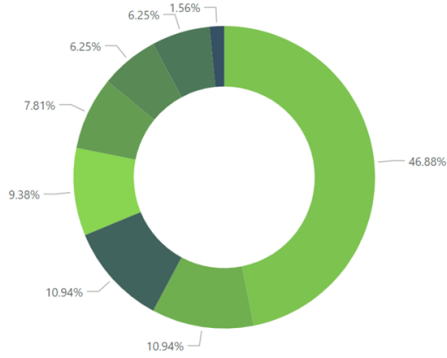
Which museum did you attend today?

- Immigration Museum
- Melbourne Museum
- Scienceworks

Melbourne Museum

**7.74**  
out of 10

Reasoning behind rating:



- Connection to a sense of history and past
- Connection to learning and education
- Connection to nature
- Common humanity and a connection to different cultures
- The museum does not play that role
- Connection to a larger universe
- Connection to children/family
- Connection to the future/the future of technology

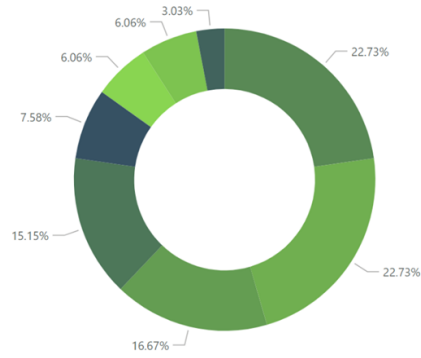
Which museum did you attend today?

- Immigration Museum
- Melbourne Museum
- Scienceworks

Scienceworks

**7.19**  
out of 10

Reasoning behind rating:



- Connection to a larger universe
- Connection to learning and education
- The museum does not play that role
- Connection to children/family
- Connection to the future/the future of technology
- Common humanity and a connection to different cultures
- Connection to a sense of history and past
- Connection to nature

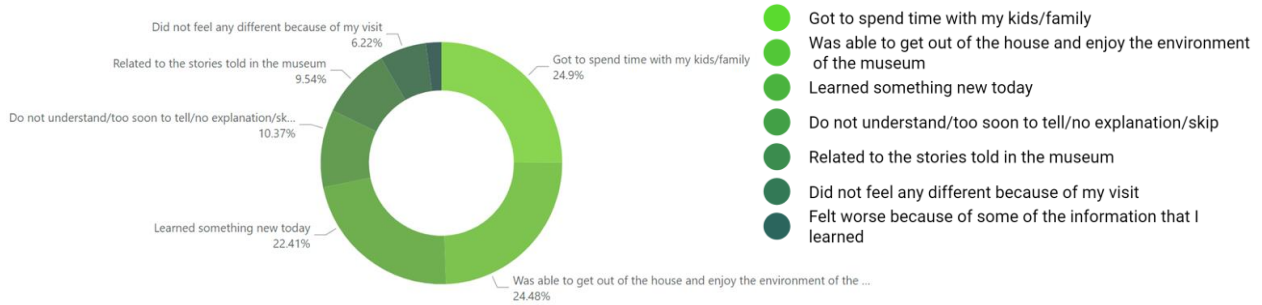
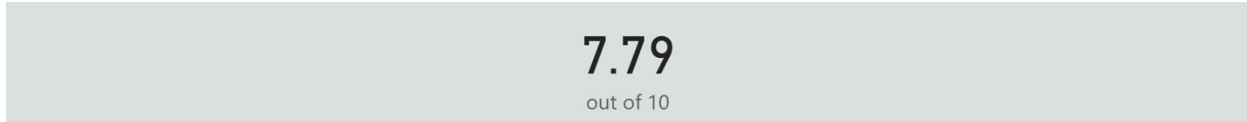
Which museum did you attend today?

- Immigration Museum
- Melbourne Museum
- Scienceworks



# I felt better because of my visit to the museum

## All Visitors



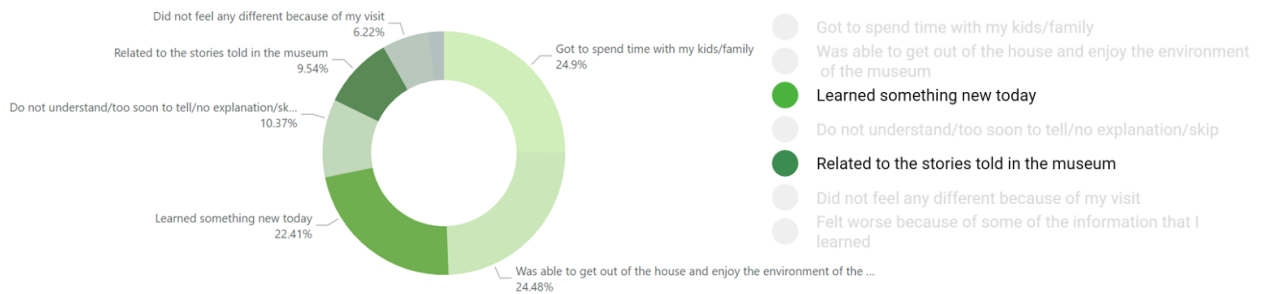
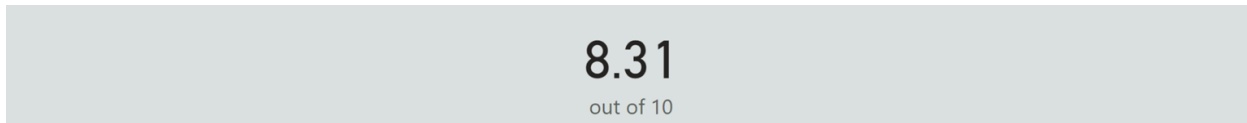
Being in the museum gives me a sense of being part of a community

**6.74**  
out of 10

Being in the museum connects me to the people I am with

**7.51**  
out of 10

## Educational related responses



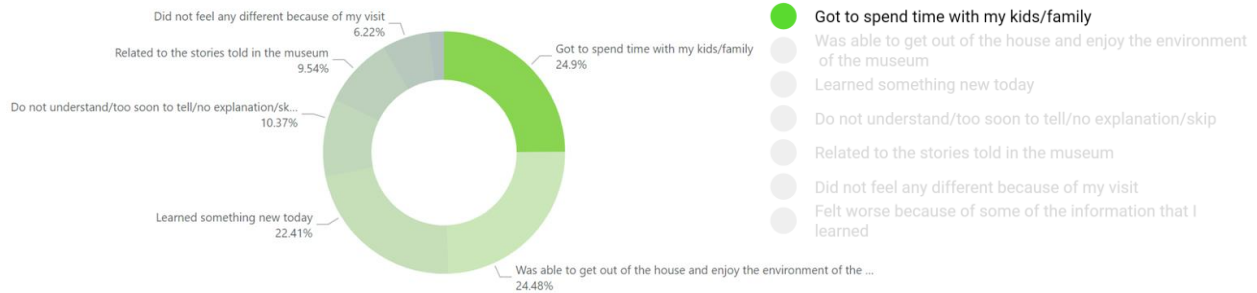
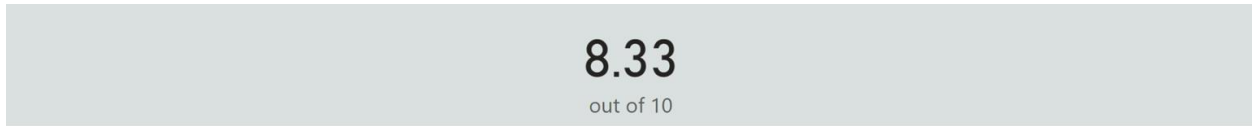
Being in the museum gives me a sense of being part of a community

**7.48**  
out of 10

Being in the museum connects me to the people I am with

**7.46**  
out of 10

## Family related responses



Being in the museum gives me a sense of being part of a community

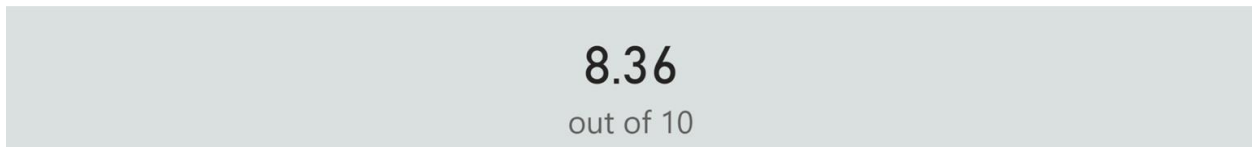
**6.83**  
out of 10

Being in the museum connects me to the people I am with

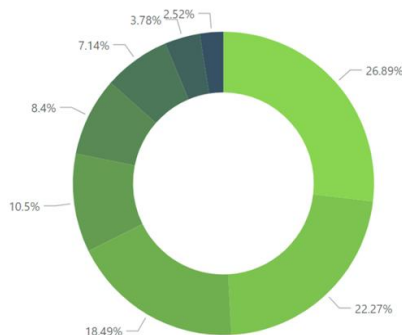
**8.10**  
out of 10

## What I am seeing and doing in the museum is important to me

### All Visitors



Reasoning behind rating:



- Education and learning is important
- Important because it is good for the children/the children enjoy it
- Immigration is important to Australian history/learning about different cultures is important
- Do not understand/too soon to tell/no explanation/skip
- Not important/does not affect everyday life so not important
- Learning from the past and present to build the future/reflecting on the past
- Learning about myself/identity
- Connected with others

What type of visitor are you?

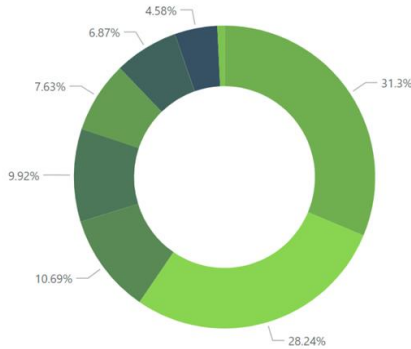
- Adult visiting on own
- Adult visiting with children
- Adult visiting with other adults
- Multi-generational group

### Adult Visitors

8.48

out of 10

Reasoning behind rating:



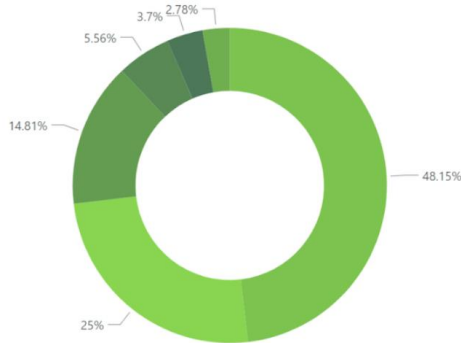
- Immigration is important to Australian history/learning about different cultures is important
- Education and learning is important
- Not important/does not affect everyday life so not important
- Learning from the past and present to build the future/reflecting on the past
- Do not understand/too soon to tell/no explanation/skip
- Learning about myself/identity
- Connected with others
- Important because it is good for the children/the children enjoy it

*Adults visiting with children*

8.20

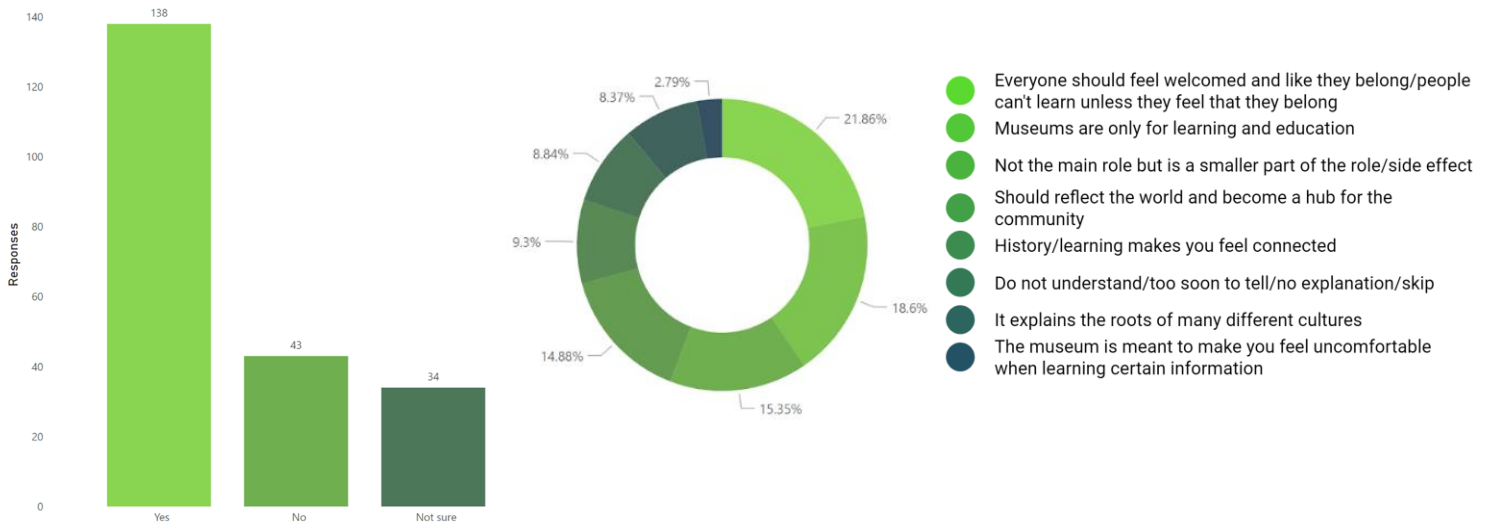
out of 10

Reasoning behind rating:

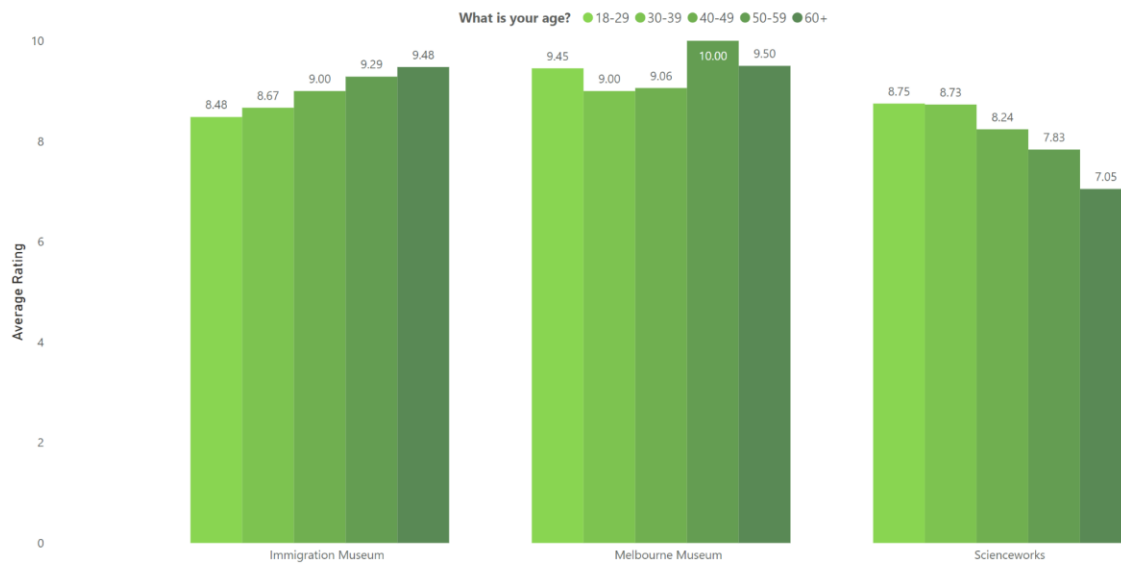


- Important because it is good for the children/the children enjoy it
- Education and learning is important
- Do not understand/too soon to tell/no explanation/skip
- Not important/does not affect everyday life so not important
- Learning from the past and present to build the future/reflecting on the past
- Immigration is important to Australian history/learning about different cultures is important

**Is creating a sense of belonging and well-being the role of a museum and why?**



## Feeling of Belonging by Age

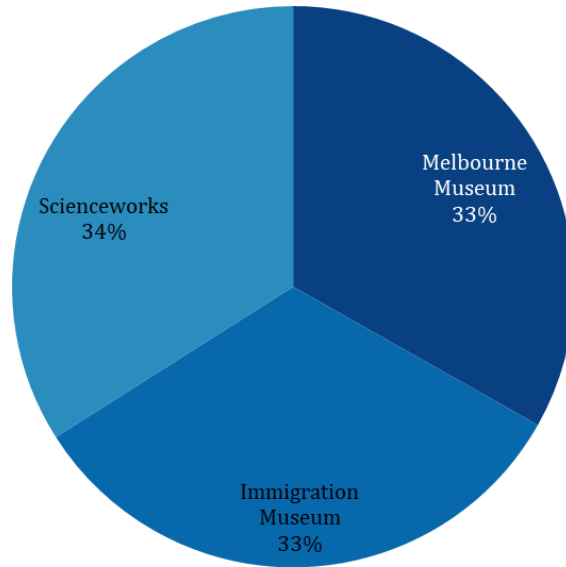


**I see people like me by age**



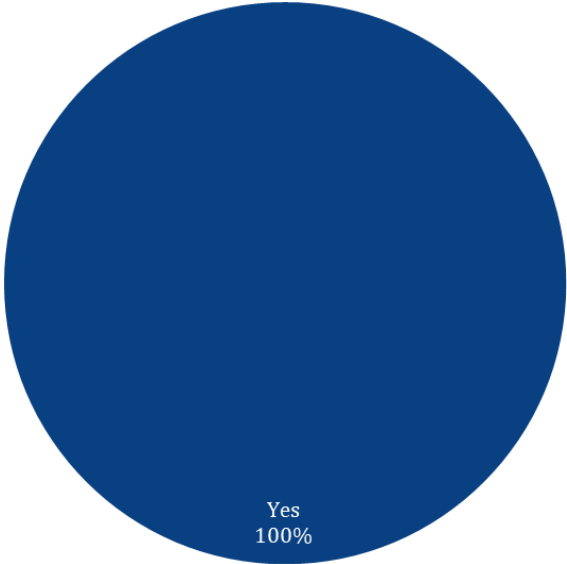
## G: Survey Demographic Data

### Which museum did you attend today?



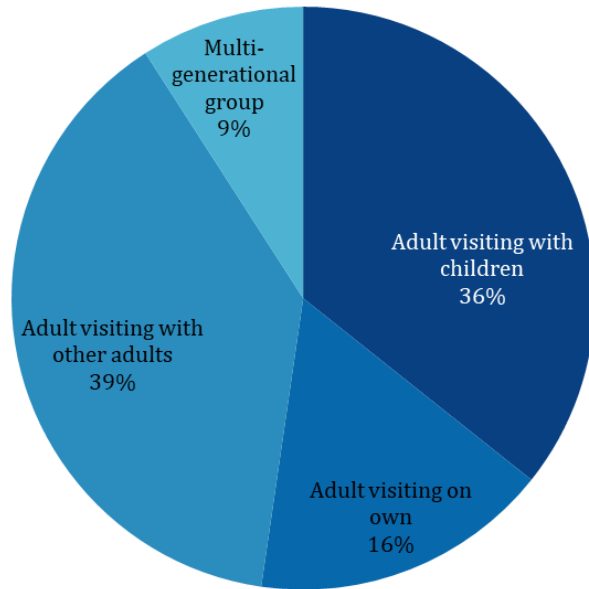
Value	Percent	Count
Melbourne Museum	33.2%	80
Immigration Museum	32.8%	79
Scienceworks	34.0%	82
	Totals	241

**Do you consent?**



Value	Percent	Count
Yes	100.0%	241
	Totals	241

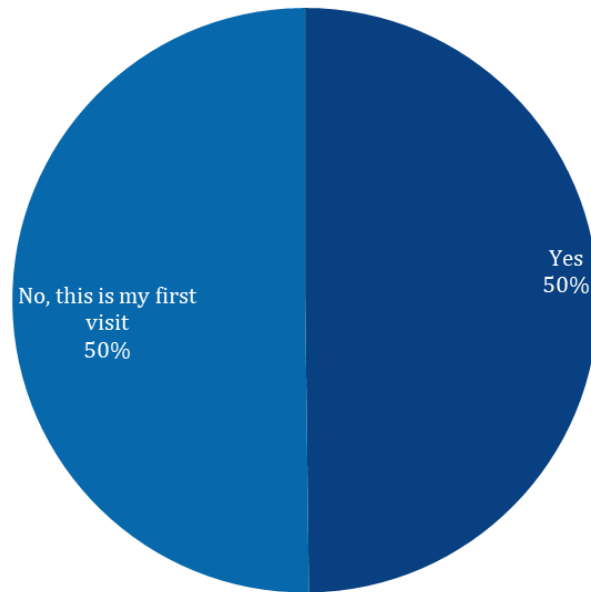
**What type of visitor are you?**



Value	Percent	Count
Adult visiting with children	35.7%	86
Adult visiting on own	16.6%	40
Adult visiting with other adults	38.6%	93
Multi-generational group	9.1%	22
	Totals	241

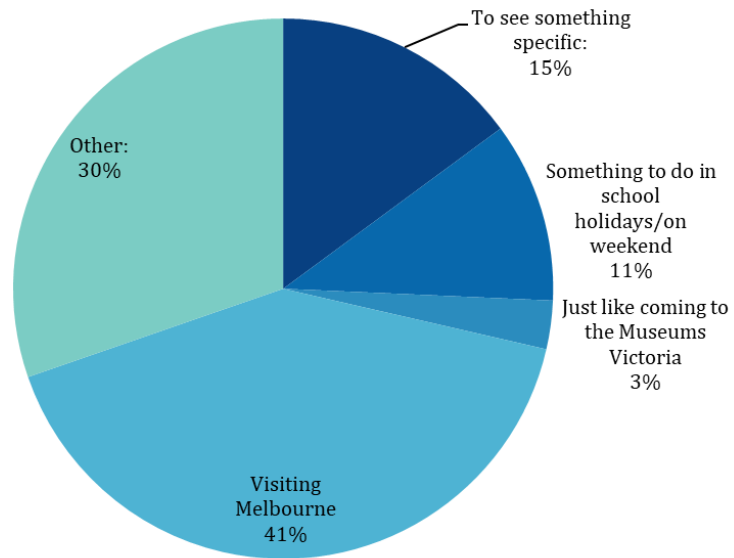
**Have you visited this museum before today?**





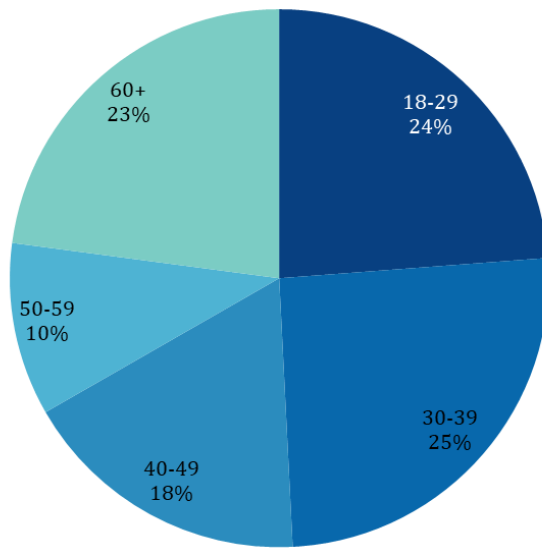
Value	Percent	Count
Yes	49.8%	120
No, this is my first visit	50.2%	121
	Totals	241

**Why did you visit the museum today?**



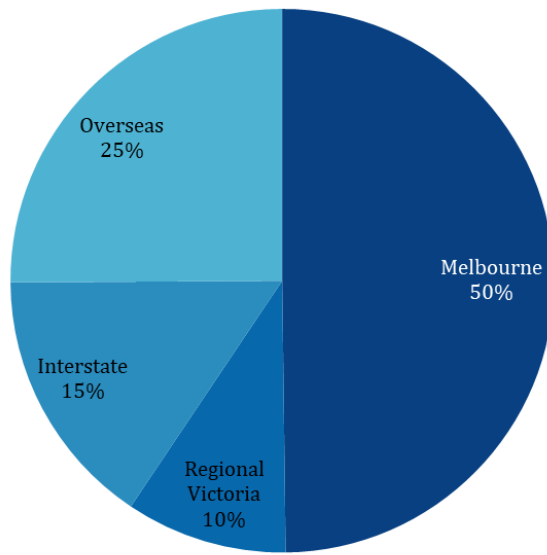
Value	Percent	Count
To see something specific:	14.9%	36
Something to do in school holidays/on weekend	10.8%	26
Just like coming to the Museums Victoria	2.9%	7
Visiting Melbourne	41.1%	99
Other:	30.3%	73
	Totals	241

**What is your age?**



Value	Percent	Count
18-29	23.8%	57
30-39	25.4%	61
40-49	17.5%	42
50-59	10.4%	25
60+	22.9%	55
	Totals	240

**Do you live in?**



Value	Percent	Count
Melbourne	49.8%	119
Regional Victoria	9.6%	23
Interstate	15.5%	37
Overseas	25.1%	60
	Totals	239

## H: Data Coding Process

To categorize our qualitative data to further analyze our results, we used the following data coding process:

### Step 1. Creating Rough Codes for Initial Sorting

We started by skimming each set of open-response answers to find common themes to turn into categories to group visitor responses into that we will be referring to as codes.

### Step 2. Creating Keyword Tables

Next, we used a word cloud tool called Voyant to find the most commonly used words in our responses that related to the codes we created. We were then able to create tables for each code that contained the common words we found using Voyant. Each statement had its own set of keyword tables for each code that would be used to go through the open responses using the Excel formulas described below. Below is an example of the keyword tables for two codes for responses to the statement “I do not feel that I belong in the museum”:

I do not feel that I belong in the museum.	Everyone has the right to be in and apart of the museum
It was very inclusive, welcoming, and accessible	
welcoming	everybody
inclusive	everyone
accessible	apart
open	belong
belong	open
welcome	public

### Step 3. Writing the Formulas

Using the keyword tables we created as a reference, the formula searches the open response answer for any of the keywords in the set of tables made for the statement being checked. If a response contains any of the keywords, it will return the code it belongs to at the top of the table. If it does not contain any of the keywords, it will return nothing. The formula then checks the rest of the tables, returning all codes that the response contained keywords from. Below is an example of the code for one response:

```
=IF(OR(COUNTIF(Z3,"*"&'Keyword tables'!$A$25:$A$28&"*"),'Keyword tables'!$A$24,"")&" "& IF(OR(COUNTIF(Z3,"*"&'Keyword tables'!$B$25:$B$30&"*"),'Keyword tables'!$B$24,"")&" "& IF(OR(COUNTIF(Z3,"*"&'Keyword tables'!$C$25:$C$28&"*"),'Keyword tables'!$C$24,"")&" "& IF(OR(COUNTIF(Z3,"*"&'Keyword tables'!$D$25:$D$29&"*"),'Keyword tables'!$D$24,"") &" "& IF(OR(COUNTIF(Z3,"*"&'Keyword tables'!$E$25:$E$26&"*"),'Keyword tables'!$E$24,"") &" "& IF(OR(COUNTIF(Z3,"*"&'Keyword tables'!$F$25:$F$26&"*"),'Keyword tables'!$F$24,"")
```

Breaking this down, the formula is essentially the same formula repeated for each table of code keywords. The COUNTIF function creates a set of 0s and 1s, showing whether or not each

keyword in a table appears in the response, 0 meaning it did not appear and 1 meaning it did. The OR function will return a boolean of either True or False, True if there is at least a single 1 (showing that at least one keyword was present) and False if the set is all 0s (showing that none of the keywords of that particular code was present). The IF function will return the code of the corresponding table if this boolean is True, or returning nothing if it is False. The same process is run on the rest of the tables in the set, creating a list of the possible codes that the response could be categorized into. An example of one of these lists from the formula is:

“„Immigration is important to Australian history/its important to learn about different cultures are important,,,”

This shows that the response did not contain words from the first two code tables, contained at least one keyword from the third code table, and none from the fourth, fifth, or sixth. The commas separate the codes and nulls returned by each smaller formula.

#### Step 4. Manually Verifying the Codes

The formula did a great job at picking out the most common words and sorting the responses, however, it was not perfect. Some responses returned multiple codes or none at all, and some returned the incorrect code. We went through and double checked each response manually, either picking which code was a better fit for those with multiple, or manually coding those with none. This process was much faster than manually coding each response, as we could quickly check and confirm the codes rather than make a decision for each one. In addition, there were a few instances where the answer was not categorized by the formula, but also did not fit into any of our initial codes. We would make note of these responses in order to create new categories to sort these responses into manually.