

Emotional Faces

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THIS IS NOT A DEFINITIVE FINAL REPORT

FORMATIVE evaluation studies like this one often:

- **are conducted quickly**, which may mean
 - small sample sizes
 - expedited analyses
 - brief reports

- **look at an earlier version** of the exhibit/program, which may mean
 - a focus on problems and solutions, rather than successes
 - a change in form or title of the final exhibit/program

Mind – Formative Evaluation Emotional Faces

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EXHIBIT PROTOTYPE

The Emotional Faces prototype encourages visitors to make faces with different emotional expressions (e.g. happy, sad, angry) to see if making a face can affect mood. It consists of 6 photographs that show the following emotions:

- Happy
- Disgusted
- Sad
- Surprised
- Angry
- Fear

There are two mirrors for each photograph, one to its left and one below. See Figure 1 and Figure 2.

PURPOSE

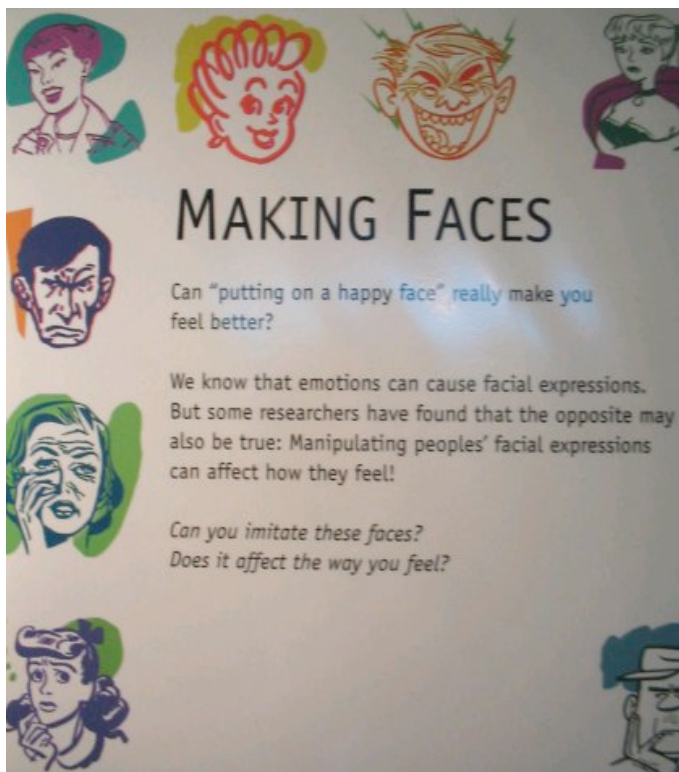
This formative evaluation gauges:

- If visitors stopped and made faces in the mirrors at the exhibit
- If visitors felt that making a face affected their mood
- If visitors felt uncomfortable making faces in public
- Which, if any, expressions were difficult for visitors to identify
- What visitors thought is the point of the exhibit.

Figure 1. The Exhibit Prototype.



Figure 2. Label.



METHOD

- The photographs and mirrors were mounted along the downstairs hallway, which leads to the stairs to the Life Sciences area.
- An evaluator counted the number of visitors who passed in front of the prototype, crossing an imaginary line along that hallway.

- An evaluator observed every third or, when it was quiet on the floor, every visitor who stopped for 3 or more seconds in front of any part of the exhibit. The evaluator only selected visitors 8-years old or older. He noted which emotional face the visitor looked at and whether or not s/he made a face in the mirror.
- After the visitor who was observed, was finished with the exhibit, the evaluator approached the visitor to ask a set of interview questions (Appendix A).

DATA COLLECTED

- Data were collected on Sunday, February 27, 2005 between 11:30am and 3:30pm.
- N=17 observations. N=14 interviews. Note the three visitors, whom we observed but did not interview, declined to be interviewed, did not speak English, or moved off before the evaluator was able to ask for an interview.
- Demographics

Gender	Count (out of 17)
Female	10
Male	7

Age	Count (out of 17)
Child (8-12)	1
Adult	15
Senior	1

Group Type	Count (out of 17)
Adult peer group	5
Adult individual	5
Family	7

RESULTS

Did visitors stop and make faces?

- We counted a total of 115 visitors who passed in front of the exhibit. Approximately 17 (15%) people stopped for 3 or more seconds at the prototype.
- About half the visitors who stopped in front of the exhibit made a face in one of the mirrors.

Observed Behavior	Count (out of 17)
Made a face	8
Did not make a face	9

Visitors' Self-Report	Count (out of 14)
Made a face	8 ¹
Did not make a face	6 ²

¹ This corresponds with the observed behavior.

² The three visitors we did not interview also did not make a face.

- This is the breakdown of the faces visitors made. There was no expression that visitors tended to avoid more than others.

Which face?	Count (out of 17)
Happy	5
Disgusted	5
Sad	3
Surprised	3
Angry	4
Fear	5

- We could not detect a significant difference (Fisher's Exact Test, $p > .05$) in the tendency for a person to make a face if the person came with a group or as individuals to the exhibit.

	Visitor Made a Face	
	Yes	No
Came alone	7	4
Came in a group	1	2

Did making a face affect their mood?

- However, when we asked if making a face affected their mood, only 1 visitors said that it did. Most (5 out of the 8) answered that making a face did not affect how they felt, and 2 visitors were not sure how it affected them, if at all.

Did visitors feel uncomfortable making a face in public?

- The visitors who did not make a face gave various reasons why they did not. These included:
 - Visitor1: I think I felt silly. I [might] have if you hadn't been sitting there.
 - Visitor4: My kids didn't want to.
 - Visitor8: It didn't hit me to make one.
 - Visitor11: Because I lost my son, so I left.
- We were particularly concerned about visitors feeling self-conscious making a face in the public space of the museum, and we asked them if having more privacy would make them more likely to make a face. We found

If you had more privacy, are you more likely to make a face?	Count (out of 17)
More likely	6
No difference	8
Less likely	0

- The people who said they were more likely to make a face explained:
 - Visitor1: Probably because I'm a shy person.
 - Visitor3: [I'd feel] less self-conscious.
 - Visitor14: because as an adult, you feel silly.
- Those who answered that more privacy would not have made a difference indicated:
 - Visitor2: because this place is about trying things out and being silly
 - Visitor17: I'm not that inhibited in a setting like that.

Which, if any, emotions were difficult for visitors to identify in the photographs

- Eight out of the 14 visitors interviewed had no difficulty identifying the expressions in the photographs used in this prototype.
- The remaining 6 visitors found the following emotions challenging to identify:

Which emotion was difficult to identify	Count (out of 14)
Sadness	3
Anger	2
Surprise	1
Fear	1

What did visitors think was the point of this exhibit?

- When asked visitors thought the point of the exhibit is:
 - Making a face can change the way you feel (4 visitors). Note that all 4 of these visitors said that they read the 'point' of the exhibit at the label.
 - Visitor1: What it said over there: that if you imitate faces it may change the way you feel.
 - Visitor16: woman: I read about how if you smile you feel better.

- Your expression is connected to your emotions (2 visitors)
 - Visitor3: to make you connect your facial expression with your emotion.
- It makes you more aware of facial expressions (2 visitors)
 - Visitor6: [man speaking:] it makes you more aware of your expressions.
- It has something to do with emotions or psychology (2 visitors)
 - Visitor12: I thought it was something about psychology.
- It has no point (2 visitors)
- We communicate with other people with our facial expressions (1 visitor)
- The exhibit lets express your feelings (1 visitor)

KEY POINTS AND POSSIBLE NEXT STEPS

- About half the visitors who stopped at the exhibit prototype made a face in one of the mirrors. When asked, half the visitors indicated that they would have been more likely to have made a face if they had more privacy (i.e. if other people, whom they did not know, could not see them); this is even though the prototype was placed in an out-of-the-way hallway. These results suggest that exhibits that encourage visitors to express and explore feelings may need to provide a 'safe' context that would help visitors feel less self-conscious. For this exhibit, it may mean providing more privacy for visitor groups who are willing to 'be silly' with each other but not in front of strangers.
- A minority (4 out of 14) of the visitors thought the point of the exhibit was to see how making a face could change how they feel. However, all of these visitors 'discovered' this point by reading the label for the exhibit instead of through direct experience of the phenomena. Only one visitor felt that making a face changed her mood, but this same visitor thought the point of the exhibit was to connect facial expressions to emotions and did not articulate a causal relationship between making a face and feeling an emotion. These findings indicate the current discrepancy at the present prototype between behavior – making a face, and intended mental effects, changing one's mood.

In future iterations of this prototype, we may want to reconsider what is(are) the main experience(s) that the exhibit should support. If it is to establish a causal relationship between making a face and feeling that emotion, we will need to identify and address the obstacles in allowing visitors to make this connection. For example, do visitors not spend enough time at the exhibit to experience the emotions?

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APPENDIX A: Interview Questions

1. Did you look at any of the photos on the wall?
YES **NO**
 - a. Was it difficult or easy to figure out what emotion each photo was showing? Was there one that was harder to figure out than the others? Which one?

2. Did you make a face in any of the mirrors?
YES **NO**
 - a. [If YES] Which face did you try to make? [Try to get answer that id emotion]
 - b. Did making a face affect how you were feeling? **YES** **NO**
- [If YES] How so?
 - c. [If NO] Is there any reason why you decided not to make a face?

3. [If in group] Did anyone in your group make a face in any of the mirrors?
YES **NO**
 - a. [If YES] Which face did that person try to make?

4. Do you think you are more or less likely to make a face if you had more privacy --- if you knew that other people you don't know wouldn't be able to see you? Or would it not make any difference?
More likely **No difference** **Less likely**
 - a. Can you say a bit about why you feel this way?

5. What do you think is the point of this exhibit? Does it even have a point?

6. Do you have any suggestions for improving this exhibit?