

**Effects of Providing Information About Common
Bottlenose Dolphins' (*Tursiops truncatus*) Behavior on
Anthropomorphic Responses**

Supplemental Appendices

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Supplemental Appendix A

Narration Script

Bottlenose dolphins' bodies are able to move effortlessly through the water because of many adaptations. Their bodies are sleek, streamlined, and spindle shaped in order to minimize drag as they travel through their environment. (:12)

Dolphins can communicate through posture, movement, sound, ramming, and biting. What you are watching is communication through raking. There are different contexts in which you would see this type of behavior. Two examples of raking are intrasexual competition and intersexual conflict. Intrasexual competition is competing with a dolphin of the same sex whereas intersexual conflict is conflict between two different sexes. (:37)

Dolphins use a strong muscle called the peduncle to pump their tail up and down to move through the water. The peduncle is the part of the body that attaches the tail to the rest of the body. You can see how the peduncle helps the dolphins move easily. Notice how their tails are a lot more flimsy looking than their peduncles. The tail flukes have no bone structure and are only made out of cartilage. The fin that sticks out on the top of their back is called the dorsal fin. There is also no bone structure in the dorsal fin, similar to the tail flukes. Each and every dolphin has a unique dorsal fin and tail flukes just as every person has a different set of fingerprints. The edges of a dolphin's dorsal fin and tail flukes have unique markings and cutouts that make them all unique, which help us identify dolphins individually. (1:32)

The dolphins you see interacting with their mouths on each other are juvenile male dolphins ranging from the age of 3 to 7 years. Males in this stage of life tend to have more of what are called rake marks than females of this stage. Raking is a big part of dolphins' social structure. Many researchers have concluded that dolphins live in a flexible fission-fusion social system, characterized by frequent changes in group membership. What this means is that their interactions with each other change constantly. The male you see not participating in their interaction is 20 years old. Research has shown that adult males usually do not participate in juvenile raking. The behavior you are observing can result in marks you can see on the dolphin's skin. Rake marks are not indicators of gender or age but could indicate relative rates and timing of raking. These marks can be either temporary or permanent but tend to heal rapidly due to the relative absence of a scab. Instead of a scab forming, a buffer layer of degenerating cells replaces the open wound. Researchers view the juveniles' behaviors as playful and competitive as well as a common way for juveniles to practice sexual behavior.

As these dolphins are moving their bodies in different directions, you can see those active flippers that are attached to their belly. These body parts are called the pectoral flippers. The pectoral flippers help dolphins navigate through the water, helping them turn right, turn left, or stop suddenly.

You can see from their coloration that the top part of their bodies is a darker gray color, while their bellies are much lighter. This adaptation is called counter shading. Counter shading allows them to blend in with their natural environment. If you are looking down at the ocean, their backs will blend in with the ocean's dark color. If you are on the bottom of the ocean looking up at dolphins, their bellies blend in with the sunlight shining down to the ocean.

While watching the dolphins interact with each other, you will notice that they go up to the surface of the water in order to take a breath of air. The longest time recorded of a dolphin holding its breath is 7 minutes and 15 seconds, but they do not typically hold their breath for that long. You can see in the video that they come up for a breath about every minute or so. (3:35)

The bubbles that you see come out of the dolphin's blowhole. The blowhole allows dolphins to breathe and vocalize. Inside of their mouths, they can have anywhere from 72 to 104 teeth. These teeth are not used to chew their food but for catching food. Dolphins are able to swallow all of their food completely whole because they do not have a gag reflex. Dolphins have a double slit pupil which allows them to have good vision whether under water or on the surface.

We hope you learned about dolphin behavior and anatomy from this video. (4:04-4:40)

Supplemental Appendix B

Pretest: *Perceived Differences Between Humans and Animals*

If you were watching dolphins, how well could you tell that they were feeling or experiencing the following characteristics?

Circle the number that represents your answers.

1. Admiration

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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2. Anger

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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3. Attraction

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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4. Desiring

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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5. Disgust

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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6. Enjoyment

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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7. Excitement

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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8. Fear

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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9. Guilt

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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10. Hope

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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11. Imagining

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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12. Intending

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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13. Love

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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14. Needing

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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15. Pleasure

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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16. Pride

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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17. Reasoning

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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18. Surprise

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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19. Thinking

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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20. Wanting

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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Supplemental Appendix C

Posttest: *Perceived Differences Between Humans and Animals*

After watching these dolphins in the video, how well can you tell that they are feeling and experiencing the following characteristics?

Circle the number that represents your answers.

1. Admiration

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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2. Anger

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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3. Attraction

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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4. Desiring

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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5. Disgust

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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6. Enjoyment

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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7. Excitement

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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8. Fear

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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9. Guilt

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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10. Hope

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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11. Imagining

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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12. Intending

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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13. Love

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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14. Needing

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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15. Pleasure

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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16. Pride

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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17. Reasoning

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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18. Surprise

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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19. Thinking

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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20. Wanting

1 Not at all	2	3	4	5	6	7 Extremely well	N/A Dolphins can't experience this.
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Supplemental Appendix D

Dolphin Ratings: Pretest Ratings

1 (Not at all) to 7 (Very much)	1	2	3	4	5	6	7
The extent to which dolphins are aware of their emotions	1	2	3	4	5	6	7
The extent to which dolphins have a conscious will	1	2	3	4	5	6	7
The extent to which dolphins have a personality	1	2	3	4	5	6	7

Supplemental Appendix E

Dolphin Ratings: Posttest Ratings

1 (Not at all) to 7 (Very much)	1	2	3	4	5	6	7
The extent to which dolphins were aware of their emotions	1	2	3	4	5	6	7
The extent to which the dolphins have a conscious will	1	2	3	4	5	6	7
The extent to which the dolphins have a personality	1	2	3	4	5	6	7

Supplemental Appendix F

Desirability of Control Scale (Questions)

Circle the number that represents your answers.

1. I prefer a job where I have a lot of control over what I do and when I do it.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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2. I enjoy political participation because I want to have as much of a say in running the govt. as possible.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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3. I try to avoid situations where someone else tells me what to do.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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4. I would prefer to be a leader rather than a follower.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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5. I enjoy being able to influence the actions of others.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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6. I am careful to check everything on an automobile before I leave for a long trip.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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7. Others usually know what is best for me.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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8. I enjoy making my own decisions.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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9. I enjoy having control over my own destiny.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
---	---	---	---	---	---	--

10. I would rather someone else took over the leadership role when I'm involved in a group project.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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11. I consider myself to be generally more capable of handling situations than others.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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12. I'd rather run my own business and make my own mistakes than listen to someone else's orders.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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13. I like to get a good idea of what a job is all about before I begin.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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14. When I see a problem, I prefer to do something about it rather than sit by and let it continue.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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15. When it comes to orders, I would rather give them than receive them.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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16. I wish I could push many of life's daily decisions off on someone else.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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17. When driving, I try to avoid putting myself in a situation where I could be hurt by someone else's mistake.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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18. I prefer to avoid situations where someone else has to tell me what it is I should be doing.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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19. There are many situations in which I would prefer only one choice rather than having to make a decision.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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20. I like to wait and see if someone else is going to solve a problem so I don't have to be bothered by it.

1 The statement does not apply to me at all.	2	3	4	5	6	7 The statement always applies to me.
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Supplemental Appendix G

Video Quiz

1. What item did you see in the video?
 - a. Ball
 - b. Buoy
 - c. Ring
 - d. Bucket
 - e. None of the above**

2. What is the greatest number of dolphins you saw at one time?
 - a. 2
 - b. 5**
 - c. 8
 - d. 1

3. What body part did these dolphins use to touch each other?
 - a. Mouth
 - b. Tails
 - c. Flippers
 - d. All of the above**

4. At the end of the video, what floated out over the dolphin's head?
 - a. Bubbles**
 - b. Snot
 - c. Food particles
 - d. A small toy
 - e. None of the above

Supplemental Appendix H

Demographics Survey

1. Gender: _____

2. Age: _____

3. Do you own a pet? Yes No

If so, what kinds of pets and how many?

4. How many times a year do you visit a zoo? _____

5. Why do you choose to visit a zoo? If you do not visit zoos, why do you choose not to?

6. How many times a year do you visit an aquarium? _____

7. Why do you choose to visit aquariums? If you do not visit aquariums, why do you choose not to?
