

Moving, Fast or Slow:
How Perceived Speed Influences Mental Representation and Decision Making

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KEY WEB LINKS

1. Examples of videos evoking speed: <https://bit.ly/speedy2021>
2. Data, analysis code, videos of stimuli referenced in web appendix: http://bit.ly/osf_speed
3. Copy of this web appendix: https://bit.ly/speed_webappendix

WEB APPENDIX A: EXPERIMENT SOFTWARE DESCRIPTION

As a point of context, we have been conducting experiments for this project for almost a decade, and during that time, the technological platforms that we have needed to run experiments online have had to evolve significantly as platforms and web browsers would change. For example, our earliest experiments were run in Flash, which allowed for significant customization of the visual interface, but Chrome eventually blocked most Flash-operated websites, rendering all of the stimuli inoperable. We anticipate that platforms will continue to evolve and outline below the key parameters required to run similar experiments.

Outlined below are the software platforms that we used for each of the experiments in the paper, with notations of changes in platforms over time that would need to be considered when replicating the stimuli. The key parameters for consideration are as follows:

1. The stimuli should play automatically (whether a video or starfield) without any intervention from the participant.
2. Any videos should play without controls (e.g., no pause, rewind, or stop buttons).
3. Videos should either play in a continuous loop or be longer than the time the participants spend on the exposure screen.
4. Videos should not show user information when embedded into Qualtrics.
5. The stimuli should not be blocked by pop-up ads or blockers on the most standard web browsers.
6. Studies with video + text should be run on non-mobile devices to ensure that stimuli are seen in a consistent visual format between devices and because videos sometimes do not play automatically on mobile devices.

Note that we do not include details for experiment 6 because we used the Facebook Ad Platform and uploaded 30 seconds ads that did not require a specialized environment.

Experiment	Software Platforms Used	Platform Changes of Note
1 Virtual train ride	Experiment programming: Qualtrics with embedded videos. The videos were recorded out of moving train windows, edited to make them faster and slower, and shown with an 800 x 450 aspect ratio. Video platform: YouTube	Embedding YouTube videos in Qualtrics in some browsers now: <ul style="list-style-type: none"> Shows user information in the top corner (e.g., name, icon) Does not allow for turning off video controls Does not allow for videos to automatically play <i>We used Kaltura in future studies.</i>
2 Physical train ride	Experiment software: Qualtrics Hardware required: Mobile touch tablets, mobile Wifi hot spot	This experiment was conducted on a moving train and data collection required that an internet connection was always available. Some data were lost when the WiFi hot spot lost connection. We would recommend using the Qualtrics Offline App function. It allows for data to be collected locally on mobile devices so that data is not lost if internet connections are spotty. The data are then uploaded manually from each device to Qualtrics for a consolidated dataset.
3a Virtual starfield	Experiment programming: JavaScript	For a short period of time after Flash become obsolete, we programmed studies in JavaScript that were similar in look and feel to the Flash studies. Later, due to browser issues, data collection would sometimes be blocked. We have now developed code to run a starfield within Qualtrics behind any text. These studies are not included in this project. Contact the authors if interested in the JavaScript code.
3b IAT	Experiment programming: Qualtrics using the IAT gen tool	Carpenter et al. (2019) have software to run IAT studies directly in Qualtrics available at https://iatgen.wordpress.com/ .
3c Virtual train ride	Experiment programming: Qualtrics with video that loops through JavaScript code Video platform: Kaltura	Kaltura takes care of the shortcomings mentioned in experiment 1, but requires having a paid account.
4 Virtual train ride	Experiment programming: Qualtrics with looping video + specialized JavaScript code to run the video as a background behind stimuli text. <i>(Video was looped because it ran throughout the entire experiment.)</i> Video platform: Kaltura	In contrast to experiments 1 and 3c where the video ran above text, the video in experiment 4 ran behind the text. and the text was displayed in a slightly opaque box over the text. Kaltura allows for the video to loop without displaying controls. Note that with some of the very recent changes in Qualtrics (after running our studies), studies using this code must be brief as the looping code can cause video distortions over time.

WEB APPENDIX B.1: EXPERIMENT 1 STIMULI

Experiment Instructions

Dear Participant,

Thank you very much for your participation in this research.

Please read the following instructions carefully. After a short time, a button will appear to allow you to continue. This task consists of a study about decision-making, simulated on a train. At some points during the program, the continue button may take a moment to appear. Before you begin, please maximize your browser window on the screen.

Have you maximized your browser window to take up your entire screen?

- Yes
- No

###

For this study, we would like you to imagine that you are on a train, and the video represents the scene outside your window.

Watch this video for a while and imagine that you are riding on the train, and then you will be asked to complete a task as if you are completing it during a train ride.

###

[One out of two videos was shown for 35 seconds, displaying the view out of a window of a fast or a slow train]

[Fast video]

Imagine that you are on a train traveling at a very high speed.

This is the scenery out your train window as you pass by all the cars on the road.

[Slow video]

Imagine that you are on a train traveling at a slow speed.

This is the scenery out your train window as you are passed by all the cars on the road.

###

[Train video was shown here]

Now imagine that while you are sitting on the train, you go to a job-search website. After searching for a while on the website, two positions catch your attention. Both positions are for the **same** company.

Below are the key differences between the two jobs:

	Job A	Job B
Position title	Business Implementation Manager	Business Planning Manager
Key responsibilities	<ul style="list-style-type: none"> ● Carrying out business plans ● Identifying best practices and improvement opportunities 	<ul style="list-style-type: none"> ● Developing business plans ● Setting overall business goals and objectives
Requirements	<ul style="list-style-type: none"> ● Project management skills ● Detail-oriented and efficient 	<ul style="list-style-type: none"> ● Project development skills ● Big-picture oriented and organized

Both jobs are similar in terms of salary and promotion, time commitment, and the general degree of skill and knowledge required.

To what extent do you find one of these jobs more appealing than the other?
(1 = *A is more appealing*, 11 = *B is more appealing*)

How likely would you be to apply to one of these jobs versus the other?
(1 = *Definitely apply for A*, 11 = *Definitely apply for B*)

[*Matching train video was shown here*]

###

[*Each question was asked on a separate page*]

How slow or fast did you feel like you were moving?
(1 = *very slow*, 7 = *very fast*)

How much time do you feel has passed since the beginning of the survey?
(1 = *a very short period of time*, 7 = *a very long period of time*)

How far do you feel like you have traveled during this study?
(1 = *a very short distance*, 7 = *a very long distance*)

How difficult or easy did you find the task of choosing between the two jobs?
(1 = *very difficult*, 7 = *very easy*)

Indicate to what extent you feel each of the following right now: inspired, alert, afraid, upset, nervous, scared, distressed, excited, enthusiastic, determined, bored
(1 = *not at all*, 7 = *very much*)

How much did you enjoy the video?
(1 = *not at all*, 7 = *very much*)

How interesting did you find the video?
(1 = *not at all*, 7 = *very much*)

###

Did the videos start automatically or did you have to press the "play" button in order for them to start playing?

- They started automatically
- I had to press play

Did the videos run smoothly during the study?

- Yes
- No

On the pages where you saw the videos, how long did it take them to load on the page?
(1 = *Videos loaded immediately*, 7 = *Videos took a very long time to load*)

Please note any issues that you had with the videos during this study.
[*Open ended question*]

###

Did you refresh your browser at any point during this study?

- Yes
- No

Did you maximize your browser window during this study?

- Yes
- No

###

Age

Gender

Device

(desktop computer, laptop computer, mobile phone, small tablet, large tablet, other)

Where are you currently completing this study? (e.g. library, dorm, coffee shop, etc.)

How fluent is your English?

(1 = *not at all fluent*, 7 = *completely fluent*)

In general, how frequently do you travel or commute by train?

(1 = *never*, 5 = *always*)

In your opinion, what was the purpose of the study?

Comments

WEB APPENDIX B.2: EXPERIMENT 2 STIMULI

[Translated from Hebrew, Hebrew version available upon request]

Dear Participant,

Thank you for your participation in this research. This study should take about 4 minutes on average to complete. This research is about gift preferences. There are no correct or incorrect answers. We are interested in your honest answers.

Consent to Participate

I agree to participate in this research on gift preferences. I am aware that I am free to choose not to participate in this research and I am free to stop participating at any point in the study. The questionnaire and survey are intended for research purposes only and preserve anonymity.

- I accept
- I don't accept

###

Imagine that you will be receiving some birthday gifts. On the following pages, you will be presented with options for different types of gifts. As you read through the pairs of options, imagine which gift you would prefer between the two options. Please answer the questions that follow about each gift.

Which of the following would you prefer? [Each pair was presented on a separate screen, randomly ordered]

Category	More Desirable Option	More Feasible Option
Photo album software	A high-end photo album-editing software that is able to create photo-albums in different sizes and a variety of covers. The software allows professional editing of photos and has various design functions. However, it is hard to use and requires some time in order to understand how to use the many features.	A normal photo album-editing software that is able to create standard-sized, hard cover photo albums. The software allows basic photo-editing and has only simple design functions. Since this is a program aimed at the consumer market, the few features that it possesses are easy to use.
Coffee maker	A high-end coffee maker, which is able to brew a variety of coffee types including espresso and cappuccino. However, it requires a while to learn how to use it correctly and also requires frequent cleaning and part replacement.	An ordinary coffee maker that does its job and is easy to use. It can only make basic coffee. It is extremely reliable and does not usually break down.
Video game	A video game that has been rated by magazine reviewers as high quality with state-of-the-art graphics. Unfortunately, it has a large learning curve and requires a long time to learn how to play.	A video game that has been rated by magazine reviewers as being of normal quality with basic graphics. However, the game is easy to pick up and play with friends.
Movie tickets	Movie tickets to a brand-new hit movie that is premiering in your local area. Since this is a new movie that has not been in theaters before, these tickets are only for a Tuesday night several nights after the premiere. Reviews have suggested that this is an excellent movie (score of 9 by reviewers).	Movie tickets to a movie released about 2 months ago in your local area. As this movie has been in theaters for a while and a lot of people have seen it, these tickets can be redeemed for any showtime during the week. Reviews have suggested that this is an OK movie (score of 7 by reviewers).

Restaurant gift certificate	A gift certificate to an upscale Italian restaurant (score of 9.2 out of 10) that is about a 1-hour drive away.	A gift certificate to an ordinary Italian restaurant (score of 6.5 out of 10) that is about a 5-minute drive away.
Desks	A desk with basic features (score of 3 out of 5 stars). Comes fully assembled. Simply remove it from the box and it is ready to use.	A desk with advanced features, including drawers, sliding keyboard tray and elevated monitor shelf (score of 4.5 out of 5 stars). Comes disassembled with components in the box, including drawers, joints and hinges.

Note: These options were slightly revised from Baskin et al. 2014 to account for the differences in product evolution over time and preferences for participants in Israel, where the experiment was conducted, and included a question about product preference for desks from study 4 of Aggarwal and Zhao (2015). Due to the effort and cost associated with running studies on trains, this stimuli was originally included as a replication of a study with the same stimuli in a simulated speed context. This study has now been removed from the paper for brevity, but showed the same effect using a simulated starfield as in experiment 3a.]

Please indicate the extent to which you would like this item as a gift
(1 = *Not at all*, 9 = *Very much*)

Please indicate the extent to which you consider this item a good gift
(1 = *Not at all*, 9 = *Very much*)

Please indicate to what extent this would be an appropriate gift for you
(1 = *Not at all*, 9 = *Very much*)

###

Age
Gender

###

Have you ever created a digital photo album?
(1= *Never*, 7= *All the time*)

Do you like drinking espresso?
(1= *Not at all*, 7= *Very much*)

Do you play console games?
(1= *Never*, 7= *Very often*)

Do you like watching movies?
(1= *Not at all*, 7= *Very much*)

###

On which station did you get on the train?
(*Open ended question*)

On which station will you get off the train?
(*Open ended question*)

To what extent do you feel physically close to your ending point?
(1 = *Not at all*, 9 = *Very much*)

To what extent do you feel physically close to your starting point?
(1 = *Not at all*, 9 = *Very much*)

How slow or fast did you feel the train was moving while completing the survey?
(1 = *very slow*, 9 = *very fast*)

In your opinion, what is the train's speed right now? (*Open ended question*)
How much time will it take to get to your destination? (*Open ended question*)

Profession

Ride purpose

- work
- school
- leisure
- military service (*military service is required of citizens in Israel*)
- getting home
- other

Are you sitting:

- Forwards
- Backwards

Device number

WEB APPENDIX B.3A: EXPERIMENT 3A STIMULI

Experiment Instructions

[Fast or slow starfield ran behind all text.]

Please read the following instructions carefully. After a short time, a button will appear allowing you to continue.

- This task consists of some brief unrelated studies.
- Most people complete this study within 5-7 minutes.
- Please read all of the instructions carefully for each section.
- At some points during the program, the continue button may take a moment to appear.
- Make sure that you have accepted the task on the Prolific website before you begin.

###

For this first task, you will view some spaceships that will change periodically in the middle of the screen. Please look carefully at each of these ships, and you will be asked about them at a later point.

###

[Six spaceships were shown for 9 seconds each with 1 second to fade in, 1 second to fade out, and 1 second in between]

###

Thank you for completing this portion of the study. You will now be asked to complete a different task and will be asked more about the spaceships at a later point.

###

Understanding Actions Study

Any behavior can be identified in many ways. For example, one person might describe a behavior as "typing a paper," while another might describe the behavior as "pushing keys." Yet another person might describe the behavior as "expressing thoughts." We are interested in your personal preferences for how a number of different behaviors should be described.

###

Instructions

For the following questions, you will find several different behaviors listed. After each behavior will be two choices of different ways the behavior might be identified.

Your task is to choose the identification that best describes the behavior for you. Simply select the button beside the statement that you pick. Please mark only one alternative for each pair.

There are no right or wrong answers - simply choose the description that you personally believe is more appropriate in each pair.

The program will automatically advance as you make your choices.

###

[Each action was presented on a separate screen]

Select the button next to the description that best describes the behavior to you:

- | | |
|---|--|
| <p>2. Making a list</p> <ul style="list-style-type: none"> <input type="radio"/> Getting organized* <input type="radio"/> Writing things down <p>3. Reading</p> <ul style="list-style-type: none"> <input type="radio"/> Following lines of print <input type="radio"/> Gaining knowledge* <p>4. Joining the Army</p> <ul style="list-style-type: none"> <input type="radio"/> Helping the Nation's defense* <input type="radio"/> Signing up <p>5. Washing clothes</p> <ul style="list-style-type: none"> <input type="radio"/> Removing odors from clothes* <input type="radio"/> Putting clothes into the machine <p>6. Picking an apple</p> <ul style="list-style-type: none"> <input type="radio"/> Getting something to eat* <input type="radio"/> Pulling an apple off a branch <p>7. Chopping down a tree</p> <ul style="list-style-type: none"> <input type="radio"/> Wielding an axe <input type="radio"/> Getting firewood* <p>8. Measuring a room for carpeting</p> <ul style="list-style-type: none"> <input type="radio"/> Getting ready to remodel* <input type="radio"/> Using a yard stick <p>9. Cleaning the house</p> <ul style="list-style-type: none"> <input type="radio"/> Showing one's cleanliness* <input type="radio"/> Vacuuming the floor <p>10. Painting a room</p> <ul style="list-style-type: none"> <input type="radio"/> Applying brush strokes <input type="radio"/> Making the room look fresh* <p>11. Paying the rent</p> <ul style="list-style-type: none"> <input type="radio"/> Maintaining a place to live* <input type="radio"/> Writing a check <p>12. Caring for houseplants</p> <ul style="list-style-type: none"> <input type="radio"/> Watering plants <input type="radio"/> Making the room look nice* <p>13. Locking a door</p> <ul style="list-style-type: none"> <input type="radio"/> Putting a key in the lock <input type="radio"/> Securing the house* <p>14. Voting</p> <ul style="list-style-type: none"> <input type="radio"/> Influencing the election* <input type="radio"/> Marking a ballot | <p>15. Climbing a tree</p> <ul style="list-style-type: none"> <input type="radio"/> Getting a good view* <input type="radio"/> Holding on to branches <p>16. Filling out a personality test</p> <ul style="list-style-type: none"> <input type="radio"/> Answering questions <input type="radio"/> Revealing what you're like* <p>17. Toothbrushing</p> <ul style="list-style-type: none"> <input type="radio"/> Preventing tooth decay* <input type="radio"/> Moving a brush around in one's mouth <p>18. Taking a test</p> <ul style="list-style-type: none"> <input type="radio"/> Answering questions <input type="radio"/> Showing one's knowledge* <p>19. Greeting someone</p> <ul style="list-style-type: none"> <input type="radio"/> Saying hello <input type="radio"/> Showing friendliness* <p>20. Resisting temptation</p> <ul style="list-style-type: none"> <input type="radio"/> Saying "no" <input type="radio"/> Showing moral courage* <p>21. Eating</p> <ul style="list-style-type: none"> <input type="radio"/> Getting nutrition* <input type="radio"/> Chewing and swallowing <p>22. Growing a garden</p> <ul style="list-style-type: none"> <input type="radio"/> Planting seeds <input type="radio"/> Getting fresh vegetables* <p>23. Traveling by car</p> <ul style="list-style-type: none"> <input type="radio"/> Following a map <input type="radio"/> Seeing countryside* <p>24. Having a cavity filled</p> <ul style="list-style-type: none"> <input type="radio"/> Protecting your teeth* <input type="radio"/> Going to the dentist <p>25. Talking to a child</p> <ul style="list-style-type: none"> <input type="radio"/> Teaching a child something* <input type="radio"/> Using simple words <p>26. Pushing a doorbell</p> <ul style="list-style-type: none"> <input type="radio"/> Moving a finger <input type="radio"/> Seeing if someone's home* |
|---|--|

* Higher level alternative.

###

[Each question was asked on a separate page]

Thank you for completing this exercise. Please answer the last few questions.

How fast did it feel like you were moving?

(1 = very slow, 7 = very fast)

How much time do you feel has passed since the beginning of the survey?

(1 = a very short period of time, 7 = a very long period of time)

To what extent did you feel you were moving forwards during the study?
(1 = *not at all*, 7 = *very much*)

How easy or difficult did you find the task of selecting which action you thought fit best?
(1 = *very difficult*, 7 = *very easy*)

Indicate to what extent you feel each of the following right now: inspired, alert, afraid, upset, nervous, scared, distressed, excited, enthusiastic, determined, bored
(1 = *not at all*, 7 = *very much*)

Have you ever completed a study with the same questions asking you to pick one of the two descriptors of an action before?
(Yes / No / Maybe)

Demographics [*asked on the same page*]

Gender

Age

Ethnicity

Marital status

Number of children

Occupation

Household income

How fluent is your English?
(1 = *not at all fluent*, 7 = *completely fluent*)

Which of the following spaceships from the first part of the study was your favorite one? [*Images of six ships*]

Why did you like this spaceship best?

[*Test question for unrelated study*]

Comments

Did you maximize your browser window during this study?
(Yes / No)

WEB APPENDIX B.3B: EXPERIMENT 3B STIMULI

[Because the IAT program in Qualtrics does not allow for any screening questions, participants were screened for device and attention checks in a first survey, and those that passed continued to the second survey]

Survey 1: Attention Check Screener

This study is about the extent to which you would recommend companies to your friends and colleagues. This first question is a screening question. In order to continue to the survey, do not click on either of the options below and just click on the continue button. If you select either answer choice, you will be terminated from the study.

- I agree
- I do not agree

###

What is 37 – 8?

###

Before beginning the main study, please maximize your browser window. This is to make sure that you can see all of the questions and parts clearly.

Have you maximized your browser window?

- Yes
- No

###

[Unrelated filler study inserted here, then participants were passed on to the next survey]

Survey 2: Word Study Instructions

Dear Participant,

Thank you for your participation in this research! This study takes about 5 minutes on average to complete.

In this study, you will be asked to categorize words in various ways. The detailed instructions for this task are on the next page. You will be asked to read specific words and push specific keys on your keyboard.

Please read the instructions carefully before proceeding to the main task.
Thank you for your participation!

###

[Participants saw the IAT instruction page with the first target groups. The word 'Fast' either appeared in the upper left corner and the word 'Slow' appeared in the upper right corner, or vice versa.]

Instructions: Place your left and right index fingers on the E and I keys. At the top of the screen are 2 categories. In the task, words and/or images appear in the middle of the screen.

When the word/image belongs to the category on the left, press the E key as fast as you can. When it belongs to the category on the right, press the I key as fast as you can. If you make an error, a red X will appear. Correct errors by hitting the other key.

Please try to go as fast as you can while making as few errors as possible.

When you are ready, please press the [Space] bar to begin.

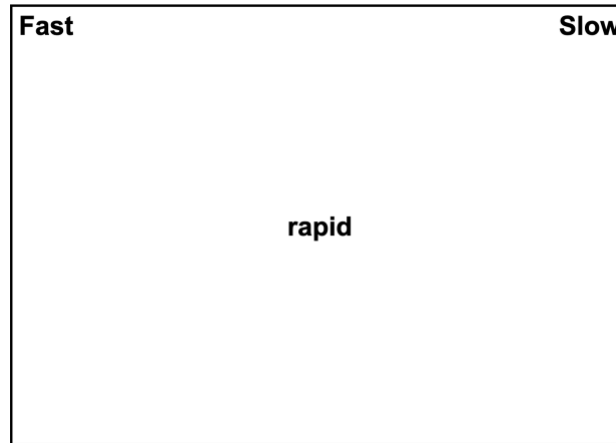
Part 1 of 7

###

[For each of the 7 blocks, participants click “E” if the word in the center is associated the left hand category, and “I” if the word in the center is associated the right hand category]

[Block 1- Words associated with Speed: Fast and Slow]

Block 1 Example



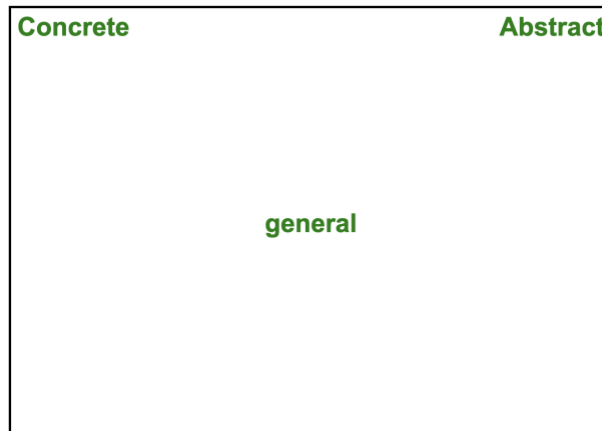
[Block 2- Words associated with Abstraction: Abstract and Concrete]

Now, the categories have changed, but the rules remain the same. Please try to go as fast as you can while making as few errors as possible. Correct errors by hitting the other key.

When you are ready, please press the [Space] bar to begin.

Part 2 of 7

Block 2 Example

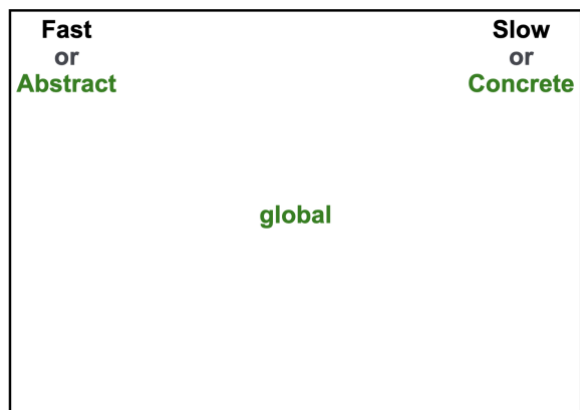


[Blocks 3,4 - Words associated with Speed and Abstraction from blocks 1 and 2 are combined into “compatible” vs. “incompatible” category headings.

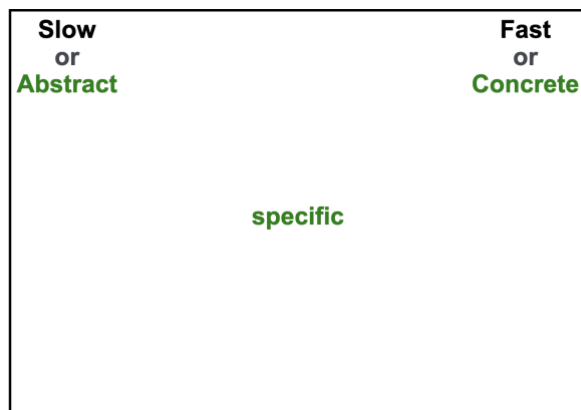
Compatible category headings: “Fast” with “Abstract” AND “Slow” with “Concrete” are paired together as categories.

Incompatible category headings: “Fast” with “Concrete” AND “Slow” with “Abstract” are paired together as categories.

Compatible Block Example



Incompatible Block Example



[If blocks 3 and 4 are “incompatible” category headings, then blocks 6 and 7 are “compatible” or vice versa.]

[Block 3- Combined practice block]

Now the four categories you saw separately will appear together. Remember, each word/image fits in only one of the four categories. The label/item colors may help you identify the appropriate category.

Use the E key for the two categories on the left and the I key for the two categories on the right. Again, try to go as fast as you can while making as few errors as possible. Correct errors by hitting the other key. Practice this combination now

When you are ready, please press the [Space] bar to begin.

Part 3 of 7

[Block 4- Combined test block]

Please continue the task as you were just doing it. Again, try to go as fast as you can while making as few errors as possible. Correct errors by hitting the other key.

When you are ready, please press the [Space] bar to begin.

Part 4 of 7

[Block 5- Words associated with Slow and Fast in the reverse left-right position from block 1]

Notice the categories from before have switched sides. Please practice this new configuration now. Remember to go as fast as you can while making as few errors as possible. Correct errors by hitting the other key.

When you are ready, please press the [Space] bar to begin.

Part 5 of 7

[Blocks 6,7 - Combined block with key assignments reversed from those of blocks 3 and 4]

[Block 6- Combined practice block, category headings (compatible v. incompatible) reversed from block 3,4]

Notice the four categories have been combined again, but in a new configuration. Please practice this combination now, and remember to go as fast as you can while making as few errors as possible. Correct errors by hitting the other key.

When you are ready, please press the [Space] bar to begin.

Part 6 of 7

[Block 7- Combined test block, reversed from block 3,4]

Please continue the task as you were just doing it, and remember to go as fast as you can while making as few errors as possible. Correct errors by hitting the other key.

When you are ready, please press the [Space] bar to begin.

Part 7 of 7

###

Gender

Age

Note any technical difficulties

Comments

WEB APPENDIX B.3C: EXPERIMENT 3C STIMULI

Simulated Decision Making

This study will take less than five minutes to complete. Before you begin, please maximize your browser window on the screen.

This task consists of a study about decision-making, simulated on a train. We are interested in how you think about processing information during the experience of moving at different speeds.

First, you will see a video on the screen that simulates the experience of moving on a train at a particular speed. Watch this video and imagine you are on a train moving at this speed.

Then you will see a task that involves word associations.

At some points during the program, the continue button may take a moment to appear.

###

Have you maximized your browser window? If not, please do so now.

- Yes
- No

###

[One out of two videos was shown for 25 seconds, displaying the view out of a window of a fast or a slow train]

[Fast video]

Imagine that you are on a train traveling at a high speed.

This is the scenery out your train window as you pass by all the cars on the road.

[Slow video]

Imagine that you are on a train traveling at a slow speed.

This is the scenery out your train window as you are passed by all the cars on the road.

###

Task Instructions

Word Associations

Now we would like to understand how you think you might process information - for example, information you might read, see, or hear - while moving at the speed that you just experienced in the video.

On the next page, you will see three pairs of words related to how you might process information while moving at that speed.

For each pair, pick **one** that you would most associate with trying to process information while moving at that particular speed.

Pick one of the two if you feel any kind of association at all. If you don't feel that either choice is remotely related to how you would process information, you can skip that pair.

###

Moving at the speed in the video, I think I would process information in a way that is more....

<i>Pair 1</i>	<i>Detailed</i>	<i>Generalized</i>
<i>Pair 2</i>	<i>Specific</i>	<i>Broad</i>
<i>Pair 3</i>	<i>Controlled</i>	<i>Automatic</i>

###

[Each question was asked on a separate page]

How slow or fast did you feel like you were moving?

(1 = *very slow*, 7 = *very fast*)

How much time do you feel has passed since the beginning of this survey?

(1 = *a very short period of time*, 7 = *a very long period of time*)

How far do you feel like you have traveled during this study?

(1 = *a very short distance*, 7 = *a very long distance*)

How difficult or easy did you find this task?

(1 = *very difficult*, 7 = *very easy*)

Indicate to what extent you feel each of the following right now: inspired, alert, afraid, upset, nervous, scared, distressed, excited, enthusiastic, determined, bored

(1 = *not at all*, 7 = *very much*)

###

Did the videos run smoothly during the study?

- Yes
- No

On the pages where you saw the videos, how long did it take them to load on the page?

(1 = *Videos loaded immediately*, 7 = *Videos took a very long time to load*)

Please note any issues that you had with the videos during this study.

[Open ended question]

###

Did you refresh your browser at any point during this study?

- Yes
- No

Did you maximize your browser window during this study?

- Yes
- No

###

Age

Gender

Device (*desktop computer, laptop computer, mobile phone, small tablet, large tablet, other*)

Where are you currently completing this study?

How fluent is your English? (1 = *not at all fluent*, 7 = *completely fluent*)

Comments

WEB APPENDIX B.4: EXPERIMENT 4 STIMULI

[A fast or slow video played on a loop as the background behind the survey, and the questions appeared on an opaque background.]

You should not complete this study if you experience motion sickness or have visual processing difficulties. Please maximize your browser window now, if you have not already.
Have you maximized your browser window? *[Yes / No]*

###

Study Instructions

In this study, we are simulating a decision-making environment as if you are on a train, looking out the window. After looking at the scenery for a bit, you will be asked some questions. There are no right or wrong answers.

Sometimes the continue button might take a moment to appear.

Please note that to receive credit for this HIT, you must:

1. Maximize your browser window and work only on this study, and
2. Complete the study in one uninterrupted sitting

The study is designed to timeout for participants that are clearly engaging in multi-tasking or not completing this study in one sitting. You will totally fine if you are watching the screen during the study and follow the instructions.

Click the continue button below only when you are ready to complete this study in one, interrupted sitting.

Make sure you enter your completion code at the end of the study to receive credit for your HIT.

Do not click any of the answer choices below and press the continue button when it appears.

- Yes
- No
- Maybe

[People who failed the attention check question twice were exited from the survey and not paid for cost reasons].

###

[Pages for the slow speed, schema-consistent condition and the fast speed, schema-inconsistent condition]

For this study, we would like you to imagine that you are on a train, and what you see is the scene outside your window.

Note that previous research has shown that visual sensory input can influence the way people process information.

Adding moving visual sensory input causes people to process information in a more detailed and specific way as they see the elements of the scenery.

On the next screen, you will be asked to look out the window for a while and imagine that you are riding on the train, and then you will be asked to complete a task as if you are completing it during a train ride. The screen will automatically advance once you are on the next page.

Please press the continue button.

###

[Train scene was shown for 25 seconds and then automatically advanced].

Please look at this scene outside of your window - the program will automatically advance.

###

In our past research, many participants have reported feeling they processed information in a **detailed and specific way** because of the visual sensory experience with the video on the train.

To what extent did this happen for you? [1 = *not at all*, 7 = *very much*]

###

[Pages for the slow speed, schema-inconsistent condition and the fast speed, schema-consistent condition]

For this study, we would like you to imagine that you are on a train, and what you see is the scene outside your window.

Note that previous research has shown that visual sensory input can influence the way people process information.

Adding moving visual sensory input causes people to process information in a more generalized and broad way as they take in the overall scene.

On the next screen, you will be asked to look out the window for a while and imagine that you are riding on the train, and then you will be asked to complete a task as if you are completing it during a train ride. The screen will automatically advance once you are on the next page.

Please press the continue button.

###

[Train scene was shown for 25 seconds and then automatically advanced].

Please look at this scene outside of your window - the program will automatically advance.

###

In our past research, many participants have reported feeling they processed information in a **generalized and broad way** because of the visual sensory experience with the video on the train.

To what extent did this happen for you? [1 = *not at all*, 7 = *very much*]

###

[Screens from here were shown to all participants]

Now imagine that while you are sitting on the train, you go to a job-search website. After searching for a while on the website, two positions catch your attention. Both positions are for the **same** company.

Below are the key differences between the two jobs:

	Job A	Job B
Position title	Business Implementation Manager	Business Planning Manager
Key responsibilities	<ul style="list-style-type: none"> ● Carrying out business plans ● Identifying best practices and improvement opportunities 	<ul style="list-style-type: none"> ● Developing business plans ● Setting overall business goals and objectives
Requirements	<ul style="list-style-type: none"> ● Project management skills ● Detail-oriented and efficient 	<ul style="list-style-type: none"> ● Project development skills ● Big-picture oriented and organized

Both jobs are similar in terms of salary and promotion, time commitment, and the general degree of skill and knowledge required.

To what extent do you find one of these jobs more appealing than the other?
(1 = *A is more appealing*, 11 = *B is more appealing*)

How likely would you be to apply to one of these jobs versus the other?
(1 = *Definitely apply for A*, 11 = *Definitely apply for B*)

###

Word Associations

Now we would like to understand how you think people might process information - for example, information you might read, see, or hear - while moving at the speed that you just experienced in the video.

On the next page, you will see three pairs of words related to how you might process information while moving at that speed.

For each pair, pick **one** that you would most associate with trying to process information while moving at that particular speed.

###

Moving at the speed in the video, I people are more likely to process information in a way that is more....

<i>Pair 1</i>	<i>Detailed</i>	<i>Generalized</i>
<i>Pair 2</i>	<i>Specific</i>	<i>Broad</i>
<i>Pair 3</i>	<i>Controlled</i>	<i>Automatic</i>

###

How slow or fast did you feel like you were moving?
(1 = *very slow*, 7 = *very fast*)

How much time do you feel has passed since the beginning of the survey?
(1 = *a very short period of time*, 7 = *a very long period of time*)

How difficult or easy did you find the task of choosing between the two jobs?
(1 = *very difficult*, 7 = *very easy*)

###

Did the train video run smoothly during the study?

- Yes
- No

Did you have to refresh your browser at any point during the study?

- Yes
- No

Please note any issues you had with the video running in the background or any other issues or comments you had with the study.

[*Open ended question*]

###

Age

Gender

How fluent is your English?

(1 = *not at all fluent*, 7 = *completely fluent*)

How would you rate the speed of your internet connection right now?

(1 = *very slow*, 7 = *very fast*)

Device

(desktop computer, laptop computer, mobile phone, small tablet, large tablet, other)

WEB APPENDIX C
POSSIBLE ALTERNATIVE EXPLANATIONS: DESCRIPTIVE STATISTICS
(For experiments where perceived speed is manipulated)

	Slow				Fast				Comparison	
	n	Mean	SD	SE	n	Mean	SD	SE	t	p
Experiment 1										
Time passed (1 to 7)	148	3.29	1.46	0.12	144	3.07	1.26	0.11	-1.38	0.17
Perceived distance (1 to 7)	148	2.55	1.36	0.11	144	3.85	1.30	0.11	8.34	<.0001
Task ease (1 to 7)	148	5.25	1.57	0.13	144	5.38	1.36	0.11	0.77	0.44
PANAS index (1 to 7)	148	5.28	0.83	0.07	144	5.50	0.86	0.07	2.28	0.02
Experiment 3a										
Time passed (1 to 7)	78	3.06	1.15	0.13	80	2.80	1.08	0.12	-1.48	0.14
Direction movement (1 to 7)	78	5.03	1.42	0.16	80	5.30	1.48	0.17	1.19	0.24
Task ease (1 to 7)	78	5.45	1.50	0.17	80	5.39	1.34	0.15	-0.27	0.79
PANAS index (1 to 7)	78	5.41	0.74	0.08	80	5.37	0.76	0.08	-0.28	0.78
Experiment 3c										
Time passed (1 to 7)	100	2.88	1.65	0.16	98	2.84	1.43	0.14	-0.20	0.84
Perceived distance (1 to 7)	100	2.77	1.49	0.15	98	3.37	1.54	0.16	2.78	0.006
Task ease (1 to 7)	100	6.32	0.99	0.10	98	6.09	1.08	0.11	-1.55	0.12
PANAS index (1 to 7)	100	5.27	0.86	0.09	98	5.17	0.86	0.09	-0.81	0.42
Experiment 4										
Schema consistent: Time passed (1 to 7)	76	3.22	1.21	0.14	78	3.42	1.44	0.16	0.81	0.37
Schema inconsistent: Time passed (1 to 7)	73	3.26	1.30	0.15	77	3.09	1.53	0.17	0.57	0.45
Schema consistent: Task ease (1 to 7)	76	5.16	1.46	0.17	78	5.21	1.51	0.17	0.04	0.84
Schema inconsistent: Task ease (1 to 7)	73	5.40	1.54	0.18	77	5.34	1.47	0.17	0.06	0.81

Note that for all p-values < .05, additional analyses were conducted ruling out the possibility that factor could account for the results. These results are reported in the results section for each experiment.

WEB APPENDIX D: DATA EXCLUSION RULES AND TECHNICAL DETAILS

Data Exclusions for Experiments

Experiment	Participant Pool	Exclusions
1	mTurk	Mobile devices Touch devices Non-U.S. participants Incomplete responses
2	Israeli commuter train riders	Incomplete responses (participants approached according to parameters outlined in web appendix D)
3a	Prolific	Mobile devices Touch devices Not fluent in English (due to non-U.S. participants in platform) Previously completed the BIF Incomplete responses
3b	mTurk	Mobile devices Touch devices Non-U.S. participants Failed attention check* Responded in < 300ms for more than 10% of trials Incomplete responses
3c	mTurk	Mobile devices Touch devices Non-U.S. participants Incomplete responses
4	mTurk	Mobile devices Touch devices Non-U.S. participants Failed attention check* (<i>15 participants</i>) Laptop users (see page that follows) Incomplete responses
5	Facebook Users	N/A – used Facebook A/B testing tool
PRETESTS		
5 Pretest A	mTurk	Mobile devices Touch devices Non-U.S. participants Failed attention check* Incomplete responses
5 Pretest B	mTurk	Mobile devices Touch devices Non-U.S. participants Failed attention check* Failed audio check Incomplete responses

* Attention checks were included only in the most recent lab studies. Data were not collected for participants who failed attention checks, except for study 4.

EXPERIMENT 4

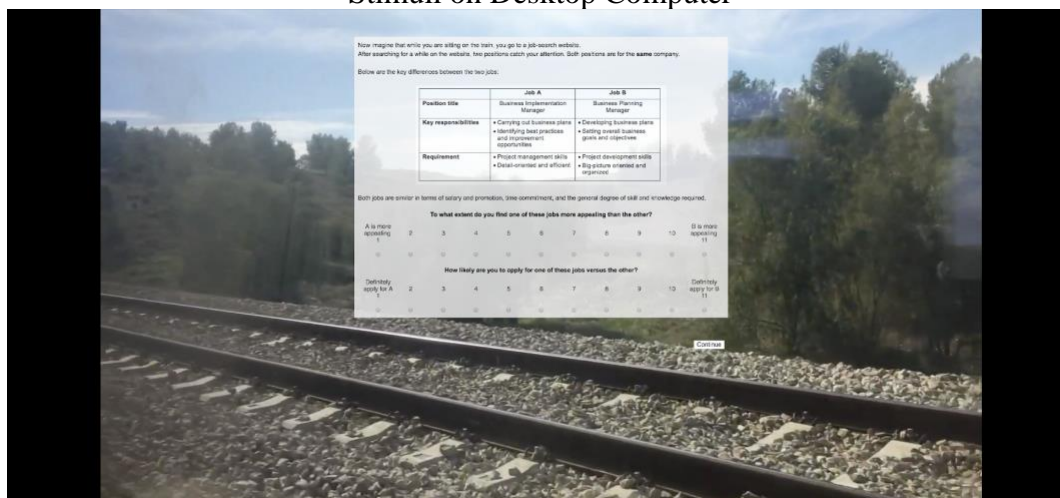
Rationale for Including Only Participants on Desktop Computers

In order to make the cover story for the manipulation moderating people's associations between speed and processing, we needed to substantially increase the size of the video so that people could reasonably view the scenery of the video with some level of detail. This was implemented through JavaScript code which ran the video as a loop, with no visible controls, behind the stimuli text. In the prior studies, the video was shown as a smaller window above the text of stimuli. We relied primarily on the small-window format in the prior studies because it would run more reliably with all types of internet connections and computer types.

As can be seen below, on desktop computers, there was plenty of room to see all stimuli text and also view the video in the background. On laptop computers, however, participants could not see the video and also could not see the full text of the stimuli behind the video. When scrolling down to see the remainder of the stimuli, the video was cut-off, creating a discontinuous experience with a blank screen behind the bottom part of the stimuli.

This study was run using the Amazon MTurk panel. We did not pre-screen participants for what device they were on prior to the study for several reasons. First, we did not want participants to specifically focus on their type of device at the beginning of the study, given that we were already using an unusual perceived manipulation. Second, Amazon MTurk panel participants are known to share information on discussion boards about screening criteria at the beginning of a study, leading other participants to misrepresent information to avoid being screened out of studies. This issue is typically dealt with by first having a pre-qualifying study and then inviting participants that meet certain criteria to then participate in the target study, but because we are asking participants about their type of device and people have multiple devices for accessing the internet, the device used for the prequalification study may not be the device used for the target study. For these reasons, we instead collected data from all participants and discarded the data from participants that indicated they did not use desktop computers. All participants were paid for the study.

Stimuli on Desktop Computer



Stimuli on Laptop Computer

Now imagine that while you are sitting on the train, you go to a job-search website.
After searching for a while on the website, two positions catch your attention. Both positions are for the **same** company.

Below are the key differences between the two jobs:

	Job A	Job B
Position title	Business Implementation Manager	Business Planning Manager
Key responsibilities	<ul style="list-style-type: none"> • Carrying out business plans • Identifying best practices and improvement opportunities 	<ul style="list-style-type: none"> • Developing business plans • Setting overall business goals and objectives
Requirement	<ul style="list-style-type: none"> • Project management skills • Detail-oriented and efficient 	<ul style="list-style-type: none"> • Project development skills • Big-picture oriented and organized

Both jobs are similar in terms of salary and promotion, time commitment, and the general degree of skill and knowledge required.

To what extent do you find one of these jobs more appealing than the other?

A is more appealing 1 2 3 4 5 6 7 8 9 10 B is more appealing 11

WEB APPENDIX E: TRAIN STUDY PROCEDURES

This web appendix details the procedures used for the study conducted on trains (experiment 2). In addition to filing the appropriate IRB approvals, we also obtained permission from the company that runs the trains to approach passengers on the train. The study was run on Israel Railways on routes between Tel-Aviv to Beer-Sheva, Tel-Aviv to Haifa, and Tel-Aviv to Binyamina. The train experiment was approved by the Passenger division of the railway company. The names of the research assistants, investigators, train routes, and dates and times for data collection were specified for the approval process.

Technical Procedures

Train routes

Train routes were chosen based on two factors. First, routes were selected based on their length. In order to collect data from as many participants as possible in each session, we chose longer routes of 40 to 90 minutes in each direction. Second, routes were chosen to ensure a range of possible speeds through a maximum of 150 km / hr.

Study timing

One objective in determining the days and times for data collection was to avoid crowdedness. First, previous research has shown that crowdedness on trains can influence purchase behavior (Andrews et al., 2015). Second, a large number of passengers accessing the internet from a single location can slow down the internet connection, affecting the administration of the study. Third, we wanted to ensure that passengers completed the study in safe conditions, seated throughout the ride with no risk of falling. And finally, the research assistants were able to more easily approach passengers on trains without crowding. Therefore, the study was conducted Mondays through Thursdays. Furthermore, to keep time-of-day constant during hours with minimal crowding, the study was conducted between 8 am and 2 pm.

Programming and Materials

The study was programmed in Qualtrics and administered on touch tablets. To maintain a consistent internet connection throughout the train ride, we used a router (*TP-Link M7200*), and all tablets were connected to that router. Because of the expense and human capital required to run studies on the train, we suggest having participants complete multiple, short unrelated studies.

Data Collection

Approaching participants

Research assistants approached passengers at random who appeared to be adults without vision or mobility issues sitting in the cabin. Passengers who were sleeping or talking on the phone were not approached. Research assistants asked the passengers if they would like to complete a survey that would take several minutes using a tablet in exchange for a snack (i.e., a chocolate or granola bar). If they declined participation, the research assistant thanked them and continued to

the next passenger. Following a passenger's consent, the research assistant gave a tablet to the passenger and stayed nearby to ensure the tablets were returned. Once the passenger completed the survey, the research assistant took the tablet and gave the passenger the chosen snack. If a passenger had to disembark before completing the study, the RA would advance the study and write in the comments that the data was incomplete for that respondent. Passengers were debriefed upon request.

Research assistant roles

Each trip included two to three research assistants and four tablets. In order to ensure tablets were not damaged or stolen, each RA was in charge of two to four devices in addition to approaching potential participants.

WEB APPENDIX F: EXPERIMENT 3C ADDITIONAL ANALYSIS

We conducted an additional analysis with a repeated measures logistic regression without listwise deletion of participants, allowing for analysis with missing values, with perceived speed as the between-subjects independent measure (slow = 0, fast = 1) and the processing-orientation as the within-subjects dependent measure, (concrete: detailed, specific, controlled = 0; abstract: generalized, broad, automatic = 1). The analysis revealed a significant effect of perceived speed where participants in the fast condition chose more abstract processing options than those in the slow condition ($\beta = .93$, $SE = .23$, $z = 4.09$, $p < .0001$, *odds ratio*: 2.53). Participants in the fast (versus slow) condition chose more words with abstract (versus concrete) processing-orientation, again supporting H2.

Possible alternative explanations. Similarly, conducting the same analysis with perceived distance as a covariate revealed a consistent significant effect of perceived speed ($\beta = .92$, $SE = .24$, $z = 3.87$, $p = .0001$, *odds ratio*: 2.52) while the effect of perceived distance was not significant ($\beta = .0082$, $SE = .08$, $z = .11$, $p = .92$, *odds ratio*: 1.01), suggesting that perceived speed cannot account for these results.

WEB APPENDIX G: PRETESTS OF EXPERIMENT 5 STIMULI

Before running the field study with 30-second video advertisements on Facebook, two pretests of the stimuli were conducted. Pretest A tested that the ad message was seen as more abstract versus concrete. Pretest B tested that the video background used for the ads felt fast versus slow without varying on affect. The stimuli details for both pretests follow this section and the data and code are posted on OSF.

Pretest A: Message Concreteness vs. Abstractness

To test that the message of the ads corresponds with abstract versus concrete descriptions, we conducted a stimuli pretest with 100 participants from the Amazon MTurk pool ($M_{age} = 37.7$; 41 female, 59 male) who participated in the experiment in exchange for \$0.51. Participants were assigned to evaluate a message with either an abstract or concrete description of sunscreen use. The description was slightly revised from the stimuli in Kim and Duhachek (2020, study 2).

Participants in the abstract message condition were shown a description with the title “Why use sunscreen?,” followed by three high-level, abstract reasons for using sunscreen. Participants in the concrete message condition were shown a description with the title “How to use sunscreen?,” followed by three concrete features that describe how to use sunscreen (see below). Participants were asked to indicate their intent to use sunscreen using four measures taken from Kim and Duhachek (2020) and Keller (2006); “I intend to use sunscreen”; “I intend to buy a bottle of sunscreen”; “I intend to check whether I have sunscreen on before I go out”; “I intend to get more information on the advantages of sunscreen”; 1 = *strongly disagree*, 9 = *strongly agree*); the four items were averaged to create an index of intent ($\alpha = .90$). Then, participants were asked to indicate whether the message emphasizes the use of sunscreen at more abstract versus concrete levels, using six items revised from Han, Duhachek, and Agrawal (2016). Three items were averaged to create an index of abstractness ($\alpha = .82$); “This ad stresses the general benefit of using sunscreen”; “This ad stresses why people should use sunscreen”; “This ad make me think of the reasons for using sunscreen at abstract levels”; (1 = *strongly disagree*, 9 = *strongly agree*), and the remaining three were averaged to create an index of concreteness, ($\alpha = .94$); “This ad stresses the specific way to use sunscreen”; “This ad stresses how to use sunscreen”; “This ad make me think about the specific way to use sunscreen at concrete levels”; (1 = *strongly disagree*, 9 = *strongly agree*).

Pretest A: Messages

HOW to use sunscreen?	WHY use sunscreen?
<ul style="list-style-type: none"> • Apply sunscreen 30 minutes before going out • Use SPF 30 or higher to block UVA and UVB light • Reapply every two hours or after swimming —It’s easy to use <p>Learn more about the top sunscreens</p>	<ul style="list-style-type: none"> • Using sunscreen means healthy skin • Works against premature aging and skin cancer • Reliable protection for the long-term —It’s important to use <p>Learn more about the top sunscreens</p>

The results indicated no difference between the two messages in intent to use sunscreen (abstract: $M = 6.21$, $SD = 2.06$; concrete: $M = 6.28$, $SD = 2.34$, $t(98) = .17$, $p = .865$). Importantly, participants found the abstract, “why” message described the reasons to use sunscreen as more general and abstract ($M = 6.79$, $SD = 1.59$) compared to the concrete, “how” message ($M = 4.54$, $SD = 2.51$, $t(98) = -5.35$, $p < .0001$). Conversely, participants found the concrete, “how” message as more specific and concrete ($M = 7.61$, $SD = 1.72$) compared to the abstract, “why” message ($M = 3.77$, $SD = 2.27$, $t(98) = 9.56$, $p < .0001$). Thus, we confirmed that people found the message emphasizing the reasons why to use sunscreen as more abstract, and the message emphasizing how to use sunscreen as more concrete.

Pretest B: Video Speed

In order to select video stimuli that stimulates the feeling of moving fast versus slow without inducing affect, we conducted a pretest with 250 participants from the Amazon MTurk pool ($M_{age} = 39.1$; 95 female, 153 male, 1 other, 1 undisclosed) who participated in the pretest in exchange for \$0.65. Participants were assigned to evaluate one of five videos combined with music. The videos were selected to match a sensation of fast versus slow movement in similar contexts, and the videos were set to instrumental background music to accentuate the feeling of speed.

Two fast and three slow videos appropriate for the pretested text on sunscreen use were tested. The two fast videos differed only in the background music and depicted a man and a woman driving in a convertible. Because faster music can sometimes induce arousal or happiness (Droit-Volet, Bueno, and Bigand, 2013), we tested different music to minimize any possible effect. Three slow videos were tested: one video of a man and woman driving in a convertible and two videos of a man and woman walking on the beach, each also matched with music. After watching the video for 30 seconds, participants were asked how fast or slow they felt the scene in the video was moving and how fast or slow they felt they were moving while watching the video (1 = *very slow*, 7 = *very fast*). Participants then completed the short-form PANAS (Mackinnon et al. 1999), followed by demographic questions.

The two speed measures were combined into a single measure ($\alpha = .84$). Results indicate that the videos with fast movement made people feel that they were moving fast, and with slow movement made people feel that they were moving slow ($F(4, 245) = 59.18$, $p < .0001$, see table below for descriptive statistics). Importantly, we did not find a significant effect on the PANAS measure ($\alpha = .78$, $F(4, 245) = .89$, $p = .47$), suggesting that the videos do not differ in evoking affect. Based on these findings, we selected fast and slow videos with similar background music and context (Video #1 and #3) to serve as the background for the sunscreen ad.

Pretest B Summary Descriptive Statistics

Video	Description	Perceived speed		PANAS	
		Mean	SD	Mean	SD
1	Fast convertible + music 1	4.51 ^a	1.16	5.07 ^c	.60
2	Fast convertible + music 2	4.23 ^a	.79	4.97 ^c	.57
3	Slow convertible	2.39 ^b	.90	4.91 ^c	.59
4	Slow walking on beach 1	2.49 ^b	.76	4.89 ^c	.49
5	Slow walking on beach 2	2.85 ^b	1.94	4.91 ^c	.46

Means with different subscripts are significantly different from each other.

EXPERIMENT 6 PRETEST A STIMULI

What is 23-15?

###

As researchers, we want to make sure our participants are carefully paying attention and answering questions. This attention check is not difficult to answer if you read carefully. If you do not pass this attention check, you will be ejected from the study and will not receive a completion code.

Before you start the experiment, we would like you to answer a color test. The color test is simple, when asked for your favorite color, you must enter the word falu in the text box below.

Based on the text you read above, what is your favorite color?

###

Please enter the confirmation code at the end of the study to receive credit for your HIT.

In this study, we are interested in your opinions about an ad. Please begin this study only when you have 3-5 minutes of uninterrupted time to complete it.

Are you ready to begin this study without interruptions now?

- Yes
- No

###

Why condition

Please read the following ad:

WHY use sunscreen?

- Using sunscreen means healthy skin
- Works against premature aging and skin cancer
- Reliable protection for the long-term —It's important to use

[Learn more about the top sunscreens](#)

How condition

Please read the following ad:

HOW to use sunscreen?

- Apply sunscreen 30 minutes before going out
- Use SPF 30 or higher to block UVA and UVB light
- Reapply every two hours or after swimming —It's easy to use

[Learn more about the top sunscreens](#)

###

To what extent do you disagree or agree with the following statements:

[1 = strongly disagree, 9 = strongly agree for each]

I intend to use sunscreen

I intend to buy a bottle of sunscreen

I intend to check whether I have sunscreen on before I go out

I intend to get more information on the advantages of sunscreen

###

To what extent do you disagree or agree with the following statements:

[1 = *strongly disagree*, 9 = *strongly agree for each*]

This ad stresses the general benefit of using sunscreen

This ad stresses why people should use sunscreen

This ad make me think of the reasons for using sunscreen abstract levels

This ad stresses the specific way to use sunscreen

This ad stresses how to use sunscreen

This ad make me think about the specific way to use sunscreen at concrete levels

###

How regularly do you use sunscreen?

(*never/very rarely/rarely/occasionally/frequently/very frequently*)

###

What was the ad that you saw about?

###

age

gender

ethnicity

education

How fluent is your English? (1 = *not at all fluent*, 7 = *completely fluent*)

To what extent do you feel your life has been economically impacted by the Coronavirus?

(1 = *not at all*, 7 = *very much*)

To what extent do you feel your life has been psychologically impacted by the Coronavirus?

(1 = *not at all*, 7 = *very much*)

comments

EXPERIMENT 6 PRETEST B STIMULI

What is 23-15?

###

As researchers, we want to make sure our participants are carefully paying attention and answering questions. This attention check is not difficult to answer if you read carefully. If you do not pass this attention check, you will be ejected from the study and will not receive a completion code.

Before you start the experiment, we would like you to answer a color test. The color test is simple, when asked for your favorite color, you must enter the word falu in the text box below.

Based on the text you read above, what is your favorite color?

###

Please maximize your browser window now, if you have not already.

Have you maximized your browser window?

- Yes
- No

###

Please turn on you speakers or headphones, if you have not already.

Have you turned on your speakers or headphones?

- Yes
- No

###

Please listen to the following audio file.

[audio file that says the word "apple" to make sure sound can be heard]

Which word did you hear?

###

Please enter the confirmation code at the end of the study to receive credit for your HIT.

In this study, we are interested in your opinions about a video. Please begin this study only when you have 3-5 minutes of uninterrupted time to complete it.

Are you ready to begin this study without interruptions now?

- Yes
- No

###

In this study, you will be asked to view a brief video and then answer questions about it. When you are ready to proceed to watch the video, click the continue button below.

###

Please click on the image below to watch the video:

[One of five videos was displayed here]

The continue button will appear after the video ends.

###

How fast or slow did you feel the scene in the video was moving?

(1 = *very slow*, 7 = *very fast*)

How fast or slow did you feel you were moving while watching the video?

(1 = *very slow*, 7 = *very fast*)

###

Indicate to what extent you feel each of the following right now:

[1 = very slightly or not at all, 2 = a little, 3 = moderately, 4 = quite a bit, 5 = extremely for each]

Inspired

Alert

Afraid

Upset

Nervous

Scared

Distressed

Excited

Enthusiastic

Determined

Bored

###

Describe what you saw in the video.

How did the video make you feel while you were watching it?

Did you hear music when you were watching the video?

###

Describe the music you heard while watching the video.

###

Age

Gender

Ethnicity

Education

How fluent is your English? (1 = *not at all fluent*, 7 = *completely fluent*)

How fast is your internet speed? (1 = *very slow*, 7 = *very fast*)
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To what extent do you feel your life has been economically impacted by the Coronavirus?
(1 = *not at all*, 7 = *very much*)

To what extent do you feel your life has been psychologically impacted by the Coronavirus?
(1 = *not at all*, 7 = *very much*)

Comments