Preregistration Report (08/29/2017)
Title: The A/B Illusion: Experiment 4 New Vignette Pilot Testing
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Research Questions:

The A/B illusion is a hypothesized phenomenon in which individuals perceive the decision to run a randomized, controlled experiment (e.g., comparing two interventions, policies, or practices) on human subjects as less appropriate than simply implementing one of those alternatives without testing its effects. The A/B Illusion was previously anecdotally observed and described (Meyer, 2015), but it had never been experimentally investigated until our pilot research. The research questions we are asking include:

1. Can we demonstrate the A/B illusion in naive research participants?
2. Assuming we are able to detect an effect, do any demographic variables or other individual differences either amplify or attenuate the A/B illusion?
3. What kinds of reasons do participants give for endorsing the A/B illusion, and what kinds of reasons do participants give for approving of unilateral implementation of untested policies?

The purpose of pilot testing our new vignettes is to determine whether participants object to the scenarios in any unforeseen ways, as well as to check for general clarity as we construct new vignettes in different domains where the A/B Illusion may emerge.

Autonomous Vehicle Vignettes for Pilot Testing

0 → A: Self-driving cars, which are currently being developed by several companies, are programmed to control all aspects of driving without any human involvement. However, there are a number of difficult problems in programming self-driving cars. For instance, cars in heavy traffic face significant danger at yellow traffic lights. The director of software engineering at a company developing self-driving cars wants to reduce accidents at yellow lights, and he thinks of a way to do this. He decides that in order to reduce side-impact collisions in heavy traffic, all of the company's cars will be programmed to brake whenever they are close to a stoplight as it turns yellow.

How appropriate is the director's decision?

In a few sentences, please tell us why you chose the reason you chose.

0 → B: Self-driving cars, which are currently being developed by several companies, are programmed to control all aspects of driving without any human involvement. However, there are a number of difficult problems in programming self-driving cars. For instance, cars in heavy traffic face significant danger at yellow traffic lights. The director of software engineering at a company developing self-driving cars wants to reduce accidents at yellow lights, and he thinks of a way to do this. He decides that in order to reduce rear-end collisions in heavy traffic, all of the

company's cars will be programmed to accelerate whenever they are close to a stoplight as it turns yellow.

How appropriate is the director's decision?

In a few sentences, please tell us why you chose the reason you chose.

0 → ABshort: Self-driving cars, which are currently being developed by several companies, are programmed to control all aspects of driving without any human involvement. However, there are a number of difficult problems in programming self-driving cars. For instance, cars in heavy traffic face significant danger at yellow traffic lights. The director of software engineering at a company developing self-driving cars wants to reduce accidents at yellow lights, and he thinks of two ways to do this. So, he decides to run an experiment by randomly assigning cars to be programmed in one of two ways. Half of the company's cars will be programmed to brake whenever they are close to a stoplight as it turns yellow, in order to reduce side-impact collisions in heavy traffic. The other cars will be programmed to accelerate whenever they are close to a stoplight as it turns yellow, in order to reduce rear-end collisions in heavy traffic.

How appropriate is the director's decision?

In a few sentences, please tell us why you chose the reason you chose.

0 → ABlong: Self-driving cars, which are currently being developed by several companies, are programmed to control all aspects of driving without any human involvement. However, there are a number of difficult problems in programming self-driving cars. For instance, cars in heavy traffic face significant danger at yellow traffic lights. The director of software engineering at a company developing self-driving cars wants to reduce accidents at yellow lights, and he thinks of two ways to do this. So, he decides to run an experiment by randomly assigning cars to be programmed in one of two ways. Half of the company's cars will be programmed to brake whenever they are close to a stoplight as it turns yellow, in order to reduce side-impact collisions in heavy traffic. The other cars will be programmed to accelerate whenever they are close to a stoplight as it turns yellow, in order to reduce rear-end collisions in heavy traffic. After the self-driving cars have been on the road for one year, all new cars will be programmed to use whichever safety measure was more effective.

How appropriate is the director's decision?

In a few sentences, please tell us why you chose the reason you chose.