SUPPLEMENTARY MATERIALS

TWOREK & CIMPIAN

STUDY 1 (ADULTS)

OUGHT MEASURE

PRESS RELEASE: NCA RELEASES 2013 COFFEE CONSUMPTION DATA
Coffee Consumption Jumps by 5%, 83% of Americans Say They Drink Coffee

San Francisco, CA (March 22, 2013) - Overall coffee consumption jumped by five percentage points this year, according to the NCA National Coffee Drinking Trends (NCDT) market research study. With this increase, 83% of the U.S. adult population now drinks coffee. At the same time, daily consumption remained strong and steady at 63%, while those who drink coffee at least once per week was up slightly to 75%. In other NCDT data, the single-cup brewing format continues to grow steadily: 13% of the U.S. population drank a coffee made in a single-cup brewer yesterday. This is up from just 4% in 2010. By contrast, past-day consumption of a coffee made in a drip coffee maker has dropped to 37% from 43% over the same period. Awareness of single-cup brewers reached 82%, up by 11 points from last year, while ownership has grown to 12% from 10% last year.

Target question:
- Do you think that it's good that so many Americans drink coffee? (*M* = 5.10 on a 1–9 scale)

Filler questions:
- Do you think the single cup brewing format is going to grow in the future?
- What do you think accounts for the success of the single cup brew?
- How far back do you think data has been collected on coffee consumption in the United States?
- What are your coffee drinking habits?

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America's pizza obsession: By the numbers
U.S. pizza vendors sell the equivalent of 10 pies a year to every single man, woman, and child in the country
By The Week Staff | June 22, 2011

The quintessential American food may be apple pie, but its popularity pales beside our national love affair with pizza pies. *The Daily* reports that Americans consume a staggering 100 acres of pizza a day, according to data from the National Association of Pizza Operators (NAPO). Over $38 billion of pizza is sold in America annually, according to *Pizza Today*, and 3 billion pizzas are sold in the U.S. each year according to NAPO. 350 slices of pizza sold every second, according to NAPO, and the average American eats an average of 46 slices of pizza year, according to *Packaged Facts*. Overall, a total of 94% of Americans eat pizza.

Target question:
- Do you think it should be that so many Americans eat pizza? (*M* = 5.57 on a 1–9 scale)

Filler questions:
- Do you think the amount of pizza sold will grow in the next 5 years?
- What do you think accounts for the current prices of pizza?
- How far back do you think data has been collected on pizza consumption in the United States?
- What are your pizza consumption habits?

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No Surprise: 64% of Americans Watch NFL Football; 73% of Men, 55% of Women
Written By Bill Gorman
NEW YORK, Oct. 14, 2011

/PRNewswire/ -- *Football Night in America* seems, at first, to be a presumptuous name for NBC to call their pre-game television program. However, according to the results of a recent Adweek/*Harris Poll* the name is accurate as almost two thirds of U.S. adults say they currently watch NFL football (64%), including almost three quarters of men (73%) and over half of women (55%). These are some of the findings of a recent Adweek/*Harris Poll* survey of 2,374 U.S. adults surveyed online between September 9 and 13, 2011 by Harris Interactive. Despite all of the technology devices that Americans have come to use and rely on, the great majority of U.S. adults say that they watch NFL football on their television (60%) while fewer than one in ten say they watch on a desktop or laptop computer (8%), smart-phone (3%) or tablet computer (2%). Only 6% say they watch games live, as in they attend the games in person.

Target question:
- Do you think that it's good that so many Americans watch football? (*M* = 5.63)

Filler questions:
- Do you think the number of viewers who watch the games live will stay at around 6% over the next 5 years?
- What do you think accounts for why only 6% of football viewers watch the games live (that is, in person)?
- How far back do you think data has been collected on football viewership in the United States?
- What are your football viewing habits?

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Americans still love to drive to work
June 13 2007, 5:04 PM EDT

An overwhelming majority of Americans skip the bus or forgo carpooling, choosing instead to drive to work, according to a government study published Wednesday. Nearly 9 out of 10 workers commuted to work by car in 2005, the Census Bureau revealed in its "American Community Survey". Today, a total of 88% of Americans drive to work. Conversely, only 4.7 percent of workers used public transportation to get to work, the survey found, with half of those workers found in the nation's largest cities like Boston, San Francisco, New York, Houston and Seattle.

The Census Bureau study also revealed other interesting trends in Americans' commuting habits. Just 1 in 10 commuters carpooled to work, usually driving with just one other person in the car, according to the study. Portland, Ore., had the highest number of commuters who bicycled to work, with 3.5 percent of its workforce pedaling to work. As a nation, just 0.4 percent of the American workforce rode their bike to work in 2005.

Target question:
- Do you think that it's good that so many Americans drive to work? (*M* = 3.74)

Filler questions:
- Do you think the percentage of people who ride their bikes to work will continue to stay low over the next 5 years?
- What do you think accounts for why so few Americans ride their bikes to work?
- How far back do you think data has been collected on driving rates in the United States?
- What are your driving habits?

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Americans Watching More TV Than Ever
By Swanni

Washington, D.C. (March 20, 2013) - The average American is now watching 23 hours of TV shows every week, compared to 21 hours in 2011 and 19 hours in 2010, according to a new study from Motorola Mobility. In addition, U.S. viewers are watching six hours of movies every week. Motorola, which has measured media activity for several years, says worldwide viewers watch an average of 19 hours of shows and movies a week, which is up from 10 hours in 2011. The study, which was based on surveys of 9,500 consumers in 17 countries, found that live TV viewing is still king with 73 percent of survey participants saying they watch it when it airs. 99% of American households own a TV. But DVR owners watch an average of one hour more programming each week. The increase in TV viewing in the U.S. and worldwide can be attributed at least in part to the growing number of available devices and services that can display both live and recorded video. Viewers can now watch live and/or traditionally scheduled programming on their big-screen TVs; recorded shows from their DVRs; and both live and recorded content from mobiles such as the iPad and iPhone.

Target question:
- Do you think it should be that so many American households own a TV? (*M* = 6.23)

Filler questions:
- Do you think the average number of shows and movies that Americans watch per week will continue to grow over the next 5 years?
- What do you think accounts for the growing number of available devices to watch videos?
- How far back do you think data has been collected on TV viewing in the United States?
- What are your TV viewing habits?

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Search and email still top the list of most popular online activities
Aug 9, 2011
by Kristen Purcell

A May 2011 Pew Internet survey finds that 92% of online adults use search engines to find information on the Web, including 59% who do so on a typical day. This places search at the top of the list of most popular online activities among U.S. adults. But it is not alone at the top. Among online adults, 92% use email, with 61% using it on an average day. According to the Pew Internet Project, these two behaviors have consistently ranked as the most popular in the last decade. Even as early as 2002, more than eight in ten online adults were using search engines, and more than nine in ten online adults were emailing. Of course, the internet population has grown substantially since 2002. So, the overall number of users of both email and search engines has also grown. In January 2002, 52% of all Americans used search engines and that number grew to 72% in the most recent survey. In January 2002, 55% of all Americans said they used email and that number grew to 70% in the current survey.

Target question:
- Do you think it should be that so many Americans use email? (*M* = 7.72)

Filler questions:
- Do you think the overall population of internet users will continue to grow in the next 5 years?
- What do you think accounts for the recent rise in the population of internet users?
- How far back do you think data has been collected on email and internet search use in the United States?
- What are your email and internet search habits?

STUDIES 1 & 2 (ADULTS)

INHERENCE BIAS MEASURE

(Note: All means below are on a 1–9 scale.)

Inherent: We use red in traffic lights to mean "stop" because of something about the color red or about stop lights—maybe the color red inherently acts as a warning. ($M_{Study\ 1}$ = 6.79; $M_{Study\ 2}$ = 7.09)

Extrinsic: We use red in traffic lights to mean "stop" because of some historical or contextual reason—maybe the color was arbitrarily assigned to this meaning a long time ago and we simply continued using it since. ($M_{Study\ 2}$ = 5.19)

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Inherent: Parents and children sleep in different beds because of something about the parent-child relationship or about the act of sleeping in separate beds—maybe one of the critical components of the parent-child relationship is teaching children independence. ($M_{Study\ 1}$ = 6.61; $M_{Study\ 2}$ = 6.38)

Extrinsic: Parents and children sleep in different beds because of some historical or contextual reason—maybe it became popular to sleep in separate beds when wealthy people began to have nannies who would watch children at night. ($M_{Study\ 2}$ = 4.97)

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Inherent: Engagement rings typically have diamonds because of something about engagement rings or about diamonds—maybe diamonds' rarity and value is a match for the value of romantic love. ($M_{Study\ 1}$ = 5.84; $M_{Study\ 2}$ = 5.44)

Extrinsic: Engagement rings typically have diamonds because of some historical or contextual reason—maybe some marketing campaigns from the past are responsible for the association of diamonds with romantic love. ($M_{Study\ 2}$ = 6.67)

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Inherent: Dollar bills are green because of something about dollar bills or about the color green—maybe since green is the color of trees it symbolizes endurance and trust and thus was chosen for money. ($M_{Study\ 1}$ = 4.49; $M_{Study\ 2}$ = 4.66)

Extrinsic: Dollar bills are green because of some historical or contextual reason—maybe green dyes were plentiful and cheap when dollar bills were first made and then the tradition just continued. ($M_{Study\ 2}$ = 6.27)

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Inherent: We don't keep chipmunks as pets because of something about chipmunks or about pets—maybe because chipmunks don't like to be picked up or held. ($M_{Study\ 1}$ = 5.53; $M_{Study\ 2}$ = 6.01)

Extrinsic: We don't keep chipmunks as pets because of some historical or contextual reason—maybe because they happened to be absent from the geographical areas where humans started to domesticate animals thousands of years ago. ($M_{Study\ 2}$ = 4.71)

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Inherent: We drink orange juice for breakfast because of something about orange juice or about breakfast— maybe the citrus aroma is refreshing and helps us to wake up. ($M_{Study\ 1}$ = 4.94; $M_{Study\ 2}$ = 5.67)

Extrinsic: We drink orange juice for breakfast because of some historical or contextual reason—maybe because orange growers a long time ago promoted orange juice for breakfast in an effort to sell more oranges. ($M_{Study\ 2}$ = 6.21)

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Inherent: Pink is the color associated with girls because of something about the color pink or about girls— maybe because pink's flower-like appearance matches girls' dainty nature. ($M_{Study\ 1}$ = 5.63; $M_{Study\ 2}$ = 5.43)

Extrinsic: Pink is the color associated with girls because of some historical or contextual reason—maybe because businesses promoted pink products for girls over the last century. ($M_{Study\ 2}$ = 6.17)

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Inherent: Wedding dresses are white because of something about the color white or about wedding dresses—maybe because the untainted nature of white reminds people of pure love. ($M_{Study\ 1}$ = 5.89; $M_{Study\ 2}$ = 6.65)

Extrinsic: Wedding dresses are white because of some historical or contextual reason—maybe because someone famous wore a white wedding dress, which started a trend that continues to this day. ($M_{Study\ 2}$ = 5.10)

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Inherent: Black is associated with funerals because of something about the color black or about funerals—maybe because the darkness of black conveys how people feel at funerals. ($M_{Study\ 1}$ = 6.64; $M_{Study\ 2}$ = 6.70)

Extrinsic: Black is associated with funerals because of some historical or contextual reason—maybe because an ancient people originated the practice for some idiosyncratic reason and then spread it to many parts of the world. ($M_{Study\ 2}$ = 5.55)

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Inherent: Toothpaste is flavored with mint because of something about toothpaste or about mint—maybe the tingling sensation of mint makes one's teeth and gums feel extra clean. ($M_{Study\ 1}$ = 6.44; $M_{Study\ 2}$ = 6.88)

Extrinsic: Toothpaste is flavored with mint because of some historical or contextual reason—maybe because mint was cheap and readily available in the US at the time modern toothpaste began being made. ($M_{Study\ 2}$ = 4.92)

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Inherent: There are 7 days in a week because of something about the quantity of 7 days or about the week as a marker of time—maybe the week is meant to align with phases of the moon, which are about 7 days long. ($M_{Study\ 1}$ = 5.81; $M_{Study\ 2}$ = 6.06)

Extrinsic: There are 7 days in a week because of some historical or contextual reason—maybe because ancient calendar-makers happened to pick this number and then the convention just continued. ($M_{Study\ 2}$ = 4.98)

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Inherent: Weekends consist of Saturday and Sunday because of something about weekends or about Saturday and Sunday—maybe Saturday and Sunday are holy days for many people, so people wouldn't be able to work. ($M_{Study\ 1}$ = 5.98; $M_{Study\ 2}$ = 6.58)

Extrinsic: Weekends consist of Saturday and Sunday because of some historical or contextual reason—maybe because the labor movement of the early 20th century made a push for more free time for workers. ($M_{Study\ 2}$ = 5.94)

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Inherent: Intelligent organisms on Earth have 2 arms and 2 legs because of something about intelligent organisms or about having 2 arms and 2 legs—maybe having 2 arms and 2 legs is the perfect balance between tool use and locomotion for intelligent organisms. ($M_{Study\ 1}$ = 5.46; $M_{Study\ 2}$ = 5.47)

Extrinsic: Intelligent organisms on Earth have 2 arms and 2 legs because of some historical or contextual reason—maybe because the animals they just happened to evolve from had similar appendages. ($M_{Study\ 2}$ = 5.34)

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Inherent: Intelligent organisms on Earth have eyes and ears because of something about intelligent organisms or about eyes and ears—maybe eyes and ears work well for perceiving the world. ($M_{Study\ 1}$ = 6.48; $M_{Study\ 2}$ = 6.42)

Extrinsic: Intelligent organisms on Earth have eyes and ears because of some historical or contextual reason—maybe because of some of the randomness of evolution, which means that other sensory organs would have been just as effective. ($M_{Study\ 2}$ = 4.96)

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Inherent: Intelligent organisms on Earth communicate through sound because of something about intelligent organisms or about communicating through sounds—maybe communicating through sound allows intelligent organisms to communicate over longer distances or while engaged in other activities. ($M_{Study\ 1}$ = 6.11; $M_{Study\ 2}$ = 6.29)

Extrinsic: Intelligent organisms on Earth communicate through sound because of some historical or contextual reason—maybe because the Earth's atmosphere just happens to support far-reaching sound transmission. ($M_{Study\ 2}$ = 5.05)

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Attention Check 1: Intelligent organisms on Earth fully pay attention when taking surveys because of something about intelligent organisms or about taking surveys—maybe paying attention allows intelligent organisms to contribute to research productively. (Study 2 only)

For this item can you please choose choice five?

Attention Check 2: Intelligent organisms on Earth fully pay attention when taking surveys because of some historical or contextual reason— maybe because taking surveys became a popular way to make money with the rise of technology over time. (Study 2 only)

For this item can you please choose choice three?

STUDY 1 (ADULTS)

DESCRIPTIVE STATISTICS

Table S1
Descriptive Statistics for the Measures in Study 1

Measure	*M*	*SD*	Skewness	Shapiro-Wilk normality test (*p* value)[a]
1. Ought Measure (possible range = 1 to 9)	5.67	1.12	.01	.745
2. Inherence Bias (possible range = 1 to 9)	5.91	1.15	−.12	.179
3. Education Level (possible range = 1 [less than high school] to 6 [doctoral])	3.62	0.90	.34	.645
4. Raven's Progressive Matrices (possible range = 0 to 12)	4.17	2.02	.24	.482
5. Conservatism (possible range = 1 [strongly liberal] to 9 [strongly conservative])	4.16	2.09	.25	.086
6. Belief in a Just World (possible range = 1 to 9)	4.98	0.80	−.50	.052

N = 122.
[a] *P* values above .05 indicate that departures from normality are not statistically significant.

CORRELATION MATRIX

Table S2
Correlation Matrix for the Measures in Study 1

Measure	1	2	3	4	5	6
1. Ought Measure	—	.30***	−.09	−.04	.15	.03
2. Inherence Bias		—	−.07	−.01	.20*	.31***
3. Education Level			—	.18*	.03	−.11
4. Raven's Progressive Matrices				—	.11	.17
5. Conservatism					—	.13
6. Belief in a Just World						—

N = 122.
* *p* < .05. *** *p* <.001.

STUDY 2 (ADULTS)

TYPICAL VS. ATYPICAL BEHAVIORS & OUGHT MEASURE

(Note: All means below are on a 0–100 scale.)

Typical: Consider that children typically address their teachers with "Ms.," "Mrs.," or "Mr."

- Is it wrong or right for children address their teachers with "Ms.," "Mrs.," or "Mr."? (*M* = 82.85)
- Should children address their teachers with "Ms.," "Mrs.," or "Mr."? (*M* = 87.56)

Atypical: Consider that children don't typically address their teachers by their first name.

- Is it wrong or right for children to address their teachers by their first name? (*M* = 26.72)
- Should children address their teachers by their first name? (*M* = 21.71)

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Typical: Think about how people often celebrate their birthdays with other people.

- Is it wrong or right for people to celebrate their birthdays with other people? (*M* = 74.82)
- Should people celebrate their birthdays with other people? (*M* = 76.79)

Atypical: Think about how people seldom celebrate their birthdays by themselves.

- Is it wrong or right for people to celebrate their birthdays by themselves? (*M* = 51.27)
- Should people celebrate their birthdays themselves? (*M* = 38.29)

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Typical: Think about how people often go watch a movie when they go on dates.

- Is it wrong or right for people to go watch a movie when they go on dates? (*M* = 68.71)
- Should people go watch a movie when they go on dates? (*M* = 63.94)

Atypical: Think about how people seldom go play video games when they go on dates.

- Is it wrong or right for people go play video games when they go on dates? (*M* = 53.08)
- Should people go play video games when they go on dates? (*M* = 42.56)

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Typical: Think about how people typically give roses as gifts on Valentine's Day.

- Is it wrong or right for people to give roses as gifts on Valentine's Day (*M* = 66.86)
- Should people give roses as gifts on Valentine's Day? (*M* = 58.56)

Atypical: Think about how people don't typically give sweaters as gifts on Valentine's Day.

- Is it wrong or right for people to give sweaters as gifts on Valentine's Day? (*M* = 53.38)
- Should people give sweaters as gifts on Valentine's Day? (*M* = 50.43)

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Typical: Think about how doctors usually wear white coats.

- Is it wrong or right for doctors to wear white coats? (*M* = 67.66)
- Should doctors wear white coats? (*M* = 63.59)

Atypical: Think about how doctors don't usually wear purple coats.

- Is it wrong or right for doctors to wear purple coats? (*M* = 46.90)
- Should doctors wear purple coats? (*M* = 39.51)

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Typical: Think about how men and women typically have separate public bathrooms.

- Is it wrong or right for men and women to have separate public bathrooms? (*M* = 82.58)
- Should men and women have separate public bathrooms? (*M* = 88.74)

Atypical: Think about how men and women typically don't share the same public bathrooms.

- Is it wrong or right for men and women to share the same public bathrooms? (*M* = 24.31)
- Should men and women share the same public bathrooms? (*M* = 20.02)

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Typical: Think about how a lot of professionals wear dark-colored clothing.

- Is it wrong or right for professionals to wear dark-colored clothing? (*M* = 65.73)
- Should professionals wear dark-colored clothing? (*M* = 58.67)

Atypical: Think about how few professionals wear clothing that has bright colors or bold patterns.

- Is it wrong or right for professionals to wear clothing that has bright colors or bold patterns? (*M* = 57.34)
- Should professionals wear clothing that has bright colors or bold patterns? (*M* = 56.77)

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Typical: Consider that people typically stand when the national anthem is played.

- Is it wrong or right for people to stand when the national anthem is played? (*M* = 83.12)
- Should people stand when the national anthem is played? (*M* = 83.37)

Atypical: Consider that people don't typically stay seated when the national anthem is played.

- Is it wrong or right for people to stay seated when the national anthem is played? (*M* = 26.61)
- Should people stay seated when the national anthem is played (*M* = 22.51)

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Typical: Consider that people often pay money to watch others play sports.

- Is it wrong or right for people to pay money to watch others play sports? (*M* = 64.59)
- Should people pay money to watch others play sports? (*M* = 62.52)

Atypical: Consider that people seldom pay money to watch others play video games.

- Is it wrong or right for people to pay money to watch others play video games? (*M* = 37.22)
- Should people pay money to watch others play video games? (*M* = 22.96)

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Typical: Consider that people generally shake hands when they first meet.

- Is it wrong or right for people to shake hands when they first meet? (*M* = 72.18)
- Should people shake hands when they first meet? (*M* = 72.90)

Atypical: Consider that people don't generally touch elbows when they first meet.

- Is it wrong or right for people to touch elbows when they first meet? (*M* = 37.75)
- Should people touch elbows when they first meet? (*M* = 29.34)

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Typical: Consider that most men wear their hair short.

- Is it wrong or right for men to wear their hair short? (*M* = 58.18)
- Should men wear their hair short? (*M* = 62.95)

Atypical: Consider that few men wear their hair long.

- Is it wrong or right for men to wear their hair long? (*M* = 55.71)
- Should men wear their hair long? (*M* = 49.47)

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Typical: Consider that couples typically live in a different house than their relatives.

- Is it wrong or right for couples to live in a different house than their relatives? (*M* = 76.22)
- Should couples live in a different house than their relatives? (*M* = 81.31)

Atypical: Consider that couples don't typically live in the same house as their relatives.

- Is it wrong or right for couples to live in the same house as their relatives? (*M* = 55.20)
- Should couples live in the same house as their relatives? (*M* = 42.11)

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Attention Check Questions:

For this question, please select somewhat agree below to indicate that you are paying attention. (1 [strongly agree] to 7 [strongly disagree] scale)

For this question, please select strongly disagree below to indicate that you are paying attention. (1 [strongly agree] to 7 [strongly disagree] scale)

STUDY 2 REPLICATION (ADULTS)

Table S3

Multilevel Model Predicting Ought Inferences in the Preregistered Replication of Study 2

Predictor	*b*	*SE*	*z*	*p*
Behavior Typicality (0 = atypical, 1 = typical)	9.81	4.63	2.12	.034
Inherence Bias	−1.03	0.50	−2.06	.039
Inherence Bias × Behavior Typicality	3.20	0.65	4.94	<.001
Cognitive Reflection Test	1.76	2.21	0.79	.428
Cognitive Reflection Test × Behavior Typicality	−4.82	2.89	−1.67	.095
Education	−0.95	0.81	−1.17	.241
Education × Behavior Typicality	3.01	1.05	2.86	.004
Conservatism	−1.39	0.36	−3.84	<.001
Conservatism × Behavior Typicality	3.25	0.47	6.93	<.001

N = 168.

Note. The preregistration for this study can be found at https://aspredicted.org/public/205223581.pdf.

ADDITIONAL DATA FOR STUDY 2

WEAKER PREVALENCE MANIPULATION

The Gist. In Study 2, the prevalence contrast between typical and atypical behaviors was sharp: Most people perform the typical behaviors we asked about (e.g., giving roses for Valentine's Day), and almost no one performs the atypical behaviors (e.g., giving sweaters for Valentine's Day). Here, we present some evidence suggesting that a weaker prevalence contrast (40% vs. 10% prevalence for typical vs. atypical behaviors, respectively) may not give rise the hypothesized interaction between inherence biases in explanation and behavior typicality in predicting *ought* judgments.

Participants. After excluding participants who indicated they did not pay attention during the study (n = 3) or did not believe the information provided (n = 274; see below), the final sample included 606 Mechanical Turk workers (M_{age} = 35.53; SD = 12.53; 252 men, 354 women). Subjects were compensated with $0.75 for their participation.

Materials and Procedure. Participants read four mock press releases, each describing the prevalence of a certain behavior (e.g., parents letting children watch TV after school). The prevalence or typicality of these behaviors was manipulated between subjects, unlike in Study 2. The press releases in the Atypical Behaviors condition claimed these behaviors were performed by about 10% of the population (see a sample press release below). In the Typical Behaviors condition, the same behaviors were said to be four times as common, characterizing approximately 40% of the population. It was important that subjects believe the prevalence information provided in the press releases; thus, at the end of the study we asked subjects whether they found the press releases believable (1 = "not at all" to 9 = "very much"). We excluded any subjects who scored below the midpoint on this question (n = 274). This study also included the Inherent (vs. Extrinsic) Explanations measure (same as in Study 2) and the CRT.

Results and Discussion. Participants' *ought* judgments were regressed on the following independent variables: behavior typicality (0 = atypical, 1 = typical), the Inherent (vs. Extrinsic) Explanations measure, the CRT, and the two-way interactions between the behavior typicality variable and the other two (Explanations and CRT). In this model, the predicted interaction between behavior typicality and the Inherent (vs. Extrinsic) Explanations measure was not significant, b = .01 [−1.20, 1.22], p = .987. One possible reason for this null result is that the prevalence contrast was too weak and ambiguous: Are behaviors performed by only 40% of the population truly typical? Conversely, are behaviors performed by 10% of the population (i.e., millions of people) atypical? In addition, the fact that we had to exclude more than a third of our sample because they did not believe the press releases suggests that this particular operationalization of the contrast between typical and atypical behaviors was problematic.

SAMPLE PRESS RELEASE
[Typical: 37%] [Atypical: 7%] of Parents Let their Children Watch TV After School

Washington, D.C. (March 20, 2015) - Just [37%] [7%] of parents let their children watch TV right when they come home from school. This statistic compares to [41%] [11%] in 2014 and [38%] [8%] in 2010, according to a new study from *Scholastic Broadcasting*. *Scholastic Broadcasting,* which has measured media activity for several years, says that less than [45%] [15%] of parents in the Midwest and the East Coast report that TV watching is an after-school activity in their home. We see similar numbers in the most Western parts of the U.S., with only [35] [5] percent of parents saying that TV is part of children's after-school routine.

The study, which was part of a larger project based on surveys of 9,500 consumers in 17 countries, also found that less than [47%] [7%] of parents in developed countries allow their children to watch some TV before they start their homework.

Target questions:
- Is it wrong or right for a parent to let their child watch TV after school?
- Should parents let their child watch TV after school?

Filler questions:
- How engaging was this press release?
- How do you think the data was collected (phone, email, etc.)?
- How far back do you think data has been collected on children's TV watching?

STUDY 3 (CHILDREN)

MOCK NEWSPAPER

University of Illinois at Urbana-Champaign March 29, 2013

Breaking News! Read all about it!

The Daily Illini

Brides wear white at weddings!

Brides wear white wedding dresses. Wedding dresses come in all sorts of shapes and sizes, but they are always white. When you look at pictures from a wedding, the bride is always wearing a white dress.

Boys wear pants!

Boys wear pants. Pants come in all sorts of colors, but boys often wear them. When you see boys at school, they are often wearing pants.

University of Illinois at Urbana-Champaign March 29, 2013

Breaking News! Read all about it!

The Daily Illini

Dads have short hair!

Dads have short hair. Dads' hair can be curly or straight, brown or blonde, but it is almost always short. When you see Dads walking around, they have short hair.

M oney is gr een!

Most paper money in America is green. Paper money comes in 1-dollar bills, 5-dollar bills, and 10-dollar bills, but it is always green. When you see people pay for stuff, they use green money.

STUDIES 3 & 5 (CHILDREN)

OUGHT MEASURE & CONTROL QUESTIONS

Ought Measure (Studies 3 & 5) (using the "brides wear white at weddings" fact)

Question 1: Do you think it is good that brides wear white at weddings, and not a different color, like yellow? Do you think it's good that brides wear white at weddings?

If child said "yes": Do you think it's sort of good, good, or really good that brides wear white at weddings?[1]

Scoring: 4-point scale (1 = "no" to 4 = "really good")

Question 2: What if brides did wear yellow to weddings? Would that be bad?

If child said "yes": Do you think it would be sort of bad, bad, or really bad if brides wore yellow to weddings?[1]

Scoring: 4-point scale (1 = "no" to 4 = "really bad")

Question 3: Remember how we read that brides wear white at weddings, and not a different color, like yellow? Is that the way that things should be? Brides wearing white?

Scoring: 0 = "no", 1 = "yes"

"Yes" Bias Control Question (Study 3) (using the "brides wear white at weddings" fact)

Do you think it's interesting that brides wear white at weddings, and not a different color, like yellow? Do you think it's interesting that brides wear white to weddings?

If child said "yes": Do you think it's sort of interesting, interesting, or really interesting that brides wear white to weddings?[1]

Scoring: 4-point scale (1 = "no" to 4 = "really interesting")

"Shallow Cues" Control Question (Study 5) (using the "brides wear white at weddings" fact)

Do you think it's fun that brides wear white at weddings?

If child said "yes": Do you think it's sort of fun, fun, or really fun that brides wear white to weddings?[1]
If child said "no": Do you think it's sort of not fun, not fun, or really not fun that brides wear white to weddings?[1]

Scoring: 6-point scale (1 = "really not fun" to 6 = "really fun")

[1] These questions were accompanied by a visual scale consisting of three circles of increasing size. Children could use this scale to respond non-verbally if they wished (i.e., by pointing to a circle).

STUDY 3 (CHILDREN)

CORRELATION MATRIX

Table S4
Correlation Matrix for the Measures in Study 3

Measure	1	2	3	4
1. Ought Measure	—	.45***	−.14	.25*
2. Inherence Bias		—	−.34**	.27*
3. Chronological Age			—	−.27*
4. “Yes” Bias Control				—

N = 80.

* $p < .05$. ** $p < .01$. *** $p < .001$.

STUDY 5 (CHILDREN)

INHERENT VS. EXTRINSIC EXPLANATION MANIPULATION

Fact: Brides wear white at weddings

Inherent: I read a book a while ago about this, and it said that brides wear white just because there's something about white that makes it go with weddings. It's because it's really bright and so it makes people happy. Also, white helps make the bride stand out and so everyone is looking at her at the wedding. So brides wear white wedding dresses! Interesting, huh? I guess there are real reasons why brides wear white. It's not like it's something that happened by accident. There's just something about white that explains why brides wear white at weddings.

Extrinsic: I read a book a while ago about this, and it said that brides wear white just because of something that happened a long time ago. It's because a really important Queen wore white all the time—and of course she wore white to her wedding too! So she just decided to wear a white dress to her wedding. After that, lots of brides started wearing white wedding dresses to look like the Queen—even though they could have gotten them in other colors, and even when the Queen wasn't around anymore! Interesting, huh? I guess there's no real reason why brides wear white. It's not like there's anything special about white that makes it go with brides. It's just because of something that happened a long time ago that brides wear white at weddings.

Fact: Boys wear pants

Inherent: I read a book a while ago about this, and it said that boys wear pants just because there's something about pants that makes them go with boys. It's because pants are easy to play sports in and boys play a lot of sports. Also, pants help boys move around and so boys can use all of their energy. So boys wear pants! Interesting, huh? I guess there are real reasons why boys wear pants. It's not like it's something that happened by accident. There's just something about pants that explains why boys wear them.

Extrinsic: I read a book a while ago about this, and it said that boys wear pants just because of something that happened a long time ago. It's because a well-known General was the first person to start wearing pants—he owned so many pants and that is all he wore! So he just decided that he wanted to wear pants. After that, lots of boys starting wearing pants to look like the General—even if there were other things to wear, and even when the General wasn't around anymore! Interesting, huh? I guess there's no real reason why boys wear pants. It's not like there's anything special about pants that makes them go with boys. It's just because of something that happened a long time ago that boys wear pants.

Fact: Dads have short hair

Inherent: I read a book a while ago about this, and it said that Dads have short hair just because there's something about short hair that makes it go with Dads. It's because short hair fits under hats and Dads wear hats all the time. Also, short hair helps Dads keep hair out of their face when it's windy. So Dads have short hair! Interesting, huh? I guess there are real reasons why Dads have short hair. It's not like it's something that happened by accident. There's just something about short hair that explains why Dads wear their hair like that.

Extrinsic: I read a book a while ago about this, and it said that Dads have short hair just because of something that happened a long time ago. It's because a really famous singer cut his hair short—his picture was in lots of famous magazines so everyone saw his hair! So the singer just decided to cut his hair short. After that, lots of men started cutting their hair short to look like the singer—even though there were other hairstyles, and even when the singer wasn't around anymore! Interesting, huh? I guess there's no real reason why Dads have short hair. It's not like there's anything special about short hair that makes it go with dads. It's just because of something that happened a long time ago that Dads have short hair.

Fact: Money is green

Inherent: I read a book a while ago about this, and it said that money is green just because there's something about the color green that makes it go with money. It's because it's easy to see and so it's easy to use when you pay for stuff! Also, green helps money look different from other paper so people don't get confused. So money is green!

Interesting, huh? I guess there are real reasons why money is green. It's not like it's something that happened by accident. There's just something about the color green that explains why money is green.

Extrinsic: I read a book a while ago about this, and it said that money is green just because of something that happened a long time ago. It's because an important businessman closed his eyes and picked a color out of a hat [close eyes and motion picking out of a hat]—there were lots of colors in the hat, and he happened to pick green! So he just decided to use green for money. After that, people kept making money green like the businessman picked—even when there were lots of other colors, and even when the businessman wasn't around anymore! Interesting, huh? I guess there's no real reason why money is green. It's not like there's anything special about green that makes it go with money. It's just because of something that happened a long time ago that money is green.

Fact: School buses are yellow

Inherent: I read a book a while ago about this, and it said that school buses are yellow just because there's something about the color yellow that makes it go with school buses. It's because it makes people in cars pay attention and so they drive safely around the school bus! Also, yellow helps kids see that their school bus is close when they wait at the bus stop. So buses are yellow! Interesting, huh? I guess there are real reasons why school buses are yellow. It's not like it's something that happened by accident. There's just something about the color yellow that explains why school buses are yellow.

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Extrinsic: I read a book a while ago about this, and it said that buses are yellow just because of something that happened a long time ago. It's because an important person in charge of schools wanted to paint the first school bus yellow—she picked yellow because she had lots of yellow flowers in her yard, and she really liked them. So she just decided to make buses yellow! After that, lots of people kept making buses yellow like the person picked—even though they could have gotten other paint, and even when the person who picked yellow wasn't in charge of schools anymore! Interesting, huh? I guess there's no real reason why buses are yellow. It's not like there's anything special about yellow that makes it go with buses. It's just because of something that happened a long time ago that buses are yellow

Fact: Birthday cakes have candles

Inherent: I read a book a while ago about this, and it said that birthday cakes have candles just because there's something about candles that makes them go with birthday cakes. It's because you can put as many as you need on your birthday cake, and so they're easy to count your years on! Also, candles help birthday cakes look bright and colorful which makes people happy. So birthday cakes have candles! Interesting, huh? It's not like it's something that happened by accident. I guess there are real reasons why birthday cakes have candles. There's just something about candles that explains why birthday cakes have them.

Extrinsic: I read a book a while ago about this, and it said that birthday cakes have candles just because of something that happened a long time ago. It's because an important President had a friend who was a candle maker— his friend gave him so many candles and he needed something to do with them. So he decided to put them on birthday cakes! After that, lots of people started putting candles on birthday cakes to be like the President—even though they could have put something else on them, and even when the President wasn't around anymore! Interesting, huh? I guess there's no real reason why birthday cakes have candles. It's not like there's anything special about candles that makes them go with birthday cakes. It's just because of something that happened a long time ago that birthday cakes have candles.

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