

# EXAMINING THE RELATIONSHIP BETWEEN SURVEY TROLLING AND GENDER IDENTITY QUESTIONS

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SurveyMonkey

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## SPECIAL THANKS

- Coauthors D. Sunshine Hillygus and Jesse Lopez at Duke University
- Lopez, Jesse and Hillygus, D. Sunshine, [Why So Serious?: Survey Trolls and Misinformation](#) (March 14, 2018).

# BACKGROUND: WHAT IS HUMOROUS RESPONDING OR “TROLLING”?

## Adolescents

Scrutiny of adolescent survey results finds evidence of humorous responding.

- False reports of artificial limbs, adoption & LGBTQ identity (Fan et al. 2007, Robinson-Cimpian 2014, Fish & Russell 2017)

## Adults

10-18% of respondents in adult samples flagged for humorous responding. (Lopez & Hillygus 2018; Clifford et al. 2018)

- More likely to report belief in political rumors/conspiracies.
- Make-up 30-60% of self-reported believers in these conspiracies.



# DESIGN DECISIONS: GENDER MEASURES

Justifiable calls for more inclusive & nuanced measures of gender.

(Bittner & Goodyear 2017; Magliozzi et al. 2016)

While many have proposed measures, few have looked at whether they alter respondent behavior.

**Some responses found in the “Other” field:**

“apache helicopter”

“I’m a buick skylark somtimes i feel like a prius”

“I list myself as a kool-aid packet”



# DESIGN DECISIONS MATTER

*“I only respond in a humorous manner when a question is stupidly worded or fails to give a NA/DK option. Ridiculous...they asked for it themselves.”*  
—Open-Ended Feedback



## GOALS OF THIS RESEARCH:

- How do different measures of gender influence self-reported humorous responding later in the survey?
- Do more inclusive, nuanced measures unintentionally prompt greater rates of humorous responding or “trolling”?

# SURVEY I: DATA & METHODS

## Sample Recruited Using SurveyMonkey

### Audience Panel

- 1,000 U.S. Adults
- Conducted August 2018
- Quotas for age and gender

### Survey Experiment:

Randomly assigned to receive one of three gender measures.

- 2-Option Binary Gender Measure
- 3-Option (M/F/Other) Measure
- 16-Item Check-All

\* Which of the following best describes you? (Select all that apply).

- Agender
- Androgynous
- Bigender
- Female
- Gender Fluid
- Gender Nonconforming
- Gender Questioning
- Gender-Queer
- Intersex
- Male
- Neutrois
- Non-binary
- Pangender
- Polygender
- Transgender
- Other (please specify)

\* Are you:

Male

Female

\* Which of the following best describes you?

Female

Male

Other (please specify)

# SURVEY I: GENDER DISTRIBUTIONS

Table 1: Gender Distributions Across Conditions

	<b>16-Item</b>	<b>3-Item</b>	<b>2-Item Binary</b>
Female Only	49% (n=176)	53% (n=170)	54% (n=202)
Male Only	40% (n=142)	46% (n=149)	46% (n=172)
Marked Non-Binary	11% (n=40)	1% (n=4)	<b>N/A</b>
Total	100% (n=358)	100% (n=323)	100% (n=374)



# SURVEY I: OUTCOME MEASURE

## Humorous Responding

Self-Reported Tendency to Respond Humorously  
On Surveys

- Flagged as “Troll” if report “Always”, “Most of the Time” or “Some of the time”

(Lopez & Hillygus 2018; Clifford et al. 2018)

Sometimes people don't take surveys seriously and instead provide humorous, or insincere responses to questions. How often do you do this?

- Always
- Most of the time
- Some of the time
- Rarely
- Never

# SURVEY I: FINDINGS

## Self-Reported Humorous Responding

- 16-item, check all option highest reports of humorous responders
- 2-item standard
- 3-item “other”

SURVEY I	16-item (n=355)	3-item (n=321)	2-item (n=371)
<i>Total trolls</i>	<b>16%</b>	<b>12%</b>	<b>14%</b>
<i>Total not trolls</i>	<b>84%</b>	<b>88%</b>	<b>86%</b>
Always	3%	3%	2%
Most of the time	4%	5%	5%
Some of the time	9%	4%	7%
Rarely	20%	20%	18%
Never	64%	68%	68%



# TROLLS VS. NOT TROLLS

## Self-Reported Humorous Responders are more likely to be...

- Younger age groups
- Lower educational attainment
- Lower income groups
- Non-white
- Male

Table 7: Non-Trolls vs. Trolls Demographic Profile-Survey 1

Demographic Breakdowns	Not A Troll ( <i>n=900</i> )	Self-Reported Troll ( <i>n=147</i> )
Below \$30,000	20%	38%
Between \$30,000 & \$74,999	36%	42%
\$75,000 or above	45%	21%
18 to 24	14%	30%
25 to 44	31%	48%
45 or above	55%	21%
Below High School	17%	37%
Some College	34%	34%
4 Year Degree or more	49%	28%
Non-White	23%	54%
White	77%	46%
Male (Profile)	46%	53%
Female (Profile)	54%	47%

# SURVEY 2: DATA & METHODS

## Sample Recruited Using SurveyMonkey

### Audience Panel

- 2,000 U.S. Adults
- Conducted November 2018
- Quotas for age and gender

### Survey Experiment:

Randomly assigned to receive one of three gender measures.

- Changes made: not required, add 2-step, replace “other” with “a gender not listed here”
- 3-Option (M/F/Not listed) Measure
- 2-part gender at birth and current
- 16-Item Check-All

Which of the following best describes you? (Select all that apply).

- Agender
- Androgynous
- Bigender
- Female
- Gender Fluid
- Gender Nonconforming
- Gender Questioning
- Gender-Queer
- Intersex
- Male
- Neutrois
- Non-binary
- Pangender
- Polygender
- Transgender
- Other (please specify)

Which of the following best describes you?

- Female
- Male
- A gender not listed here (please specify)

What sex were you assigned at birth?

- Male
- Female

What is your current gender?

- Male
- Female
- A gender not listed here (please specify):

## SURVEY 2: OUTCOME MEASURE

### Humorous Responding

Self-Reported Tendency to Respond  
Humorously On Surveys

- Flagged as “Troll” if report “Always”, “Most of the Time” or “Some of the time”

(Lopez & Hillygus 2018; Clifford et al. 2018)

Sometimes people don't take surveys seriously and instead provide humorous, or insincere responses to questions. How often do you do this?

- Always
- Most of the time
- Some of the time
- Rarely
- Never

# SURVEY 2: FINDINGS

## Self-Reported Humorous Responding

This time, 16-item, check all = lowest reports of humorous responders

3-item with open-ended option

2-step question most

SURVEY 2	16-item (n=706)	3-item (n=678)	2-step (n=655)
<i>Total trolls</i>	<b>11%</b>	<b>14%</b>	<b>15%</b>
<i>Total not trolls</i>	<b>88%</b>	<b>86%</b>	<b>83%</b>
Always	2%	2%	3%
Most of the time	3%	4%	4%
Some of the time	6%	8%	8%
Rarely	18%	18%	16%
Never	70%	68%	67%

# CONSISTENCY IN GENDER SELECTION

Across the two surveys, very few mismatch between their profile listed gender and reported gender.

Survey 1

	<b>2-Option Binary</b>	<b>3-Option</b>	<b>16-Item List</b>
Marked Gender Reported Prior To Survey	99% ( <i>n</i> =372)	97% ( <i>n</i> =313)	94% ( <i>n</i> =337)
Did Not Mark Gender Reported Prior To Survey	1% ( <i>n</i> =2)	3% ( <i>n</i> =10)	6% ( <i>n</i> =21)
Total	100% ( <i>n</i> =374)	100% ( <i>n</i> =323)	100% ( <i>n</i> =358)

Survey 2

	<b>3-Option</b>	<b>Gender/Sex 2-Item</b>	<b>16-Item List</b>
Marked Gender Reported Prior To Survey	97% ( <i>n</i> =652)	95% ( <i>n</i> =615)	95% ( <i>n</i> =667)
Did Not Mark Gender Reported Prior To Survey	3% ( <i>n</i> =21)	5% ( <i>n</i> =31)	5% ( <i>n</i> =38)
Total	100% ( <i>n</i> =673)	100% ( <i>n</i> =646)	100% ( <i>n</i> =705)

# PRELIMINARY TAKEAWAYS

Non-negligible percent of self-reported trolling exists in our surveys and in the lower to mid range found in previous research (10-18% , [see Lopez & Hillygus, 2018](#)).

Evidence so far is inconclusive about the impact of asking a more inclusive gender question on self-reported trolling but worth exploring further.

Possible implications for longitudinal studies: when asking gender more than once and in different ways over time, more chance for inconsistency.



# FUTURE RESEARCH

**Redefine “troll” flags:** changing the self-report criteria, adding other flags for trolls

**Remove the trolls:** if/how the picture changes when we remove those flagged as trolls

**Explore gender question’s impact on other outcomes:** dropoff and skip rates, likelihood to take surveys, motivation for taking surveys, etc.

# QUESTIONS?

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