# Trolls just want to have fun

Erin E. Buckels, Paul D. Trapnell, Delroy L. Paulhus
Personality and Individual Differences, (2014, in press)



Lauris Kaplinski
Bioinformatics Journal Club
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# Psychometry

- A study of psychological measurement

  - the construction of instruments and procedures for measurement

  - the development and refinement of theoretical approaches to measurement

- IQ was the first well-studied psychometric measure

- Personality measures

- http://personality-testing.info

  - Some quick online tests, generally OK

# Intelligence Quotient

- Intelligenz-Quotient, IQ

- First tests by Francis Galton, Alfred Binet

  - Early studies of IQ were often related to eugenics

- Normalized to median = 100, sd = 15

- The General Factor $g$

- Charles Spearman developed factor analysis to explain the correlations between ability tests

  - G seems to be the inheritable and immutable base of most cognitive ability

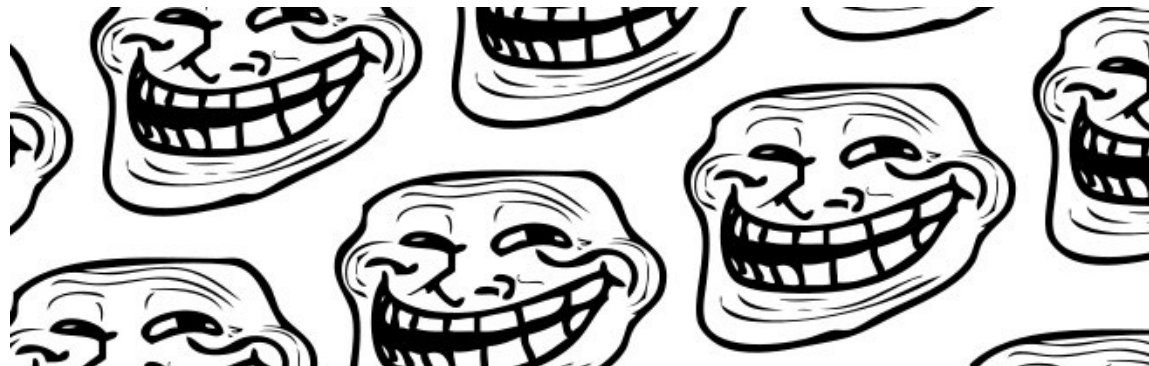- Other approaches – multiple intelligences etc.

# The Big Five

- Openness

  - Appreciation for adventure, new ideas, curiosity, variety of experience

- Conscientiousness

  - A tendency to be organized and dependable, self-discipline, act dutifully, aim for achievement, prefer planned rather than spontaneous behavior

- Extraversion

  - Energy, positive emotions, assertiveness, sociability, the tendency to seek stimulation in the company of others, and talkativeness

- Agreeableness

  - A tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others

- Neuroticism

  - The tendency to experience unpleasant emotions easily, such as anger, anxiety, depression, and vulnerability

# The Dark Triad

- Narcissism

  - grandiosity, pride, egotism, lack of empathy

- Machiavellianism

  - manipulation and exploitation of others, a cynical disregard for morality, focus on self-interest and deception

- Psychopathy

  - enduring antisocial behavior, impulsivity, selfishness, callousness, remorselessness

- Dark Tetrad adds sadism

  - gaining pleasure from seeing others undergo pain or discomfort

# Trolling

- Online trolling is the practice of behaving in a deceptive, destructive, or disruptive manner in a social setting on the Internet with no apparent instrumental purpose

- Lots of attention but little studied

- The major difference from eg. cyber-bullying is deception (anonymity) and "pointless" nature

- Boredom, attention seeking, revenge, pleasure, and a desire to cause damage identified as the main motivators

KEEP CALM AND DON'T FEED THE TROLL

# Main correlates with antisociality

- Heavy internet usage

  - low agreeableness

  - low conscientiousness

  - high extraversion

- Men are using internet more

  - Still more antisocial

- Narcissists use Facebook more

  - Usage correlated with antisocial personality disorder



Trolling /B/

It's like pissing in an ocean of piss

# Methods

- Study 1

    - 418 participants (42.4% female; M age = 29.2, SD = 11.0) from Amazon's Mechanical Turk website ( http://www.mturk.com)

    - Large battery of personality questions, forum usage embeddd into it

    - Specify favourite forum activity (trolling, disputing, making friends)

- Study 2

    - 188 Canadian psychology students (55% female; M age = 21.15, SD = 3.63)

    - 609 United States residents (43% female; M age = 35.04, SD = 12.98) recruited on Amazon's Mechanical Turk website

    - Specify enjoyment of each forum activity

# Measures (personality)

- 44-item Big Five Inventory (John & Srivastava, 1999)

- Short Dark Triad scale (SD3; Jones & Paulhus, in press)

  - Narcissism (eg. I have been compared to famous people)

  - Macchiavellism (eg. it's not wise to tell your secrets)

  - Psychopathy (eg. payback needs to be quick and nasty)

# Measures (sadism)

- **Short Sadistic Impulse Scale** (SSIS; O'Meara, Davies, & Hammond, 2011)

  - 10 item questionnaire (e.g., hurting people is exciting etc.)

- **Varieties of Sadistic Tendencies scale** (VAST; Paulhus & Jones, in press)

  - 6 questions about direct sadism (e.g., I enjoy hurting people)

  - 7 questions about vicarious sadism (e.g., In video games, I like the realistic blood spurts)

- **Comprehensive Assessment of Sadistic Tendencies** (CAST; Buckels & Paulhus, 2013)

  - 5 questions about direct physical sadism (e.g., I enjoy physically hurting people)

  - 6 questions about direct verbal sadism (e.g., I enjoy making jokes at the expense of others

  - 7 questions about vicarious sadism (e.g., I enjoy playing the villain in games and torturing other characters)

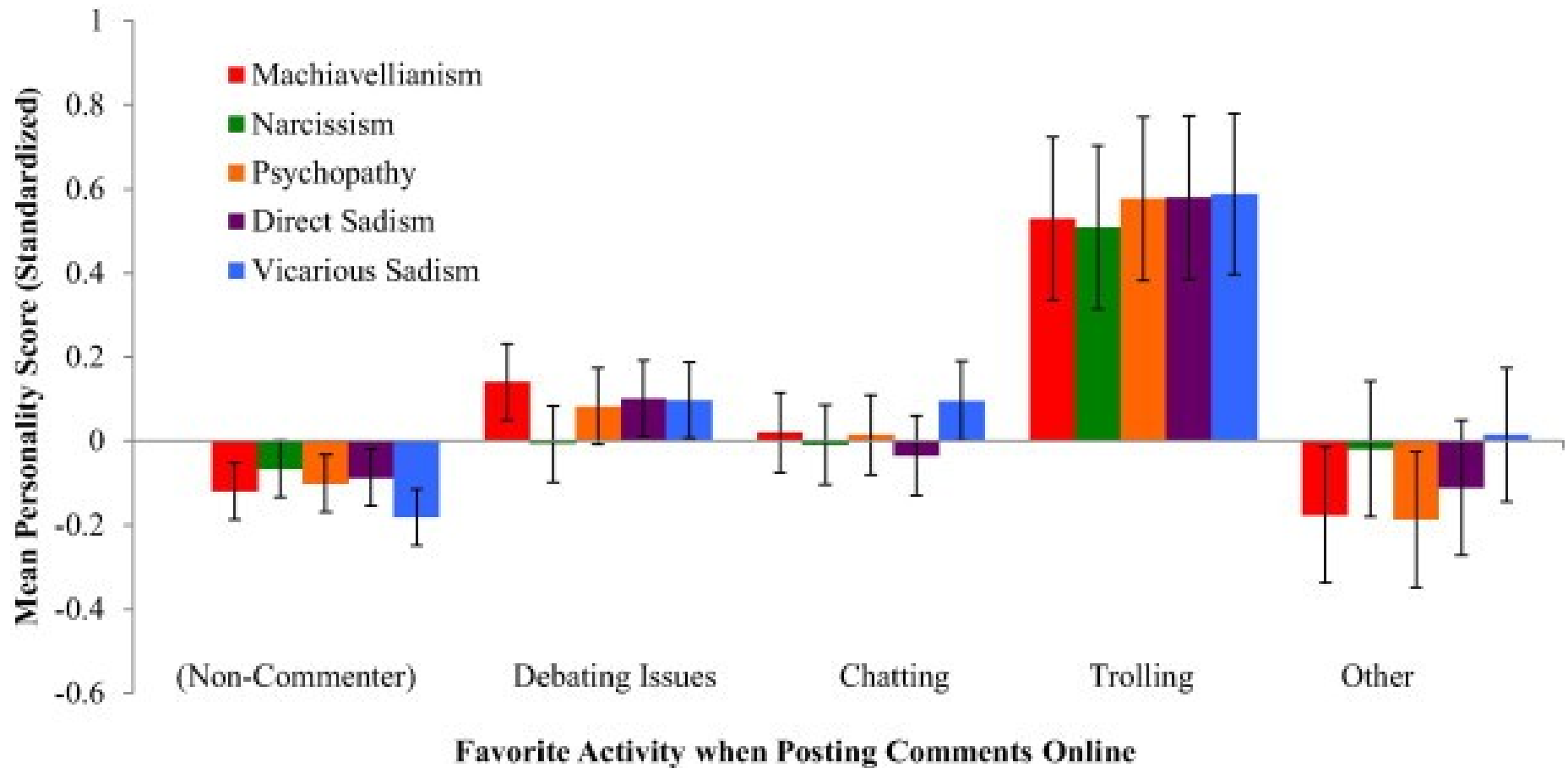# Measures (online behaviour)

- Overall commenting frequency

- What did participants enjoy doing most on comment sites?

  - debating issues that are important to you

  - chatting with other users

  - making new friends

  - trolling other users

  - other (specify)

- The order of answers was randomized

- 4 Questions relevant to trolling

  - E.g., I have sent people to shock websites for the lulz

- Mean responses to these four items formed the composite score labeled, **Global Assessment of Internet Trolling** (GAIT).

# Results (study 1)

- Mean hours of commenting per day was 1.07, SD = 1.77

- Commenting time was associated with:

  - lower conscientiousness scores, r = −.16 (p < .001)

  - higher scores on all Dark Tetrad measures except narcissism

  - direct sadism, r(508) = .12 (p = .01)

  - vicarious sadism, r(508) = .21 (p < .001)

  - psychopathy, r(512) = .12 (p = .005)

  - Machiavellianism, r(512) = .16 (p < .001)

  - Negatively correlated with age

  - Men commented more hours than women

- extraversion, agreeableness, neuroticism, and narcissism were all non-significant

# Results

# Results (study 2)

Table 1.

Associations of Dark Tetrad variables with commenting behavior and enjoyment in Study 2.

| Personality scale | Commenting frequency (h/day) | Commenting frequency (controlling for overall Internet use) | Rated enjoyment: | | | | GAIT scores |
|---|---|---|---|---|---|---|---|
| | | | Trolling | Debating | Chatting | Making friends | |
| Sadism Total | .43*** | .40*** | .52*** | .21 | .07 | −.12 | .68*** |
| Direct Sadism | .35*** | .36*** | .54*** | .14 | −.001 | −.17 | .65*** |
| Direct Physical | .35*** | .34** | .44*** | .19 | .04 | −.20 | .62*** |
| Direct Verbal | .32** | .33* | .53*** | .10 | −.02 | −.15 | .56*** |
| Vicarious Sadism | .39*** | .40*** | .39*** | .25* | .13 | −.03 | .55*** |
| Machiavellianism | .33** | .33*** | .37*** | −.06 | −.10 | −.14 | .34*** |
| Narcissism | .27* | .30** | −.09 | .23* | .19 | .21 | .18*** |
| Psychopathy | .23* | .23* | .38*** | .07 | −.23* | −.21 | .55*** |

Note. *p < .05; **p < .01; ***p < .001. All tests are two-tailed.

GAIT scores were a composite of four items capturing trolling behavior, enjoyment, and identity.

# Results

- Sadism, psychopathy, and Machiavellianism scores were positively correlated with self-reported enjoyment of trolling

- Narcissism was not correlated with trolling enjoyment, but was instead positively correlated with enjoying debating issues important to people

- Enjoyment of chatting was negatively correlated with psychopathy

- GAIT scores were strongly associated with commenters' trolling enjoyment

- GAIT was negatively correlated with age ($r = -.21$, $p < .001$), conscientiousness ($r = -.24$) and agreeableness ($r = -.18$)

- Marginally positively with openness ($r = .13$)

- Extraversion and neuroticism were unrelated to GAIT

# Results

- Multiple regression analysis with data from the subsample of commenters

  - Sadism and Machiavellianism were unique predictors of trolling enjoyment

  - Narcissism was negatively associated

  - Psychopathy was unrelated to trolling enjoyment

  - The pattern of association was unaffected by controlling for overall Internet use

- If the full sample was used psychopathy was also weak predictor of GAIT score

# Causal links

- Sought to test the hypothesis that sadism leads to trolling because those behaviors are pleasurable

- Enjoyment of trolling was positively associated with GAIT scores when controlling for sadism, $\beta = 0.48$, $t(80) = 6.31$, $p < .001$

- The mediated effect of sadism through enjoyment was significant, Sobel's $z = 4.10$, $p < .001$; 95% CI = [0.09, 0.45]

- It remained significant even when controlling for scores on the Dark Triad, Sobel's $z = 3.44$, $p < .001$; 95% CI = [0.10, 0.51].

- The direct effect of sadism was substantially reduced, but remained significant when controlling for trolling enjoyment, $\beta = 0.40$, $t(80) = 5.07$, $p < .001$, indicating partial mediation

- No support for the opposite causal direction; the standardized indirect effect of GAIT on sadism via trolling enjoyment was not significant, Sobel's $z = 0.74$, $p = .46$; 95% CI = [−0.09, 0.25].

# Discussion

- Dark Tetrad associations were largely due to overlap with sadism

- If controlling for sadism and the other Dark Tetrad measures, narcissism was actually negatively related to trolling enjoyment

- Found clear evidence that sadists tend to troll because they enjoy it

  - When controlling for enjoyment, sadism's impact on trolling was cut nearly in half; and the indirect effect of sadism through enjoyment was substantial, significant, and remained significant when controlling for overlap with the Dark Triad scores

- Strong positive relations among online commenting frequency, trolling enjoyment, and trolling behavior and identity, pointing to high levels of consistency among the measures.

  - The findings add to accumulating evidence linking excessive technology use to antisociality

# Conclusions

- Do antisocial persons use technology more than others because it facilitates their nefarious goals/motives?

- Some authors argue that use of Internet technology actually shifts users in an antisocial direction (Carr, 2011, Immordino-Yang et al., 2012 and Suler, 2004).

- The troll persona appears to be a malicious case of a virtual avatar (Dunn and Guadagno, 2012 and McCreery et al., 2012), reflecting both actual personality (Dunn and Guadagno, 2012 and McCreery et al., 2012) and one's ideal self (Bessière, Seay, & Kiesler, 2007)

- The research suggests that, for those with sadistic personalities, that ideal self may be a villain of chaos and mayhem – the online Trickster we fear, envy, and love to hate: the cyber-troll.

# Thank you!