Trolls just want to have fun

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DON'T FEED THE TROLL

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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.
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
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 embedded 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, $r = -0.16$ ($p < 0.001$)
  - higher scores on all Dark Tetrad measures except narcissism
    - direct sadism, $r(508) = 0.12$ ($p = 0.01$)
    - vicarious sadism, $r(508) = 0.21$ ($p < 0.001$)
    - psychopathy, $r(512) = 0.12$ ($p = 0.005$)
    - Machiavellianism, $r(512) = 0.16$ ($p < 0.001$)
  - Negatively correlated with age
  - Men commented more hours than women
- Extraversion, agreeableness, neuroticism, and narcissism were all non-significant
Results
### Results (study 2)

<table>
<thead>
<tr>
<th>Personality scale</th>
<th>Commenting frequency (h/day)</th>
<th>Commenting frequency (controlling for overall Internet use)</th>
<th>Rated enjoyment:</th>
<th>GAIT scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Trolling</td>
<td>Debating</td>
</tr>
<tr>
<td>Sadism Total</td>
<td>.43***</td>
<td>.40***</td>
<td>.52***</td>
<td>.21</td>
</tr>
<tr>
<td>Direct Sadism</td>
<td>.35***</td>
<td>.36***</td>
<td>.54***</td>
<td>.14</td>
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<tr>
<td>Direct Physical</td>
<td>.35***</td>
<td>.34**</td>
<td>.44***</td>
<td>.19</td>
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<tr>
<td>Direct Verbal</td>
<td>.32**</td>
<td>.33**</td>
<td>.53***</td>
<td>.10</td>
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<tr>
<td>Vicarious Sadism</td>
<td>.39***</td>
<td>.40***</td>
<td>.39***</td>
<td>.25*</td>
</tr>
<tr>
<td>Machiavellianism</td>
<td>.33**</td>
<td>.33***</td>
<td>.37***</td>
<td>-.06</td>
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<tr>
<td>Narcissism</td>
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<td>.30**</td>
<td>-.09</td>
<td>.23*</td>
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<tr>
<td>Psychopathy</td>
<td>.23*</td>
<td>.23*</td>
<td>.38***</td>
<td>.07</td>
</tr>
</tbody>
</table>

*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 ($r = -0.21$, $p < 0.001$), conscientiousness ($r = -0.24$) and agreeableness ($r = -0.18$).
- Marginally positively with openness ($r = 0.13$).
- 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!

TROLLS

TROLLS EVERYWHERE