

# **Adolescent Cyberaggression: Unveiling the Influence of Anonymity and Appetitive Cybermotives on Peers and Celebrities**

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# Study Overview



## What is Cyberaggression?

- hostile or aggressive online behavior, including negative comments toward peers and celebrities (Wright, 2014)

## Cyberaggression Target: Peers vs. Celebrities

- cyberaggression is directed towards different targets, such as peers and celebrities, in different ways due to the distinct power and influence of the targets.
- perceived distance from the victim influences the perpetration: the more distant the victim, the less constrained people can feel to aggress.

## Factors Influencing Cyberaggression Toward Peers and Celebrities

- Aggressor's Perceived Anonymity

# Study Overview



## Aggressor's Perceived Anonymity

- Research has consistently shown that anonymity plays a significant role in cyberaggression (e.g., Lapidot-Lefler and Barak, 2012)
- online disinhibition effect (Suler (2004): anonymity reduces self-awareness and social constraints, leading to disinhibited behavior online.

## Appetitive Cyberaggressive Motives

- inflicting harm on a victim for the enjoyment of violence beyond secondary rewards (e.g., status; Weierstall et al., 2013).
- Cyberaggression Typology Questionnaire (CATQ) (Runions et al., 2017):
  - impulsive appetitive aggression (i.e., to achieve an immediate affective reward, such as fun)
  - controlled appetitive aggression (i.e., to achieve a desired reward).

### STUDY GOAL

*This study investigates the potential impact of anonymity and appetitive cybermotives on cyberaggression towards peers and celebrities, with appetitive cybermotives as moderators.*

# Research Hypotheses

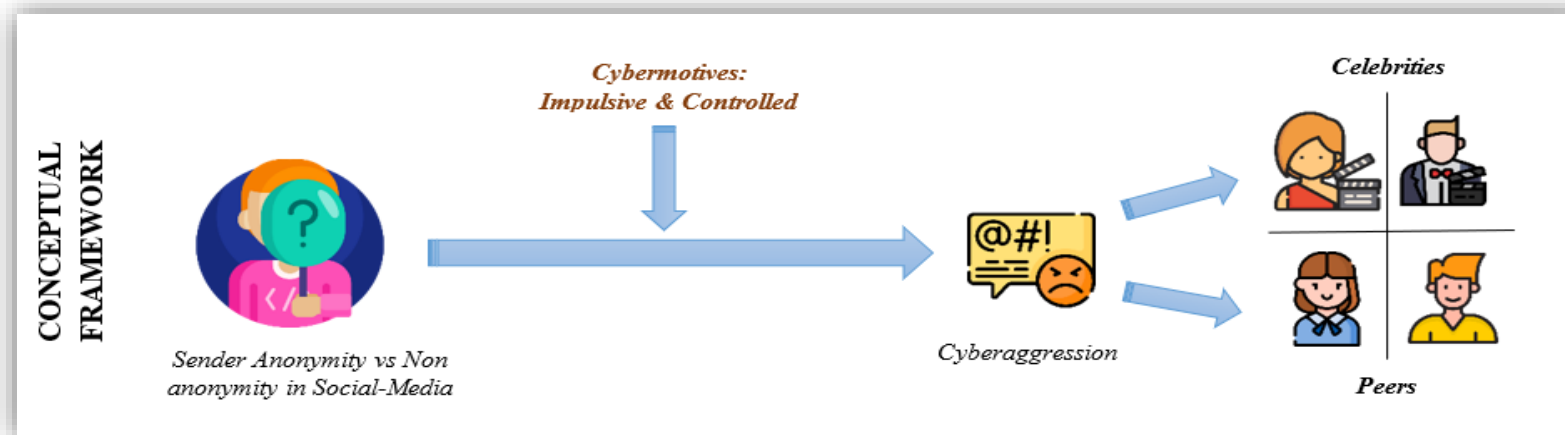


**Hypothesis 1:** anonymity will result in higher cyberaggression than non-anonymity.

**Hypothesis 2:** Cyberaggression towards celebrities will be higher than towards peers in both anonymity and non-anonymity conditions.

**Hypothesis 3:** Cyberaggressive motives (appetitive: controlled and impulsive) will moderate the relationship between anonymity and cyberaggression such that the positive effect of anonymity on cyberaggression will be higher for those with higher levels of cyberaggressive motives.

**Hypothesis 3a & 3b:** Both controlled and impulsive appetitive motives will moderate the relationship between anonymity and cyberaggression towards peers and celebrities, respectively, such that the positive effect of anonymity on cyberaggression will be higher for those with higher levels of controlled and impulsive appetitive motives.



# Methodology



**Study Conducted:** Online survey experiment

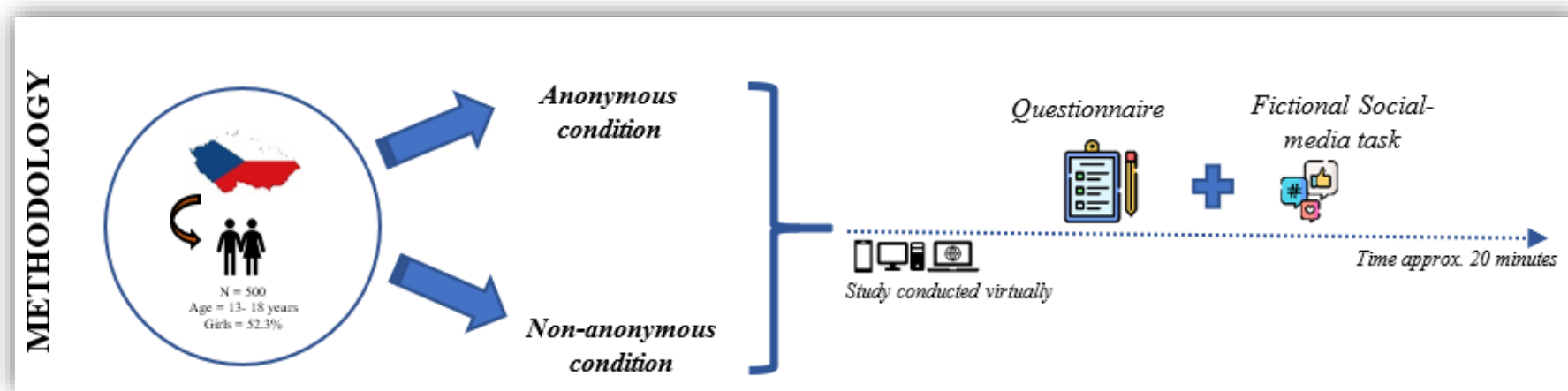
**Participants:**  $N = 500$ , Females: 52.3%,  
Mage=15.42, SDage=1.70

**Area:** Different regions of Czechia

**Time Duration:** Approx. 20 minutes

## Procedure

1. Respond demographic (age, gender, home region, and time spent on social media) and impulsivity questions
2. Experimental Manipulations (*Fictional Social Media Task*)
3. Respond to questions about motives, normative beliefs, and general cyberaggression activities, and manipulation check



# Manipulation and Measures



## Experimental Manipulations

**Anonymity:** Between-participant manipulated factor  
Random assignment to anonymous or non-anonymous condition.

A fictional social media task that resembled making an Instagram post.

### Vignette instruction

*Your profile will be completely **visible** and people **can easily track you**.*

*Your profile will be completely **anonymous** and people **can't track you**.*

## Manipulation Check

Perceived anonymity

## Outcome Variable

12 text-based „public“ stimuli that contained aggressive and neutral content balanced for the target types (i.e., peer and celebrity) and gender.

*Someone sent these posts to a girl/guy you don't like.*  
*Someone sent these posts to a actor/actress you don't like.*

The degree to which participants liked aggressive posts toward peers and celebrities  
10-point visual analog scale (1 = liking, 10 = disliking).

*I would definitely give it "I don't like it"*  
*I would definitely give it "I like it"*

# Measures



## Moderator Variable

Cyber-Aggression Typology Questionnaire (CATQ) (Runions et al., 2017). Controlled appetitive scale:  $\alpha=.86$ ,  $\omega=0.87$ ,  $M=1.42$ ,  $SD=.54$  (6 items). Impulsive appetitive scale:  $\alpha=.83$ ,  $\omega=0.83$ ,  $M=1.53$ ,  $SD=.60$  (5 items).

## Control Variable

Normative belief for Cyberaggression, Impulsivity, Social media activity, social media usage, Gender, Age

# Data Analysis and Results



- **Bivariate analysis**
- **Main Analysis:** Moderation analyses used standardized variables with 5,000 bootstrap samples in SPSS Process Macro (Hayes, 2013).

## MAIN RESULTS

**No significant difference in cyberaggression between the anonymous and non-anonymous groups**

( $t(490) = .27$  ,  $p = .40$ , Cohen's  $d = .02$ ).

*Hypothesis 1 was not supported.*

Participants in both groups reported a **higher liking for sharing aggressive content towards celebrities than peers.**

- **Anonymous group**, mean scores were higher for celebrities ( $M = 4.54$ ,  $SD = 2.47$ ) than peers ( $M = 4.30$ ,  $SD = 2.51$ ),  $t(df) = -1.90$  (245),  $p = 0.03^*$ , Cohen's  $d = .12$ .
- **Non-anonymous group**, mean scores were higher for celebrities ( $M = 4.47$ ,  $SD = 2.49$ ) than peers ( $M = 4.21$ ,  $SD = 2.42$ ),  $t(df) = -1.90$  (243),  $p = 0.03^*$ , Cohen's  $d = .12$ .

*Hypothesis 2 was supported*



# Results



Anonymity did not predict cyberaggression and **cyberaggressive motives did not act as moderators**

Moderation analyses used a Process Macro for SPSS with Model 2, and 5,000 bootstrap samples  $F(10, 478) = 4.98, p < .0001, R^2 = .09$ , indicating a small to medium effect size (Cohen's  $f^2 = .09$ ).

*Hypothesis 3 was not supported.*

*Hypotheses 3a and 3b were also not supported.*

Additionally, separate analyses for gender, same findings

# Discussion



- ❑ **Tendencies for cyberaggression more prevalent towards celebrities than peers**
  - ❑ Consistent with the argument that the extent of cyberaggression can be influenced by perceived distance from the victim
  - ❑ If distant - less restricted in inclination to engage in aggressive behavior
  - ❑ Celebrities as less approachable and relatable (subjective proximity)
  
- ❑ **Anonymity did not significantly impact cyberaggression toward peers nor celebrities**
  - ❑ Types of aggressive behavior - trolling or posting teasing texts could be already less constrained
  
- ❑ **Cyberaggressive motives lacked a moderating role in the relationship between anonymity and cyberaggression.**
  - ❑ Individuals who are highly motivated to engage in cyberaggression for entertainment or other appetitive reasons may already have a predisposition towards such behavior, regardless of anonymity.

# Limitations/Future Research



- ❑ Cyberaggressive behavior related to posting teasing texts on social media
  - ❑ Future researchers should involve different types of aggressive behavior to study anonymity and the perpetration of cyberaggression
  
- ❑ Ecological validity
  - ❑ Expanding beyond text-based stimuli to include visual or audio

# References



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Adolescent Cyberaggression/ IRTIS/ FSS/MUNI

**M U N I**

**Interdisciplinary Research Team  
on Internet and Society**

# Instruction

- We have created a new social media website - “Socialsite”. This is similar to other social media websites such as facebook. However, it has introduced some additional features:
- Your profile will be completely visible and people can easily track you.
- The website will post only text-based post with emojis and links.
- The website will suggest you some post and you can tag it to anyone which will display it in public with your profile pic.
- Now you will be shown some post which is tagged for some people. The post will be shown to you for 2 sec. Your task is to rate the extent of your liking and disliking to post that ‘post’ publicly (Refer Appendix B for posts)