MUNI FSS

ECC 26 SHIFTING GROUNDS

Experimental investigation of uncertainty-identity dynamics in audiences of ethnicity-based cyberhate

The role of anonymity and discussion norms

Marie Jaron Bedrosova
marie.bedrosova@fss.muni.cz
Michal Muzik
Hana Machackova

MUNI Interdisciplinary Research Team on Internet and Society

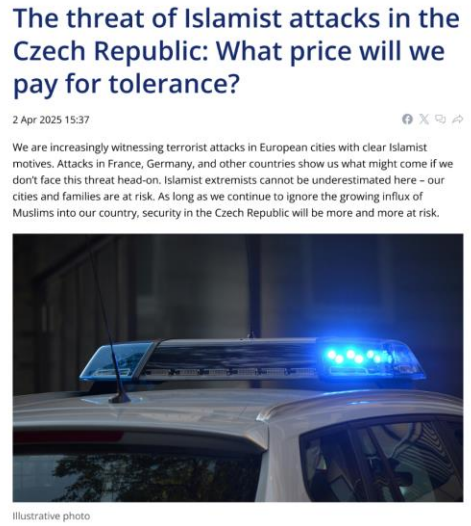
The data described study is from the project „Perceived anonymity in computer-mediated communication (PACC)“ LL2304.

CYBERHATE AND ONLINE NEWS

Online hate speech, cyberaggression and content motivated by **intergroup bias** and attacking people due to their **group membership** (Council of Europe, 2022; Kansok-Dusche et al., 2023; Mondal et al., 2017)

Ethnicity and **religion** are among the most prevalent categories targeted by cyberhate (Castaño-Pulgarín et al., 21021; Linghiardi et al., 2020; Yu et al., 2024)

Increasingly present on social media and in **online news** and **news discussions** (Hawdon et al., 2015; Pöyhtäri, 2014; Reichelmann et al., 2020; Salminen et al., 2020; Zannettou et al., 2020)



CYBERHATE BYSTANDERS AND RESEARCH GAPS

Cyberhate can shape **public attitudes** and intensify **intergroup tensions**

Majority of people encounter cyberhate as **bystanders** (exposed audiences)

On news platforms, bystanders and their interpretations of the incidents are crucial

How they **evaluate its severity or threat** can influence whether they remain passive, intervene, or endorse it (Rudnicki et al., 2022)

A gap in our understanding of the **contextual and psychological mechanisms shaping bystander evaluations**

- **Self-uncertainty**
- **Group identification**
- **Platform anonymity**
- **Discussion group norms**

UNCERTAINTY-IDENTITY THEORY AND CYBERHATE

UNCERTAINTY AND GROUP IDENTIFICATION

Feeling self-uncertainty about our identity or group identity is unpleasant

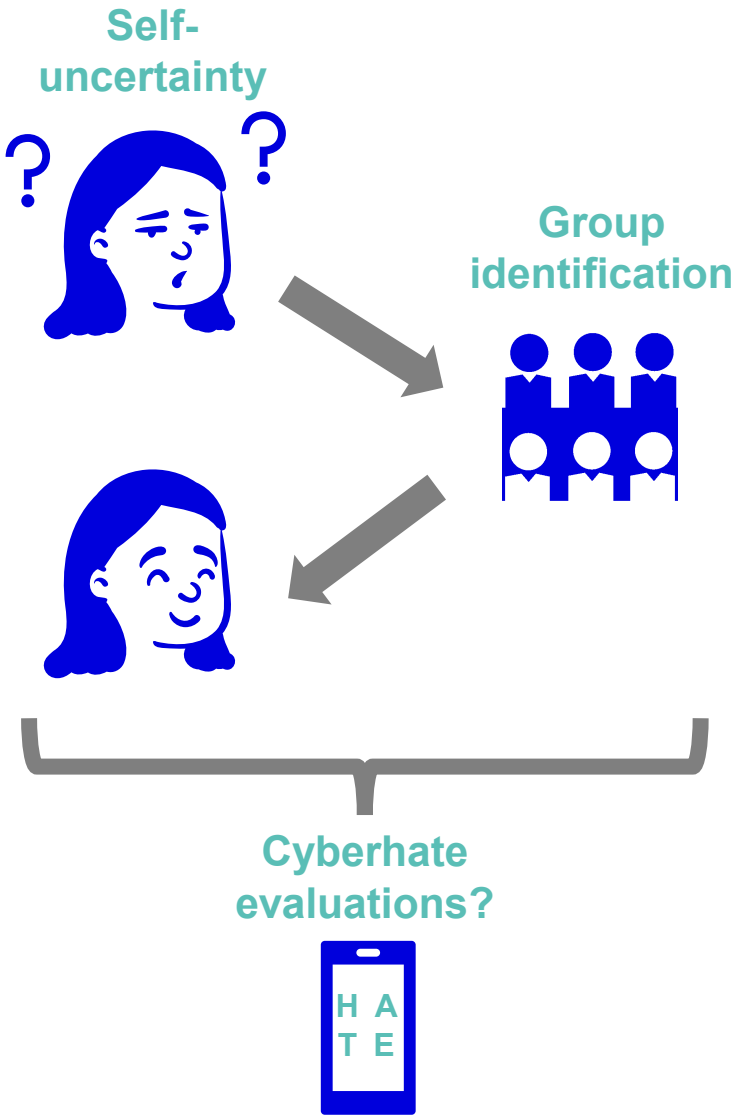
Group identification reduces self-uncertainty by offering a clear sense of social identity that shapes our thoughts, emotions, and behaviours

Predictability in **intergroup interactions**

Shapes how we perceive **in-groups** and **out-groups**

Does it affect how we evaluate cyberhate targeting an out-group?

(Choi & Hogg, 2020; Hogg, 2007, Hogg & Mahajan, 2018)

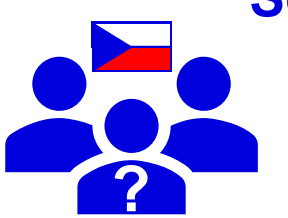


UNCERTAINTY-IDENTITY THEORY

SELF-UNCERTAINTY DOMAINS

Individual self-uncertainty, unique personal traits

6 items, e.g., *I am unsure about the opinion I have for myself*



Social self-uncertainty, group membership, e.g., (Czech) nationality

Identity (social norms, values, and group prototypes)

5 items, e.g., *I feel uncertain about what Czechia stands for*

Membership (position and relations in the group)

5 items, e.g., *I feel uncertain about fitting-in as a typical Czech*

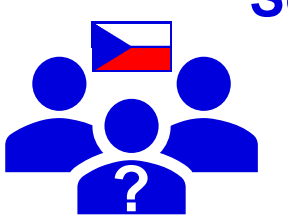
(Choi & Hogg, 2020; Hogg, 2007, Hogg & Mahajn, 2018, Sedikides & Brewer, 2001; Wagoner et al., 2017)

UNCERTAINTY-IDENTITY THEORY

SELF-UNCERTAINTY DOMAINS

Individual self-uncertainty, unique personal traits

6 items, e.g., *I am unsure about the opinion I have for myself*



Social self-uncertainty, group membership, e.g., (Czech) nationality

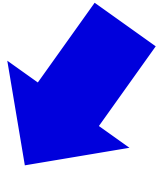
Identity (social norms, values, and group prototypes)

Membership (position and relations in the group)

5 items, e.g., *I feel uncertain about what Czechia stands for*

5 items, e.g., *I feel uncertain about fitting-in as a typical Czech*

(Choi & Hogg, 2020; Hogg, 2007, Hogg & Mahajn, 2018, Sedikides & Brewer, 2001; Wagoner et al., 2017)



3 items, e.g., *I have a lot in common with the users commenting in the discussions*

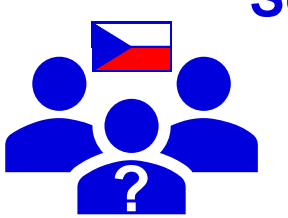
Group identification with users in online news discussion (in-group, Czech people)

UNCERTAINTY-IDENTITY THEORY

SELF-UNCERTAINTY DOMAINS

Individual self-uncertainty, unique personal traits

6 items, e.g., *I am unsure about the opinion I have for myself*



Social self-uncertainty, group membership, e.g., (Czech) nationality

Identity (social norms, values, and group prototypes)

Membership (position and relations in the group)

5 items, e.g., *I feel uncertain about what Czechia stands for*

5 items, e.g., *I feel uncertain about fitting-in as a typical Czech*

(Choi & Hogg, 2020; Hogg, 2007, Hogg & Mahajn, 2018, Sedikides & Brewer, 2001; Wagoner et al., 2017)

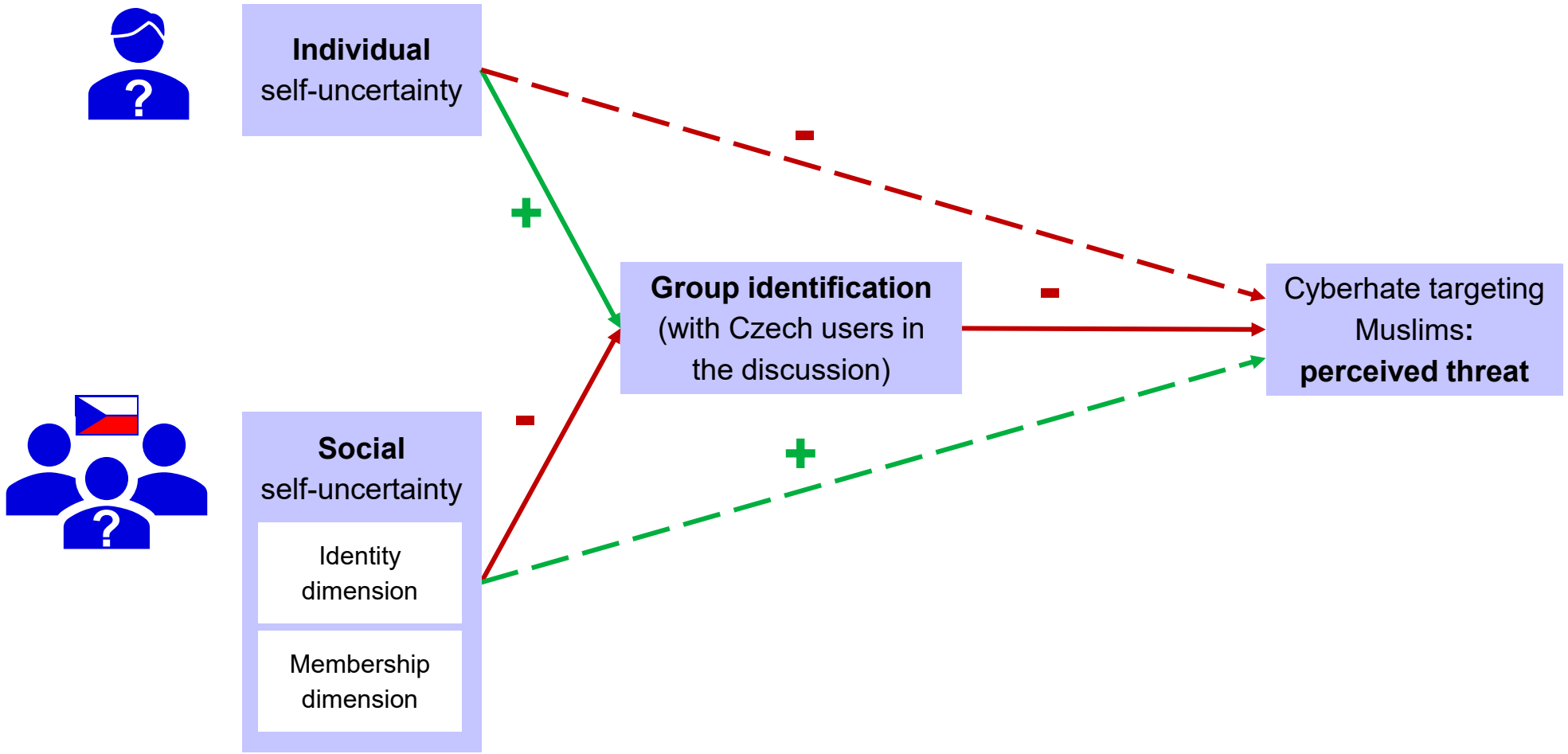
3 items, e.g., *I have a lot in common with the users commenting in the discussions*

Group identification with users in online news discussion (in-group, Czech people)

Cyberhate evaluation: perceived threat of witnessed cyberhate attacking Muslims (out-group)

3 items, e.g., *The posts are harmful to the affected people.*

THEORETICAL MODEL



+ MANIPULATION OF 2 CONTEXTUAL FACTORS

THEORETICAL MODEL

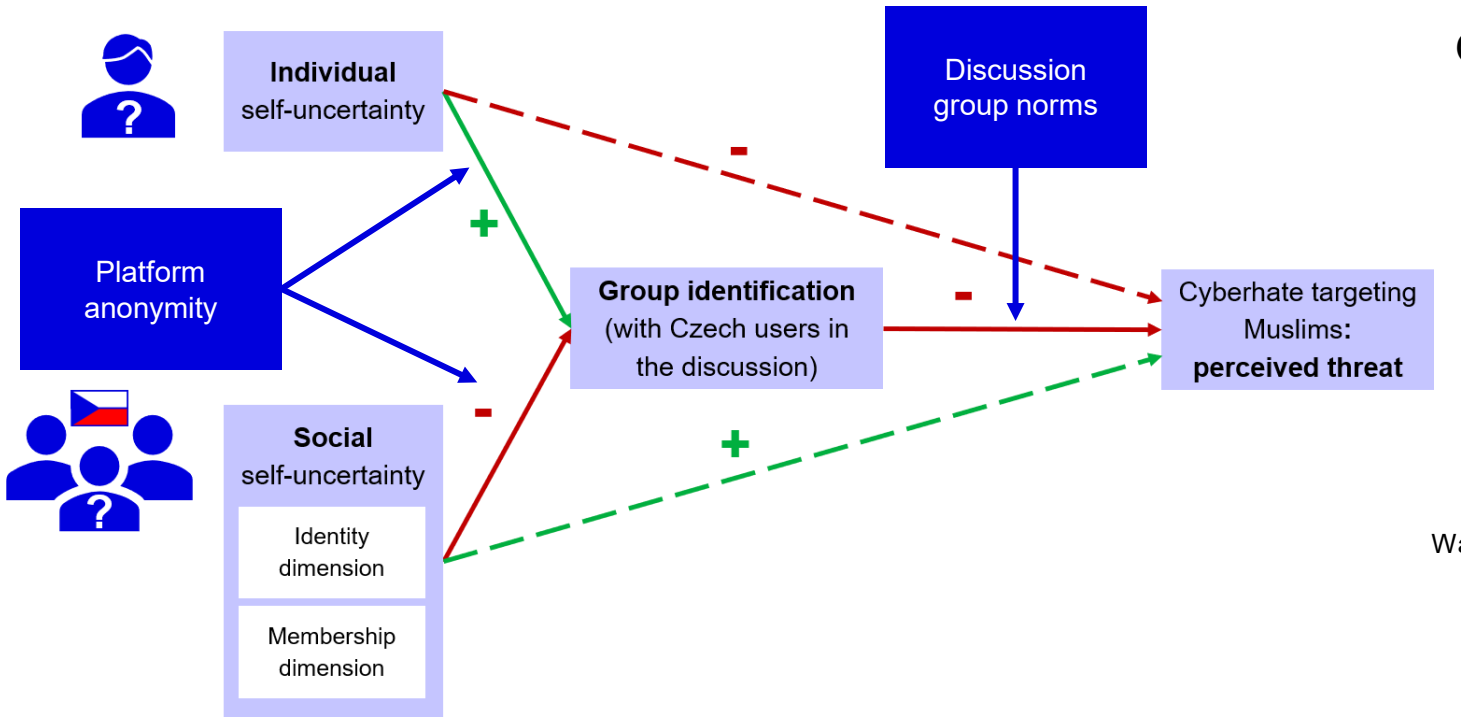
Anonymity in online interactions

More **ambiguity?**

Amplifies the **group aspect** of the situation and the salience of social identity, heightens **intergroup distinctions**

Can increase **group identification**

(SIDE model; Lea et al., 2001; Postmes et al., 2006; Spears, 2017)



Group norms in online discussions

Other users‘ comments **influence bystanders‘ evaluations**

Hostility in discussions **reinforces further hostility**

(Allison & Bussey, 2016; Álvarez-Benjumea & Winter, 2018; Cheng et al., 2017; Rösner & Krämer, 2016; Wang & Kim, 2024; Zapata et al., 2024)

METHODOLOGY

Online experiment 2×2

Manipulation of anonymity and group norms

Multiple-message design

3 news posts = a series of articles on the topic of Muslims in Czechia

Stimuli pre-testing

Cognitive interviews (N = 10)
Online pilot (N = 164)

Online survey (CAWI)

2025 Czechia

N = 935
49.3% women

18-38 yo
M_{age} = 29.0
SD = 5.9

Pre-registration

OSF

osf.io/tj7u9

Analysis

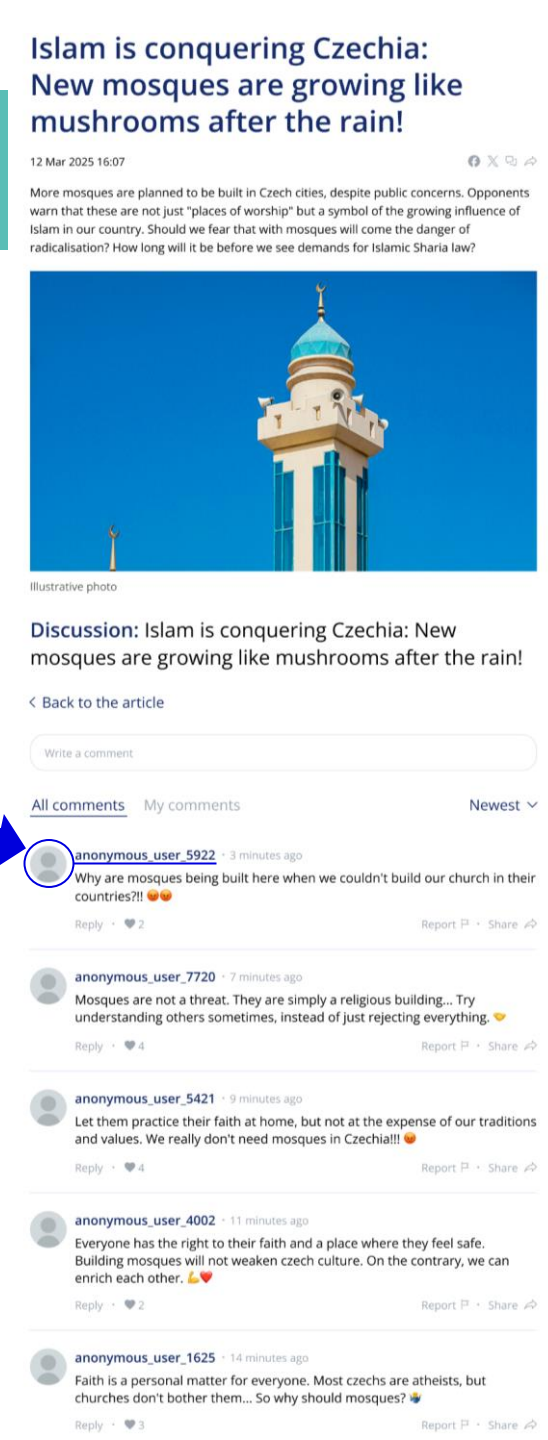
SEM, lavaan R package

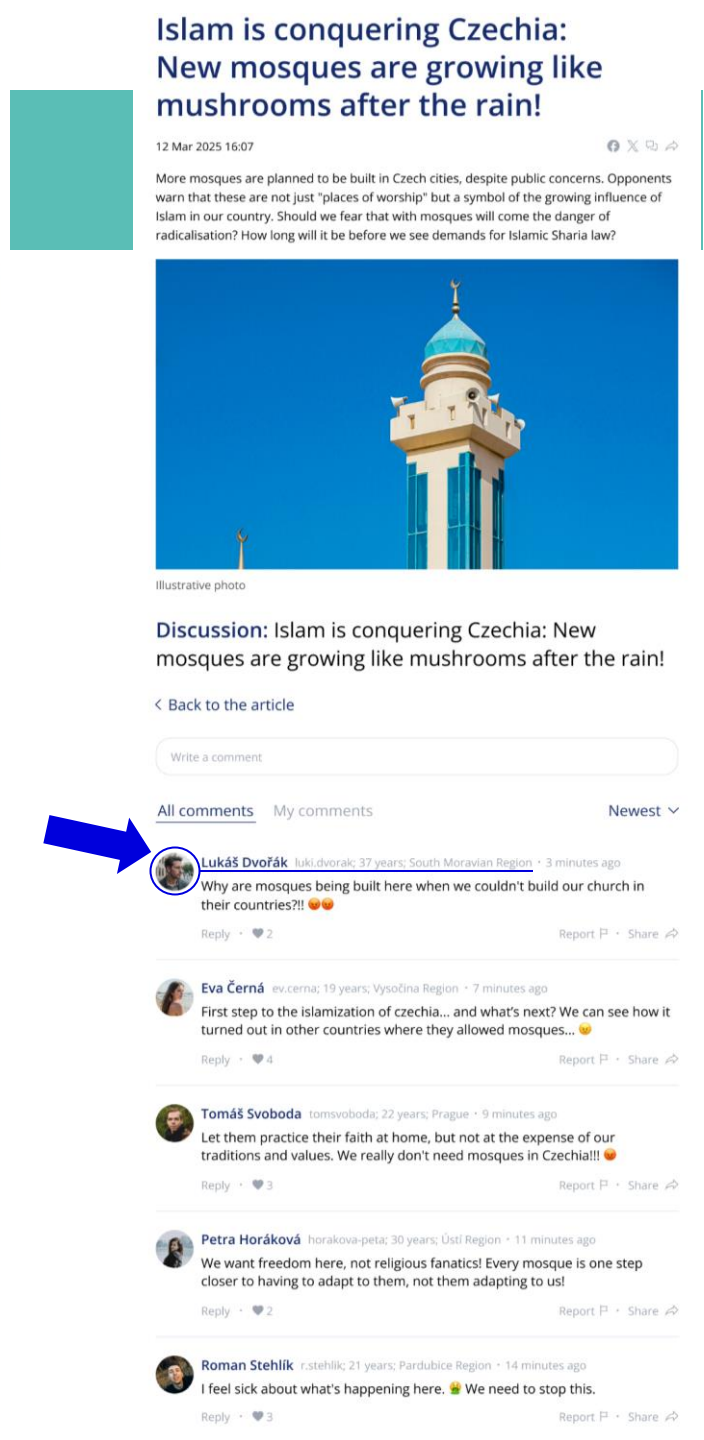
STIMULI

Online experiment 2×2

Manipulation of **platform anonymity** and group norms

- Anonymous: no photo, anonymous username
- Non-anonymous: photo, Czech name, personal nickname, age, region of Czechia



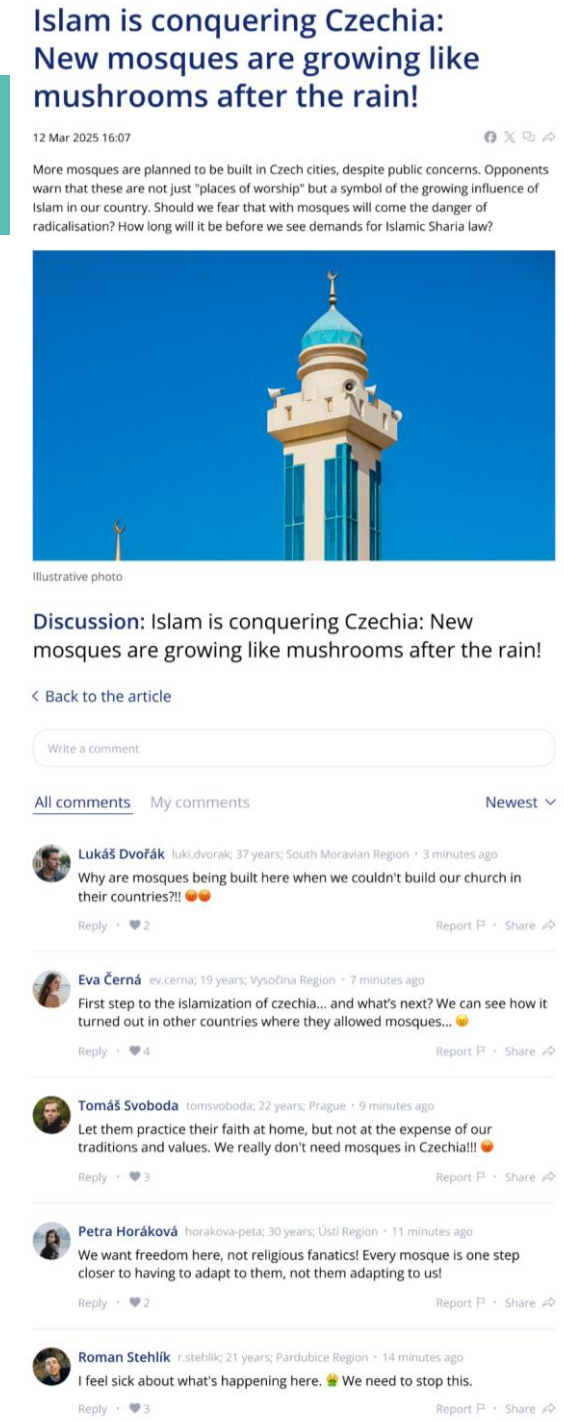


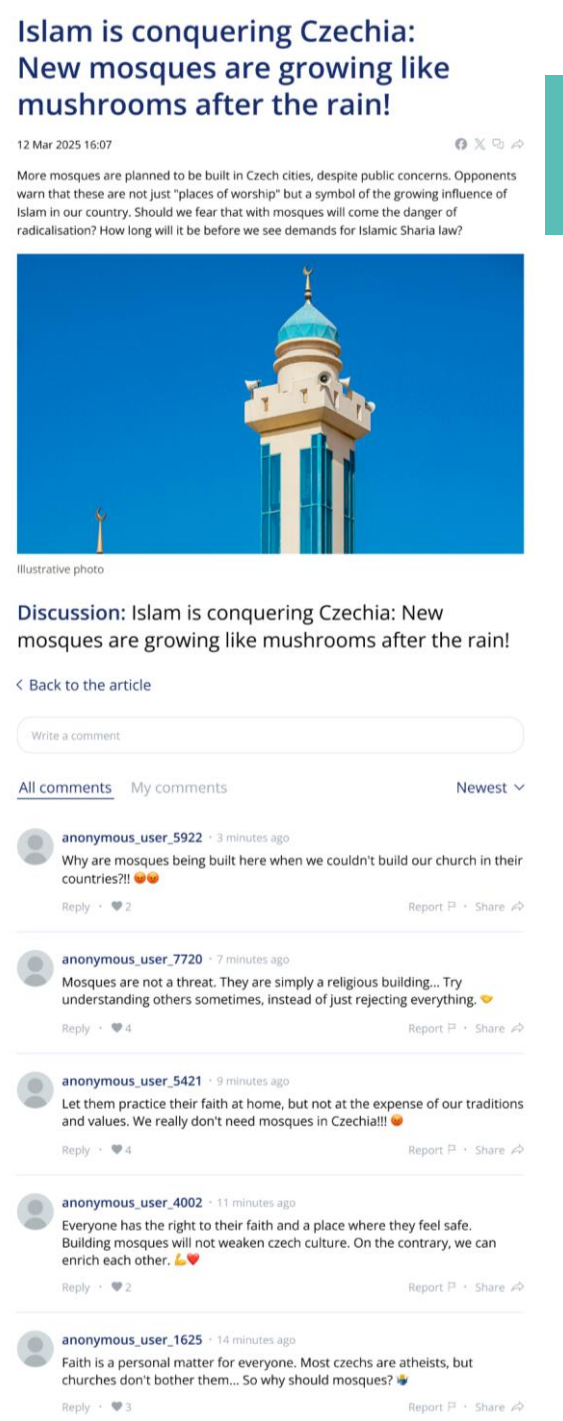
STIMULI

Online experiment 2×2

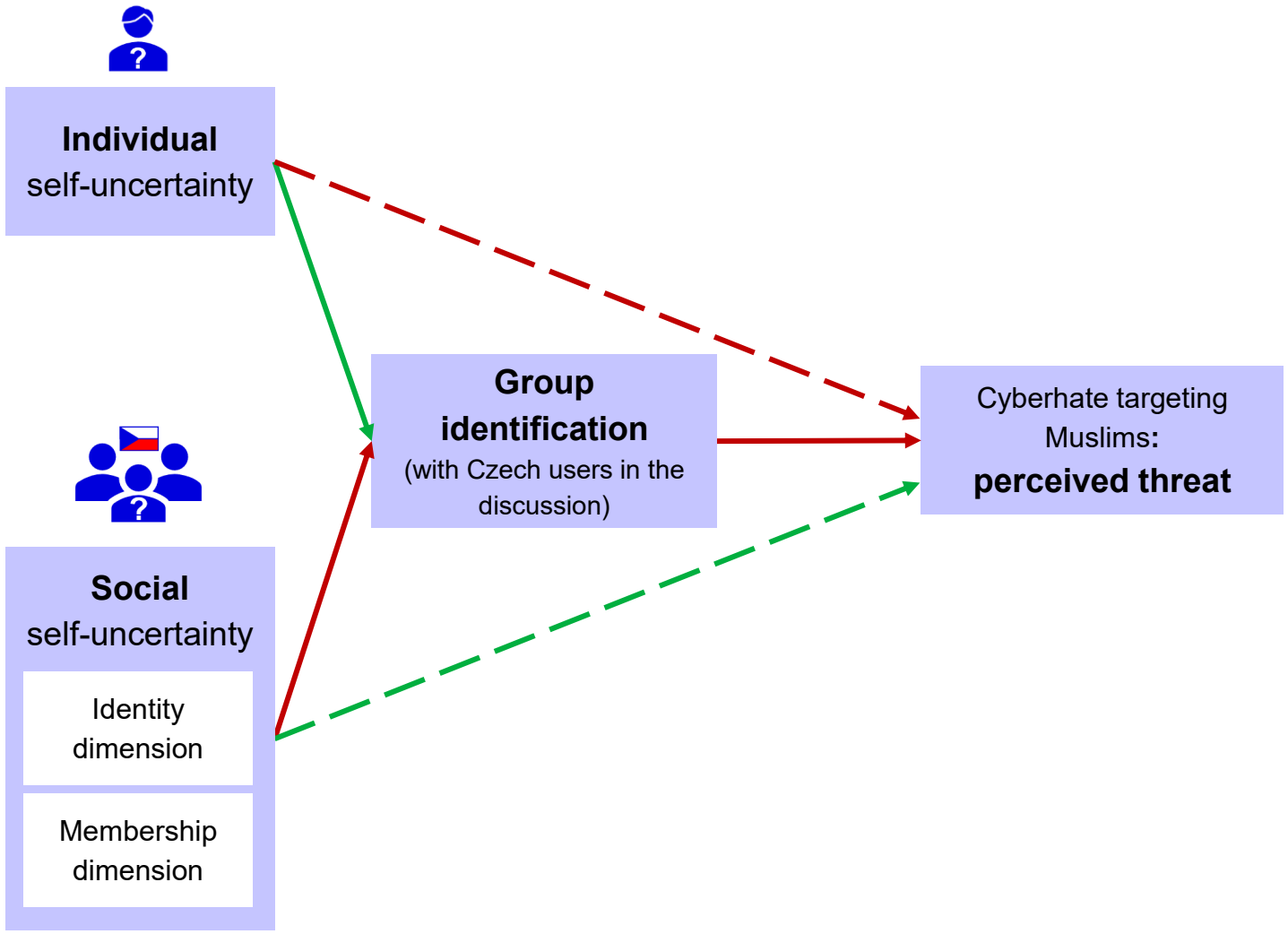
Manipulation of platform anonymity and **group norms**

- Aggressive group norm: 5 aggressive comments against Muslims
- No dominant group norm: mix of aggressive, supportive, and neutral comments

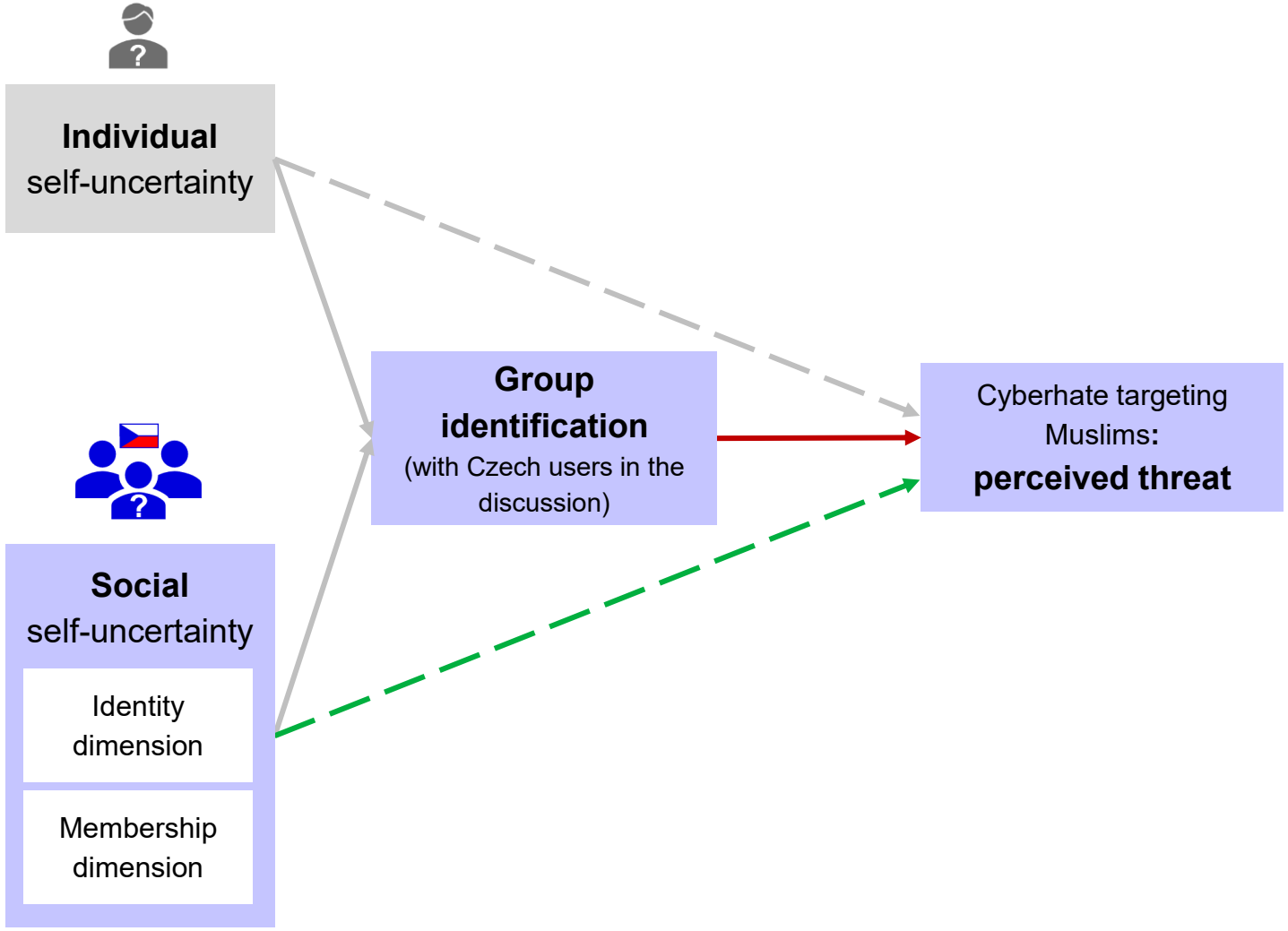




RESULTS AND DISCUSSION



RESULTS AND DISCUSSION



Individual S-U

Did not play a role in group identification nor in cyberhate evaluation (i.e., perceived cyberhate threat)

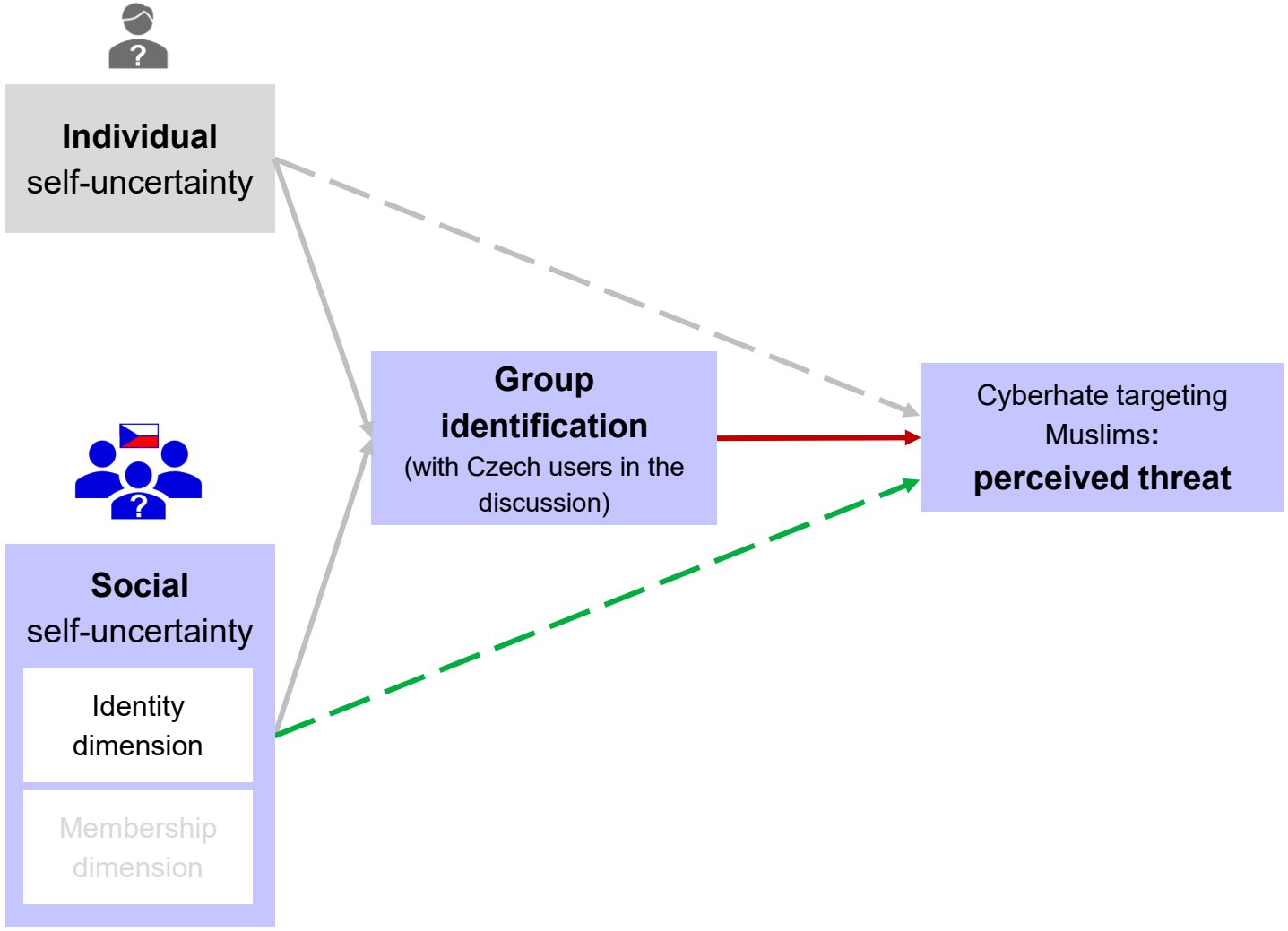
Why?

Ethnicity-based cyberhate primarily **heightens intergroup concerns** rather than self-focused uncertainties

Observing audience, not interacting with users + online discussion (loosely structured group of users)
… **lower personal relevance**

Future research: discussions with peers or within participants‘ own social groups

RESULTS AND DISCUSSION



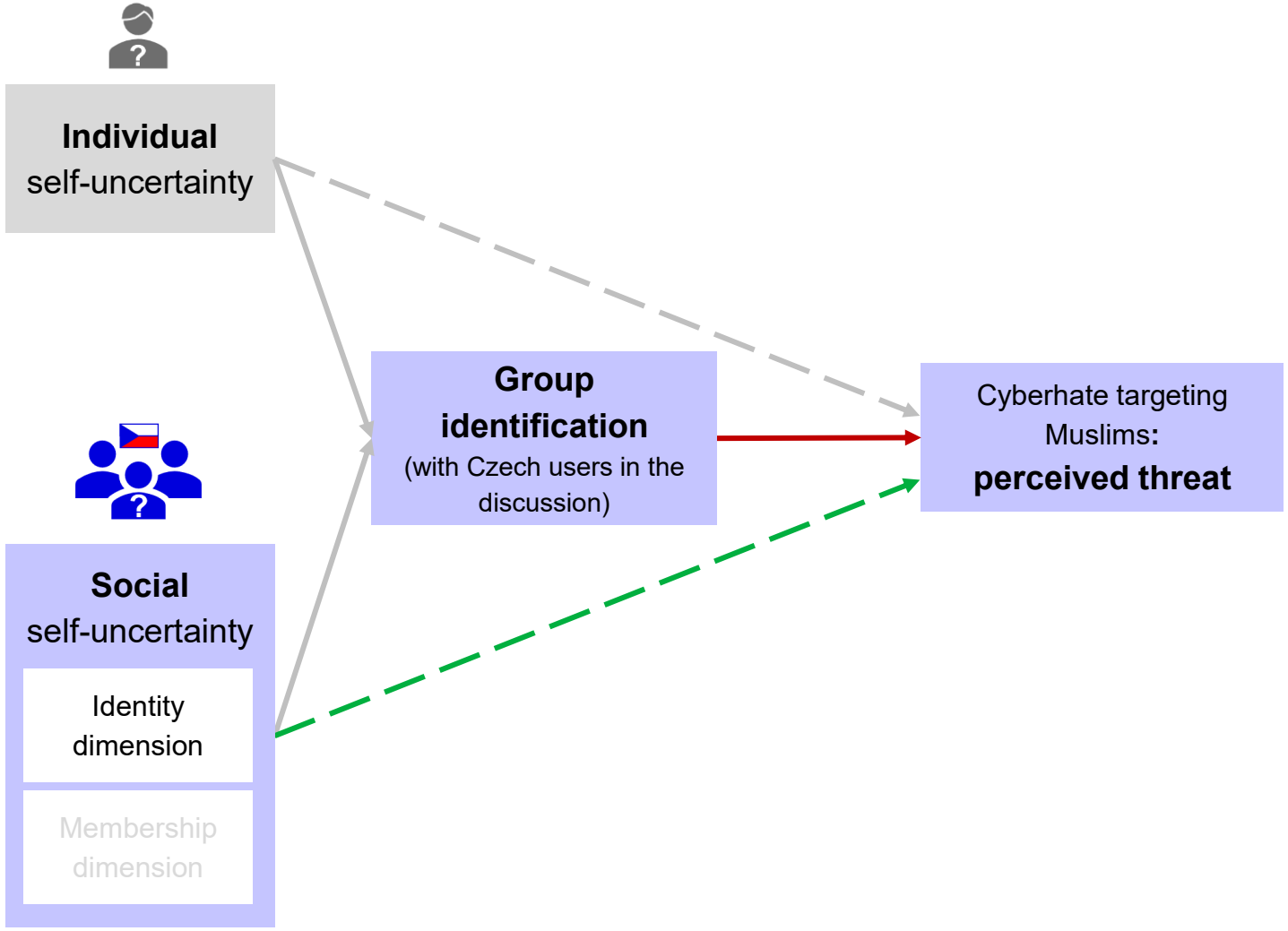
Social S-U

Membership dimension did not play a significant role

Identity dimension did not influence group identification, but **positively predicted** perceived cyberhate threat (i.e, people uncertain about the Czech identity perceived anti-Muslim cyberhate as more threatening and harmful)

Un/certainty about national group values and norms as more important when evaluating out-group hostility and cyberhate; it **increases sensitivity toward it**

RESULTS AND DISCUSSION

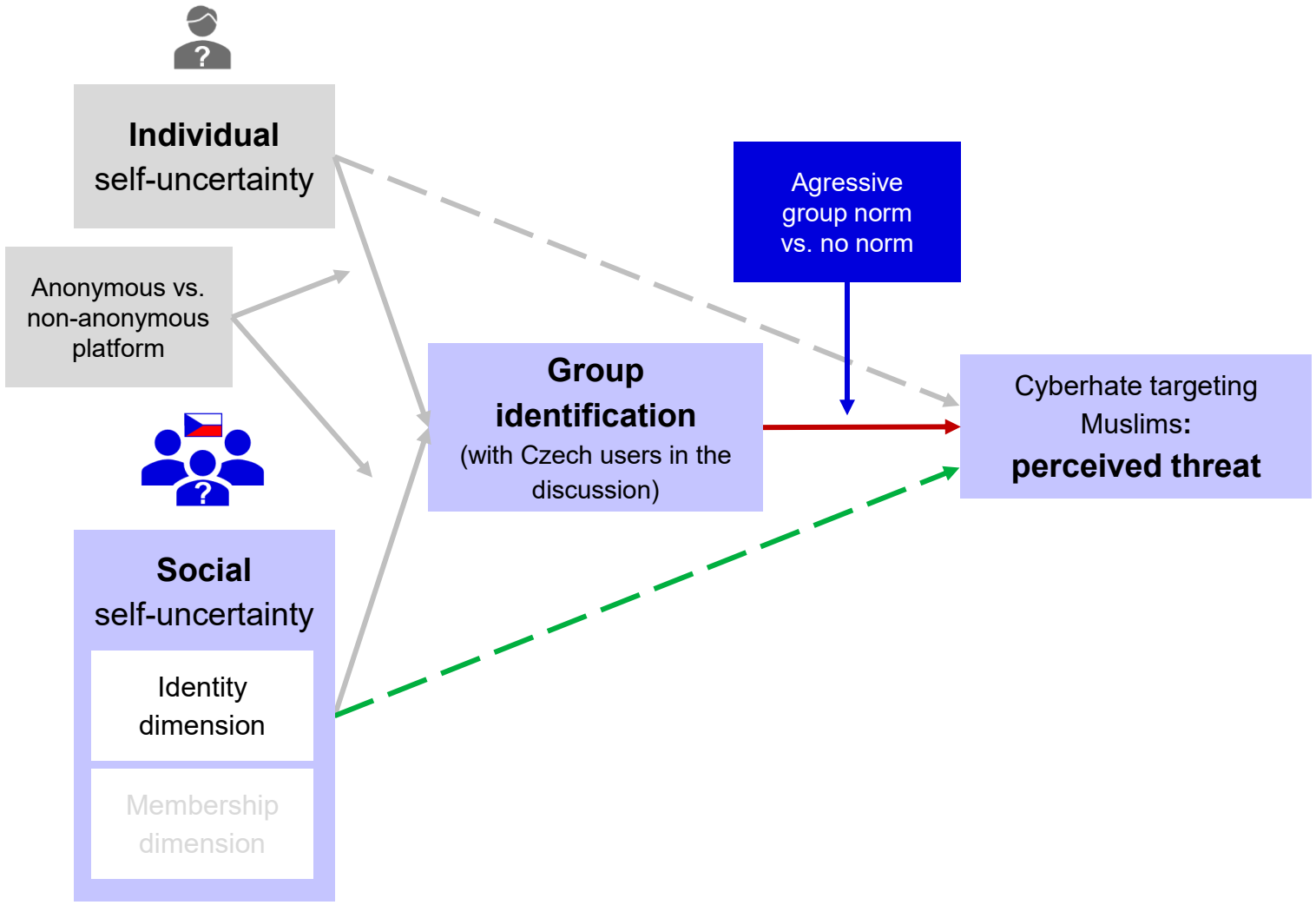


Group identification

Did not have a mediating role between S-U and cyberhate evaluation

It was **negatively associated** with perceived cyberhate threat (i.e., people who identified more strongly with other commenting users perceived anti-Muslim cyberhate as less threatening and harmful)

RESULTS AND DISCUSSION



Platform anonymity did not have a moderating role

Discussion group norms

Aggressive group norm **heightened the negative link** between group identification and perceived cyberhate threat

I.e., people who identified more strongly with other commenting users perceived anti-Muslim cyberhate as less threatening and harmful when they were exposed only to aggressive comments in the discussion

Aggressive group norms (i.e., unchallenged hate speech) can contribute to the **normalisation of biased and hateful discourse** and **reduce sensitivity** toward out-group hostility

MAIN CONCLUSIONS AND IMPLICATIONS

IMPLICATIONS FOR RESEARCH

Uncertainty-identity theory research

Distinct roles of S-U domains

A need to address uncertainty at the **social-identity level**, not only the individual-identity level

Research on the roles of national identity

A need to distinguish **identity and membership dimensions** (in relation to cyberhate and out-group hostility)

Ethnicity-based cyberhate – identity dimension of social S-U plays a vital role

MAIN CONCLUSIONS AND IMPLICATIONS

IMPLICATIONS FOR CYBERHATE PREVENTION AND INTERVENTIONS

Go beyond addressing individual outgroup attitudes (e.g., anti-Muslim prejudice; tolerance) and also consider **how people understand their group identity, values, and norms**

Identification with commenting users and aggressive group norms (vs mixed comments) in discussion can lead to a **reduced sensitivity toward cyberhate**

- Moderation efforts should **actively disrupt aggressive/biased group norms** in discussions

- Interventions should **encourage users to actively challenge hateful content** (e.g., education and training in effective counter-speech)

MUNI FSS

ECC 26 SHIFTING GROUNDS

Thank you for your attention

:)

Marie Jaron Bedrosova
marie.bedrosova@fss.muni.cz
Michal Muzik
Hana Machackova

MUNI Interdisciplinary Research Team on Internet and Society

The data described study is from the project „Perceived anonymity in computer-mediated communication (PACC)“ LL2304.