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# EXPLORING SURVEY INSTRUMENTS IN ONLINE HATE SPEECH RESEARCH: A COMPREHENSIVE SCOPING REVIEW

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### Introduction

Over the last decade, online hate speech (OHS) has emerged as a subject of active debate among a wide range of scholars as well as governmental and private entities. The notion of hate speech, otherwise rooted in legal frameworks, in the context of the European legislation system typically denotes extreme negative communication towards minorities and other protected groups, thereby being a specific exception to the freedom of speech (European Court for Human Rights, 2023). With the ever-evolving technological and social landscape, OHS is increasingly studied across various scientific fields, including computer science, criminology, communication, psychology. and educational research (see Waqas et al., 2019). With the advancements in machine learning technology, many scholars focused on researching new methods to identify OHS (Jahan & Oussalah, 2023; Poletto et al., 2021; Tontodimamma et al., 2021) and limit its spread (Masud et al., 2022; Qian et al., 2019). Additional impetus to the OHS debate was given in 2016, when global social media corporations and the European Commission signed a Code of Conduct to counter illegal OHS, binding IT companies to Suggested Citation (APA): Šubelj, Ž., Vehovar, V., Wisteria, A., Petrovčič, A., & Bartol, J. (2024, October). Exploring survey instruments in online hate speech research: A comprehensive scoping review. Paper presented at AoIR2024: The 25th Annual Conference of the Association of Internet Researchers.

speedily review and remove potential hateful content (European Commission, 2016). Furthermore, the passing of the Digital Services Act in EU countries made hate speech issues formally nested in a broader legal and institutional frame (European Commission, 2020).

Nevertheless, scholars have only recently begun to systematically explore how individuals perceive and experience OHS as well as what kind of strategies they use for countering it (Bliuc et al., 2018). While such insights can be obtained with various methods – including qualitative methods and data mining techniques – this study focuses on survey measures, widely used research means for understanding large-scale social phenomena. High-quality survey measurement can bring insights into individuals' OHS perceptions and experiences, which is of great importance for the design and implementation of strategies aimed at informing the public about OHS and restraining its expansion. Importantly, educational and informational initiatives have proved effective in developing anti-hate critical thinking and fighting OHS (Müller & Lopez-Sanchez, 2021; Woo & Cho, 2023).

A scoping review of existing survey measures assessing individuals' perceptions and experiences with OHS will provide several original insights with practical implications. First, no such review has yet been conducted. Multiple studies reviewing prior scholarly literature looked at existing definitions of hate speech, with a focus on different online environments (Ermida, 2023; Hietanen & Eddebo, 2023; Kansok-Dusche et al., 2023; Papcunová et al., 2023; Sellars, 2016). However, most reviews were narrative or otherwise limited in scope. In addition, scholars conducting reviews of existing academic research on OHS emphasized that certain groups, such as OHS perpetrators, have not been given enough attention (Tontodimamma et al., 2021) and advocated for a greater focus on quantitative research methods (Bliuc et al., 2018; Castaño-Pulgarín et al., 2021; Kearns et al., 2023). Second, the current assessment approaches and collected data are fragmented (Kansok-Dusche et al., 2023). Providing an overview of existing survey measures can lead to the informed and expedient development of comprehensive and reliable instruments, that could be used in the future to gather valid and comparable data. Additionally, mapping the researched topics within the OHS field as well as population groups will help identify gaps in the literature and provide directions for future scholarly endeavours.

Therefore, we systematically collected and assessed existing academic papers to answer the following research questions (RQs):

RQ1: Which population groups are studied using OHS survey measures?

RQ2: Which OHS topics are covered by survey measures?

RQ3: Which kind of survey measures are used to assess OHS?

### **Methods and Results**

A systematic approach has been undertaken to map existing academic evidence, following the PRISMA-ScR guidelines (Tricco et al., 2018). The search was executed

using the Web of Science and Scopus databases, alongside the bibliographic harvester of the University of Ljubljana (DiKUL).

A total of 725 articles were initially identified for review. After removing duplicates, 370 articles were screened by two independent reviewers based on their titles and abstracts. A total of 65 records (comprising 67 different studies), which included 309 survey measures related to OHS, were selected for full-text review. During this phase, data were extracted, including demographic information, survey admission type, and key characteristics of each survey measure. In addition, an inductive thematic analysis was conducted to categorize each survey measure based on the OHS aspect it addresses.

Concerning RQ1, preliminary findings indicate that the highest percentage of OHS survey-based studies focused on student and young adult populations (34%). Nearly half of the studies employed non-probability sampling methods. 70% disseminated the questionnaire online. Over 60% of the studies investigated OHS in general Internet contexts, followed by 36% focused on social media. Regarding minorities, most survey measures addressed OHS in general, followed by 26% focused on discrimination related to nationality, ethnicity, or migrant status.

In relation to RQ2, the 309 identified survey measures addressed different aspects of OHS. Through inductive thematic analysis, each question was categorized into one of 11 topics. The largest proportion of questions (21%) addressed individuals' reactions and coping strategies when faced with OHS. Over 18% of the questions examined perceptions of hate speech, while 16% focused on exposure to OHS and 13% on victimization. Topics of self-perpetration, others' perpetration, and combating hate speech each accounted for 5–10% of the questions. Fewer than 5% of the questions explored each of the following topics: consequences of OHS, free speech vs hate speech, legislation, and definitions of hate speech.

With respect to RQ3, 83% of survey measures were close-ended questions, and 4% were close-ended questions with an open-ended option "Other". Half of the identified measures were ordinal scales (Likert-type questions (n=73) or Likert scales (n=71)), followed by 31% of questions with categorical response options (single- (n=73) or multiple-choice questions (n=22)) and three open-ended questions. However, no scale was consistently employed in a standardized way, resulting in fragmentation in question typology. Nevertheless, for each of the 11 topics, the most common and typical survey questions will be identified in the next phase.

## Conclusion

Preliminary findings reveal a disproportionate focus on students and young adults, leaving older population groups under-researched, even though older adults express high levels of concerns regarding OHS (Pacheco, 2024) and online ageism increased during the pandemic (Levy et al., 2022). Additionally, the predominant use of non-

representative sampling methods in the reviewed studies raises concerns about the generalizability of the findings. Broad research scopes are predominant; in order to better understand real-world experiences, scholars should aim for more detailed research scopes, including studying OHS in specific online contexts and within specific groups. In terms of topics, existing survey measures mostly cover the topics of direct exposure/perpetration of OHS, neglecting the whole hate speech ecosystem; what comes before and after the dissemination of hate speech online. In terms of question types, ordinal scales are most common, but the lack of standardized scales results in fragmented findings that are difficult to compare. Future research should prioritize examining general and older populations and focus on their understanding of hate speech and how it can be mitigated. Standardized survey measures for OHS should be developed and systematically evaluated to improve the reliability and comparability of future research findings.

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