

The @ntidote project's aim

The @ntidote project stems from the finding that current adolescents (<18 years old) and emerging adults (18-25 years old) in Belgium are regularly confronted with cyberviolence, particularly online hate speech (OHS) and non-consensual dissemination of intimate images (NCII). Previous research in Belgium and abroad signalled that the omnipresence of social media and communication apps in the lives of adolescents and emerging adults resulted in them being regularly exposed to these harmful online behaviours. Therefore, the @ntidote project set out five objectives to better understand OHS and NCII within the Belgian context.

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Understand how adolescents and young adults experience OHS and NCII;

Clarify how OHS and NCII are legally embedded and how cases of OHS and NCII are prosecuted and judged

Collect data on prevalence, appreciation and coping of OHS and NCII among Belgian adolescents and emerging adults, including their understanding of (un-)harmful content;

Map how online service providers (OSPs) address and assess OHS and NCII online;

Explore coping mechanisms and support needs of victims from the perspective of victims themselves as well as support organisations.

1. QUALITATIVE UNDERSTANDING OF OHS AND NCII

OHS and NCII are complex phenomena. Therefore, the research team interviewed 24 adolescents and emerging adults to understand how this age group experiences OHS and NCII. A remarkable finding is that several participants identified with several roles (e.g., identifying both as a victim and a bystander of OHS and/or NCII).

The inductive analysis used showed that there is no common understanding among adolescents and emerging adults on what constitutes OHS. In particular, the team observed a different grasp of what constitutes OHS among the participants based on what they considered the target group of OHS: some of them defined OHS as aggressive content, i.e. content characterized by aggressive expression towards an individual or a representative of a group, whilst others defined OHS as hateful content that aims to promote hate towards a representative of a group or an entire group.

> For NCII, the existing or previous relationship between the victim and perpetrator as well as the presence or absence of consent proved important to participants in assessing one's responsibility. Additionally, for both NCII and OHS certain situational factors should also be taken into account: the number of bystanders and whether the messages were sent privately or shared in public (e.g., discussion groups).

Linked to OHS and NCII, participants identified several underlying reasons for both behaviours, including generic reasons such as revenge, gaining or maintaining popularity and social status, as well as motives specific to the age group of adolescents and young adults, such as immaturity and lower levels of emotional regulation.

This study concluded that research should take into account the voice of adolescents and emerging adults to capture the complexity of these phenomena. Understanding OHS and NCII further requires a multidisciplinary approach with due account of the presence of development specificities related to these age groups.

2. MAPPING OF THE REGULATORY FRAMEWORK ON OHS AND NCII

The research revealed that there is no general framework addressing cyberviolence at the national, European or international level, but only legal frameworks concerning specific forms of cyberviolence, including OHS and NCII. As to OHS, the research showed that there is a developed national, European and international framework on hate speech that is mostly technology-neutral, meaning that it applies to both online (OHS) as offline hate speech. The research show that, at the legal level, there is a particular priority for racism, xenophobia, and gender-based hate speech in the international and supranational legal framework, but less attention for norms concerning hate speech on other grounds. The legal framework of NCII is clearly still under construction, with on the one hand a developed framework at the national level, and on the other, a lack of international and European norms criminalising NCII. However, NCII among minors is already addressed in international and European rules as child sexual abuse material (CSAM) and initiatives are underway at the European level to criminalise NCII.

Whereas the legal analysis demonstrates that from a normative side law enforcement authorities and courts are well equipped to address complaints and cases of OHS and NCII, the analysis of actual criminal complaints and judgments shows that (i) there were only a limited number of complaints compared to the prevalences of OHS and NCII as suggested by the literature and the survey and vignette study, and (ii) that the vast majority of cases is discontinued on a wide variety of grounds. Only a handful of cases will end up in court.

3. QUANTITATIVE ANALYSIS: SURVEY AND VIGNETTE STUDY ON OHS ND NCII

A survey among 2819 adolescents and adolescents and emerging adults showed that approximately one out of three of them ever has been a victim of OHS or NCII. More than one out of five reports having sent what they consider OHS and almost one out of three has ever been perpetrator of NCII. This study also identified the role of gender, sexual orientation, ethnicity, and age in OHS & NCII victimisation and perpetration.

In general, the outcomes showed that age plays a significant role in both OHS and NCII perpetration and victimisation. Emerging adults were more victimised and perpetrated in comparison to adolescents. Moreover, LGBTQIA+ members and Belgians with a foreign background (i.e., mother or father born abroad) were more victimised. Surprisingly, with respect to NCII victimisation, the outcomes did not show significant differences between men and women. This is in contrast with the commonly accepted idea that women become more often victim of NCII. In conclusion, prevention strategies should include more educational initiatives that target vulnerable groups such as members of the LGBTQIA+ community or Belgians with a foreign background.



In addition to the survey, a vignette study, in which specific situations of OHS and NCII were described, was conducted. Results showed that adolescents and emerging adults consider both OHS and NCII as particularly harmful behaviour. The level of harmfulness decreases, from the perspective of adolescents and young adults, when the NCII victim is heterosexual and the OHS victim is male, especially among participants that are non-Belgians (who are born abroad) and Belgians with a foreign background (born in Belgium but mother or father were born abroad). This might underpin the important role of gender stereotypes, cultural values and personal norms in assessing the harmfulness of NCII and OHS. As to the sanctioning of these behaviours, almost one out of two is in favour of alternatives to prison sanctions and fines (e.g., courses on online violence or mediation between the victim and the perpetrator).

The vignettes also allowed to test the Prototype Willingness Model (PWM). For both behaviours, OHS and NCII, prototype favourability (i.e., having a positive attitude towards a person who perpetrates the behaviour), and prototype similarity (i.e., thinking you are like the perpetrator) are significantly related to willingness to act and as such result in a higher risk of engaging in these behaviours. Subjective norms are also in both behaviours significantly related to intention, i.e., the more significant others (e.g., peers) approve OHS or NCII, the bigger the intention to engage in these behaviours. Moreover, the results showed also that OHS is a behaviour driven by the rational pathway (i.e., rationally weighing the advantages and disadvantages) whilst NCII is driven by the social reaction pathway (i.e., taking into consideration the reaction of the environment). As such, creating more awareness about the harmfulness of NCII among adolescents and emerging adults could result in a lower risk of engaging in this behaviour.









4. SELF-REGULATORY FRAMEWORK AND UNDERSTANDING OF CYBERVIOLENCE BY INDUSTRY

The team's research on online service providers' (OSPs) self-regulatory framework and understanding of cyberviolence shows that OSPs neither use nor define the term cyberviolence. They prefer to distinguish between various categories of impermissible online content and adopt separate policies depending on the type of content for which distinct permissibility criteria are defined. Those policies are a living document: they evolve in line with new behaviours observed on the platforms. But usually, they do not take into consideration the legal framework of the user's location on the definition of impermissible content. Moreover, those policy rules are written in an open wording, leaving considerable room for interpretation, in contrast to the detailed internal rules to be applied by moderators. OSPs therefore enjoy a wide margin of discretion when defining and moderating online content. This powerful role played by OSPs is further enhanced by the confidentiality that reigns in the content moderation realm. This results from an analysis of OSPs' policy rules and a survey conducted among 13 moderators. Consequently, users may not always understand what is (im)permissible content when they use an online platform, or why and how a moderation decision has been taken in relation to the content they

Even if there is little transparency with respect to the online content moderation process, research confirms that technical (often AI) tools and human moderation nowadays go hand in hand to combat cyberviolence. Technical tools seem to be used primarily to prevent (i.e., proactively) or detect (i.e., reactively) impermissible content, while human moderators rarely intervene proactively. Instead, they react to user notifications or to content flagged by AI tools. Moreover, more recently established online platforms turn more often to (human) non-professional content moderators.

The Digital Services Act (DSA) of the EU will considerably impact the role of service providers in combating illegal online content, so the research shows. It imposes a whole range of new due diligence obligations on OSPs as well as an obligation to cooperate with law enforcement authorities. These obligations vary, depending on the service and size of the provider, but will lead to more transparency on how providers deal with impermissible content.

5. COPING MECHANISMS & VICTIM SUPPORT

The survey among 2819 adolescents and emerging adults also focused on emotions and coping mechanisms of NCII and OHS victims. The results reveal that both behaviours have a substantial impact on the mental health of adolescents and emerging adults. Among the respondents, the most common feelings after victimisation of OHS are feeling angry or furious (>40%). Furthermore, one third of the victims of OHS feels nervous, ashamed, helpless, and irritated whilst one out of five victims feels guilty and lonely. For NCII, approximately one out of two reported feelings of nervousness, helplessness, anger, guilt, and irritation. More than 40% of NCII victims feel anxious, ashamed, lonely, or furious. These results underpin the psychological impact these behaviours may have on victims.

Although OHS and NCII have a high emotional impact on victims, the results show that adolescents and emerging adults only scarcely reach out for professional help, including police or victim support organisations. In turn, victim support organisations indicate that adolescents and emerging adults will not easily reach out to them.



Rather, they will discuss their experiences with their peers and to a lesser extent with their parents and teachers. However, there is a vast network of organisations in Belgium that provide support for victims of cyberviolence, either based on the behaviour (OHS or NCII) or on characteristics of the victims (gender or sexual orientation). The interviews with several Belgian support organisations (e.g., Child Focus, Unia, Institute for the Equality of Women and Men) revealed that there is a strong cooperation between the organisations. However, due to the lack of a formal coordination and structure as well as due to financial constraints to address cyberviolence, it often happens on a project-based ground, resulting in an overlap of energy and resources. All organisations highlighted the importance of mainstreaming information on boundaries online in formal education (primary and secondary school as well as high schools and universities).

To improve the support system that victims of OHS and NCII need, four important steps should be taken: : (1) ensuring that organisations have sufficient budget and capacity to live up to the requirements of the DSA with regard to acting as trusted flaggers, i.e., hotlines with a prioritised connection to OSPs; (2) improving the knowledge of adolescents and emerging adults, relatives and others in their network on the potential of support organisations in coping with cyberviolence; (3) removing potential hurdles by low-threshold access to support organisations; (4) invest in wider communication to the general public, particularly to young people in school and parents, on coping and support.





6. CONCLUSIONS

Based on a holistic analysis of the @ntidote results, the research team decided on **ten main findings** that can further shape the understanding of OHS and NCII as well as the future approach to these behaviours:

- There is no common understanding of what constitutes cyberviolence, including what constitutes OHS and NCII. This complicates research as well as prevention.
- Experiences with OHS and NCII are highly prevalent among adolescents and young adults. In most cases they are bystanders, but there is also a significant group that is victimised.
- Contrary to common perception, there is a wide variety of motives associated with perpetration of OHS and NCII.
- Relevant criteria for victimisation and perpetration for both OHS and NCII are age and ethnicity. Sexual orientation is a significant criterion for victimisation of OHS. Gender was found to be a relevant criterion for perpetration of NCII.
- Notwithstanding a developed legal framework in Belgium that criminalises (forms of) OHS and NCII, the vast majority of criminal complaints are discontinued. The lack of capacity and prioritisation are the most important reasons for the high level of discontinued cases.
- Specifically for OHS, the procedural hurdle for prosecuting cases before the Court of Assize results in the discontinuation of many cases and is considered problematic, both from the perspective of the European and international legal framework as from the perspective of support organisations.
- Adolescents and young adults are significantly in favour of alternatives to classic criminal punishments when addressing criminal complaints on OHS and NCII (e.g., following a course on cyberviolence).
- A limited number of major OSPs are predominantly used by adolescents and young adults. Some OSPs are prevalent in the criminal reports, interviews, and prevalence study in relation to occurrence of OHS and NCII.
- Whereas OSPs are considered vital in tackling OHS and NCII, analysis shows that there is a wide variety among the OSPs in the delineation of permissible and non-permissible content and their procedures of moderation and removal. Support organisations highlight that the cooperation with OSPs for the removal of OHS or NCII is incoherent.
- Victims of OHS and NCII experience substantial harm and negative emotions, but generally do not reach out to professionals, including support organisations or police. They will mostly turn to peers for support.

7. Recommendations

Based on the research outcomes, the @ntidote team summed up several recommendations that are further categorised under **five themes**:

1. Enforcement

- Streamline the ground of prosecution and discontinuation of OHS and NCII. For NCII specifically, guidelines should be provided to the prosecution on the delineation between NCII and CSAM in order to improve best fit qualification and prosecution;
- Invest in the capacity of specialised police to investigate and take action against OHS and NCII as well as clarify the categorisation of OHS and NCII in databases of the police, the public prosecutor's office and courts;
- Develop and apply alternatives to classic punishments for OHS and NCII, (e.g., a compulsory course specific for perpetrators of OHS and NCII within the framework of probation or mediation), especially in regards with the variety of perceived motives for perpretration;
- Closely monitor and enforce the implementation of the DSA, both at the EU and at the national level, especially with regard to the new due diligence and cooperation obligations of OSPs.

2. Legal framework

- Reopen a national dialogue to reconsider which forms of hate speech are to be criminalised as well as alternatives to criminalisation to tackle OHS within the boundaries of the international and European legal framework (e.g., mediation and probation trajectories aiming for restoration and behavioural change);
- Support the development at the EU level of what constitutes unlawful content, in particular with regard to OHS and NCII, in order to create a common denominator for removal applicable to all OSPs active in the EU. With respect to OHS, special attention should be paid to human rights such as the freedom of expression and information, and press freedom. In particular for NCII, account must be taken of the principle of equality, the prohibition of gender-based violence, and the importance of sexual integrity, whereby consent should be the defining element for the delineation of unlawful dissemination of intimate images.

RECOMMENDED



3. Media Literacy

- Improve among the common public but more specifically among adolescents and emerging adults the understanding of what constitutes OHS and NCII, why these behaviours are harmful and what is considered illegal in the Belgian Criminal Code.
- Invest in developing and mainstreaming societal tolerance principles as well as improving attitudes towards minority groups. To achieve this, educational initiatives should be developed to improve the understanding of what constitutes OHS and NCII, to better navigate online boundaries and appreciate the impact of these behaviours on others.
- Enhance closer collaboration between educational actors and support organisations that are specialised in working with minority groups.

4. Research

- Research further in-depth the role of personal characteristics of adolescents and emerging adults by conducting research that includes minorities only (e.g. through collaboration with organisations that are specialised in working with minority groups, which would allow to get access to bigger samples);
- Conduct further research on proactive and reactive content moderation, especially with respect to trusted flaggers, the follow-up given to user notifications, the remedies available to users, and the treatment of impermissible content. In particular, invest in research to better understand what is relevant in defining permissibility as well as the role of consent, age, ethnicity, and other personal characteristics in the moderation process.
- Develop a human rights framework delineating NCII in the light of artificial forms of intimate images (such as denuding technology), in particular in the light of the freedom of expression and information, and press freedom.
- Integrate the voice of adolescents and emerging adults when researching the understanding of these phenomena (e.g., when developing a vocabulary) and developing solutions, while taking into account the diversity of the sample and the methods of communication and regulation.

5. Victim Support

- Invest in the accessibility and availability of psychological support for victims (e.g. by developing a formal collaboration among support organisations and ensuring a structural budget for these organisations).
- Reduce the barriers in contacting support organisations and increase the knowledge on the current support organisations among adolescents and emerging adults, their networks (e.g., teachers, parents, peers), and the media (e.g., by including contact details when publishing related articles).
- Develop in cooperation with support organisations technology that informs and supports victims, their network and bystanders based on privacy and security.
- Invest in the acquirement of the status of trusted flagger of specialised victim support organisations under the DSA as well as incentivise the development of technology and cooperation between OSPs, authorities and support organisations to prevent, find, and remove unlawful content.

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