Web Measurement Study: Targeting Children

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Carnegie Mellon University, Fall 2024

1 Introduction

The rapid adoption of digital technologies has resulted in an unprecedented level of internet penetration across all demographic segments. This digital integration spans the entire socioeconomic spectrum, encompassing diverse populations from the elderly to the youth, and from the most affluent to the economically disadvantaged. Within this digitally connected landscape, children emerge as a particularly vulnerable demographic, facing heightened exposure to online risks and security challenges. A survey from Pew Research Center states that around a third of parents told their children have been using some sort of a device be it a TV, tablet, smartphone, or desktop and a fifth of them own their smartphones [3]. A recent survey by the Census Bureau of the US states that tablet ownership in families with children has increased by 22% from 2021, and children spend around 4-5 hours a day in front of a screened device. Furthermore, the survey also found that tablet ownership is significantly higher among families having children irrespective of income bracket and race [4]. This indicates that a vast majority of the younger population is online for a considerable amount of time and it is our responsibility to make their online environment safe and secure.

While bringing the children online has significantly helped them in learning topics such as mathematics [5], especially for children coming from low-income families [6], exposing them to online advertisements does come up with many concerning issues such as behavioral influence. For instance, children exposed to junk food advertisements are more likely to end up obese [7]. Moreover, research [8,9] suggests that children often lack the cognitive ability to understand online privacy or even discern between ads and a specific website content especially on websites showing native ads [10].

Native ads come under a broader category of online advertising called targeted advertising where the website with an ad slot requests for an ad from the supply side platform. The ad exchange is the intermediary which requests bids from various demand side platforms. The ad exchange then picks the highest bid and sends it to the supply side platform which then displays the ad [15].

While there are regulations like COPPA [11] which requires websites to collect parental notice and choice for data collection from children, a study by Egleman [12] shows that FTC has brought only 34 enforcement cases in its 21 of being in action while there are visibly many

violations of the regulation. COPPA 2.0 [13] which prohibits targeted advertising to children and the Kids Online Safety act KOSA [14] are some regulations that are promising but still haven't been passed.

Ideally, user based targeted advertising should refrain from displaying inappropriate ads which includes, but not limited to, ad categories such as NSFW content, ads related to abortion, gambling, politically motivated campaigns, alcohol, medical marijuana etc. These categories are widely understood to include topics that could be harmful, inappropriate, or sensitive, making their exclusion from targeted advertising toward vulnerable groups an accepted standard in responsible advertising practices. These ads can be categorized into 4 major categories namely weight loss ads, mental health ads, dating services ads, and ads that contain "clickbait racy content" as explored in the paper by Moti et al [16]. We intend to answer the following research questions in this study:

> **RQ1**: Are third party ad networks placing inappropriate ads for children profiles?
> **RQ2**: Are we able to see children inappropriate ads in children websites when viewed under an adult's profile.
> **RQ3**: Are children oriented websites COPPA compliant?

The rest of the report presents the structure and methodology of our investigation into advertising networks' content delivery patterns. Following a comprehensive literature review that revealed a notable research gap in understanding the relationship between user profiles and served advertisements, we did experiments utilizing four distinct Chrome browser profiles representing adult female, adult male, female child, and male child demographics. These profiles underwent a week-long conditioning period through targeted browsing activities. Subsequently, we visited 177 children-oriented websites identified by Moti et al. [16], examining each for advertisement presence, content appropriateness, tracker deployment, and COPPA compliance by analysing their privacy policy. Our findings revealed concerning patterns, including the presence of age-inappropriate advertisements containing suggestive dialogue that implies sexual content on children-targeted websites. The tracker analysis demonstrated a predominant presence of Google-owned tracking mechanisms, while only 33% of advertisement-displaying websites targeting children demonstrated full COPPA compliance.

2 Related Work

As children increasingly access digital platforms, understanding how websites tailor advertisements for young users and their compliance with regulatory frameworks becomes crucial. The current body of research highlights pervasive tracking practices, weaknesses in regulatory compliance, and children's limited ability to discern advertisements. This literature review synthesizes key findings from eight studies, examining their implications for our project, which investigates ad targeting differences across user profiles (adult male, adult female, child male, and child female).

The pervasive nature of tracking on children's websites emerges as a central theme across multiple studies. Moti et al.'s [16] investigation using custom web crawlers revealed sophisticated tracking mechanisms specifically designed to collect children's data, while Engleheart et al.'s [17] large-scale analysis of one million sites using OpenWPM confirmed these findings, demonstrating that cookies and device fingerprinting remain commonplace even on child-focused platforms. These studies collectively highlight how tracking technologies have evolved to circumvent privacy protections, creating a complex ecosystem where user data collection persists despite regulatory restrictions. This widespread tracking infrastructure serves as the foundation for targeted advertising systems, which our research aims to examine through controlled profile experiments.

The exploitation of regulatory loopholes and widespread non-compliance emerge as interconnected challenges in protecting children online. Medjkoune et al.'s [18] experiments revealed how advertisers systematically circumvent COPPA restrictions through content-blending techniques, while Cai et al.'s [19] analysis of 117 children's websites found that only half met COPPA requirements. These studies complement each other in demonstrating how the advertising industry has adapted to regulations not through compliance, but by developing sophisticated methods to bypass protections while maintaining targeting capabilities. This pattern of circumvention directly informs our research methodology, particularly in examining how different user profiles experience varying levels of advertising oversight.

The scale of non-compliance becomes even more apparent in mobile environments, as demonstrated by Reyes et al.'s [20] comprehensive analysis of over 5,000 android apps. Their finding that most child-targeted apps collect persistent identifiers and location data without proper consent aligns with the website-focused studies, suggesting that COPPA's limitations span across digital platforms. This systematic disregard for privacy regulations, coupled with the sophisticated tracking mechanisms identified in earlier studies, creates an environment where children's data remains vulnerable despite existing protections. Our research builds upon these findings by examining how such non-compliant practices manifest in real-world browsing scenarios across different user profiles.

The challenge of advertisement recognition in children's online experiences directly influenced our four-profile methodology. Cai et al.'s [21] analysis of gaming platforms revealed how advertisements are strategically embedded within interactive content, making traditional ad recognition nearly impossible for young users. This integration of advertising into gameplay, influencer content, and unboxing videos represents a sophisticated evolution of marketing strategies that exploits children's limited ability to distinguish actual content from sponsored advertisement content. By using both adult and child profiles in our study, we can systematically document how these embedded advertisements vary based on the user's declared age, providing concrete evidence of how advertising networks adjust their strategies for different demographics.

The cognitive limitations of young users in recognizing digital advertisements, as demonstrated through Levine's research [10] with children aged 6-12 and Ali et al.'s [1] investigation of 6-10 year olds, directly informed our approach to analyzing ad content. Our use of parallel adult and

child profiles enables us to compare how advertising networks might adjust their targeting strategies based on user age, potentially revealing whether they exploit these known cognitive limitations. This comparative approach helps bridge the gap between theoretical understanding of children's ad recognition capabilities and actual advertising practices in the digital ecosystem.

3 Methodology

Our methodology employed four distinct browser profiles representing adult and child demographics (male and female in each category) to analyze targeted advertising patterns. The profiles were systematically primed through demographic-specific browsing behaviors, with each profile engaging in relevant online activities for 30 minutes daily. After successful profile establishment, evidenced by the emergence of targeted advertisements within two days, we proceeded to visit 177 children-focused websites. Data collection involved tracking advertisements through a custom Chrome extension, with subsequent analysis focusing on ad content appropriateness and website compliance with COPPA regulations.

3.1 Browser Profiles

To analyze the behavioral targeting of advertisements towards children, we implemented a systematic approach using four distinct Chrome browser profiles. Each profile was configured to represent different demographic segments: adult male, adult female, male child under 13, and female child under 13. These profiles were authenticated with newly created Google accounts, where age and gender were explicitly specified during the account creation process. This methodology allows for the observation of how advertising networks build detailed browsing profiles based on user characteristics and behavior, including sites visited, pages viewed, and interaction with various types of content. This controlled environment enables the systematic comparison of how advertisers tailor their content and strategies across different age groups and genders, providing insights into the sophisticated targeting mechanisms employed in digital marketing.

3.2 Seeding the profiles

The research methodology incorporated a crucial priming phase designed to cultivate distinct advertising ecosystems for each browser profile. Users remained continuously authenticated in their respective profiles while engaging in demographic-specific web activities. This approach involved executing targeted searches, visiting relevant websites, and interacting with content that aligned with each profile's designated characteristics for thirty minutes each day. The advertising algorithms demonstrated remarkable efficiency in profile development, with personalized ad targeting manifesting by the third day, significantly earlier than the initially projected one-week timeline. Each profile received dedicated daily engagement sessions lasting approximately thirty minutes throughout the week-long priming period. The effectiveness of this approach was evidenced by the emergence of distinctly targeted advertisements - adult profiles began receiving sophisticated commercial content such as automotive and travel advertisements, while child-oriented profiles showed a clear shift towards youth-focused

marketing content. This methodology enabled the observation of how digital advertising platforms rapidly construct and refine user profiles based on behavioral patterns and demographic information.

3.3 Targeted Websites for Ads

Following the priming phase, we proceeded to visit targeted websites. We compiled a list of children-focused websites through a reference from a previous study [16] and recommendations from relatives' children, ensuring that contemporary and relevant websites were included. Many of these websites were about arithmetic games, other games, kids schools etc. For the purposes of this study we visited 177 websites, with each of these persona to observe the nature of ads displayed, if any. These websites were divided geographically and varied in language, though including all the geographies and multi-language study was out of scope for this study.

3.4 Data Collection & Tools

Our data collection methodology leveraged a combination of specialized tools and manual processes to comprehensively track advertising behaviors. We utilized Google Chrome as our primary browser platform, enhanced with a custom-modified version of the Ghostery Chrome Extension to collect tracker data. The extension was configured by disabling its ad-blocking capabilities while maintaining its tracking functionality, allowing us to monitor ad network behavior in real-time. This modified extension logged detailed tracker information including domain sources, network names (such as Google, DoubleClick, Amazon, OpenX), tracker categories (advertising, site analytics, utilities), and unique identifier codes. All this data was systematically recorded in a structured database using Google Sheets for subsequent analysis.

The research process involved both automated and manual components to ensure comprehensive data capture. While the modified Ghostery extension automatically collected tracker data, we manually captured screenshots of advertisements displayed on each visited website to document visual evidence of advertising content. This dual approach enabled us to analyze both the technical aspects of ad delivery mechanisms and the actual content being served to different user profiles. Our primary objective was to evaluate how ad networks adapt their content based on user profiles and assess their compliance with responsible advertising standards, particularly regarding child-appropriate content. This methodology provided insights into both the technical infrastructure of ad delivery systems and their practical implementation across different demographic profiles.

3.5 Appropriateness of an Ad

To determine advertisement appropriateness, we established specific criteria based on content analysis guidelines and child protection standards. An advertisement was categorized as inappropriate for kids if the content was deemed explicitly inappropriate when featuring suggestive dialogue (phrases implying sexual content or mature themes), revealing attire (swimwear, partial nudity, or emphasized body parts), mature entertainment promotions (dating

services, age-restricted content, or adult-themed shows), or coarse language (including innuendos and double entendres). Additionally, advertisements promoting age-restricted products or services (alcohol, gambling, or dating platforms), containing violence (physical confrontations or weapons), or displaying provocative imagery (suggestive poses or situations) were classified as inappropriate.

We developed a secondary review protocol for advertisements that didn't fall into these explicit categories but raised concerns. This involved a blind voting system through Google Forms, where reviewers would independently evaluate the content based on specific criteria: age-appropriateness of language, visual content, promoted product/service, and overall presentation. Each reviewer would provide a binary appropriate/inappropriate vote without seeing others' responses to prevent bias. A simple majority (more than 50%) would determine the final classification. However, during our study, all advertisements were clearly classifiable based on our primary criteria, making the secondary review process unnecessary.

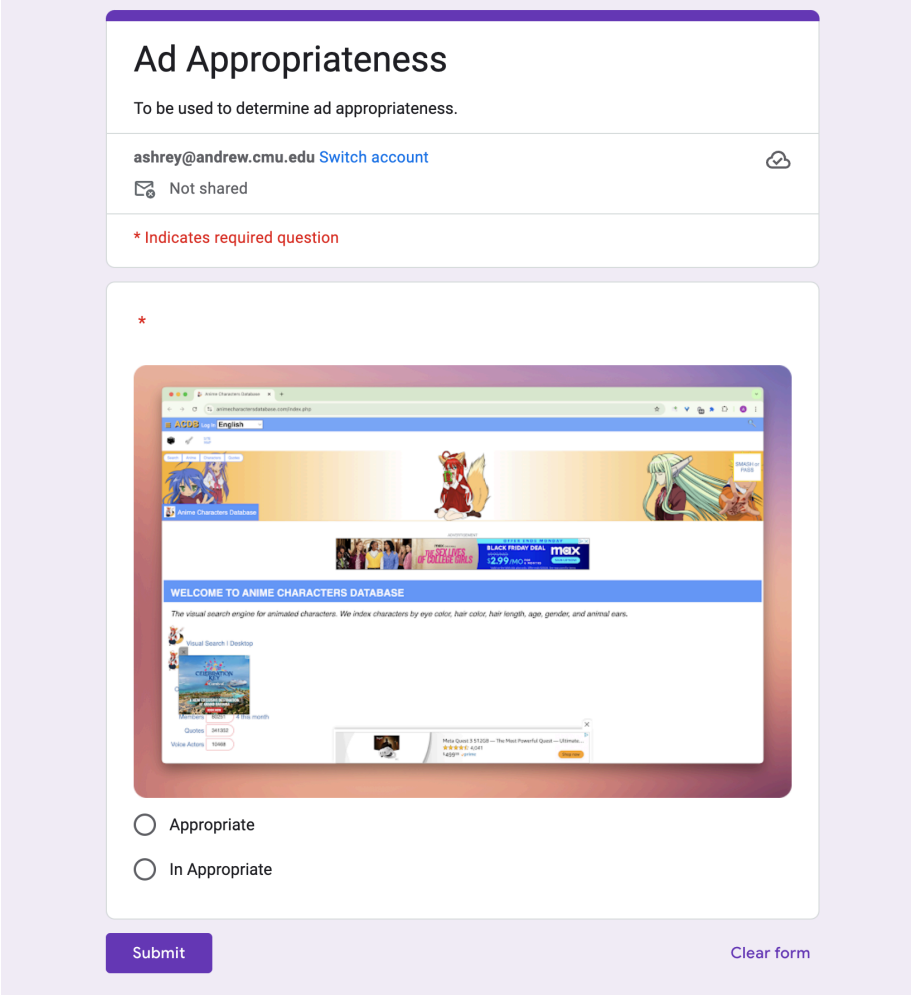

Fig 1. Planned Ad Appropriateness Form

3.6 Privacy Policy and COPPA Compliance

For our COPPA compliance analysis, we established four distinct categories with specific criteria for evaluation. A website is classified as Compliant when it explicitly mentions COPPA in its privacy policy and provides detailed documentation of children's data handling practices. Such websites must implement verifiable parental consent mechanisms before collecting any personal information from children under 13, clearly state and limit data collection to necessary purposes, provide transparency about third-party services while ensuring their COPPA compliance, and implement specific technical measures like data encryption to protect children's information.
Partially Compliant websites acknowledge children's privacy but lack COPPA-specific references in their policies. These sites typically have consent mechanisms that lack proper verification procedures, collect data without clear purpose limitations or full transparency, use third-party services without verifying their COPPA compliance, and maintain basic protection measures while lacking comprehensive security protocols.

Websites categorized as Likely Non-Compliant demonstrate significant gaps in children's privacy protection. These sites have no explicit mention of COPPA or children's privacy protections in their policies, lack parental consent mechanisms for under-13 users, collect personal data without restrictions or transparency, use third-party services without addressing their compliance status, and maintain insufficient measures to protect children's data.

The Non-Compliant category encompasses websites with complete disregard for COPPA requirements. These sites operate without a privacy policy or any children's privacy considerations, have no parental consent mechanisms whatsoever, engage in unrestricted collection of sensitive information, make extensive use of third-party services without compliance considerations, and lack any data protection measures.

4 Results

The web measurement study analyzed 177 child-oriented websites to investigate the presence of inappropriate advertisements and evaluate their compliance with the Children’s Online Privacy Protection Act (COPPA). We found websites with advertisements on 23 of them.
The study focused on three research questions, and the findings are presented in the subsequent subsections.

4.1 Prevalence of inappropriate ads for children

Our analysis revealed several concerning instances of explicitly inappropriate advertisements appearing on websites targeted at children. When browsing with profiles designated as under-13, we documented multiple ads containing mature or suggestive content that clearly violated standard guidelines for child-appropriate material. These advertisements appeared despite the browsing profiles being explicitly identified as belonging to children, raising serious concerns about the effectiveness of age-based content filtering systems.

Specific examples of inappropriate content included an advertisement containing the phrase "I'm a Virgin," an ad displaying explicit anatomical imagery, and another featuring a partially unclothed female figure. Other concerning instances included advertisements with phrases such as "I'm a side chick" and "Mom Balls." Of particular concern was an advertisement promoting "The Sex Lives of College Girls" television show, which appeared on a website specifically designed for preschool-aged children. Another advertisement featured the caption "Pics On The Beach Gone Wrong" accompanied by an image of an individual in revealing beachwear.

These examples are documented with screenshots in the appendix, providing clear evidence of the content filtering failures in current advertising systems. These findings highlight significant gaps in the implementation of child protection measures within digital advertising networks. The presence of such explicitly inappropriate content on children's websites demonstrates critical failures in both the behavioral targeting systems and content moderation mechanisms that should prevent mature content from reaching young audiences. These documented instances raise important questions about the effectiveness of current advertising guidelines and content filtering protocols in protecting young users from inappropriate material.

4.2 COPPA Compliance

The COPPA compliance assessment found that only 33.3% of the analyzed websites were fully compliant with COPPA regulations. The remaining two-thirds of the websites with advertisements were not fully compliant. Among these, 40% were categorized as partially compliant, meaning they implemented some measures to protect children's data but did not meet all compliance requirements. Additionally, 13.3% of the websites were classified as non-compliant, indicating a significant failure to adhere to legal standards for child protection in

digital environments.

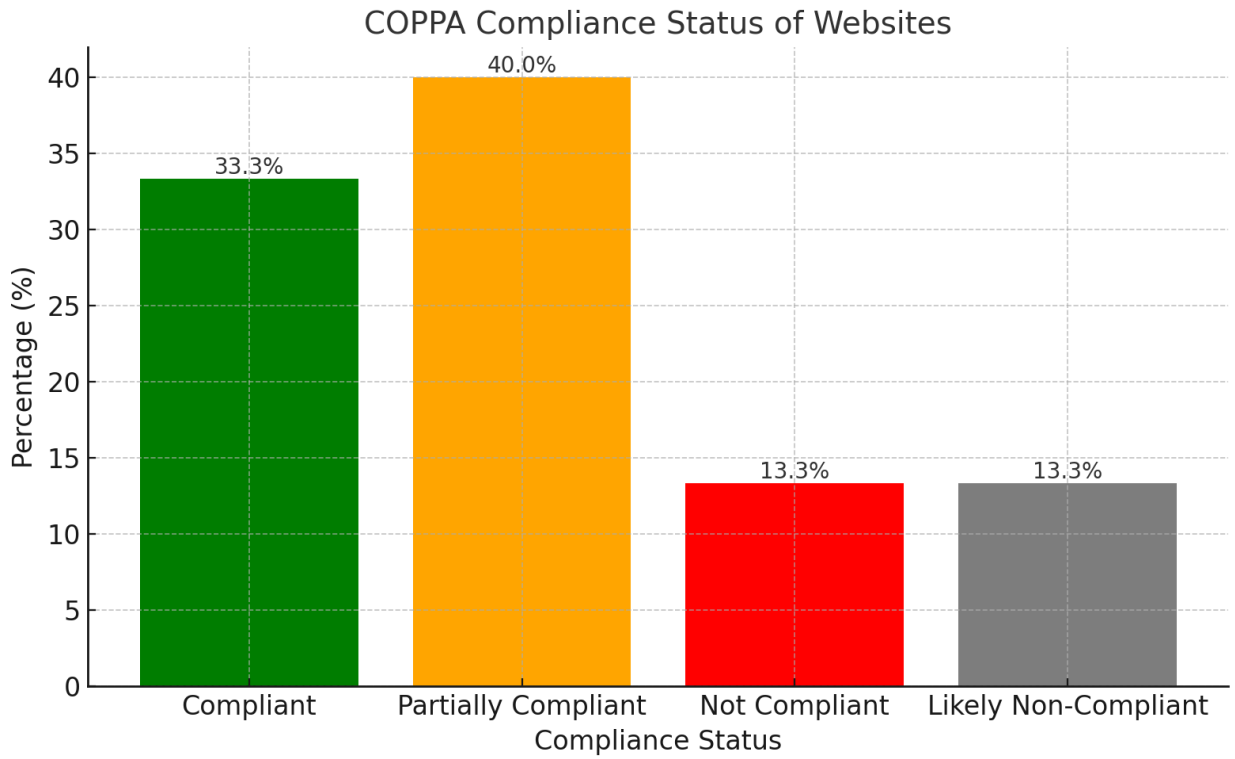

Fig 2. COPPA Compliance Status of Ad Websites

4.3 Ad Occurrences & Ad Network Distribution

The study identified the top 10 domains by ad occurrences, with "brainzilla.com" leading the list, followed by "dltk-kids.com" and "heypikachu.com". These popular child-oriented domains serve as key platforms for advertising and warrant closer scrutiny to ensure compliance with COPPA and the delivery of appropriate ads for their audience.

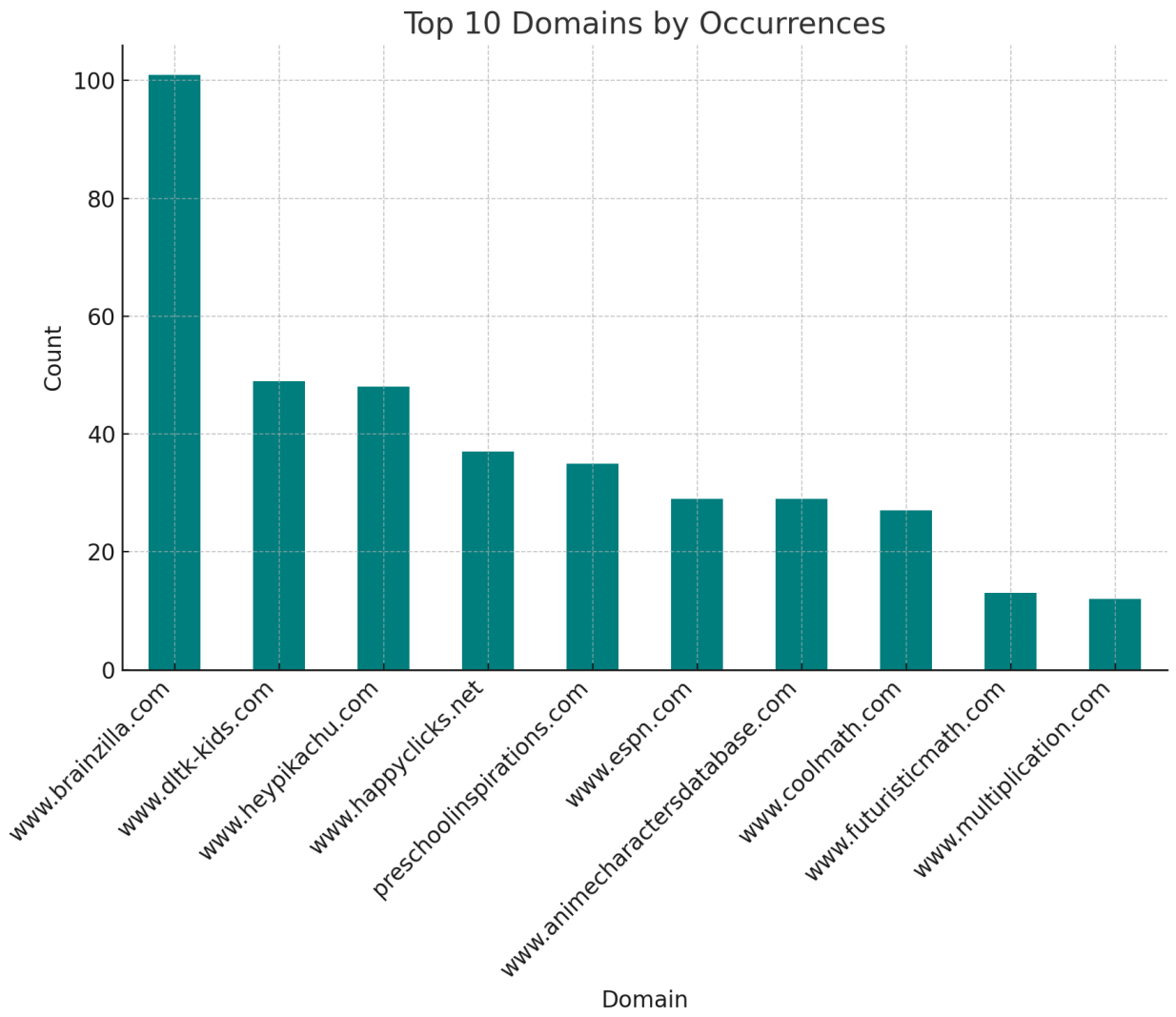

Fig 3. Top 10 domains by occurrences of ad networks

The analysis revealed that third-party ad networks are prevalent on child-oriented websites, with “Others” ad-networks comprising 25% of the ad network distribution, indicating a wide variety of loosely regulated networks. Prominent networks like DoubleClick (17%) and Google Adsense (15%) were also prevalent, while Google Recaptcha, Google Tag, and Google Analytics collectively accounted for a significant portion of ad placements. These results highlight the central role of major ad networks and the potential risks posed by unregulated or less monitored

networks categorized as "Others."

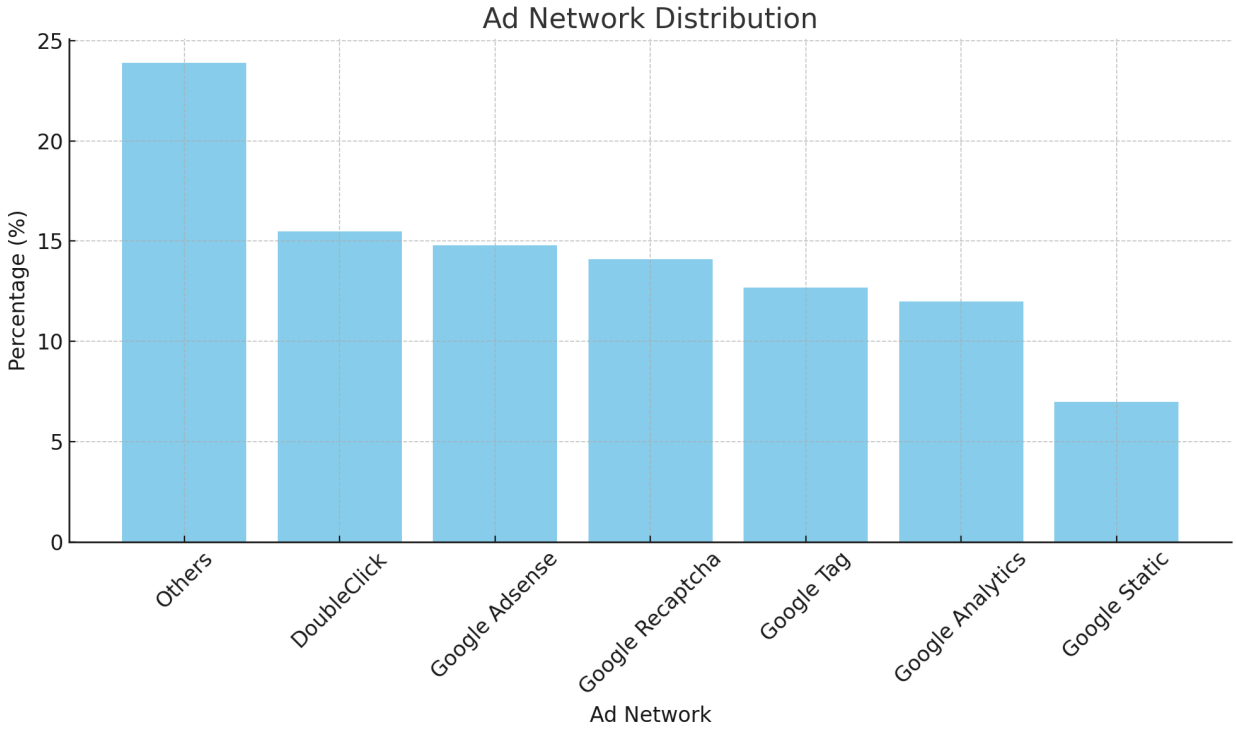

Fig 4. Ad network distribution across the websites with advertisement

The findings indicate significant concerns about COPPA compliance and the regulation of third-party advertisements on child-oriented websites. While major ad networks dominate the space, the presence of unregulated ad networks categorized as "Others" and the lack of full compliance in the majority of websites raise critical concerns about children's online safety and privacy. These results highlight the need for stricter enforcement of regulatory standards and improved transparency in ad placements on child-oriented websites.

5 Discussion

5.1 Limitations

5.1.1 Geographic Limitation

All user profiles originated from North America, reflecting the research team’s actual location. To overcome this geographic limitation, we considered using a VPN to simulate different regions. However, this approach risked producing unreliable results, as many websites employ commercial firewalls (e.g., Cloudflare) that block suspicious connections or serve altered content. Moreover, ad networks often detect and flag these IP addresses to prevent ad revenue losses associated with click farming [2].

5.1.2 Demographic Limitation

Our methodology was limited by relying on only four user profiles, each defined by basic demographic factors such as age and gender. While these profiles offered valuable insights, they represented a simplified view of user diversity. In reality, the digital ecosystem is shaped by a much richer array of demographic variables, including finer age brackets, broader gender identities, racial and ethnic backgrounds, diverse geographic locations, and various socioeconomic factors.

5.2 Challenges

5.2.1 Manual Effort for Screenshots

During the data collection process, we faced scalability limitations due to its reliance on manual screenshot capture and analysis of advertisements. This labor-intensive approach restricted our study to examining only 177 websites, representing a small fraction of the vast ecosystem of children's online content. The manual nature of the process, while ensuring accuracy in ad documentation, consumed substantial time and resources that could have been allocated to expanding the scope of the research. This constraint highlights the need for automated solutions in future studies to enable analysis of a broader range of websites and provide a more comprehensive understanding of advertising patterns across children's digital spaces. A larger sample size would not only increase the statistical significance of findings but also potentially reveal additional patterns in advertising behaviors that might not be apparent in a smaller dataset.

5.3 Interesting Findings

During our analysis, we encountered several notable anomalies in website behavior and policy implementations. One particularly interesting discovery was a website that offered users comprehensive control over their advertising experience through a single interface element. This site implemented a unique feature - a button that, when activated, completely disabled all advertisement displays and tracking mechanisms across the entire platform. This implementation demonstrates that technical solutions for user privacy control are feasible, raising questions about why such features aren't more widely adopted across children's websites.

Our privacy policy analysis revealed concerning practices regarding user data control and transparency. One striking example was a website that explicitly stated in its terms that users could not delete their accounts, while asserting the platform's unilateral authority to remove user content without notice. More troublingly, the same policy admitted that "deleted" images weren't actually removed from their servers, contradicting basic principles of data privacy and user rights. This practice raises significant concerns about data retention and user privacy, particularly in the context of children's online safety and their right to data erasure. Refer to the appendix to view a screenshot of these websites.

6 Future Work

Future research directions involve automating and scaling regulatory compliance checks for online advertising and data tracking under various global frameworks (e.g., COPPA, GDPR, India's DPDP, China's PIPL, emerging African laws). By simulating diverse, global user profiles, we can examine how ad networks respond to regional regulations and platform policies, revealing compliance gaps and region-specific challenges. Further studies could expand demographic profiles beyond children and adults to include teenagers, seniors, and users from varied racial, cultural, geographic, and socioeconomic backgrounds. This broader scope could uncover biases, cultural factors, and behavioral patterns in ad targeting, necessitating efficient, partly automated systems to manage and analyze complex data sets.

Additionally, developing systematic methods to trace advertisements back to their originating networks would offer insights into patterns of non-compliance and the distribution of targeted ads. Such comprehensive mapping would contribute to a deeper understanding of the digital advertising ecosystem, promoting ethical practices, transparency, and consumer trust in an increasingly globalized and diverse online environment.

7 Acknowledgements

We extend our sincere appreciation to our research mentors who played pivotal roles in shaping this study. Professor Lujo Bauer provided exceptional academic leadership and continuous support that significantly enhanced the quality and direction of our research. Special recognition goes to our teaching assistant and research advisor, Elijah Bouma Sims, whose dedicated mentorship was crucial to the project's success. His thoughtful guidance helped refine our research methodology, overcome technical challenges, and sharpen our analytical approach. The collaborative environment fostered by our mentors enabled us to navigate complex research challenges while maintaining scientific rigor throughout the investigation.

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9 Appendix

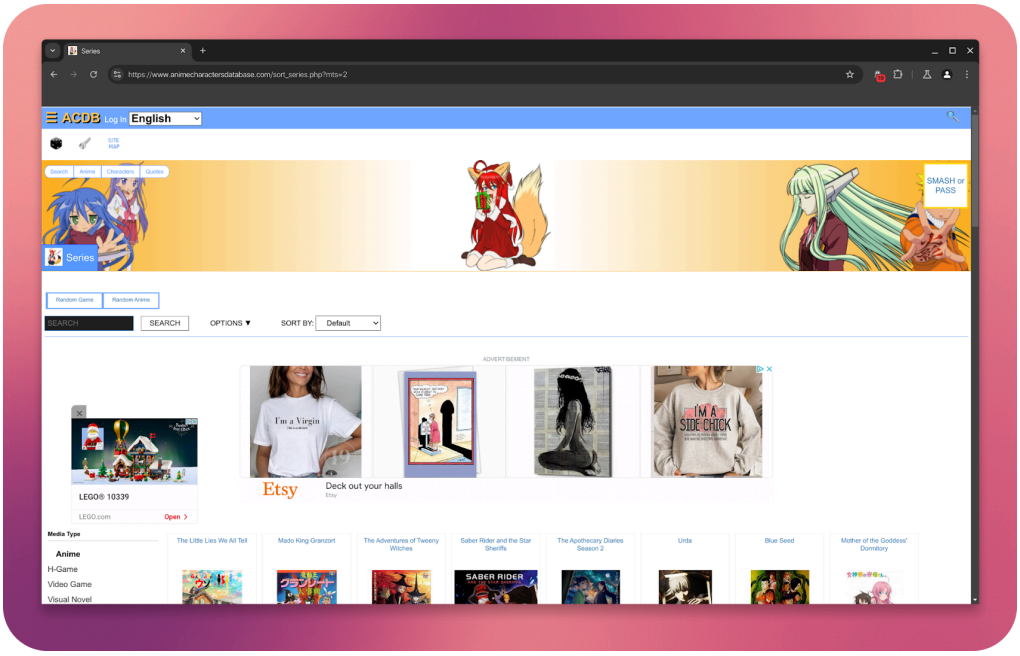

Fig 5. One of the Inappropriate ad on an anime website as seen through the children profile

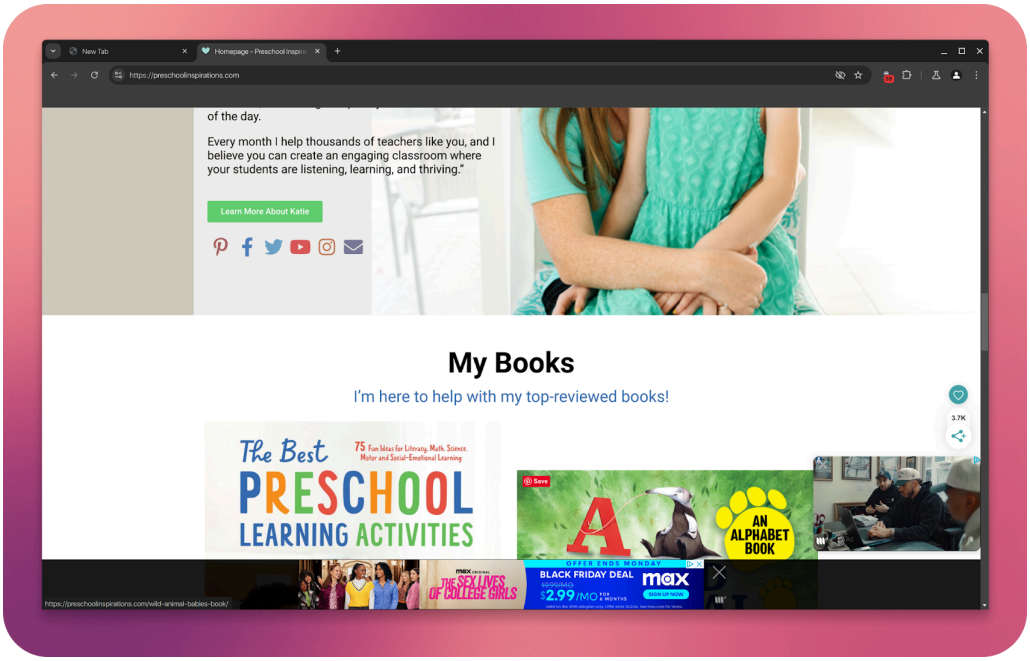

Fig 6. Another Inappropriate ad on a pre-school website as seen through the children profile

Fig 7. Clickbaity racy ads on children gaming website as seen through the children profile

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+ Pseudonym allowed
+ Only the necessary logs and debug information are kept
+ Anime Characters Database warns you if emergency maintenance is happening

- Terms may be changed any time at their discretion, without notice to the user
- Anime Characters Database can use your content for all their existing and future services
- Anime Characters Database may stop providing services to you at any time
- Your account can be suspended and your data deleted any time for any reason
- You shall defend and indemnify Anime Characters Database
- Anime Characters Database uses temporary session cookies

× You cannot delete your account
× We can remove your content at any time and without prior notice
× Deleted images are not really deleted
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Fig 8. animecharactersdatabase.com's privacy policy, which prevented anyone from deleting your account

3rd Party Ads Privacy Policies

- Google Adsense and Analytics - Privacy Policy
- anymindgroup - Privacy Policy
- jlist - Privacy Policy

Opt Out

You can disable 3rd Party content server side by using the button below. This will tell our web server to stop including Ad code in web pages. You may also want to remove any cookies set by 3rd party sites as well.

Turn Ads OFF

Fig 9. animecharactersdatabase.com "Turn Ads OFF" button to disable all ads on clicking

9.1 Acknowledgement of AI Usage

All the content is written and included by us. Grammarly and Chat-GPT were used for checking the grammar, paraphrasing and restructuring.

9.2 Code & Website analysis data

1. Modified Chrome Extension - https://drive.google.com/file/d/19bZFyXQmjGfAmOfm_PevkLKURBqg37Mj/view?usp=sharing
2. Website list and our analysis - https://docs.google.com/spreadsheets/d/1GE4U8TEbxNSbQQAKdqsNxBTXCbgRsDrwsSOFIw1cSpU/edit?gid=0#gid=0

9.3 Copy of Poster

Web Measurement Study: Targeting Children

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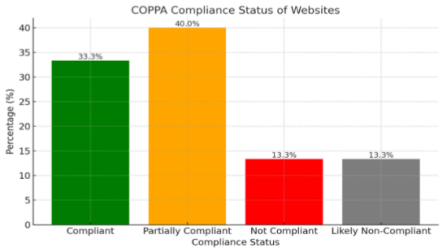
Background

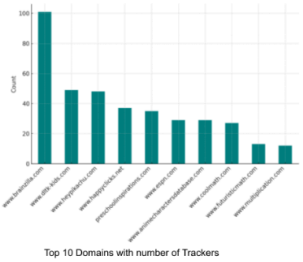
- The internet connects almost everyone, but privacy risks are unevenly distributed for some groups, especially children.
- Children often struggle to understand online privacy or distinguish ads from the website and some inappropriate ads might negatively affect a child's behaviour.
- This study surveys 177 websites for advertising from 4 profiles. We checked websites with ads and analysed the privacy policy for websites showing ads.

How Targeted Advertising Works

- A website requests an ad slot for an ad from an ad exchange.
- The ad exchange is the intermediary which requests bids from various demand side platform.
- The ad exchange then picks the highest bid and sends it to the supply side platform which then displays the ad.

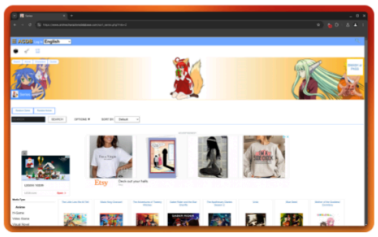
Results & Findings





Problem

Are ad networks following responsible online advertising for children?



Inappropriate ad on an Anime Website through the children profile

Research Questions

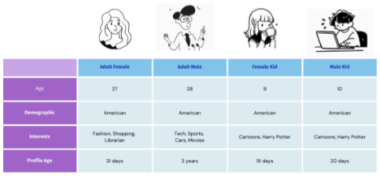
RQ1: Are third party ad networks placing inappropriate ads for children profiles?

RQ2: Are we able to see children inappropriate ads in children websites when viewed under an adult's profile?

RQ3: Are children oriented websites COPPA compliant?

Our Approach

- This study involves creating **multiple Chrome profiles** (child male and female, adult male, adult female) and priming them with activities that mimic real-world usage to analyze the types of ads shown to children and adults on children-targeted websites.

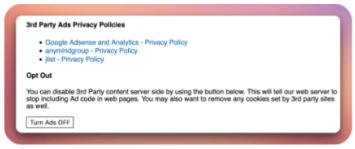


	Adult Female	Adult Male	Female Kid	Male Kid
Age	27	28	9	10
Demographic	American	American	American	American
Interests	Fashion, Shopping, Librarian	Tech, Sports, Cars, Movies	Cartoons, Harry Potter	Cartoons, Harry Potter
Profile Age	31 days	3 years	18 days	20 days

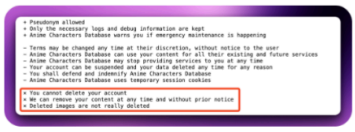
- Leveraging a modified ad-blocker extension for tracker monitoring and manual ad capture.We then analyse the ad for its 'appropriateness' for children.
- Go through privacy policy to ensure compliance with the guidelines.

Interesting Findings

- Ad Disable throughout the website using a single button.



- Conspicuous privacy policy.



Future Work

- Automating the process of analysing website for compliance to regulations
- Analyze the data tracked by each tracker and check if they perform behavioural targeting.
- Currently focused on the USA and COPPA compliance, we aim to expand our analysis to regulations in other regions, including the EU, India, China, and Africa.
- Global profiles to analyze how ad networks behave across regions by accessing websites through these diverse profiles.
- Do companies ensure the actual ad they're running is compliant with website?