Parents and carers

Algorithms and adolescents: The rewards and risks of recommender systems for young people

Algorithms are rule-based, step-by-step instructions that help computers solve problems and make decisions. They process vast amounts of data to deliver personalised feeds, recommendations, and search results on online platforms and social media. While not inherently harmful, algorithms can amplify sensational, extreme, or divisive content, exposing adolescents to violence, or hate speech, and unrealistic beauty standards.

Recommender systems use personal data – such as age, preferences, and online engagement – to predict and suggest content like videos, songs, or products. Recommender systems drive the content people see on:

- **Social media** such as Facebook, Instagram, TikTok, X (formerly Twitter), recommending posts, videos, friends, and ads based on user interactions.
- **Streaming services** such as Netflix, YouTube, Spotify, Disney+, suggesting movies, shows, music, and videos based on viewing/listening history and preferences.
- **Online shopping** sites such as Amazon, eBay, Etsy, recommending products based on browsing history, purchases, and user ratings.
- Search engines such as Google or Bing, personalising search results and the ads you see.

The invisible influence of algorithms

When used well, algorithms and recommender systems can help young people discover content, learning tools, and activities that match their interests and needs. Understanding how the systems may influence adolescents is critical for fostering healthier digital interactions. Continuing exposure to the same types of content can lead to:

- **Dependency** features like infinite scrolling and autoplay encourage compulsive use, making it harder for adolescents to disconnect.
- **Misleading content** algorithms may promote false or harmful information, distorting young people's understanding of important issues.





- **Distorted reality** content rabbit holes and echo chambers can reinforce harmful attitudes and unrealistic expectations about life, relationships, and success.
- Risky interactions algorithms may steer young users toward unsafe individuals or communities.
- Unrealistic ideals Some content promotes harmful beauty standards and sexualisation.
- **Harmful beliefs** exposure to hate, misogyny, racism, or violent ideologies can shape harmful worldviews.

Algorithms learn from user behaviour and large datasets. If these datasets reflect stereotypes or social inequalities, the system can reinforce and perpetuate harmful biases and beliefs. They can also contain gender stereotypes or unequal representations; the systems can reinforce harmful norms and expectations.

- **Girls and young women** may be disproportionately exposed to content that emphasises appearance, beauty standards, or sexualised imagery, which can affect self-esteem and body image.
- **Boys and young men** may be steered toward aggressive, hyper-masculine, or emotionally suppressive content, reinforcing narrow ideas of masculinity.
- **Gender-diverse and non-binary youth** often face invisibility or misrepresentation, with algorithms failing to reflect their identities or pushing content that invalidates their experiences.

Talking to young people about online content

Talking with children and young people about their online experiences starts with simple, curious conversations.

- **Ask about their sources:** Begin by asking where they get information about various topics, for example, news, food, fitness, or wellbeing. This helps you understand what might be influencing them and opens the door to discussing credible and trustworthy sources.
- Explore credibility together: Encourage them to think critically ask questions like 'Is this person qualified to give advice?' or 'Does this seem realistic?' This helps build their ability to spot misleading content and promotes a healthier self-image.
- Balance the algorithm: Recommender systems can lead young people down narrow content paths or 'rabbit holes'. Use your discussions as a chance to explore more balanced, reliable sources together and talk about how algorithms shape what they see.

These conversations reassure young people that they're supported rather than judged and give them the skills and confidence to navigate online spaces more safely and thoughtfully.

Retraining your algorithms and recommender systems

The following strategies can help children and young people, and adults alike, to re-train the content you encounter online.

- **Be mindful and intentional** by paying attention to the messages you are sending to platforms when engaging with content online.
- **Use platform tools** to customise content suggestions by using features such as 'not interested', 'dislike' or 'hide'.
- **Support what you like** by actively engaging with content that you enjoy, for example liking, sharing and commenting on content you enjoy.
- **Diversify your content** by actively seeking out diverse perspectives and information and exploring different topics, creators and content.
- **Start fresh** by resetting your app preferences from time to time, allowing you to rebuild your recommendations with intention.

Additional reading and resources

- An unfair fight how algorithms are shaping our adolescents | eSafety Commissioner
- Recommender systems and algorithms position statement | eSafety Commissioner
- Parents | eSafety Commissioner
- Young People | eSafety Commissioner

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