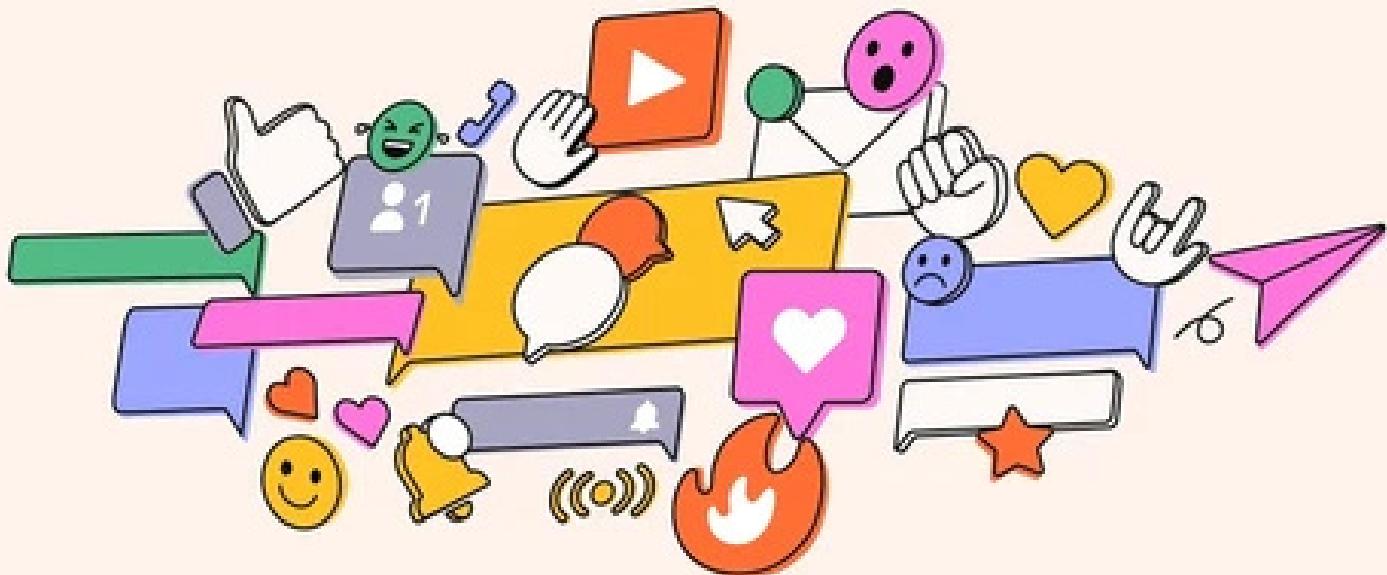


# WHAT TEENS' ONLINE CONVERSATIONS REVEAL ABOUT SUBSTANCE USE

*Understanding why adolescents use substances is essential for effective prevention.*



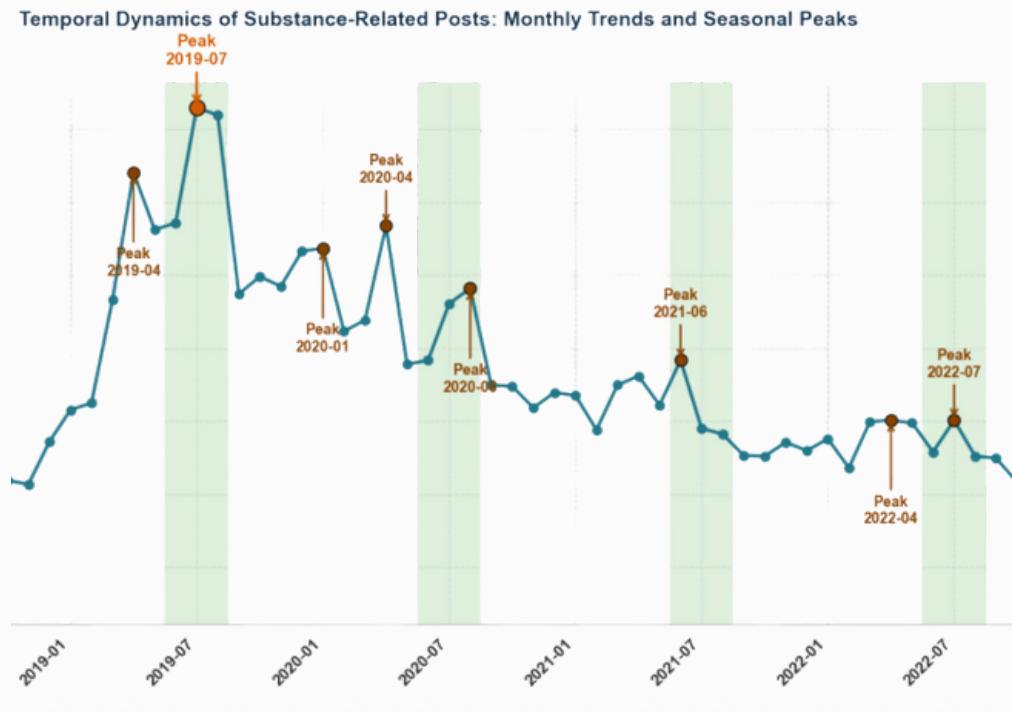
A recent study, “Emotions, Context, and Substance Use in Adolescents: A Large Language Model Analysis of Reddit Posts,” analyzed nearly 39,000 posts from teens online to explore the emotional and social contexts surrounding substance use. Using advanced AI tools, researchers examined emotions like sadness, guilt, fear, and joy, alongside key contexts—peers, family, and school.

## Key Findings: Emotions and Context

- **Negative emotions dominate substance-use discussions.** Sadness, guilt, fear, and disgust appeared much more often in posts about substance use, while joy was more common in non-substance use discussions.
- **Peer influence is the strongest driver.** Over 70% of substance-use posts referenced peers, often linked with guilt, fear, or sadness. Teens described fear of exclusion, peer pressure, and shame tied to public incidents. Joy also appeared when bonding with peers, sometimes connected with risky behaviors.
- **Family and school contexts matter.** Family posts often expressed fear of parental discovery, guilt over disappointing parents, or sadness from conflict or parental substance use. School-related posts highlighted fear of discipline, sadness from academic stress, and occasional joy during social events or milestones. These environments can act as both protective and risk factors.

## Predicting Substance Use Conversations

Using predictive modeling, the study showed that peer and family influences, guilt, and disgust were key predictors of substance-use posts. In contrast, joy and school-related content were linked to non-substance-use discussions. The model performed well in identifying substance-use content, underscoring the strong connections between emotions, social contexts, and behavior.



**Monthly trends in the percentage of substance-use related posts from 2018 to 2022.**

## Implications for Prevention

This research highlights that adolescent substance use is not just experimentation—it is deeply tied to emotions and social pressures.

Key takeaways for prevention efforts include:

- Engaging peers positively: Peer norms are powerful; programs that build healthy peer networks can reduce risky behavior.
- Supporting emotional health: Addressing guilt, sadness, and fear through coping skills and mental health support is critical.
- Involving families and schools: Strengthening family bonds and supportive school policies can serve as buffers against risky behavior.
- Timing interventions strategically: Substance-use discussions peak during school breaks and holidays, suggesting opportunities for targeted outreach.

By understanding teens' emotional experiences and social influences, community coalitions like The Charles Town Initiative can design interventions that truly resonate with youth, providing timely support and fostering healthier choices.

**READ THE STUDY**