

Nicolette Sullivan December 11th, 2024

#### Peer presence shapes teen decision-making

Peer influence isn't always negative, as commonly thought. There are positive aspects too.

Nicolette Sullivan presented teenagers with situations in which they would receive more money than their friends. In the presence of peers, teens were less likely to accept advantages and preferred to share the money equally. She writes that peer presence can be leveraged to promote positive social behaviours in adolescents.

Adolescence is a critical period for social development, and peer influence plays a significant role in shaping teens' behaviour. Peer influence is typically seen in a negative light for promoting, for example, risk-taking behaviours. We find that that's not always the case. Our recent study explores how adolescents are more likely to act prosocially when they know their peers are watching.

#### Peer influence: risk and reward

Past research has consistently shown that peer influence can have a significant negative impact on adolescent behaviour, such as increased recklessness when driving. Peer group behaviour also influences adolescents' tobacco and alcohol consumption. This is, in part, because adolescence is a period of uniquely increased social and affective engagement, paired with more flexible goals compared to adulthood. Instead, in our work, we set out to understand the plus sides to peer presence during adolescence.

In our experiment, adolescents made a series of decisions about how much money to share with a peer friend. The teens completed the task both alone and while being observed by that friend, and we characterized their choices using a cognitive model that allowed us to estimate their aversion to inequity. Cognitive modelling is a computational approach that uses simulations of social decision-making processes to quantify and compare participants' social preferences based on their choices. This model helped us to capture the nuances of how individuals weigh their own outcomes against

those of others when they are going to gain more than their peer (advantageous inequity) or stand to gain less (disadvantageous inequity).

Real-time decision process estimates were collected to understand the mechanisms underlying these choices. Specifically, using computer mouse tracking, we calculated the time it took for participants to begin considering the consequences of their choice – the monetary outcomes for themselves and their peer.

In the presence of their peers, compared to being alone, teens were less likely to accept advantageous inequity, situations in which they were to receive more money than their friend. Instead, they preferred to equally share the money.

When alone, they tended to consider the impact of their choices on themselves first, only later considering the possible outcomes for their friends. Conversely, when observed by friends, they began considering peer outcomes much earlier in the decision-making process. This faster processing of peer outcomes was associated with more prosocial behaviour, as adolescents were more likely to make altruistic choices when they quickly considered the benefits to their peers.

This indicates that the self-oriented behaviour that teens may exhibit is not fixed in stone. The observed flexibility in the mechanisms underlying prosocial choices highlights the potential for positive peer influence to encourage cooperation and empathy among adolescents.

# A uniquely adolescent phenomenon

We also collected data from a control group of adults. Unlike adolescents, adults did not exhibit a significant difference in the processing speeds for self and other outcomes. Indeed, when comparing adolescents to adults, adolescents were significantly slower at processing others' possible rewards. Interestingly, peer presence made the teenagers process the decision more like the adults did.

Together, these comparisons suggest that taking longer to consider others' outcomes is a unique characteristic of adolescence, indicating developmental differences in how social information is processed across age groups. It also means that teenagers are likely to become less selfish by the time they reach adulthood.

# Summary

This work reveals the dual nature of peer presence on adolescent behaviour. While most past work has emphasised peer presence's role in promoting maladaptive behaviour due to heightened sensitivity to rewards, we highlight its potential benefits (specifically, the potential to enhance prosocial behaviour in adolescents). By accelerating the evaluation of outcomes for others, peers

can play a crucial role in fostering altruism and cooperation. This work aligns well with other work on peer presence, such as increased contributions to public goods and safer decision-making when peers model safe behaviour.

### **Implications**

The slower processing of others' outcomes in adolescence indicates that pausing for moment before making a decision can be beneficial, especially for teenagers. This brief pause allows individuals to fully process and consider the potential impact of their actions on others, fostering empathy and consideration.

By giving the brain time to catch up with the social information, it helps ensure that decisions are not solely driven by immediate self-interest, but also take into account the well-being of others. This practice can lead to more thoughtful and prosocial behaviour, promoting healthier and more cooperative interactions in both personal and social contexts. Encouraging this habit can be a valuable tool in guiding adolescents (and the rest of us) towards more responsible and compassionate decision-making.

Peer presence can be leveraged to promote positive social behaviours in adolescents. For example, they could be used to develop strategies that encourage prosocial behaviour in various settings, such as schools and community programs. By fostering environments where positive peer influence is prevalent, we can enhance cooperation and altruism among young individuals.

Sign up for our weekly newsletter here.

- This blog post is based on Peer presence increases the prosocial behavior of adolescents by speeding the evaluation of outcomes for others, by Nicolette Sullivan, Rosa Li and Scott Huettel, in Nature's Scientific Reports.
- The post represents the views of the author(s), not the position of LSE Business Review or the London School of Economics and Political Science.
- Featured image provided by Shutterstock
- When you leave a comment, you're agreeing to our Comment Policy.

#### About the author



Nicolette Sullivan

Nicolette Sullivan is an Assistant Professor of Marketing in the Department of Management at the The London School of Economics and Political Science.

Posted In: LSE Authors | Management



© LSE 2025