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NeuroView

Individual differences in adolescent mental health during COVID-19: The importance of peer relationship quality

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Lockdowns and school closures deprive adolescents of typical social interactions. In this NeuroView, we explore how the quality of existing peer relationships might moderate—both positively and negatively—the impact of these restrictions on adolescent mental health, and we highlight the importance of individual differences.

Mental health problems in adolescents have increased in recent years, and there is some evidence that the COVID-19 pandemic has exacerbated this trend (Ford et al., 2021). One study showed that the highest levels of self-reported behavioral, emotional, and attentional difficulties in UK adolescents occurred during the national lockdowns when social restrictions were most stringent and schools were closed to the majority of students (Creswell et al., 2021). This has led to concerns that depriving adolescents of typical socializing is causing harm. During strict lockdowns, adolescents have limited face-to-face peer interactions. Even when restrictions are eased, socializing is limited or discouraged. For example, physical distancing is required, large gatherings such as parties are banned, and a period of social isolation is required if a young person has been in contact with a positive case at their school. The concern is that this disruption to typical social interactions, at this age in particular, is having a negative impact on mental health.

Adolescence (approximately ages 10–24 years) is considered a sensitive period for social development in which certain social experiences need to occur during a limited time period for healthy brain and cognitive development to take place (Nelson et al., 2016). During this time, individuals ordinarily spend less time with their parents and more time with peers,

establishing complex relationships with people their age. This shift enables two processes. First, young people develop close attachments with a small number of peers, including friendships and romantic relationships. Second, they establish their place within their wider peer group. Indeed, it has been proposed that the key social task of adolescence, compared with other stages of development, is to fully integrate with a larger group of peers (Nelson et al., 2016). Lockdowns and other social restrictions are likely to disrupt both processes: there are fewer opportunities to initiate and maintain intimate, one-to-one relationships, and it is difficult or impossible to establish oneself in a wider peer group when schools are closed and/or larger gatherings are banned. This widespread social disruption could increase the risk of poor mental health, for example by increasing loneliness (Orben et al., 2020).

However, to understand the impact of social restrictions on adolescent mental health, individual differences must be considered. When 11- to 16-year-olds in the UK were asked in July 2020 how lockdown had affected their lives, 42.8% said their lives were worse, but 29.6% said there had been no change; 27.5% said their lives were better (Viazrd et al., 2020). Evidently, the pandemic has not affected all adolescents in the same way, and there are many factors that might contribute to this, including existing

mental health symptoms, socio-economic status, family relationships, parental job losses, and experience of bereavement due to COVID-19.

The role of existing peer relationships

In this NeuroView, we examine the role of one possible moderating variable: the quality of existing peer relationships. Peer relationship quality is a multidimensional construct, which includes positive characteristics such as companionship and intimacy, as well as negative characteristics such as conflict. Here, we explore how individual differences in the quality of existing peer relationships might moderate the impact of school closures and other social distancing measures on adolescent mental health.

Adolescents with high-quality existing peer relationships

One possibility is that adolescents with robust, high-quality peer relationships fare well during lockdowns. There is a wealth of data from before the pandemic showing that high-quality friendships and romantic relationships are beneficial for adolescent mental health and that such relationships are associated with resilience in the aftermath of adversity. One study, for example, found that friendship quality in adolescence was associated with better psychosocial functioning 1 year later, including in young people with



adverse early family experiences (van Harmelen et al., 2017). This suggests that those with warm, secure peer relationships might be better able to cope with the shock and disruption of the pandemic's social restrictions.

Critically, these adolescents might have been able to maintain their high-quality relationships by moving them online, interacting with their peers via video calls, social media, instant messaging, and video games (Orben et al., 2020). There is evidence from before the pandemic that the fundamental aspects of adolescent friendship can exist via digital media, such as opportunities for self-disclosure, fun, and emotional support. When lockdowns are implemented, those with robust friendships might therefore still experience the benefits of those relationships, just via a different means. There is evidence from qualitative studies that this is indeed the case, at least for some adolescents (Demkowicz et al., 2020).

However, even for the strongest friendships, internet-mediated socializing is not the same as face-to-face interaction. There are many proposed reasons for this: group interactions are more difficult, options for shared activities are limited, and there is no physical touch. With video calls, typical patterns of eye contact and other forms of non-verbal behavior are disrupted. As such, it is unclear whether online socializing provides the same mental health benefits as interacting with peers in person.

It is also relevant that some adolescents have only limited access to the internet during lockdowns, or access that is not private, or no access at all; for these individuals, any potential benefits of online interaction would not be realized. Individuals from low socio-economic backgrounds may be more adversely affected during lockdowns for this reason, alongside many other factors. However, even for individuals without access to the internet, or for whom internet-mediated socializing was not an adequate substitute, pre-existing high-quality relationships might be protective. This could be because the associated mental health benefits of such relationships persist despite several months of separation, or because of the ready availability of positive social interactions when restrictions partially lifted (e.g., meeting a friend outside).

An alternative proposal is that for some adolescents with high-quality relationships, lockdown is especially harmful for mental health, because these young people are deprived of the face-to-face interactions that they enjoy. Evidence collected before the pandemic indicates that, when adolescents enjoy going to school, it's most commonly because of the chance to spend time with friends and the social aspects of learning (Gorard and See, 2011). For adolescents with high-quality peer relationships, school is a place to have fun with and access emotional support from their friends. In addition, these individuals might ordinarily have a fulfilling social life outside of school as well, including attending parties, sports clubs, and other group activities. For these young people, it is possible that no online alternative could be a substitute for the pleasure and meaning derived from their rich social lives before the pandemic.

Adolescents with poor-quality existing peer relationships

We now consider the impact of lockdown and social distancing on the mental health of adolescents with poor-quality existing peer relationships. One UK study conducted in the summer of 2020 asked 8- to 18-year-olds (N = 19,039) how they felt about various aspects of returning to school, and around 15% said they were worried about seeing classmates/peers again (around 22% felt "indifferent" and 64% were looking forward to it; rounded figures are from Mansfield et al., 2020). When asked about seeing friends specifically, around 9% said they were worried about this (8% indifferent, 82% looking forward to it). It could be that, for adolescents with poor-quality peer relationships, the absence of face-to-face interaction during lockdown could actually be favorable (at least in the short term).

There are many groups of adolescents who might find it difficult to spend time with their peers at school. One such group is those who are being bullied—a pattern of repetitive, aggressive behavior that usually occurs within the context of a power imbalance. Decades of research has shown that being bullied in childhood or adolescence is harmful for current and long-term mental health, and is a common reason cited in cases of school refusal.

For young people being bullied, lockdowns and social distancing might therefore present a welcome respite from conflict and abuse.

Even adolescents who appear to have many close friends can experience high levels of conflict within those relationships. First, some adolescents are actively bullied by their friends; the term "frenemy" has been coined to describe an individual who bullies a person while also acting as their friend. Even for those not bullied, adolescent friendships can be characterized by high levels of conflict, frequently shifting loyalties, and acts of relational aggression, such as social exclusion and rumor-spreading. Whatever the context, for young people who have hostile or unstable relationships with their peers, the intensely social nature of school can be stressful and threatening. For some of these individuals, too, school closures could be a period of respite and relief.

However, it is unlikely that lockdown means these issues stop altogether. Although there has been very little research into the nature of bullying and peer conflict during the pandemic, there are several indications that some young people continue to be victimized even at home. Bullying and relational aggression can take place online (cyberbullying) as well as face-to-face, and some adolescents are bullied by their siblings; many victims experience both in parallel. Others experience or witness abuse from their parents, which could intensify without the temporary respite of school. For some individuals, lockdown will therefore result in a shift in the nature of conflict or victimization they experience, rather than removing the problem altogether. Nonetheless, it is a reasonable speculation that lockdown offers some relief for some adolescents who have poor-quality relationships with their peers, including those who are being bullied. For these young people, lockdown and the associated absence of peers might actually result in improved mental health.

It is also important to consider the experiences of adolescents with psychiatric disorders such as social anxiety disorder or neurodevelopmental disorders, particularly autism. First, young people with these conditions are at a heightened risk of being bullied. Even if they are not

bullied, these individuals are more likely to have difficult peer interactions, and therefore possibly experience some benefits from school closures. Emerging data indicate that some young people with autism reported positive aspects of lockdown, including fewer social pressures (Harper et al., 2020). For adolescents with social anxiety disorder, school presents a series of anxiety-provoking social scenarios that can be overwhelming (Blöte et al., 2015); again, lockdowns might present some temporary respite for these young people.

Equally, for some young people with psychiatric and neurodevelopmental disorders, social restrictions might be harmful for mental health. On average, adolescents with special educational needs had worse mental health throughout the pandemic (Creswell et al., 2021). Some individuals with autism, for example, reported that the high levels of uncertainty and disrupted routines during the restrictions are particularly distressing (Harper et al., 2020). In addition, outside the pandemic, individuals with autism have fewer social interactions outside school than their neurotypical peers (Shattuck et al., 2011); it could be that this group is especially harmed when their usual school social interactions are disrupted. Social restrictions might therefore have made low-quality or limited social interactions even more impoverished, increasing loneliness and harming mental health. Even if school closures are temporarily relieving for some individuals with psychiatric or neurodevelopmental disorders, they could still mean young people miss out on key social development in the long term. For example, any relief experienced by individuals with social anxiety disorder is likely to be temporary, since avoidance of social interactions ultimately maintains and reinforces social anxiety. It may be that these individuals then especially struggle once they return to school.

Concluding thoughts

School closures and other social restrictions can have a positive, negative, or negligible impact on an adolescents' mental health, depending on the individual. There are many factors that will contribute to these differing effects, including family relationships, socio-economic status, personality traits, and exist-

ing mental health problems. In this article, we examined one such factor in detail: the quality of an adolescent's existing peer relationships.

We highlighted that there are many ways in which peer relationship quality might moderate the impact of social restrictions. For some young people with high-quality peer relationships, lockdown and restrictions might be a manageable disruption involving a temporary switch to online socializing, or alternatively a lonely and deeply frustrating end to rewarding in-person socializing. For those with poor-quality peer relationships, particularly those being bullied, lockdown might be a welcome relief, although possibly not for those who are still bullied online or by siblings. Some individuals with psychiatric or neurodevelopmental conditions have difficult or more limited peer relationships, and they too might experience some benefits from the pandemic's social hiatus (although we caution against the idea that this would have long-term benefits). Equally, others with these conditions might find the lack of access to routine socializing particularly harmful for their mental health.

The current paper provides testable hypotheses relating to how peer relationship quality might affect the short- and long-term impact of the pandemic on adolescent mental health. In any future research, we emphasize the importance of considering individual differences. It is tempting to extract simple, universal lessons about the effects of school closures and social restrictions on mental health; what is more realistic is to recognize that the effects are as many and varied as adolescents themselves.

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DECLARATION OF INTERESTS

S.J.B.'s recent and current relevant committees and consultancies are The Times Education Commission (2021–), the Rethinking Assessment advisory group (2020–), chair of the Royal Society of Biology Education and Science Policy committee

(2018–2021), school governor (2017–), and expert witness for Just for Kids Law (2017–).

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