Commentary: A longitudinal exploration of the effects of the COVID-19 lockdowns for adolescents both with and without neurodevelopmental disorders – a reflection on Houghton et al. (2022)

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Adolescence is a key period of development, with multiple changes and adjustments in terms of biological, cognitive, social and emotional growth making this age a critical period for communal interaction and social sensitivity (Blakemore & Mills, 2014). The worldwide unprecedented circumstances of the COVID-19 pandemic, including ‘stay-at-home’ (‘lockdown’) orders, school closures and social distancing may have led to an increase in depression, mental health difficulties and loneliness for adolescents (Ellis, Dumas, & Forbes, 2020). Furthermore, adolescents with Neurodevelopmental Disorders (NDDs) might be affected differently during lockdown from their peers. Given the symptoms frequently seen in NDD, there might be both negative (e.g. struggling to adapt to changes in routines caused by restrictions) and/or positive (e.g. relief of fewer social activities) aspects of the COVID-19 lockdowns. Houghton et al. (2022) investigate these factors in a longitudinal study of the impact of COVID-19 restrictions in adolescents with and without NDD (both N = 238) in Western Australia.

Within the population of adolescents without NDD, given the increased vulnerability for mental health difficulties and loneliness during this developmental time period and the importance of a strong friendship group to help support adolescents, it might be expected for the COVID-19 pandemic lockdown restrictions to have had a secondary negative effect on many adolescents due to being unable to see friends and attend school (e.g. Ellis et al., 2020). Friendship groups and school structure might help with loneliness during adolescence, acting as a buffer to prevent mental health difficulties. However, it is also worth noting the high technology, digital and social media usage among adolescents which might have meant that they were generally able to keep in touch with friends and attend social events online during the pandemic (Cauberghe, Van Wesenbeeck, De Jans, Hudders, & Ponnet, 2021). Furthermore, some adolescents (particularly those who are more introverted) may have enjoyed spending more time at home.

One currently somewhat neglected group of adolescents in terms of the impact of COVID-19 restrictions is adolescents with various forms of NDD. These individuals might have been more susceptible to negative effects of lockdown than their peers due to unpredictable and changing routines, the loss of the structure that the school day provides and uncertainty in terms of lockdown restrictions. Past research (e.g. Breaux et al., 2021; Kawaoka et al., 2021) has found adverse effects of lockdown on adolescents with NDD. However, individuals with NDD with social difficulties might experience more time spent alone and generally socialising less than others, which might mean being better accustomed to ‘social isolation’ than peers without NDD prior to the pandemic. Furthermore, those with NDD often experience difficulties at school and other social situations, meaning that enforced restrictions may have provided relief from ever changing and confusing past obligations (e.g. Cassidy et al., 2020; Dekker et al., 2022).

Understandably, given the sudden and recent onset of COVID-19, many studies within this field so far have been cross sectional, occurring during one time point during COVID and some research involving individuals with NDD lacks a control group. Two years on from the beginning of the pandemic, as it hopefully begins to stabilise and the world heads more towards ‘normality’, longitudinal studies investigating the effect of the lockdowns at various different stages of lockdown and restrictions will start to emerge. Houghton et al. (2022) begin to fill the current gap in longitudinal research, by specifically exploring implications for mental health and loneliness across two separate populations of adolescents; those with and without NDD longitudinally during the pandemic, over two-and-a-half years. This involved before (November 2018, April 2019, March 2020) and after (July/August 2020) the schools closed. There is an impressive sample size, with the participants with NDD matched to the control group on age and sex. Adolescents with five different types of NDDs are considered; Autism Spectrum Disorder (ASD;
findings of the paper suggest that the adolescent
cents both with and without NDD. Interestingly, the
effect that the lockdowns have had on adoles-
these results. There is thorough consideration about
potential theoretical and applied implications of
dinal research in this area and the wide-ranging
extremely important given the lack of past longitu-
mental health symptoms time during lockdown. Therefore,
the unpredictability of the COVID-19 lock-
downs was not associated with poor mental health
in adolescents with NDD. However, it was linked
with a decline in mental health for those without.
Potential explanations for these findings concern
the social difficulties often experienced by adoles-
cents with NDD. They may have been more used to
being alone and awarded some relief from stressful
in-person social activities via lockdown, using social
media to stay in touch with friends. However, those
without NDD suddenly and unexpectedly experi-
experienced social isolation and were not able to engage
in previously enjoyed social experiences hence had
a decline in mental health. These explanations are
admittedly post hoc and it is also important to
consider individual differences here; not everyone
with NDD has social difficulties and some of the
sample of those without NDD fared better from
lockdown than others. Importantly, some of the
sample will have been affected by COVID-19 during
the lockdown more than others, for example, via
own illness or illness/bereavement of someone close
to them, loss of job of family member, more stress
within the family home, etc. These individual
differences were not explored within the paper,
but would be an interesting area for future
research.

Nevertheless, the work of Houghton et al. (2022) is
extremely important given the lack of past longitudi-
dinal research in this area and the wide-ranging
potential theoretical and applied implications of
these results. There is thorough consideration about
the effect that the lockdowns have had on adoles-
cents both with and without NDD. Interestingly, the
findings of the paper suggest that the adolescent
population without NDD might have been particu-
larly vulnerable to the negative effects of lockdown.
Thus, these individuals may benefit from mental
health interventions in the aftermath of the COVID-
19 pandemic, as they experienced significant
decline in positive wellbeing and increases in
depressive-type symptoms. As adolescents begin to
socialise again and ‘re-learn’ the pre-pandemic social
experiences, routines and school structure, it is very
important to consider the mental health and loneli-
ness these participants tended to experience during the
restrictions.

Unlike their typically developing peers, adoles-
cents with NDD had a considerably high baseline
rate of poor mental health and loneliness. However,
they did not show negative mental health outcomes
post lockdown/school closure. The increase in
online activities, less pressure to attempt to conform
to societal expectations and becoming more used to
being alone might all be seen as an advantage for
those with NDD during lockdown but a disadvantage
for those without. As individuals with NDD might be
used to being lonelier in general (as demonstrated by
their higher loneliness than the control group at the
beginning) lockdown might not have made as much
difference as compared with the control group who
suddenly, dramatically and unexpectedly found
themselves isolated. Indeed, the adolescents with
NDD might have felt more ‘connected’ with others
than previously as everyone was now staying at
home with social interaction difficulties. This could
explain why pre-COVID there were higher levels of
isolation and lower positive attitudes to being alone
in the adolescents who had NDD.

Crucially however, there were some differences in
different subgroups of neurodevelopmental disor-
ders. For adolescents with ASD and SLD, the
COVID-19 lockdowns were not associated with
adverse impairment. For adolescents with ADHD
there was higher positive mental wellbeing and
decreases in externalising symptoms in between
pre-COVID and post schools re-opening. This is in
contrast to past research finding adverse effects of
lockdown for adolescents with ADHD (e.g. Breaux
et al., 2021). As the authors themselves highlight,
future research should see if these effects are repli-
cated across different samples and cross-culturally.

The Houghton et al. (2022) paper makes an
important contribution to the study of mental health,
NDD and adolescents. From an educational and
clinical perspective, interventions should target help
for adolescents both with and without NDD as the
world begins to ‘emerge’ from COVID-19. The very
high rates of mental health problems and loneliness
even at baseline for those with NDD are concerning
and future research and interventions should help to
alleviate this. Nevertheless, unlike their peers, this
group did not experience increased mental health
and loneliness difficulties through lockdown.

It would be interesting to tease apart the qualita-
tive reasons for differences between how adolescents
with and without NDD perceived lockdown and if
experiences during the lockdown could be simulated
to assist those with NDD in future. For example, an
increase in digital and technical activity and different
routines that those with NDD might have experienced during lockdown, if helpful, might be applied to some social activities. The in-person school experience is of vital importance, as this study highlights and use of online/digital technology is no substitute for this. However, more hybrid models of working and socialising, such as making some events available online as well as in person might help facilitate engagement for some individuals with NDD (as well as other individuals who might for various reasons have difficulties attending in person or prefer to attend online). As we progress from the pandemic, this study paves the way for future longitudinal and cross-cultural research about the secondary effects of COVID-19 restrictions on adolescents both with and without NDD.

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Accepted for publication: 2 June 2022

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