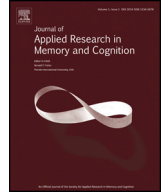




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COVID-19 Special Forum Article

The Ecology of Youth Psychological Wellbeing in the COVID-19 Pandemic

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The consequences of profound disruption to everyday life caused by the COVID-19 pandemic will only emerge over time. Guided by ecological systems (Pitchik et al., 2021) and developmental psychopathology (Masten & Cicchetti, 2010) frameworks, I review evidence that points to parents at home with children as particularly vulnerable to increased psychological difficulties, particularly in contexts of poverty. Resultant compromised parenting may reduce children's opportunities for the kinds of everyday interactions that promote cognitive and socioemotional development and expose them to increases in coercive, avoidant, and other problematic caregiving behaviours. I discuss three evidence-based strategies that parents could adopt to buffer their child's mental health: building positive discipline strategies, talking with the child about the pandemic and its consequences, and conversing about the past. I conclude, however, that approaches to supporting parents and their children at this time must also address multisystem factors that compromise caregivers' ability to provide nurturing care.

Keywords: Youth mental health, COVID-19 pandemic, Caregiving behaviors, Ecological systems, Positive discipline, Parent-child reminiscing

General Audience Summary

The COVID-19 pandemic has caused profound disruptions in many people's lives, and the effects are still unfolding. The psychological evidence so far tells us that many people have shown remarkable resilience. Overall rates of mental health difficulties have increased, however, especially for people with pre-existing difficulties. Yet to fully understand the pandemic's current and likely effects on youth psychological wellbeing, we need to take account of the multiple systems within which families live. In particular, mothers with children at home have been identified as suffering more than other groups; they are vulnerable to heightened depression, anxiety, and other mental health problems, especially when they are living in conditions of financial and food insecurity, poverty, job loss, and other systemic pressures. Caregiver psychological difficulties and stress have implications for children's mental health and development. Specifically, increases in caregiver mental health problems—and of pandemic-related stressors more generally—can (as emerging evidence suggests) increase the risk of negative, relationship-damaging cycles between parent and child, which can maintain and escalate children's mental health problems. Caregiver mental health problems can also reduce children's opportunities for engaging in everyday conversations that are crucial for cognitive and emotional development. These emerging findings highlight the need for interventions at each point of the ecological system. Examples include financial support for caregivers and widely available and accessible mental health and parenting resources delivered in multiple ways. These resources can guide caregivers towards evidence-based approaches to improving and maintaining their child's mental health and development. These approaches include positive approaches to discipline, engaging children in conversations about everyday past experiences, and talking with their child about the pandemic to reduce fear and correct misinformation.

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The coronavirus (SARS-CoV-2, known as COVID-19) has altered the lives of millions of people across the planet (Aknin et al., 2021). Uncertainty and fear, the death of loved ones, social isolation, and other profound disruptions to daily life have become central to the experience of many people for periods of varying duration. Especially troubling, the situation remains in flux: The virus is ever-changing, accelerating, and re-emerging unexpectedly, with periods of lockdown reimposed without foreseeable end and vaccine roll-outs unpredictable and controversial.

The convergence of factors known to impair optimal youth development associated with the pandemic has resulted in ominous warnings about its serious implications for the psychological wellbeing of children, young people, and their caregivers (Gruber et al., 2021; Holmes et al., 2020). Against a backdrop of the increased prevalence of youth mental health difficulties in many countries (Ford & Cross, 2021), the negative psychological consequences of the pandemic have been highlighted as a challenge across developmental periods that might extend long into the future (Gruber et al., 2021; Holmes et al., 2020; Humphreys, Myint, & Zeanah, 2020).

The primary aims of this review are to discuss how multi-systemic factors might affect children and adolescents' development and their mental health during and after this pandemic and what might buffer children from these negative outcomes. In advance, I highlight three broad conclusions. First, we do not yet have sufficient evidence from longitudinal studies conducted with a diverse range of people (adults and their children) to know whether and how COVID-19 has affected children's psychological functioning in an enduring way (Wright, Hill, Sharp, & Pickles, 2021). Second, the evidence to date suggests impressive resilience in some. But there are concerning early signals that parents with children at home are particularly vulnerable to increases in psychological problems emanating, in part, from factors such as food and financial insecurity and poor and crowded housing. Approaches to helping caregivers to buffer their children's psychological wellbeing must include attention to these structural factors. Third, during the pandemic, as at other times, critical pathways from systemic adversity to poorer youth psychological functioning are via the negative impact on caregiver mental health and caregiving behaviours (Peris & Ehrenreich-May, 2021; Prime, Wade, & Browne, 2020). Compromised caregiving, in turn, likely reduces children's exposure to the kinds of everyday interactions that are the bedrock of cognitive and socio-emotional development while increasing their risk of exposure to harsh, lax, or avoidant discipline styles. Approaches to helping caregivers must also provide ready access to mental health and parenting resources (Fosco et al., 2021).

Initially, however, I present a brief overview of what the research findings to date inform us about at the time of writing about the overall effects of COVID-19 and its sequelae on the mental health of adults (often caregivers) and youth. Thereafter, I outline the theoretical frameworks that have guided my approach: an adapted ecological systems view (drawing on Pitchik et al., 2021) and a developmental psychopathology approach (Masten & Cicchetti, 2010). Third, I consider what

the evidence to date tells us about the role of factors at each "nested" level by considering the more nuanced picture of who might be especially at risk of negative outcomes and the potential influential mechanisms. Finally, within the context of clinical and developmental research, I consider how parents might buffer their children and promote resilience.

A Note on Terminology

In the research reviewed, it is inevitable (given the broad focus) that a range of terms has been adopted to refer to psychological functioning (e.g., psychological distress and wellbeing, mental health). In this review, I refer to "psychological functioning" and "psychological well-being" to refer to both mental health and developmental outcomes for children and caregivers, and psychopathology or mental health when the focus is more specific. Moreover, it is important to note that research on the effect of the pandemic on caregiving tends to have a general focus on mothers to the exclusion of fathers. This replicates the pervasive bias in psychology which not only tends to exclude fathers (Cabrera, Volling, & Barr, 2018) but places disproportionate responsibility on mothers for children's outcomes. I have, therefore, generally adopted the term "caregiver," specifying "mothers" where the research has done so.

Overall Findings of Pandemic's Effects on Mental Health

Research investigating the implications of the pandemic for mental health has been characterized by an impressive mobilization of international scientists (Holmes et al., 2020). Meta-analyses and systematic reviews of multiple studies are just now emerging, many (but not all) drawing on mostly studies with participants from Western cultures and all, inevitably, reporting on a period from some time in the past.

What do these overall findings tell us? In the first year of the pandemic, the expected and widespread slew of mental health problems did not occur. Findings show that the psychological distress (anxiety, depression, distress) of adults (and therefore, of many parents) increased during the early months, and that, across many countries and cultures, rates of pandemic-related post-traumatic stress disorder, at almost 25%, were also somewhat higher than occurs for most other kinds of disasters (Aknin et al., 2021; Yuan et al., 2021). By mid-2020, however (prior to the advent of the Delta variant), anxiety, distress, and depression had reduced, although often not back to pre-pandemic levels (Aknin et al., 2021; Helliwell, et al., 2020). Nonetheless, longer-term impairment of adults' mental health is by no means inevitable—a finding considered to reflect "almost astonishing resilience" (Helliwell et al., 2020, p. 48; Achterberg, Dobbelaar, Boer, & Crone, 2021; Aknin et al., 2021; Robinson et al., 2021).

With respect to young people, overall findings show considerable increases in depression, anxiety, stress, inattention-hyperactivity, conduct problems, sleep disorders, and, for some, posttraumatic stress disorder in the first year or so of the pandemic (Berger et al., 2021; Fosco et al., 2021). Yet a raft of mixed findings from research within the United Kingdom led researchers to conclude that "(D)espite lurid headlines

suggesting a Tsunami of mental health conditions amongst children and young people unleashed by the pandemic...” ... “most of the UK’s kids are probably OK...” (Ford & Cross, 2021, p. 2). Indeed, some children experienced an improvement in their mental health difficulties during the lockdown phase of the pandemic, and some families have welcomed quality time together. Inevitably, however, the data have significant limitations: Research has been conducted in only a few countries, few studies are longitudinal, and very few have gathered data from both parents and youth, and of course, the pandemic’s sequelae continue to unfold (Solmi, Cortese, & Correll, 2021).

Theoretical Model

How do we understand these broad findings? Guided by the United Nations nurturing care framework (Britto et al., 2017), Pitchik et al. (2021) have developed an ecological model within which the pandemic’s multisystemic effects might “affect the enabling environment for caregivers to provide nurturing care” (p. e765) (see also Benner & Mistry, 2020; Prime, Wade, & Browne, 2020). I have drawn heavily on Pitchik et al.’s model but have adapted it to specify particular mental health and developmental outcomes for caregiver and child (see Figure 1). Consistent, too, with Bronfenbrenner’s ecological systems framework (Bronfenbrenner & Evans, 2000), children’s development is characterized as nesting within multiple interacting levels (cultural, sociopolitical and economic, parenting and individual), of which the most powerful is the child’s immediate care setting (Britto et al., 2017).

The premises of a developmental psychopathology framework are also crucial, however: As the pandemic and its sequelae compromise a family system, pre-existing or newly-developed difficulties can have cascading effects across time, gathering a raft of other escalating difficulties (Masten & Cicchetti, 2010; Morris, Hays-Grudo, Kerr, & Beasley, 2021). I now address each of these levels in turn.

Factors Influencing the Impact of COVID-19 on Youth Psychological Outcomes

Cultural, Political, Social, and Economic Factors

Across countries, nested within but by no means solely determined by their cultural context, different pictures of the impact of COVID-19 have emerged. Data from over 150 countries suggest that greater initial success in reducing

COVID-related deaths and retaining wellbeing has occurred in countries adopting a public health approach that aimed to drive community transmission to zero and keep it there (a goal subsequently challenged by the advent of the Delta variant); where there were lower levels of income inequality; and where people reported greater trust and confidence in public institutions, perhaps facilitating a shared sense of community identity and purpose (Helliwell et al., 2020; Van Bavel et al., 2020).

Within countries, however, risk of infection and the negative psychological consequences of the pandemic have been disproportionately experienced by people already living in disadvantaged circumstances: those in precarious and front-line jobs (including health workers); people who cannot work from home; who live in overcrowded and poor quality housing; and people from ethnic minority groups (Aknin et al., 2021; Helliwell et al., 2020; Whitehead, Taylor-Robinson, & Barr, 2021; Yuan et al., 2021). Researchers estimated that the first year of the pandemic would result in an additional 42- to 66 million children living in extreme poverty.

Yet, according to Whitehead et al. (2021), the greatest financial burden of containment and lockdown has been carried by low-income families with young children due, in part, to the additional costs of increased spending on food and heating. Other research, too, identifies caregivers at home with children (under 5 years or 18 years) as suffering more than other groups (Aknin et al., 2021), and caregivers’ suffering clearly has implications for their children.

Caregiver Factors: Influence on Caregiving Behaviours and Child Psychological Functioning

Longitudinal findings suggest that mothers’ depression and anxiety have increased during the pandemic, particularly in situations where they were attempting to manage the effects of income disruptions, balancing home and work responsibilities, and difficulty obtaining childcare (Aknin et al., 2021; Gademann et al., 2021; Racine et al., 2021). For example, larger increases in depressive symptoms were reported by Bangladeshi caregivers of children 6- to 27 months who had experienced greater pandemic-related food insecurity and financial loss compared to less affected caregivers (Pitchik et al., 2021). Meta-analysis of rates of PTSD (posttraumatic stress disorder) following infectious disease pandemics (including COVID-19) suggests that the multiple factors posing esca-

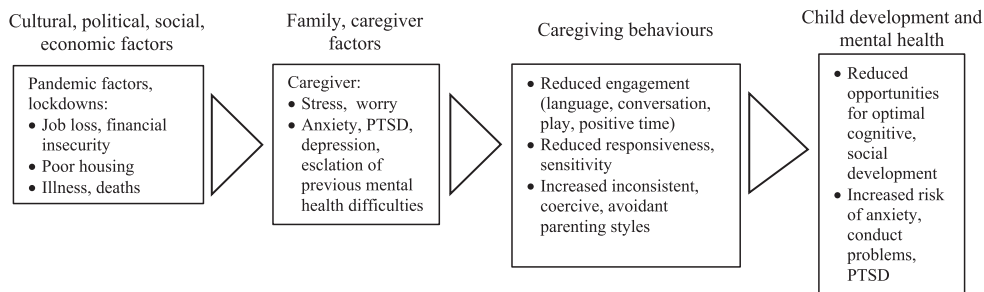


Figure 1. Adapted model of factors that can influence the impact of COVID-19 pandemic on the child (from Pitchik et al., 2021’s conceptual model, originally developed through the lens of the nurturing care framework).

lated risk include having or living with children in limited space, receiving limited support, contracting the infection, and working as a frontline healthcare worker (Yuan et al., 2021). For both caregivers and children, experiencing psychological difficulties of any type prior to COVID-19 increases the likelihood of their exacerbation after its onset (Aknin et al., 2021; Fosco, Sloan, Fang, & Feinberg, 2021; Luthar, Ebbert, & Kumar, 2021; Wright, Hill, Sharp, & Pickles, 2021; Yuan et al., 2021).

Each of these mental health difficulties (anxiety, depression, PTSD, high levels of stress) potentially influence caregiving and youth psychological outcomes. Caregivers' reports of changes in their parenting behaviour during the pandemic do, indeed, reveal an increase in negative emotional interactions with their child, including both harsh and lax discipline practices, often occurring in the context of financial concerns and/or a pre-existing mental health condition (Chung, Lanier, & Wong, 2020; Fosco, Sloan, Fang, & Feinberg, 2021; Gadermann et al., 2021; Whittle, Bray, Lin, & Schwartz, 2020). Increases in controlling behaviours (coercion and overprotection) have also been found to be predicted by higher levels of caregivers' COVID-related fear (Wissemann, Mathes, Meyer, & Schmidt, 2021). If at a high level and sustained, increases in parents' negative approaches to discipline are concerning. Robust theory and research demonstrate that harsh and lax discipline and coercive cycles powerfully maintain and escalate children's externalizing and internalizing difficulties, shape their hypervigilance towards threat, and can lay the foundation for troubled relationships (Patterson, Forgatch, & DeGarmo, 2010). These negative patterns can also tip into child maltreatment.

We can draw on research within clinical and developmental psychology to consider more specifically how, in the absence of appropriate intervention, problematic caregiving behaviours might cascade across time to influence children's outcomes. To take one example, low-income pregnant and parenting women have particularly high rates of depression even in the absence of the multisystem stressors imposed by the pandemic. Longitudinal evidence points to a negative cascade whereby economic circumstances negatively affect women's depressive status, which, in turn, influences their future economic mobility and opportunities (Smith & Mazure, 2021). In these ways, low-income pregnant and parenting women can become mired in a cycle of escalating depression and poverty.

It is perhaps unsurprising, therefore, that relative to non-depressed mothers, those who are depressed tend to display lower levels of sensitive caregiving and greater disengagement and negativity towards their children, while also having trouble setting appropriate behavioural limits; these parenting difficulties, in turn, predict their children's emotional and behavioural dysregulation (Lovejoy, Graczyk, O'Hare, & Neuman, 2000; Lunkenheimer, Skoranski, Lobo, & Wendt, 2021; see also Goodman, Simon, Shamblaw, & Kim, 2020). Moreover, less sensitive caregiving increases the likelihood that the child will display negative interpretational biases that render them vulnerable to depressive episodes (Sfärlea et al., 2019) and, indeed, predicts young people's poorer emotional and behavioural

adjustment into adolescence (Bachmann, Beecham, O'Connor, Briskman, & Scott, 2021).

Heightened caregiver anxiety, too, can contribute to a cycle over time that escalates youth anxiety: Fear and anxiety are at the core of many people's responses to the pandemic, given the uncertain and increased threat that it poses (Van Bavel et al., 2020). Caregiver and child pandemic-related fear, anxiety, and stress can be tightly entwined: For example, adolescents' stress around their parents during COVID-19 was significantly linked with their (the adolescents') depression and anxiety (Luthar, Ebbert, & Kumar, 2021 see also Achterberg, Dobbelaar, Boer, & Crone, 2021), and adolescents with family members who experienced financial insecurity or physical health concerns and self-quarantining during the pandemic reported more severe emotional problems (Miller et al., 2021). For younger children, greater parental fear of the pandemic, expressed either verbally or behaviourally, was associated with greater levels of child pandemic-related fear (Radanovi, Mici, Pavlovi, & Krstic, 2021).

Parallel to the example of caregiver depression discussed earlier, a great deal of research demonstrates that anxious caregivers can inadvertently shape their child's anxiety by encouraging avoidance of even mildly challenging situations, viewing their child as unable to cope and attempting to protect them and to reduce their own (the caregiver's) anxiety level (Aktar, Majdandži, De Vente, & Bögels, 2014; Orchard, Cooper, & Creswell, 2015; Rapee, 2013). Similar patterns emerge for childhood posttraumatic stress disorder and demonstrate that caregivers experience higher levels of negative emotions when attempting to manage their child's challenging behaviour and tend to facilitate avoidance (Franz et al., 2021; Hiller et al., 2018; Johnco et al., 2021; Taraban et al., 2017).

Caregiver depression, disengagement, and other mental health difficulties (including stress and antisocial behaviour) also tend to be associated with lower levels of the kinds of parent-child conversations about everyday experiences (Valentino et al., 2014; Van Bergen et al., 2018; see also Salmon, 2018 for review) that provide a crucial context within which children's cognitive and socio-emotional development is scaffolded (Nelson & Fivush, 2004; Salmon & Reese, 2016). Robust findings from concurrent, longitudinal, and experimental research paradigms demonstrate that, from the early years and beyond, elaborative everyday discussions about the past, in which the child's contribution to the conversation is supported and extended, boost children's language and literacy; their ability to recall their personal experiences in rich detail (autobiographical memory) and identity development; their understanding of their own and others' emotions; and their self-regulation (Fivush, Haden, & Reese, 2006; Salmon & Reese, 2016). Underscoring the longitudinal link between core developmental skills and children's poorer emotional competence and mental health Swetlitz, Lynch, Propper, Coffman, & Wagner, 2021 have recently demonstrated that maternal depression in infancy leads to reduced maternal elaborative talk in early childhood and increased child behavioural problems at age 7 years.

It is important to note, too, that the content of reminiscing conversations can pose problems. Caregivers of children with significant behavioural problems tend to engage in more negatively-focused conversations than other caregivers (Van Bergen et al., 2018), and anxious parents of anxious children tend to have difficulty supporting their child’s expression of negative emotions and convey an expectation of catastrophic outcomes during discussions about past experiences (Moore, Whaley, & Sigman, 2004; see Salmon, 2018, for review). In our recent findings, mid-adolescents show greater anxiety a year later when they and their mothers have mutually promoted emotional avoidance when reminiscing about a shared conflict event (Dewhirst et al., 2021). Extending these findings, we might expect, therefore, that caregivers with mental health difficulties that lead them to disengage or to focus on negative outcomes will have particular difficulty providing their children with developmentally-appropriate information about the pandemic in order to quell their fears.

In summary, caregivers with children at home have so far emerged as particularly at risk of mental health problems during the pandemic, particularly in the context of multisystemic stressors, and caregivers have also reported negative alterations to their caregiving behaviour. These changes and ongoing multisystemic challenges imposed by the pandemic increase risk of first, coercive or avoidant cycles that may maintain or escalate youth anxiety, depression, behavioural problems, and/or PTSD; and second, reduced levels of engagement in everyday conversations that provide a foundation for cognitive and socio-emotional development as well as distortions in the ways in which emotions are managed within these conversations. Underpinning all difficulties, however, is a lowering of the quality of the crucial relationship between caregiver and child. Thus, Pitchik et al. (2021) conclude that early child development has been influenced both directly and indirectly by the pandemic, and these effects are exacerbated in contexts of poverty.

What Can Buffer the Effects of the Pandemic on Children?

Masten & Cicchetti, 2010 note, at any point, well-timed and targeted interventions could counteract negative cascades by reducing problems in key domains or building competence in

others—and key domains may refer to different levels of the child’s context. Figure 2, again adapted from Pitchik et al. (2021), reconceptualizes Figure 1 to provide a broad overview of possible interventions at each level of the ecological system. Note that I do not discuss all of the factors in Figure 2 but focus on those specifically related to mental health.

Political, Social, Economic Factors

As is clear from the discussion interacting risks posed by the pandemic, interventions must be multisystemic. Integral to buffering the worst effects on caregiver and child mental health care policies and services that support caregivers’ mental health and capacity to provide nurturing care for their children. This includes support for those experiencing economic adversity (such as income support payments and sustainable economic support; emergency food provision), as well as ready access to physical and mental health services and to parenting resources and childcare (Shearer et al., 2021; Whitehead et al., 2021; Yoshikawa et al., 2020). Importantly, interventions at each level have implications for the others. For example, just as low-income pregnant or caregiving mothers can become engaged in an escalating cycle of depressed mood and poverty, better mental health can be one pathway to employment (Smith & Mazure, 2021).

Caregiver Factors: Access to Mental Health and Parenting Resources

The need for ready access to parental mental health and parenting resources has been highlighted since the onset of the pandemic. For example, a striking 70% of caregivers in a longitudinal study in the United Kingdom reported wanting extra support to manage their child’s response to the pandemic and its associated restrictions (Waite et al., 2020), and, of course, caregivers with pre-existing psychological problems will be highly represented amongst this group. At the level of caregiving behaviour, approaches to intervention will necessarily aim to support positive parenting in order to reduce problematic parenting styles and to support or increase caregivers’ engagement in everyday interactions that facilitate children’s development. Both, ultimately, maintain or improve the quality of the

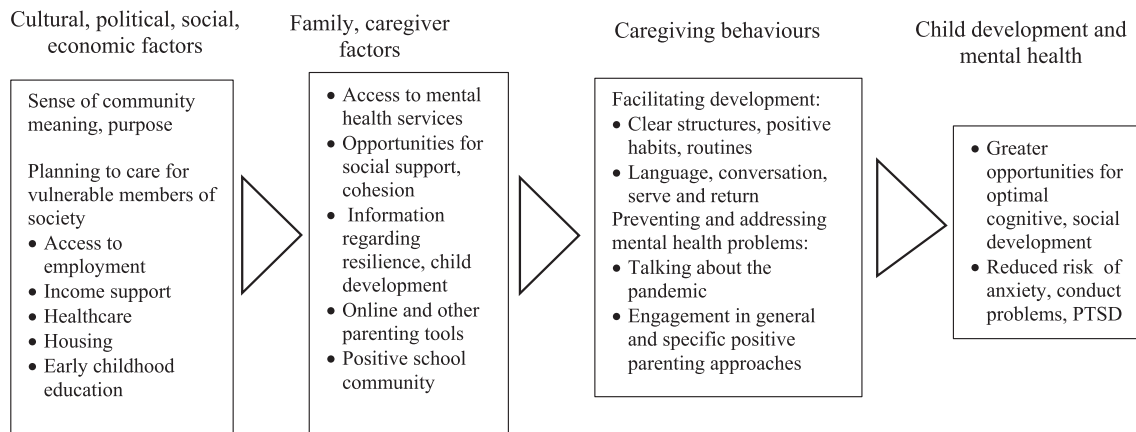


Figure 2. Intervention possibilities to buffer child mental health (adapted from Masten & Motti-Stefanidi, 2020; Pitchik et al., 2021).

caregiver-child relationship (Morris, Hays-Grudo, Kerr, & Beasley, 2021). Fortunately, a large psychological literature provides guidance as to many, although not all, essential elements in these approaches.

Improving access to mental health and parenting services for large numbers of people requires delivery platforms at a scale to reach caregivers, including television, app-based learning programmes, and other mass media interventions; that is, the *how* of delivery is crucial. In response to the need for caregiver support to manage children's behavioural and emotional problems during the pandemic, digital public health interventions drawing on a strong evidence base are being developed and evaluated. SPARKLE (Supporting Parents and Kids Through Lockdown Experiences; Kostyrka-Allchome, Creswell, & Byford, 2021) is one such approach, co-designed with parents in the United Kingdom. Via videos, graphics, and text, parents are able to receive information about core parenting skills and common challenges, link in with high-quality online resources, and put in contact with other parents. This kind of approach also provides, in multiple modalities, the much-needed social support that is a crucial mechanism for the effectiveness of parenting interventions (Morris, Hays-Grudo, Kerr, & Beasley, 2021). Similarly, the well-evaluated parenting programme Triple P's various online versions for caregivers has been found to be effective for caregivers from diverse socioeconomic backgrounds and to be particularly helpful in reducing child problem behaviour for parents with more problematic parenting styles and children with greater levels of behaviour problems (Day et al., 2021).

Overall, however, we have much to learn about how best to deliver online approaches to mental health and parenting (Wasil, Venturo-Conerly, Shingleton, & Weisz, 2019), and there are a number of obstacles to widespread dissemination, accessibility, and uptake. One obstacle to accessing online approaches, for example, is many caregivers misunderstand what is involved in effective approaches (Dadds & Tully, 2019), while knowledge of factors influencing children's cognitive and emotional development—and therefore of the need to learn more about them—tends to be the domain of educated, higher SES parents (Rowe, 2018; Suskind et al., 2016). Once accessed, however, it is simply difficult to alter caregiving behaviour, let alone under conditions of an international pandemic. Moreover, findings suggest that parents who initially struggle with confidence and adjustment difficulties may require additional practitioner scaffolding (Day et al., 2021). Finally, despite the plethora of mental health apps over recent years very few have paid attention to individuals from marginalized and culturally-diverse groups in their development, and most lack evidence supporting their effectiveness (Ramos et al., 2021). A particular challenge at this time, therefore, is how best to reach people from all aspects of society under the most stress.

In summary, integral to caregivers engaging with their children in positive ways is that there is ready access to caregiver mental health resources and to parenting advice and information. The pandemic has escalated awareness of the importance of multiple platforms that are readily available to deliver this

information to a wide variety of caregivers (the *how*) but has simultaneously highlighted the gaps in implementation (see Britto et al., 2017).

Caregiving Behaviours: Facilitating Child Mental Health and Development

Research reviewed in previous sections suggested that escalations in problematic parenting during the pandemic can negatively impact children's mental health and development. I now draw on clinical and developmental literature to discuss strategies that caregivers could adopt, if adequately supported, to buffer their children from these negative sequelae (the *what*): building effective responses to children's behaviour and reducing coercive and avoidant cycles, building positive discipline strategies; reminiscing about everyday experiences to consolidate key developmental skills; and talking with children about the pandemic to reduce fear and misconceptions. Engagement in each of these strategies has benefits for both mental health and children's development: They are, of course, integrally connected.

Building Positive Discipline Strategies

The early indications of pandemic-related escalations in problematic (coercive, harsh, avoidant) caregiving behaviour underscore the importance of the large literature on positive approaches to parenting. Decades of research, within a social learning theory framework, has identified the elements of building positive caregiver-child relationships and of reducing escalations conduct problems or anxiety (Rapee et al., 2009; Scott & Gardner, 2015). In the context of a relatively structured routine, caregivers are encouraged to gradually bring the energy that they expend in negative, escalating interactions to noticing and praising their child's small (or larger) positive behaviours. Moment-to-moment exchanges are crucial: To quote Dadds & Tully, 2019, "(E)ach incident of parent-child discipline has the potential to invest in the building of a more socially skilled, resilient, and self-regulating child or, on the other hand, a child who is more vulnerable to interpersonal conflict, intense unregulated emotions, and impulsive selfishness" (p. 794).

Thus, for example, when a child has been manifesting oppositional or aggressive behaviour, they might be praised for being helpful, working independently, playing cooperatively, or reading quietly; when a child has been behaving in an anxious and avoidant way, they might receive praise for attempting avoided activities, that is, for courageous behaviour that exposes the child to their fears (Creswell, Waite, & Hudson, 2020; Rapee, Schniering, & Hudson, 2009). Caregivers are encouraged to ignore minor or irritating misbehaviour, such as complaining, and, as a last resort, to use proportional consequences for more serious misbehaviour, such as a brief period of timeout from positive reinforcement (Dadds & Tully, 2019).

Positive discipline skills provide a critically important way for caregivers to step out of relationship-damaging escalating negative cycles and have been found to promote sensitive caregiving and to alter caregivers' negative views of their child

(O'Connor, Matias, Futh, Tantam, & Scott, 2013; Sawrikar & Dadds, 2018). Beneficial outcomes for children include improvements in behavioural and emotional self-regulation as well as reductions in conduct problems and anxiety (Dadds & Tully, 2019; Rapee, Schniering, & Hudson, 2009; Scott & Gardner, 2015). Moreover, the effectiveness of these approaches extends beyond Western samples: In Low and Middle-Income Countries (LIMC) programs, delivered across diverse methods and contexts with the aim of achieving improvements in caregiver interactions, behaviors, knowledge, and beliefs have been demonstrated to boost children's cognitive and language development (Britto et al., 2017).

Of course, parenting interventions are not a panacea. Even with therapist-conducted interventions, more than 33% of young people with conduct problem behaviour do not substantially improve (Dedousis-Wallace, Drysdale, McAloon, & Ollendick, 2021), and approximately 40% of young people with anxiety disorders do not respond to treatment (Creswell, Waite, & Hudson, 2020). Importantly, very few children receive any evidence-based treatments, underscoring again the critical importance of developing more readily accessible approaches (Creswell, Waite, & Hudson, 2020).

In summary, boosting parenting skills could buffer children from the effects of the pandemic and enhance resilience by providing a structure within the family, increasing sensitive caregiving and family warmth, and improving children's self-regulation while reducing their vulnerability to escalating mental health problems across time.

Talking With Children About the Past

As discussed earlier, one of the most powerful ways in which parents can support their children's cognitive and socioemotional development and, ultimately, their mental health is to engage them in conversations about their everyday past experiences. Conversations about the past have the advantage of being freely available to all parents and children, ubiquitous in daily life, and often relatively brief (Fivush, Haden, & Reese, 2006; Salmon & Reese, 2016). Each collaborative conversation between parent and child is, potentially, a building block of child resilience.

Findings from robust theoretically-guided research show that caregivers (mothers in most research) begin reminiscing with their child from the very early years, and the initially highly parent-scaffolded conversations evolve as children more active contributors (see Nelson & Fivush, 2004; Salmon & Reese, 2016; Wang, 2016; Waters, Camia, Facompré, & Fivush, 2019). Across childhood and into adolescence, caregivers' individual and culturally-influenced styles of talking of discussing the past are increasingly reflected in their children's styles of remembering and narrating their own past experiences (Fivush, Haden, & Reese, 2006; Reese, Macfarlane, McAnally, Robertson, & Taumoepeau, 2020; Salmon & Reese, 2016; Wang et al., 2019). In Western cultures, a more elaborative style, in which parents elicit the child's conversational contribution and add new information to the discussion, has been found to lead to richer and detailed autobiographical memory recall over time, relative to a style in

which the parent tends to repeat their own questions and engage the child to a lesser extent (Fivush, Haden, & Reese, 2006; Wareham & Salmon, 2006).

How might conversations about the past lead to the multiple positive developmental outcomes noted in the earlier section? The *process* of reminiscing conversations has much in common with the of "serve and return," in which caregivers are encouraged to reciprocally and contingently respond to their child's "invitations" (Shonkoff & Bales, 2011). Within these sensitive and responsive conversations, there are multiple opportunities for children's development. For example, reminiscing with a young child about a time when they were distressed can provide structure to help them understand the experience (e.g., "this happened because..." or "after..."), and to learn emotion labels and their causes and consequences (e.g., "you looked sad... were you sad because... you cried and I gave you a hug"). In this way, children develop the skills to recall their experiences in narrative form. Moreover, when the child is engaged during the discussion, even briefly, self-regulation might be facilitated (see Salmon & Reese, 2016). Conversations about past experiences, relative to talk at other times and contexts that do not involve narrative skills, are likely beneficial for language development because they challenge children because they include longer and more complex sentences, more sophisticated vocabulary, and higher-order thinking talk (HOTT: e.g., inferences, comparisons, and abstractions including emotion and metacognitions) and children have to link ideas together in a story to support complex thought (Frausel, Richland, Levine, & Goldin-Meadow, 2021; Rowe, 2018). In turn, impoverished language skill has a direct longitudinal pathway to poorer youth mental health (see Salmon, O'Kearney, Reese, & Fortune, 2016, for review).

Importantly, conversational style is malleable. For example, we (Salmon, Dadds, Allen, & Hawes, 2009; P. Van Bergen, Salmon, & Dadds, 2018; P.V. Van Bergen, Salmon, Dadds, & Allen, 2009) engaged mothers in reminiscing coaching, in which they were encouraged to reminisce about everyday activities with their young children (ages 3- to 7 years) using the elements of elaborative talk: open-ended questions, helping the child provide detailed descriptions of their experience, and labelling emotions and identifying emotion causes. We found that mothers of both typically-developing children and children with behavioural (conduct) problems came to use richer and more elaborative utterances and increased their positive and negative emotion language; this pattern emerged despite lower levels of elaborative utterances and more negative emotion talk at baseline for mothers in the clinical group. Moreover, the children in our research came to have a more sophisticated understanding of emotion causes post-intervention (Van Bergen, Salmon, Dadds, & Allen, 2009). Other research using similar approaches to intervention also demonstrate that it is possible to alter both the style and content of the conversations of harder-to-reach parents (e.g., mothers who have maltreated their child) to capture the elements demonstrated to be beneficial for their children (e.g., increased sensitivity, engaging the child via open-ended questions and elaborations) (Valentino et al., 2019; Wang et al., 2019).

Yet again we have much to learn about optimal ways of engaging caregivers, particularly from groups who do not realise the critical importance of everyday interactions for their children (Leffel & Suskind, 2013). Caregivers may be motivated to engage in everyday reminiscing once they realise that personal storytelling can improve children's academic skills (Frausel, Richland, Levine, & Goldin-Meadow, 2021; Reese, 2013); or they may prefer specific guidance such as to use mealtime as an opportunity to recall past and plan future events (Leech, Wei, Haring, & Rowe, 2018) or to adopt particular kinds of language ("wh" open-ended questions, emotion terms; Van Bergen et al., 2018). Shared book reading may be preferable for caregivers as another way of engaging children in linguistic interactions, and has the advantages of providing a focus external to the dyad and one that might be more magical, engaging, and colourful than everyday life during a worldwide pandemic while also engaging both caregiver and children in more complex language with more conversational terms and varied topics relative to other daily activities (Butterfield et al., 2019; Reese, Sparks, & Leyva, 2010). Although the benefits of book reading for language and literacy are well established (Demir-Lira et al., 2019), there are also collateral benefits including, for a low-income sample of parents of very young children facing multiple external stressors, reductions in parenting stress and improvements in the parent-child relationship (Canfield et al., 2020).

How might caregivers harness the benefits of reminiscing conversations to boost their positive discipline strategies and manage specific pandemic-related challenges? One possibility is that caregivers reminisce about specific times where the child behaved prosocially or courageously; this could provide an additional source of praise, a stronger memory of positive experiences for both caregiver and child, and a way of highlighting for the child the specific behaviours (compliance, cooperative play, reading quietly) desired by their parent (Salmon, Dittman, Sanders, Burson, & Hammington, 2014). Another possibility is that small positive activities scheduled as part of a family routine could be later discussed, potentially providing a counterpoint for the excessively negative emotion focus that is found when children have significant behavioural problems (Van Bergen et al., 2018). A conversation of an instance of the child's aggression or fear, successfully managed, would also enable the child's attempts of self-regulation and coping to be identified, praised, extended, and later recalled.

Finally, parent-child reminiscing discussions about difficult experiences may enable the child to feel they are understood; allowing the child to talk (but not forcing them to do so) has been identified by parents and researchers as an important way of meeting a child's emotional needs following a single-incident traumatic event (Alisic, Boeije, Jongmans, & Kleber, 2012; McGuire, Hiller, Cobham, Haag, & Halligan, 2019). Importantly, parents can also help children to express their feelings and clarify and interpret experiences, and, as we discuss below, can correct misinformation (Alisic et al., 2017; Fivush, McDermott Sales, & Bohanek, 2008; Salmon & Bryant, 2002). Yet, the balance to be achieved by parents is

a delicate one, particularly in the context of a traumatic event. Some evidence suggests that both too little and too much conversation about a traumatic event (and, as we have discussed, conversation that focuses on youth vulnerability) can each heighten children's distress. Creating a climate for a child or young person to talk if they choose to do so is important, yet waiting until the child raises their concerns may preclude potentially helpful interactions with their parent (McGuire, Hiller, Cobham, Haag, & Halligan, 2019).

In summary, everyday reminiscing conversations facilitate children's development in myriad ways and are especially important under pandemic circumstances. For example, these conversations, even if brief, build critical developmental skills, can serve to enhance positive discipline approaches adopted by caregivers, and can facilitate children's emotion management and coping.

Talking With Children About the Pandemic

Also important to developing children's resilience and protecting them from misunderstanding and excessive fear is effective (clear, specific, concrete, accurate) and evidence-based communication about the pandemic (Rapa, Dalton, & Stein, 2020). Children's understanding of the virus and its consequences is influenced by their level of cognitive and socio-emotional development (such as their developing conscience, linguistic and abstraction skills). For these developmental reasons, young children may be especially vulnerable to self-blame and other virus-related misunderstandings. Findings show that children ages 3- to 5 years struggled to understand why they were prevented from seeing family and friends during lockdowns and social distancing, and have at times developed distressing misconceptions concerning how the virus might be caught, the (heightened) risk of contagion, whether they are responsible for virus transmission, and whether it is punishment for their poor behaviour (Dalton, Rapa, & Stein, 2020; Rapa, Dalton, & Stein, 2020; Vasileva, Alisic, & De Young, 2021).

Children's concept of death also develops from the pre-school years until about 10 years of age: Their understanding begins with deaths' universality, then its finality, and finally its causality, and increasingly, they can hold both biological and religious conceptions (Harris, 2018; Menendez et al., 2020). The sophistication of children's understanding is influenced by a number of factors, including their engagement in cultural rituals and practices and their parents' openness to discussions (Menendez et al., 2020). It is possible, but unclear, that the profound disruption to typical cultural practices necessitated by the pandemic will make the information provided by adults even more important, particularly when children have experienced the death of someone close to them. Yet Western societies have tended to shield children from death, and because children's early questions about death tend to be quite general, a mismatch can emerge between children's questions and their parents' answers (Menendez et al., 2020).

Providing accurate and clear information to children has been shown to reduce their distress in diverse settings. For

example, in our own research investigating young children's (ages 4- to 7 years) understanding and memory of an invasive medical procedure, telling children what was happening as the unfamiliar and potentially frightening procedure unfolded reduced their level of distress by half, relative to children in a control condition (Salmon, McGuigan, & Pereira, 2006). Underscoring the potential importance of pandemic-related discussions, a cross-sectional study by Tang and colleagues found that the frequency of Chinese children and adolescents' self-reported discussion with their parents about the pandemic mitigated the youths' depression, anxiety, and stress (although possibly related factors such as the family emotional climate were not measured) (Tang et al., 2021). More generally and crucially, findings show that the quality of communication with children about life-threatening situations and death can have longer-term implications for the children's and their family's psychological wellbeing (Menendez, Hernandez, & Rosengren, 2020; Rapa, Dalton, & Stein, 2020 for reviews).

Unsurprisingly, parents often avoid these difficult discussions. Parents may believe that providing their children with information about the pandemic and its sequelae will increase anxiety, or the parents may be preoccupied with their own concerns (Dalton, Rapa, & Stein, 2020; Leffel & Suskind, 2013; Salmon, McGuigan, & Pereira, 2006). Although children are astute observers of their own internal and external worlds from a very young age, parents tend to underestimate their awareness of changes in their environment and the distress they might feel (Lagattuta, Sayfan, & Bamford, 2012; McCloskey, Figueredo, & Koss, 1995).

In summary, within the bounds of cultural appropriateness, encouraging parents to have direct conversations with their children about the pandemic and its consequences may, at least under some circumstances, reduce their anxiety and improve wellbeing over time.

Overall Conclusion

In the context of the pandemic and its unfolding consequences, the importance of bolstering parents' tools and knowledge with structural and systemic support—financial support, access to mental health and parenting resources—cannot be overestimated. For those most at risk, who include mothers at home with their children, the potential for negative developmental cascades unfolding over time, exacerbated by poverty and other stressors, is escalated. Within these difficult circumstances, parents can contribute to the psychological well-being of their children in many ways. For example, psychological and developmental evidence attests to the importance of building safe and responsive contexts through adopting positive discipline strategies, providing developmentally-appropriate information about the pandemic, and engaging in everyday collaborative conversations about the past and the future. Leffel and Suskind's (2013) comment is especially pertinent during this time: Parents can actively change their children's environments when they are given tools, support, and encouragement, and the knowledge of how they are important in the lives of their children. To this,

we can add that they must also be provided with social conditions that enable nurturing care.

Conflict of Interest

The author declares that there is no conflict of interest.

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