A consistent body of research suggests that perceiving severe and irreparable loss alongside a high level of blame and unfairness in relation to pain has negative implications for physical and mental health outcomes among adults with a long-term pain condition [9]. Together, these core ingredients of pain-related injustice appraisals may be detrimental because, in their intuitive aversion to injustice, the thoughts, feelings and behaviour of those experiencing pain may be disrupted by it. The conception of an injustice is first and foremost subjective in nature. The point at which pain might be interpreted in this way will be influenced by various factors that may occur singly or in combination, such as whether an external agent is considered responsible for the onset of pain, how effectively pain is managed medically and whether adequate support is received from relevant others [5].

Since its inception 10 years ago, research examining the role of justice-related cognitions in the context of pain has proceeded in different directions. In this issue of PAIN, Miller et al. report a novel study exploring the effects of third party, proximal other appraisals of injustice in relation to pain. Their key focus of investigation is the effect of concordant and discordant perceptions of injustice for child pain among treatment-seeking parent-child dyads, on child pain and functional outcomes. The authors highlight the relevance of this research by drawing on an associated literature that has shown discordant parent-child catastrophizing appraisals have important repercussions for child pain [2,6].

Within the Miller et al. study [4] injustice appraisals were examined using modified versions of the Injustice Experience Questionnaire (IEQ) [7] to reflect the perspective of the parent and child, for example “I should not have to live this way” or “My child should not have to live this way”. Child-parent dyads were categorized into one of four categories of concordance or discordance (high or low) based on their scores on the IEQ. Measured outcomes included pain intensity, stress, functional disability and quality of life.
There are several new and thought-provoking findings. Parents reported a significantly higher level of perceived injustice than their child, although most of the dyads were concordant in their views. In other words, most parents and their child held a similar perspective of loss, blame and unfairness in relation to the child’s pain. Parental ratings of injustice were correlated with poor child outcomes, but these effects were strongest among children with higher injustice ratings and, also in dyads containing children with high perceptions of injustice, specifically those in the ‘concordant high’ and ‘discordant high child - low parent’ groups. As the authors rightly suggest, these findings indicate that, consistent with the pattern of findings in the only other paediatric study [3] and within the adult literature in general, child appraisals of their own injustice are the primary drivers of pain and functional outcomes. Nevertheless, perhaps the most interesting finding is that among all concordant and discordant groups, the worst outcomes were observed in the discordant group where the child had a higher level of perceived injustice than their parent. The authors propose the adverse effects of this discrepancy may be due to the child’s heightened display of pain behaviour that is used to communicate the severity of their suffering to their parent, whom they perceive as not taking their pain seriously. This is a plausible interpretation that, as noted, is consistent with the association between perceived injustice, heightened pain behaviour and adverse outcomes observed in adult samples [8]. Going forward, there are many exciting opportunities to explore, including the nature and impact of the child’s emotional and other reactions to their injustice appraisals, in addition to the parental response to the child’s protestations of injustice. It is intriguing that, within these discordant dyads, the parental injustice ratings were clinically significant. As indicated in the discussion, it will be useful in future to investigate whether these findings will be replicated with parents who do not have such significant ratings.
Although the authors explain their findings well in relation to relevant literature, interpretation is still somewhat precluded by the lack of key information on the characteristics of the participants. This includes facts about the gender of the parent, duration of diagnosis and number of clinic appointments attended, all of which could be hypothesised to influence pain-related injustice appraisals and associated child outcomes. This is an important study limitation that is acknowledged. What is known is that the composition of the parent-child dyads is not influenced by the age of the child. A second recorded qualification is that the generalizability of the findings is potentially limited by the fact that the children were predominantly white and female, from one clinic. They were also mostly adolescents. This is a relevant consideration because adolescents can differ from children in how they evaluate and form justice judgements. As recognised by the authors, parents often influence the development of their child’s justice beliefs [1]. This is more likely to be true of younger children whose lives are shaped by the family context than older children who may be most influenced by other areas of life involving, for example, peers and school. Therefore, it may be worthwhile for future research to investigate injustice appraisals in separate child and adolescent contexts.

Several important directions for future research are provided. One key recommendation is to explore the potential independent effects of the blame/unfairness and severity/irreparability of loss subscales of the IEQ to determine the level of concordance and discordance in each subscale within parent-child dyads and the implications of each for child outcomes. Making this distinction would also identify whether either subscale is most meaningful to the pain-related justice reasoning of the parent and the child.

Miller et al. have shown that the parent has an important role to play in pain-related injustice appraisals in the context of pediatric pain. They provide much opportunity for
testable hypotheses to be generated. Future research should proceed in a systematic way to maximise learning and guide clinical interventions in this emerging field of inquiry.

**Conflict of interest statement**

The author has no conflict of interest to declare.
References


