

## Overview of the Science in *Timbi Talks About Addiction*

There is strong scientific evidence underlying each practice/activity we share in the Timbi books, and we are particularly drawn to practices which facilitate positive thinking. Read *Timbi Talks* aloud with the child in your care the first few times to be sure they understand the key points of the book. Sit as close as they are comfortable with and enjoy your time together.

Page by Page Review (Items 1-4 are adapted from [NACoA's Tools for Kids](#).<sup>1</sup>)

1. The affected parent did not choose the disease, but the disease changed them, and they can behave strangely and be scary. (pp. 2-5, 8-10)
2. The child is not alone in their situation. There are many other children who have a parent who struggles with addiction. There is comfort in knowing that this isn't the only time this situation has occurred, and there are professionals who know how to deal with it. (pp. 6-7)
3. You and other safe adults in the child's life are available to listen and hear them. (p. 12)
4. The child did not cause the disease and is not to blame for the parent's behavior or circumstances. The egocentrism and magical thinking that are developmentally normal<sup>2</sup> for young children contribute to their sense that anything happening around them results from them and their behavior. The adult can point out that the child behaves independently at times, and reinforce the fact that grown-ups always do. (p. 13)
5. Timbi labels emotions throughout the books. Labeling negative emotions has been shown to diminish their intensity and duration.<sup>3</sup>
6. Lacking adequate vocabulary to verbally process challenging events, the child will likely experience the trauma in their body in some way.<sup>4</sup> Timbi tells them they can learn to listen to their body and be more in control of their reactions: (pp.14-15)
  - o They can take some deep breaths<sup>5</sup>—the safe adult can explain that the body will naturally and automatically calm down with deep breaths. (pp.16-19)
  - o Sitting on the floor or feeling your feet on the floor can be grounding.<sup>6</sup> that is, it helps the child feel connected to the ground/earth and not frighteningly cut loose from it. (pp.16-19)
  - o The visualizations of the mountain and tree are helpful for children to feel more grounded, and many studies have shown that being in nature, and even just thinking about, it is calming to the nervous system.<sup>7</sup> They are loosely adapted from renowned Buddhist teacher, Thich Nhat Hanh's Pebble Meditation.<sup>8</sup> (pp. 16-19)
  - o Neuroscientists have found that humans have separate neural circuitry dedicated to play which enhances self-regulation and aids healing.<sup>9</sup> Additionally, running around and playing is a way to help children expend some of the energy they may be holding in. However, immediately post-trauma, some children may be too shut down to engage in a lot of physical play. (p. 20)
  - o Singing is stress-relieving and therapeutic.<sup>10</sup> (p. 21)
  - o Hugging a pillow or other soft object is another way of activating positive neurochemicals.<sup>11</sup> (p. 21)
7. The emotions and feelings the child is having are perfectly natural in the circumstances. They are an automatic response to the situation, but the child can begin to be in control of them. Emotions have been shown to be fleeting; it is rumination about them allows them to persist.<sup>12</sup> The goal is to disrupt the rumination. Awareness is the first step of gaining control. (p. 22)
8. Finally, the child can remember/learn that they are: (p. 23)
  1. Good—this is not their fault.
  2. Lovable and loved—you are present and there for them.
  3. Strong and resilient—acquiring and practicing the skills presented in the book will help.

You'll find a handy list of the skills and tools introduced in the book that the child can practice, fostering a sense of agency or control in their lives at the end of the book.

## References

- 1 NACoA's Tools for Kids: [https://nacoa.org/tools\\_for\\_kids/](https://nacoa.org/tools_for_kids/)
- 2 Egocentrism and Magical Thinking: <https://www.ncbi.nlm.nih.gov/books/NBK537095/>
- 3 Labeling emotions: <https://www.psychologytoday.com/us/blog/sweet-emotion/201408/why-labeling-emotions-matters>
- 4 Trauma in the body: [https://www.aacap.org/AACAP/Families\\_and\\_Youth/Facts\\_for\\_Families/FFF-Guide/Physical\\_Symptoms\\_of\\_Emotional\\_Distress-Somatic\\_Symptoms\\_and\\_Related\\_Disorders-124.aspx](https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Physical_Symptoms_of_Emotional_Distress-Somatic_Symptoms_and_Related_Disorders-124.aspx)
- 5 Benefit of Deep Breaths: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5455070/>
- 6 Grounding: <https://www.unh.edu/pacs/what-grounding#:~:text=Grounding%20is%20a%20self%2Dsoothing,and%2Dnow%20and%20to%20reality.>
- 7 Being in Nature: <https://jech.bmj.com/content/jech/early/2018/06/27/jech-2018-210436.full.pdf>
- 8 Pebble Meditation: <https://ncdvtmh.org/wp-content/uploads/2022/10/Thich-Nhat-Hanh-Pebble-Meditation.pdf>
- 9 Playing: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5646690/#:~:text=Brain%20areas%20most%20likely%20to,of%20the%20amygdala%2C%20and%20habenula.>
- 10 Singing <https://www.menningerclinic.org/news-resources/exploring-the-mental-health-benefits-of-music#:~:text=The%20simple%20act%20of%20singing,muscles%20in%20your%20respiratory%20system.>
- 11 Hugging: <https://www.sciencedirect.com/science/article/pii/S2666497621000655>
- 12 Rumination: <https://www.psychiatry.org/news-room/apa-blogs/rumination-a-cycle-of-negative-thinking#:~:text=Rumination%20involves%20repetitive%20thinking%20or,and%20can%20worsen%20existing%20conditions.>