

# To What Extent Is the Thrive Intervention Grounded in Research and Theory?

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The Thrive approach is an assessment and planning based intervention that aims to develop children's social and emotional wellbeing. Despite the increased popularity of Thrive, there is limited research that has investigated its effectiveness. After reviewing the assessment, training and intervention elements of Thrive and the evidence base for the underpinning assumptions, this article considers the evaluative research. Thrive is rooted in attachment theory and assumes that infant development is vulnerable to disruption by poor attachment experiences and that these disruptions can be ameliorated in later life through the development of secure relationships with school staff. The article concludes that, while Thrive is based on attachment theory, which itself is well supported by evidence, how Thrive applies and interprets this theory is less well supported. There is currently limited evidence of the impact of Thrive on children's development. Other issues and implications of this critique are also discussed.

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Thrive is a school-based intervention developed by Banks, Bird, Gerlach and Lovelock in 1994 (Thrive, 2014). It was previously known as Emotional Needs, Achieving, Behaving and Learning in Education (ENABLE). The aim of the intervention is to develop children's social and emotional wellbeing so that they can engage with life and learning (Thrive, n.d.). Thrive proposes to support children through increasing adults' understanding of their needs and providing therapeutic strategies and techniques (Howarth, 2013).

## The Thrive Assessment, Intervention and Training

The Thrive approach is an assessment and planning based intervention. Schools are required to buy a whole-school induction training day and have at least one licensed Thrive practitioner, who must attend a ten-day course (previously nine days) and attend one Thrive training course per year. Schools are also required to buy Thrive-Online, which is a computer-based assessment tool that screens whole classes, groups and individuals, aims to identify "interruptions" in a child's development and produces a profile of emotional learning for each pupil (Cole, 2012). Based on information provided on the website, it is estimated that a school wanting to adopt Thrive should budget for £4,000 in the first year.

The Thrive assessment is based on a staged development

model that has been adapted from the work of Illsley Clarke and Dawson (1998). Illsley Clarke and Dawson's model is grounded in Transactional Analysis (Berne, 1964), which is a theory of interpersonal communication, development, growth and change. Illsley Clarke and Dawson identify six stages of development:

- "Being" (0 to 6 months);
- "Doing" (6 to 18 months);
- "Thinking" (18 to 36 months);
- "Power and Identity" (3 to 6 years);
- "Structure" (6 to 12 years); and
- "Identity, Sexuality and Separation" (12 to 18 years).

Thrive's computerised assessment claims to identify which of these "stages" a child is in by teachers answering a series of questions based on pupil observation.

These stages are described in the parenting book "Growing up again" (Illsley Clarke & Dawson, 1998); however, to the authors' knowledge, they have not been empirically investigated. The assessment is not standardised and the reliability and validity have not been established, making it

potentially misleading to assess emotional development in terms of “age expectations”. Furthermore, this assessment cannot be used to establish a causal relationship between “interruptions” in social and emotional development and behaviour, because it does not address and rule out other potential contributing factors, for example, communication needs (St Clair, Pickles, Durkin, & Conti-Ramsden, 2011). Additionally, these stages are not defined operationally and are thus open to interpretation, which makes it difficult to conclude that the stages represent distinct categories. While the assessment provides a framework for schools to use as a measure of social and emotional development, further research is needed to validate it and to determine its effectiveness.

The Thrive practitioner would complete assessments of individuals and use the recommended art and play-based activities in one-to-one intervention where needed. These activities are based on what Thrive describes as Vital Relational Functions (VRFs). These functions are based on work by Sunderland (2006) and include relational experiences such as attunement, validation, emotion regulation, soothing and containment. Examples of strategies and interventions for those classified at the “being stage” include peek-a-boo, putting stickers on your face and waiting for the child to notice, using face paints, clapping games and high-5s.

The Thrive website (<https://www.thriveapproach.com/>) describes the intervention as a whole-school approach available for every teacher to draw upon. A whole-school approach is considered an essential characteristic in promoting social and emotional development in schools (National Institute for Health and Care Excellence, 2008, 2009; Weare & Nind, 2011). Evidence suggests that, to be effective, interventions, including targeted interventions, for emotional wellbeing should be embedded in a broader whole-school and community approach to support all pupils’ social and emotional needs (Lee, Partt, Weidberg, & Davis, 2018). In this way, Thrive’s approach is consistent with best practice.

There is currently little research that has investigated the effectiveness of Thrive. Thrive states that it draws on attachment theory, neuroscience and theories of child development; it assumes that infant development is vulnerable to disruption by poor attachment experiences and that one way to ameliorate these disruptions in later life is through the development of secure relationships with school staff. After considering these assumptions, the critique will address direct research on Thrive.

## Attachment Theory and Evidence

Bowlby’s theory of attachment (Bowlby, 1969) has been researched and developed over the last 50 years and remains an influential and well-used theory (Mercer, 2011). As Mercer (2011) reminds us, the broadly accepted tenets of the theory are:

- i. attachment involves an affective bond with specific person(s) and an emotional response related to their presence or absence;
- ii. attachment does not require specific experiences or persons; and
- iii. between the ages of six months and four years, separations from the attachment figure(s) produce child distress in the short-term and mourning in the long-term, followed by the possibility of forming a new attachment.

One of Bowlby’s central hypotheses was that attachment quality is the foundation for individual differences in personality; he argued that a child develops an internal working model based on their experiences of their attachment figure(s), which is then used as a template for all future relationships. A number of researchers (e.g., Mikulincer, Shaver, & Pereg, 2003; J. R. Schore & Schore, 2008) have claimed that attachment theory provides a framework for understanding the development of emotion regulation, which can be defined as the activation of a goal to influence the emotion trajectory, i.e., taking action in order to influence the development of one’s own or another person’s emotions (Gross, Sheppes, & Urry, 2011). Mikulincer et al. (2003) argued that seeking proximity with a caregiver is a strategy for regulating emotions; the caregiver provides emotion regulation for the infant who is unable to do this independently. Furthermore, when this external emotion regulation is unavailable, the child develops secondary strategies, which may be maladaptive, such as becoming overly self-reliant and avoiding relationships or constantly seeking proximity, becoming hypervigilant to distress and to others. These maladaptive strategies can lead to poor emotion regulation. A. N. Schore (2001) describes the organisation of the brain as being structured in response to early attachment experiences; therefore, those experiences can impact on the child’s ability to cope with stress and self-regulation later in life.

There is a substantial body of evidence suggesting that early attachment experiences do impact on later life (Moullin, Waldfogel, & Washbrook, 2014) and individuals with insecure attachment styles may be less academically

successful and socially competent and demonstrate poorer emotion regulation than those with secure styles (Bergin & Bergin, 2009). A meta-analysis of 69 studies found significant associations between insecure attachment styles and externalising problems (Fearon, Bakermans-Kranenburg, Van IJzendoorn, Lapsley, & Roisman, 2010). However, effect sizes varied greatly dependent on methodologies used across studies. Using the simplest classification of attachment styles (secure versus insecure), a modest effect size ( $d = 0.31$ ) was found to indicate association (but not necessarily causation) between attachment style and externalising behaviour. More recently, Meins (2017) has argued that the findings of the predictive power of early attachment are “much less clear cut” (p. 22) and that there are many individual differences that need to be accounted for when considering a child’s attachment style.

It is important to note that, within this area of research, it may be very difficult to distinguish the impact of insecure attachment itself from factors that are known to contribute to insecure attachment, such as poverty and low-quality childcare (Moullin et al., 2014). Also, it is important to note the impact of culture on attachment. This is because culture influences elements of child rearing; therefore, it is unsurprising that attachment patterns vary depending on the values of a culture (Agishtein & Brumbaugh, 2013). One example of this is that samples of Japanese infants show a higher percentage of insecure resistant attachment compared with global norms (Takahashi, 1986), which links with a value in Japanese culture for infants to remain near their mother. Furthermore, as we age, attachment processes fundamentally change; in adolescence, attachment is no longer measured using caregiver separation, because many other factors become relevant, such as social relationships (Allen & Manning, 2007).

Rich Harris (2009) argues that attachment theory places too much emphasis on parental influence when other relationships and factors such as genetics also play a role. For example, a child’s temperament is associated with attachment quality (Rispoli, McGoey, Koziol, & Schreiber, 2013) and is predictive of later internalising, externalising and conduct difficulties (Saudino, 2005). This argument implies that associating social and emotional difficulties to caregiver–child relationships could be seen as a reductive analysis as it places the full responsibility on the caregiver rather than acknowledging that a child grows and develops in an ecological framework with reciprocal relationships. In accordance with this, Thrive places emphasis on the idea that young people may form attachments with a broad range of adults, such as staff in schools.

### Stability of Attachment Style

Bowlby initially believed that the internal working model was fixed, and the evidence on brain development cited above may imply that early attachment experiences have permanent effects. However, various authors have now highlighted the importance of later relational experiences and described the internal working model as being subject to change (Riley, 2011). The Thrive intervention is based on this idea that, later in life, children can benefit from the nurturing experiences that they may have missed in their early years. It is now known that brain organisation and new connections develop in response to experiences (Kolb, Gibb, & Robinson, 2003) and that this occurs throughout life (Lenroot & Giedd, 2006). During adolescence, changes in emotional capacity are seen, including the ability to discriminate cues and to regulate emotions (Yurgelun-Todd, 2007). During this time, significant restructuring occurs in the brain regions associated with these functions, and this continues throughout adolescence into early adulthood (Yurgelun-Todd, 2007).

Despite the allure of neuroscientific explanations (Skolnick Weisberg, Keil, Goodstein, Rawson, & Gray, 2008) and optimism about their relevance to education, several neuroscientists are cautious of the implications (Rees, Booth, & Jones, 2016). Goswami (2006) has explored the “gap” between neuroscience research and school-based practices. There is limited evidence to show specific interventions having a positive neurological impact. Therefore, due to this gap and preliminary findings from neuroscience, it is difficult for these findings to guide practice (Santiago Declaration, 2007).

However, longitudinal research does suggest that attachment style is not necessarily fixed throughout life. Fraley, Roisman, Booth-LaForce, Owen, and Holland (2013) followed up 707 American participants at age eighteen who had previously provided data from an earlier attachment study. Fraley and colleagues found that individual differences in attachment styles were not primarily determined by early caregiving experiences. They argued that “theoretically, attachment styles are believed to be a function of a number of factors” (p. 14), and, therefore, “we should not expect large associations between early experiences and adult attachment styles” (p. 13). Maternal sensitivity, along with *changes* in maternal sensitivity, social competence and friendships were found to play important roles. Maternal sensitivity in adolescence has also been found to be a better predictor of attachment style than a measure of security in infancy (Beijersbergen, Juffer, Bakermans-Kranenburg, & van IJzendoorn, 2012) with increased maternal sensitivity leading to changes from insecure to secure attachment styles. The finding that attachment style is not fixed has important implications for intervention and supports the notion of an intervention such

as Thrive. However, it should be noted that longitudinal studies, necessarily, measure attachment style differently during infancy and adolescence, and measurement type is known to impact findings (Fearon et al., 2010). It is difficult to compare infant and adolescent measures of attachment; given the number of additional factors to consider in adolescence, such as lifestyle choices, relationships and conflict, which may have a temporary or permanent impact, one could question the usefulness of comparing these measures at all.

### Relationships at School

The Thrive approach aims to use school-based relationships to develop feelings of security and promote the development of self-regulation skills in children who are struggling with this. Therefore, the assumption is that teacher–pupil relationships can, in some way, reflect an attachment relationship or ameliorate difficulties experienced by children who have poor attachment relationships with their primary caregiver. Bombèr (2011) has been an advocate for the importance of relationships at school in supporting children with attachment difficulties. She argues that an attachment-like relationship can be developed. Bergin and Bergin (2009) also argue for enhancing teacher–pupil relationships to promote child development, although, at the time, they described research in this area as “limited” (p. 141). Nonetheless, they suggested that many outcomes are linked to teacher–pupil relationships, including social competence, academic progress and school engagement.

Whilst numerous studies have demonstrated the importance of positive teacher–pupil relationships for school engagement and achievement (Roorda, Koomen, Split, & Oort, 2011), fewer have looked specifically at emotion regulation with reference to attachment theory. Mitchell-Copeland, Denham, and DeMulder (1997) did examine this issue; they assessed the attachment relationships of 62 preschool children and their teachers using the Attachment Q-Set, observing the attachment behaviours of teacher–pupil and mother–child interactions. Various measures of emotion-related social competence were used, which assessed children’s self-regulation of emotions and responses to the emotions of peers. Mitchell-Copeland and colleagues found that the quality of teacher–pupil attachment was significantly related to children’s prosocial behaviour in response to peers’ emotions and their social competence. Furthermore, it was found that a secure teacher–pupil relationship compensated for the effects of an insecure mother–child relationship. Amongst children with insecure maternal attachment, those with secure teacher–pupil relationships were more prosocial, socially competent and emotionally positive (a measure of emotion regulation). This study provides some support for

Thrive’s theory, in that secure teacher–pupil relationships may promote pupils’ socio-emotional wellbeing and emotion regulation. While it should be noted that some of the outcome variables were measured using teacher report, which is a subjective measure likely to be affected by the quality of the teacher–pupil relationship, the study did combine these with observer and peer ratings.

Although the teacher–pupil relationship cannot necessarily be said to be an attachment relationship, available evidence seems to suggest that positive teacher–pupil relationships can enhance aspects of children’s social and emotional development, even when that child does not have a secure attachment style with their primary caregiver. Other interventions that also have an underpinning in attachment theory, such as nurture groups, have shown positive outcomes for children (Binnie & Allen, 2008; Cooper & Whitebread, 2007).

### Direct Evidence for Thrive

To this date, there has been no peer-reviewed published research looking directly at Thrive. However, searches revealed two unpublished thesis projects from the University of Exeter, which directly explored Thrive (Cole, 2012; Howarth, 2013). The first focused on the impact of Thrive on pupils’ socio-emotional skills and teachers’ attitudes towards inclusion and confidence in supporting children with emotional difficulties (Cole, 2012). Cole used teacher-report questionnaires to measure pupils’ emotional reactivity, sense of relatedness and readiness to learn, compared with a comparison group of pupils in non-Thrive schools, where a range of other interventions was employed. Cole found no significant impact of Thrive compared to the comparison groups on any of the measures. In fact, comparison pupils made significantly greater progress in their readiness to learn than the Thrive pupils. Furthermore, staff in Thrive schools did not demonstrate more inclusive attitudes or feel more confident at the end of the intervention study period, and they expressed uncertainty about the long-term effectiveness of Thrive on pupil outcomes.

The qualitative element of Cole’s thesis asked staff, parents and pupils to share their experiences of Thrive; themes from this analysis were used to consider possible reasons for the perceived lack of effectiveness of the programme. Cole found that staff did not generally feel that there was a whole-school commitment to Thrive, and, instead, felt that it was being used with limited consistency across pupils. Thrive is intended to be a school-wide programme that is also individualised to specific needs based on the Thrive-Online assessment. However, Cole suggested that, given its basis in

attachment theory, it may be more useful for pupils who have identified attachment needs, rather than being used as a tool to support any student who is demonstrating social, emotional and mental health needs. Unfortunately, there does not seem to be any evidence that Thrive-Online is capable of distinguishing, or intends to distinguish, children whose difficulties stem from poor attachment compared with any other cause. Currently, there is no evidence that the assessment process can identify those who are suitable for Thrive intervention.

The second thesis (Howarth, 2013) focused on evaluating the impact of the Thrive training and whether it meets its aims, specifically:

- i. encouraging building positive relationships;
- ii. increasing trainee self-efficacy; and
- iii. increasing understanding of behaviour and socio-emotional development.

Pre- and post- questionnaires were completed by 26 participants who attended the one-day induction training and 34 participants who attended the nine-day practitioner course. The findings suggested that the nine-day course<sup>1</sup> was much more effective in meeting the aims and the questionnaires showed improvements in all areas. However, the one-day course showed significant changes only in terms of improved quality of relationships. In schools that adopt the Thrive approach, typically only one or two members of staff would attend the nine-day training, with most staff members attending only the introductory course. This makes it difficult to see how Thrive can be implemented effectively as a whole-school approach.

In the qualitative element of Howarth's research, it emerged that the practitioners felt that the training had helped them to reconsider the possible causes of a child's behaviour as being less within their own control. Research has shown that if a teacher believes a child's behaviour can be attributed outside of the child's control they are more likely to seek advice to support the child's needs (Andreou & Rapti, 2010). Howarth's findings suggest that reframing of teachers' perceptions of children's behaviour may be one positive aspect of the nine-day Thrive training. The neuroscience that is included in the training may also help to contribute towards improved understanding of children's behaviour and socio-emotional development. Research has found that explanations of psychological phenomena that contain neuroscience information can have a striking effect on non-experts' judgements (Skolnick Weisberg et al., 2008). However, this can

be at the detriment of active cognitive processing of the evidence that is being presented.

While the nine-day training course appeared to be received well by practitioners and may have contributed to increased confidence and understanding of attachment relationships and behaviour, currently available research demonstrates very limited impact of the Thrive programmes in terms of practice and outcomes for children. Furthermore, due to several methodological issues and this not being peer-reviewed published research, the findings must be interpreted with caution. Limitations include lack of a control group (Howarth, 2013), absence of pre- and post- measures for staff outcomes (Cole, 2012) and small sample sizes. In Howarth's study, although qualitative data suggested a very positive response to the Thrive training, it should be noted that contextual focusing was used at the start of the interview, to help the interviewee frame the questions within their recent experience. The focusing questions, however, could be seen as priming the interviewee to focus on positive aspects (for example, interviewees were asked to describe a situation within the last two weeks in which they related positively to a child or they felt confident dealing with a child).

Cole (2012) used a comparison group of pupils in non-Thrive schools, who were engaged in a range of other interventions. Future research should seek to compare Thrive with active control groups that can be assessed to ensure that they are not quantitatively or qualitatively different from the Thrive group. Further exploration of the assessment procedures and staged process model would be valuable to determine its effectiveness, along with research that looks specifically at how the intervention is being implemented in schools. Future research should also aim to utilise a range of measures other than self-report and explore outcomes for a more diverse range of pupils.

## Conclusion

Thrive appears to be based in well-founded, evidence-based theories relating to attachment and the importance of teacher-child relationships. It is unclear, however, what evidence there is to support the connection of some of the less evidence-based theories, such as the proposed stages of development (Illsley Clarke & Dawson, 1998), with attachment theory and neuroscientific research. In addition, there is not currently any evidence to suggest that the Thrive intervention activities are effective in implementing any of these theories in practice.

<sup>1</sup>As mentioned above, the training is now ten days, but was nine at the time of this study.

Evidence from direct evaluations of Thrive is minimal, but what is available suggests little or no positive impact for individual's receiving the one-to-one interventions. Furthermore, there is no evidence to support the use of the Thrive-Online assessment tool as an effective method of identifying children that require intervention.

Thrive is marketed as a whole-school approach, but existing evidence suggests that it may not be being used this way and that it may not be effective as a whole-school approach (Cole, 2012). There is some inconsistency in the idea of using Thrive as a universal intervention, given that the theory that it is based on refers mainly to individuals with significant attachment difficulties rather than the general population. Some beneficial effects have been found following the full Thrive training course, including increased self-efficacy for staff, but it is concerning that some of the underlying principles that Thrive practitioners are sharing with schools are not sufficiently evidence informed.

Given the limited direct evidence for Thrive, taken with the significant cost of implementation, it would be prudent to consider carefully the possible alternatives that are similarly based in attachment theory and emphasise the development of teacher-child relationships. Nurture is one such intervention that has greater evidentiary support in terms of promoting emotional wellbeing amongst children with social, emotional and behavioural difficulties (Hughes & Schlösser, 2014). The only aspect of the Thrive approach that has been shown to have a positive impact is the practitioner training course. A greater understanding of attachment theory and social and emotional development may well be beneficial for school staff but could be achieved through more cost-effective methods, such as training designed specifically to meet the needs of the individual school and delivered by appropriately qualified professionals, such as educational psychologists.

## References

- Agishtein, P. & Brumbaugh, C. (2013). Cultural variation in adult attachment: The impact of ethnicity, collectivism and country of origin. *Journal of Social, Evolutionary, and Cultural Psychology*, 7(4), 384–405. doi:10.1037/h0099181
- Allen, J. P. & Manning, N. (2007). From safety to affect regulation: Attachment from the vantage point of adolescence. *New Directions for Child and Adolescent Development*, 2007(117), 23–39. doi:10.1002/cd.192
- Andreou, E. & Rapti, A. (2010). Teachers' causal attributions for behaviour problems and perceived efficacy for class management in relation to selected interventions. *Behaviour Change*, 27(1), 53–67. doi:10.1375/bech.27.1.53
- Beijersbergen, M. D., Juffer, F., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2012). Remaining or becoming secure: Parental sensitive support predicts attachment continuity from infancy to adolescence in a longitudinal adoption study. *Developmental Psychology*, 48(5), 1277–1282. doi:10.1037/a0027442
- Bergin, C. & Bergin, D. (2009). Attachment in the classroom. *Educational Psychology Review*, 21(2), 141–170. doi:10.1007/s10648-009-9104-0
- Berne, E. (1964). *Games people play*. New York, NY: Grove Press.
- Binnie, L. M. & Allen, K. (2008). Whole school support for vulnerable children: The evaluation of a part-time nurture group. *Emotional and Behavioural Difficulties*, 13(3), 201–216. doi:10.1080/13632750802253202
- Bombèr, L. M. (2011). *What about me? inclusive strategies to support pupils with attachment difficulties make it through the school day*. Chippenham, England: Worth.
- Bowlby, J. (1969). *Attachment*. Attachment and loss. London, England: Random House.
- Cole, M. J. (2012). *Promoting emotional well being and inclusion for children identified with emotional and behavioural difficulties in mainstream primary schools: An evaluation of a psychotherapeutic approach (Thrive)* (Doctoral thesis, University of Exeter, Exeter, England).
- Cooper, P. & Whitebread, D. (2007). The effectiveness of nurture groups on student progress: Evidence from a national research study. *Emotional and Behavioural Difficulties*, 12(3), 171–190. doi:10.1080/13632750701489915
- Fearon, R. P., Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., Lapsley, A.-M., & Roisman, G. I. (2010). The significance of insecure attachment and disorganization in the development of children's externalizing behavior: A meta-analytic study. *Child Development*, 81(2), 435–456. doi:10.1111/j.1467-8624.2009.01405.x
- Fraley, R. C., Roisman, G. I., Booth-LaForce, C., Owen, M. T., & Holland, A. S. (2013). Interpersonal and genetic origins of adult attachment styles: A longitudinal study from infancy to early adulthood. *Journal of Personality and Social Psychology*, 104(5), 817–838. doi:10.1037/a0031435
- Goswami, U. (2006). Neuroscience and education: From research to practice? *Nature Reviews Neuroscience*, 7(5), 406–413. doi:10.1038/nrn1907
- Gross, J. J., Sheppes, G., & Urry, H. L. (2011). Emotion generation and emotion regulation: A distinction we should make (carefully). *Cognition and Emotion*, 25(5), 765–781. doi:10.1080/02699931.2011.555753
- Howarth, K. (2013). *Thrive training and Thrive trainees' perceived relationships with children with BESD, self-efficacy in managing children's BESD and causal attributions about BESD in children: A two-phase evaluation* (Doctoral thesis, University of Exeter, Exeter, England).
- Hughes, N. K. & Schlösser, A. (2014). The effectiveness of nurture groups: A systematic review. *Emotional and Behavioural Difficulties*, 19(4), 386–409. doi:10.1080/13632752.2014.883729
- Illsley Clarke, J. & Dawson, C. (1998). *Growing up again: Parenting ourselves, parenting our children*. Center City, MN: Hazelden.
- Kolb, B., Gibb, R., & Robinson, T. E. (2003). Brain plasticity and behavior. *Current Directions in Psychological Science*, 12(1), 1–5. doi:10.1111/1467-8721.01210
- Lee, K., Partt, K., Weidberg, F., & Davis, R. (2018). Supporting the emotional and mental health of your school community.
- Lenroot, R. K. & Giedd, J. N. (2006). Brain development in children and adolescents: Insights from anatomical magnetic resonance imaging. *Neuroscience and Biobehavioral Reviews*, 30(6), 718–729. doi:10.1016/j.neubiorev.2006.06.001
- Meins, E. (2017). Overrated: The predictive power of attachment. *The Psychologist*, 30(January), 20–24.
- Mercer, J. (2011). Attachment theory and its vicissitudes: Toward an updated theory. *Theory & Psychology*, 21(1), 25–45. doi:10.1177/0959354309356136
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 27(2), 77–102. doi:10.1023/A:1024515519160
- Mitchell-Copeland, J., Denham, S. A., & DeMulder, E. K. (1997). Q-sort assessment of child-teacher attachment relationships and social competence in the

- preschool. *Early Education and Development*, 8(1), 27–39. doi:10.1207/s15566935eed0801\_3
- Moullin, S., Waldfogel, J., & Washbrook, E. (2014). *Baby bonds: Parenting, attachment and a secure base for children*. Sutton Trust.
- National Institute for Health and Care Excellence. (2008). Social and emotional wellbeing in primary education. London, England.
- National Institute for Health and Care Excellence. (2009). Social and emotional wellbeing in secondary education. London, England.
- Rees, P., Booth, R., & Jones, A. (2016). The emergence of neuroscientific evidence on brain plasticity: Implications for educational practice. *Educational and Child Psychology*, 33(1), 8–19.
- Rich Harris, J. (2009). Attachment theory underestimates the child. *Behavioral and Brain Sciences*, 32(1), 30. doi:10.1017/S0140525X09000119
- Riley, P. (2011). *Attachment theory and the teacher–student relationship*. Abingdon, England: Routledge.
- Rispoli, K. M., McGoey, K. E., Koziol, N. A., & Schreiber, J. B. (2013). The relation of parenting, child temperament, and attachment security in early childhood to social competence at school entry. *Journal of School Psychology*, 51(5), 643–658. doi:10.1016/j.jsp.2013.05.007
- Roorda, D. L., Koomen, H. M. Y., Split, J. L., & Oort, F. J. (2011). The influence of affective teacher–student relationships on students’ school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81, 493–529. doi:10.3102/0034654311421793
- Santiago Declaration. (2007).
- Saudino, K. J. (2005). Behavioral genetics and child temperament. *Journal of Developmental & Behavioral Pediatrics*, 26(3), 214–223. doi:10.1097/00004703-200506000-00010
- Schore, A. N. (2001). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22(1–2), 7–66. doi:10.1002/1097-0355(200101/04)22:1<7::AID-IMHJ2>3.0.CO;2-N
- Schore, J. R. & Schore, A. N. (2008). Modern attachment theory: The central role of affect regulation in development and treatment. *Clinical Social Work Journal*, 36(1), 9–20. doi:10.1007/s10615-007-0111-7
- Skolnick Weisberg, D., Keil, F. C., Goodstein, J., Rawson, E., & Gray, J. R. (2008). The seductive allure of neuroscience explanations. *Journal of Cognitive Neuroscience*, 20(3), 470–477. doi:10.1162/jocn.2008.20040
- St Clair, M. C., Pickles, A., Durkin, K., & Conti-Ramsden, G. (2011). A longitudinal study of behavioral, emotional and social difficulties in individuals with a history of specific language impairment (SLI). *Journal of Communication Disorders*, 44(2), 186–199. doi:10.1016/j.jcomdis.2010.09.004
- Sunderland, M. (2006). *What every parent needs to know*. London, England: Dorling Kindersley.
- Takahashi, K. (1986). Examining the strange-situation procedure with Japanese mothers and 12-month-old infants. *Developmental Psychology*, 22(2), 265–270. doi:10.1037/0012-1649.22.2.265
- Thrive. (2014). The Thrive approach research and evidence base.
- Thrive. (n.d.). The Thrive approach.
- Weare, K. & Nind, M. (2011). Mental health promotion and problem prevention in schools: What does the evidence say? *Health Promotion International*, 26(Suppl. 1), i29–i69. doi:10.1093/heapro/dar075
- Yurgelun-Todd, D. (2007). Emotional and cognitive changes during adolescence. *Current Opinion in Neurobiology*, 17(2), 251–257. doi:10.1016/j.conb.2007.03.009