

# Feeding forward to a 'miracle day' – a pilot study of video feedforward in reactive attachment disorder

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## Abstract

Video feedforward is a solution-focused intervention used to improve desired behaviour. We present two case studies of using video feedforward in reactive attachment disorder. Children with reactive attachment disorder, their caregivers and their clinician completed storyboards of behaviours desired during a 'miracle day' and filmed the individual scenes. These scenes were edited to a prolonged sequence of successful behaviour which was fed back to the child and their caregiver using principles of video interaction guidance. Families reported major improvements in the targeted behaviours, usually within a week of filming the 'miracle day'.

## Keywords

Attachment, reactive attachment disorder, video feedforward, video interaction guidance, maltreatment

## Background

Reactive attachment disorder (RAD) is a disorder associated with a history of maltreatment, an institutional upbringing and/or multiplacement experiences (Cicchetti & Toth, 1995; Goldfarb, 1945; Tizard & Rees, 1975), and it impairs a child's cognitive, emotional and social development (Green, 2003; Millward, Kennedy, Towson, & Minnis, 2006; Zeanah et al., 2004). There is a disinhibited and an inhibited type (American Psychiatric Association, 2000; World Health Organization, 1996): the former is characterised by indiscriminate friendliness and the latter by hypervigilant, ambivalent or contradictory responses during social interactions. These subtypes often co-exist (Minnis et al., 2009).

Children with RAD demonstrate a poor understanding of the social world (Bennett, Espie, Duncan, & Minnis, 2009; Rutter, Kreppner, & Sonuga-Barke, 2009). A qualitative study revealed that these young people exhibit a trust of new people as well as a craving of kindness from others, despite being aware of the potential dangers associated with indiscriminate friendliness (Bennett et al., 2009).

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Another major difficulty children and young people with a history of early maltreatment seem to experience is that of 'faulty signalling' to their caregivers and their social surroundings (Field et al., 1988; Stovall & Dozier, 2000). Stovall and Dozier (2000) argue that sensitive responding to an infant's signals is optimal for caregivers of typically developing children but may be insufficient for infants who have experienced inadequate early care due to the infant's 'faulty signalling'. For example, foster infants often push new foster parents away ('faulty signalling'), and foster parents often respond in a sensitive (reciprocal) way, by allowing themselves to be pushed away (Dozier, 2003). That means if the otherwise nurturing caregivers of these children respond in ways that are sensitive to this 'faulty signalling', the infants will experience a non-nurturing world (Stovall & Dozier, 2000).

This poses a challenge for those looking after children with these relationship difficulties: although they are motivated to provide sensitive and warm caregiving, a child with RAD may not be predisposed to receive this (Millward et al., 2006). These 'faulty signalling' behaviours observed in maltreated infants have also been noted in older children (Howe, 2006).

According to Dozier and colleagues, in most therapeutic work, the therapist challenges the client's world view, and they argue that caring for maltreated children requires a therapeutic approach (Dozier & Bates, 2003; Dozier & Tyrrell, 1997). Based on this assumption, Dozier's team developed an attachment-based intervention for foster parents that challenges infants to change their expectations (Dozier, Higley, Albus, & Nutter, 2002). Caregivers are encouraged *not* to respond in a sensitive (reciprocal) manner to the child's signals (as the child's signals might appear as though they do not want or need help) but to *over-ride* their predisposition to respond in a sensitive fashion to a child's behavioural signals by providing additional nurturing. This should be challenging but gentle (Dozier et al., 2002).

Interventions using video as an additional tool have proven particularly useful in improving infant-caregiver interactions. A recent meta-analysis showed that in circumstances where an infant *does* send out appropriate signals but their caregiver fails to respond to these adequately, the most effective interventions use a moderate number of sessions (whereby interventions with fewer than five sessions were as effective as interventions with five to 16 sessions), and those using video were more effective than those that did not (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003).

Interventions improving outcomes for infants who have experienced sub-optimal care have been relatively well established and researched: however, there seems to be a lack of evidence-based interventions that focus on school-aged children who have experienced maltreatment. One of the few interventions with an evidence-base for RAD in school-aged children is dyadic developmental therapy (DDP; Becker-Weidman, 2006). This intervention, in which children/young people are encouraged to explore their difficulties and past traumas together with their parents/caregivers, appears to provide children/young people with the 'gentle challenge' that Dozier (2003) advocates. DDP, however, is very resource-intensive and not always feasible. Furthermore, there is no intervention for school-aged children with RAD that fulfils the criteria of 'less is more' of Bakermans-Kranenburg et al. (2003), namely few sessions and the use of video as a tool.

In view of Stovall and Dozier's (2000) findings that children who have experienced sub-optimal care send out signals that do *not* generate the most optimal response from their caregiver, one might argue that an intervention that helps these children to send out the right signals first, before attempting to address the caregiver's (and others') responses to these cues, might be more powerful. A behavioural technique drawing on social learning theory (Bandura, 1977) might be a useful starting point for children with these difficulties.

Video feedforward (VFF; Dowrick, 1999) is a technique whereby a person changes their behaviour using self-modelling, through observation of themselves on video. The VFF approach differs from other approaches in that it is not problem-focused (Dowrick & Biggs, 1983). Self-modelling interventions have addressed different age groups and have been used successfully for vocational and academic issues, to acquire physical skills (such as in rehabilitation and/or sports), communication and personal and social adjustment (Dowrick & Biggs, 1983). Moreover, a meta-analysis by Bellini and Akullian (2007) summarised evidence of the effectiveness of video-modelling and video self-modelling (identical to VFF) to improve social-communication skills, behavioural functioning and functional skills in children and adolescents with autism spectrum disorder. As far as we know, no intervention to date has looked at this in relation to children with RAD.

Video interaction guidance (VIG; Kennedy, Landor, & Todd, 2010; Kennedy & Sked, 2008), on the other hand, is a video technique which is based on theories of intersubjectivity and mediated learning (Trevarthen, 1979). In VIG, positive video moments of a caregiver-child interaction are selected and replayed to the caregiver, labelling the behaviour in specific ways. These so called 'moments of contact' are usually initiated by the child: the caregiver-child interaction is characterised by reciprocal communication and mutually pleasurable experiences. Through these self-modelling and video-feedback sessions, the *caregiver* becomes more attuned to the child's initiatives. These techniques are used sequentially. Juffer, Bakermans-Kranenburg, and van IJzendoorn (2007) demonstrated the effectiveness of VIPP (a video-feedback intervention to promote positive parenting, similar to VIG) in increasing sensitivity between parents and children with attachment difficulties and feeding problems. Moreover, a recent meta-analysis by Fukkink (2008) revealed that video feedback (used similarly to VIG) enhanced positive parenting skills by increasing parental sensitivity during interactions with their children and decreased parental stress, resulting in better developmental outcomes for the children. Furthermore, a recent randomised control trial involving caregivers reported for maltreatment and their children compared a treatment group receiving a video-feedback intervention (similar to VIG) with a control group (Moss et al., 2011). The intervention group showed significant improvements in child attachment security and parental sensitivity, as well as a reduction in child disorganisation, and older children in the intervention group showed less externalising and internalising problems following intervention.

We illustrate the use of VFF/VIG with two case studies. In line with Landor and Strathie's (2011) suggestion that VFF aids the management of difficulties with individual skills and behaviours, whereas VIG addresses difficulties with interpersonal relationships, we hypothesised that VFF addresses the 'faulty signalling' of the child, and that VIG enhances the parents'/caregivers' sensitivity to the child's improved signalling. Details have been changed to protect the children's identity.

## Method

### Participants

Two adopted children aged seven and eight years with a history of maltreatment and a diagnosis of RAD took part in this pilot study. The diagnosis of RAD was made based on information from parents, teachers and observation of child behaviour in the waiting room (Minnis et al., 2009). Ethical Committee approval was sought, and written consent for the use of video was obtained from the caregivers of both children.

## Procedure

During an initial home visit, the family and the clinician started the VFF intervention by identifying and positively reframing the child's/family's difficulties, using solution-focused techniques (De Shazer, & Berg, 1997), for example the 'miracle question' ('Imagine you woke up and a miracle had happened and everything was the way you wanted it to be. What would you see? How would you feel? Who would notice?', etc.) and scaling questions, asking the children and their caregivers to rate their difficulties on a scale from zero to 10. Then, either as a homework exercise or by facilitation of the clinician, a storyboard was made, detailing as little or as many steps as the child and family wished to include in their 'miracle day', breaking down the sequence of behaviour into small steps.

During another home visit, the clinician took a video of each of these scenes, whereby the child usually took the role of the Director, instructing the clinician when to start and stop recording. Individual scenes were edited and compiled into one scene depicting a successful behaviour.

During another home visit, the clinician played the video to the family, using VIG principles reviewing the micro-analysis of 'moments of contact' between the child and the caregiver. This was done by reflecting collaboratively on moments where the caregiver responded in an attuned way to the child's verbal and non-verbal signals, by analysing the behaviour and exploring thoughts, feelings, wishes and intentions. Lastly, the clinician suggested that the family watch the video together several times.

## Results

### *Case study of Tim*

Tim was seven years and 10 months old and living in an adoptive family. Tim's history of early maltreatment included emotional neglect as well as two episodes of severe physical abuse which resulted in hospitalisation. Tim had several episodes of foster care until being placed and consequently adopted by his new family at the age of five years.

Tim presented with a range of externalising behavioural difficulties, and the first behaviour we worked on centred around reunion episodes with his adoptive mother (Tim's mother picking him up from after-school care at Tim's grandparents). During reunions, Tim physically and emotionally hurt his mother by scratching her, nipping her, calling her names, biting her, running away or hiding and being incapable of tolerating communication between his mother and other people during the reunion episodes. These behaviours put an enormous burden on the family.

Tim and his mother created a story board of a 'miracle day', consisting of 10 scenes breaking down Tim's behaviours into successful behaviours, such as hugging his mother, greeting her in a friendly manner, tolerating her 'boring' conversation with other people while getting ready to go home and many more. A video of these individual scenes was made on a subsequent visit.

Before editing of the video and feeding back, Tim's mother already reported a change in Tim's behaviour. During the feedback session, using VIG principles whilst watching the video together with Tim and his mother, the clinician noticed that Tim displayed a number of spontaneous 'improved signalling' behaviours during his video which were not rehearsed, to which his mother responded sensitively. For example, when leaving the grandparents' house following their reunion, Tim spontaneously hugged his mother (this had not been rehearsed), and she responded to this sensitively. The clinician then reviewed the microanalysis of these 'moments of contact' with Tim and his mother whilst watching the video together, and the same behaviours that had occurred during the video were observed in 'real life' from both Tim and his mother, such as hugging and smiling, whilst reviewing the video. Following this intervention, behaviours centring around reunion

episodes did not seem to pose a problem any longer. Tim's mother also reported that she reminds Tim of the 'miracle day' when he appears to display previously undesired behaviours during reunion episodes, and this verbal reminder appears to be sufficient for Tim to successfully display the newly acquired desired behaviours.

The intervention was also repeated successfully with a second behaviour, namely to help Tim play more gently with other children in the playground at school. This had previously led to sanctions for Tim as he frequently injured other children during play. At four months follow-up, Tim and his mother felt that they were doing well and they did not require further treatment.

### **Case study of Susi**

Susi was an eight year old girl who had experienced emotional neglect in her birth family and had witnessed substance misuse. She came into foster care when she was 18 months old, was placed with her current family when she was four and a half years old and was consequently adopted.

Susi presented with internalising difficulties: her mother reported Susi's 'endless worrying about everything', and said Susi always wanted to please people, in particular her parents. The main difficulty in the family centred around massive episodes of crying when Susi was unable to produce the answer to a question. These bouts of crying were a burden for Susi's parents, as they had already attempted in many ways to help Susi by reassuring her that they loved her, encouraging her to be more patient with herself and allowing herself to take time to answer questions.

Several behaviours that might take place during a 'miracle day' were identified, such as Susi working on her homework and being patient with herself if she did not know the answer to a question, allowing herself to take time and giving herself space to think. Before making the video, Susi practised each scene through role play, involving her mother for scenes that entailed verbal communication. Susi practised each scene until she felt comfortable being filmed. During the feedback session, Susi's mother reported that Susi's behaviour had drastically improved, even before watching the video. When watching the video with Susi and her mother, the clinician reviewed the microanalysis of some 'moments of contact' between Susi and her mother with them, and reflected together on moments where Susi's mother responded in an attuned manner to Susi's 'improved signals'. For example, not only was Susi more able to be patient with herself and allow herself to take time, but also her mother was able to respond to this more sensitively by allowing Susi to take her time. During a follow-up telephone conversation a month after the feedback session, Susi's mother reported that Susi continued doing well. One episode of authentic crying had occurred during that time: however, according to Susi's mother, this was after Susi had been in trouble for misbehaving, and therefore it was entirely appropriate. Other episodes of crying without apparent reason had completely ceased. This family chose not to engage in any further video work, as the behaviour that had caused them great distress had now disappeared. At four months follow-up, the family reported no further problems.

### **Discussion**

The combination of VFF and VIG seems to have been successful for children with RAD with both externalising as well as internalising difficulties. It appears that VFF may have helped these children improve their 'signalling': in other words, Tim managed to display affectionate behaviour towards his mother during reunions, and Susi was better able to regulate herself and react appropriately to difficulties with her homework without experiencing bouts of crying. VIG also

facilitated the caregiver's sensitive response to their child's improved signalling, potentially strengthening the caregiver-child relationship.

There are some intriguing aspects of VFF that might be worth exploring in future research: for example, Tim felt able to make a video by simply thinking through a narrative with a positive conclusion whilst Susi felt the need to role play each scene.

It would be helpful for future research to attempt to disentangle the different aspects of VFF and VIG that produce change. It would also be interesting to investigate whether there would be an effect on father-child relationships. Moreover, it would be interesting for future research to investigate whether there is a link between the length of time a child with RAD has lived with their adoptive/foster family and the success of the intervention.

This study is clearly limited by the small number of children discussed, and our findings may not generalise to other populations. We hope, however, that this preliminary work will stimulate further empirical research on the effectiveness of VFF/VIG in this patient group.

In summary, both children thoroughly enjoyed the video work, possibly because it differs from more traditional 'talking therapies'. One might also suggest that, since children with RAD have a tendency to control situations, this intervention gave them a sense of control, as they acted as the 'director' when making the videos. Finally, marked and sustained improvements were observed in a small number of sessions. This small pilot suggests that VFF/VIG might be worthy of future research to establish its cost-effectiveness in clinical practice.

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