'Draw, write and tell'. A literature review and methodological development on the 'draw and write' research method

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Abstract

The creative research method 'draw and write' has been used in health, social care and education research for several decades. A literature search of studies utilising this method was conducted during the planning stages of a study exploring primary school children's perceptions of infant feeding. A review of this literature noted a range of benefits of 'draw and write' in enabling child participation. However, it also identified that the method has been used inconsistently, and found that there are issues for researchers in relation to interpretation of creative work and analysis of data. As a result of this an improvement on this method, entitled 'draw, write and tell', was developed in an attempt to provide a more child orientated and consistent approach to data collection, interpretation and analysis. This article identifies the issues relating to 'draw and write' and describes the development and application of 'draw, write and tell' as a case study, noting its limitations and benefits.

Keywords

Children, draw and write, draw write and tell, creative methods, infant feeding, breastfeeding

The creative research method known as 'draw and write' has been widely used by researchers working with children to explore a range of social and health related subjects. A literature review of studies in the United Kingdom, which have used 'draw and write', was undertaken recently as part of research exploring children's perceptions of infant feeding. This article reports the findings of this literature review and comments on the use of the method across a range of studies. It also describes and discusses the rationale for 'draw, write and tell', which was developed for the research study (Author 2011a) in an attempt to resolve some of the issues relating to 'draw and write' identified during the literature review.

Background

The involvement of children in research has increased considerably during the last few decades (Hunt, 2004), aided by changes in legislation and a greater recognition of children's rights to 'be heard' regarding issues that affect their lives (Cree et al., 2002). In England and Wales the development of the 1989 Children's Act (Department of Health, 1989), and the 2004 National Service Framework for Children, Young People and Maternity Services (Department of Health, 2004) demonstrated growing concern for children's views in relation to legal and social work decision making (Cree et al., 2002). Equally there has been a move to involving children more in healthcare and education choices, and it is also now widely accepted that children should be offered the opportunity to participate in research relating to these areas of their lives (Morgan et al., 2002). A move to researching 'with' rather than 'on' children has occurred in recent years (Morgan et al., 2002), with emphasis on exploring their worlds through their own eyes rather than those of adults. However, their participation presents a number of questions relating to issues such as consent, confidentiality and risk (Critchlow, 2005). In addition, there has been concern about children's abilities to understand research questions and communicate their ideas effectively (Punch, 2002). These particular issues have been partially responsible for the development of a number of 'creative' research methods which, it is argued, help to enable child participation (Gauntlett, 2007).

A range of creative methods has emerged in recent years. These involve activities which are visual, tactile or performative (Coad, 2007). They include artwork (Wesson and Salmon, 2001), collages (Vaughan, 2005), clay modelling (Bernhaupt et al., 2007), Lego[™] (Gauntlett, 2007), photography (Darbyshire et al., 2005), video (Gauntlett, 2004), acting and puppetry (Greene and Hill, 2005). A lively debate has ensued regarding the efficacy of these methods, and the extent to which they either aid communication or allow researchers to identify children's 'real' ideas and beliefs (Buckingham, 2009). Gauntlett (2004; Gauntlett, 2006) argues that creative methods offer children time to think, and enable them to build ideas in stages, rather than having to provide an immediate response. Similarly, Harden {Harden, 2000} states that creative methods provide them with 'time out' to consider ideas. This is fundamental because children might not have developed the strategies for recall or structured thought that adults generally possess (Smith et al., 2003). However, it is also apparent that their verbal comprehension and communication skills might be different from those of adults, and these vary greatly according to age,

gender, experience and individual learning needs (Hill, 2006). In addition, for many of them language and literacy might not match their cognitive abilities (Horstman et al., 2008). Children might perhaps be regarded as having 'limitations of language' (Ireland and Holloway, 1996) or might use a vocabulary and language style which is unfamiliar to adults (Punch, 2002). This can create dilemmas for researchers when, as Punch notes, 'the language dilemma is mutual' (Punch, 2002). As a result creative methods might be attractive to researchers working with children because they are regarded as having the potential to resolve some of these issues. Detractors of creative methods, although not denying these benefits, have suggested that there is a tendency to assume that all children will enjoy and be able to express their ideas through these activities (Backett-Milburn and McKie, 1999). It has also been noted that the potential for subjective interpretation of children's work, from an adult perspective, might also affect the credibility of this research and a key issue appears to be that there is sometimes a failure to describe the process or issues involved in data analysis (Backett-Milburn and McKie, 1999). Despite these on-going debates researchers have enthusiastically embraced creative methods. 'Draw and write', as one of the most longstanding methods, has been used throughout the last four decades (Gauntlett, 2007). At first sight the method, involving participants in drawing and writing, appears not to need explanation. However, there have been numerous permutations in the interpretation and application of the method, and no commonly recognised method of data analysis.

Literature Review

A literature search for health related research using the 'Draw and write' method was undertaken using search terms 'draw and write', 'draw + write', 'children + draw + research' in the British Education Index, British Nursing Index, PsycINFO, CINAHL, Ingenta Connect, Medline, JSTOR and Google Scholar[™]. The references in each relevant article were then checked and followed up as appropriate. Following the initial search additional ones using the key words 'draw and tell' and 'children + art + health + research' were conducted in the same databases. This included studies undertaken wholly or partially in the United Kingdom, with primary school children (ages approximately four to eleven), in health and wellbeing related studies. The search was limited to articles published in English. Whilst it was recognised that 'draw and write' has been used in other countries and in relation to other subjects, the infant feeding focus of the study was specific to the cultural background of the UK and this defined the inclusion/exclusion criteria. No historical limits were set on the search, which was conducted in April 2009, and repeated in August 2010.

In total 35 research articles or reports were identified, relating to 25 different studies. Full text for five of these articles could not be located despite contacting publishers and/or authors. In addition to original research, an article by Backett-Milburn and McKie (1999) was identified, which offered a critical review of the method.

Range of research employing 'draw and write'

The concept of 'draw and write' emerged in 1972 with the work of Wetton, who is widely held to have pioneered the method in health education research (Gauntlett and Horsley, 2004). Wetton (1999) later observed that seven and eight year olds appeared to be able to illustrate their feelings and emotions with greater ease than they were able to articulate them. Since then a wide range of health and wellbeing related studies have used the method. These have varied considerably in size, from nine children (Smith and Callery, 2005) in one study to another with over 20,000 participants (Williams et al., 1989). There is also diversity in the participants' ages, with some research spanning the entire primary school age range (Franck et al., 2008) and others concentrating on several specific year groups (McWhirter et al., 2000), or a single age group (Pridmore and Bendelow, 1995). Research among healthy children in school and at home has often looked at attitudes to sun safety (McWhirter et al., 2000; Newton-Bishop et al., 1996), perceptions of cancer and cancer prevention (Bendelow et al., 1996; Oakley et al., 1995), healthy lifestyles (Gabhainn and Kelleher, 2002; MacGregor et al., 1998), diet (Box and Landman, 1994; Caraher et al., 2004; Hendry, 1995) and exercise (Mulvihill et al., 2000). Studies have been conducted in hospitals, and at home, exploring the experiences of children receiving cancer treatment or other medical care (Franck et al., 2008; Horstman et al., 2008; Horstman and Bradding, 2002).

Why researchers use 'draw and write'

'Draw and write' provides children with a choice for imparting information in ways that might be familiar to them. The use of both drawing and writing might result in 'richer' data (Porcellato et al., 1999), because it is recognised that slightly different ideas and perspectives might be presented depending on the methods used (Backett and Alexander, 1991). Current understanding of child development and the use of art suggests that this method might assist children in constructing complex ideas and recalling events (Horstman et al., 2008). Indeed, some researchers have noted that writing alone appears to generate fewer ideas than drawing and writing (Pridmore and Lansdown, 1997)

A key theme identified in some of the 'draw and write' literature relates to enabling participation. The method is appropriate for a broad range of ages and abilities, with the potential for children to adapt the style of drawing, or the drawing/writing balance, to suit their personal communication preferences. In addition, 'draw and write' has proved to be effective in facilitating participation for those who do not speak English (Box and Landman, 1994), or who have disabilities (Pridmore, 1996). In general, 'draw and write' is regarded by researchers as providing an acceptable and enjoyable means of participation for many children (Bendelow et al., 1996; Bradding and Horstman, 1999). Byrne (1999) suggests that drawing is a day to day activity for them. As a result it is a relatively non-threatening means of eliciting ideas, even when it relates to a subject they might find difficult to discuss (Mulvihill et al., 2000). However, others have acknowledged that not all children like drawing, and they should be provided with other means of participating if they so wish (Horstman et al., 2008).

Ethical considerations

The literature contains a range of comment on the ethical implications of involving children in research, and on the role that 'draw and write' might play in this. Horstman et al. (2008) regarded the use of 'draw and write' as a means to reduce the power differentials between children and adults because it enables children to quide the research exercise. Several researchers commented that the method provides an 'unthreatening' means of asking children about 'sensitive' topics, such as self- esteem (Byrne, 1999), cancer (Oakley et al., 1995) or parental smoking (Woods et al., 2005). It is noted by some researchers that 'draw and write' can enable children to negotiate their participation, by simply choosing not to draw (Horstman et al., 2008) but it appears that generally few, if any, children decline to participate in research (McWhirter et al., 2000; Pridmore and Bendelow, 1995). This might be a problematic sideeffect of research being conducted in schools. Participation in activities is generally assumed in this environment and children might not feel empowered to refuse (Pridmore and Bendelow, 1995). There is however a risk that, in feeling more at ease, children might reveal more in their drawings than they truly wish to (Backett-Milburn and McKie, 1999). It was noted that some articles (Backett and Alexander, 1991; Bendelow et al., 1996; MacGregor et al., 1998) did not refer to gaining children's assent although one study did explicitly offer them strategies for refusing, such as taking a book to read (Pridmore and

Lansdown, 1997). Other ethical issues have also been highlighted, in particular around the difficulties of maintaining confidentiality in the publication or in the dissemination of visual work (Backett-Milburn and McKie, 1999).

'Draw and write' for data, discussion or diversion

Studies utilising 'draw and write' appear to vary markedly in terms of the function that the exercise has within the research. In many the method is used as a means of collecting data, with pictures and text (Horstman et al., 2008; Horstman and Bradding, 2002; Pridmore and Bendelow, 1995; Pridmore and Lansdown, 1997; Russell et al., 2004) or sometimes just the text (Franck et al., 2008; Gabhainn and Kelleher, 2002; McWhirter et al., 2000; Smith and Callery, 2005) as data. In some cases 'draw and write' might only form a discussion point for interviews, or a 'warm up exercise' to help establish rapport with children, with no analysis of the art or text (Mulvihill et al., 2000). In some research 'draw and write' is used to focus children's attention on the subject, but the data generated by this activity are not subsequently analysed (Oakley et al., 1995; Woods et al., 2005). In some studies the aim of including the activity in the research was not made clear. It is perhaps worth reflecting on the ethical implications of obtaining data which are not utilised (Guillemin, 2004).

The value of 'draw and write' data

Commentators have questioned whether 'draw and write' produces different data, greater quantities of data, or even more 'authentic' data, than other research methods (Backett-Milburn and McKie, 1999). Children appear able to produce 'draw and write' data relating to thoughts and emotions, even those which are potentially complex or abstract (Horstman et al., 2008; Pridmore and Bendelow, 1995). However, as Backett-Milburn and McKie (1999) point out, the fact that children can produce these data should not prevent a critical assessment of the actual value and meaning of what is collected. It is debateable whether differences in data between research methods are because of the way children respond to the method, the manner in which researchers 'frame' the research question (Backett-Milburn and McKie, 1999), or the participants' reaction to other factors such as peer pressure and environment (MacGregor et al., 1998). It was noted by some researchers that children might present information reflecting the dominant discourses on particular issues (Backett-Milburn and McKie, 1999), and be significantly affected by wider cultural influences (Pridmore and Bendelow, 1995). This has been generally perceived as a weakness of 'draw and write' (Backett-Milburn and McKie, 1999), but researchers have commented that this is advantageous where their area of study focuses on children's social perceptions (Russell et al., 2004). Similarly, it has been suggested that children might tend to tell researchers what they believe to be the 'right' answer (Horstman et al., 2008) or might choose to present images which do not match their real opinions or feelings (Backett-Milburn and McKie, 1999). This perhaps reflects the notion that children, especially those in a school environment, might feel they must present a 'correct' response to adult questions.

Interpreting children's drawings

One of the risks inherent in 'draw and write' research is that the content and detail of children's drawings might be regarded as literal representations of their thoughts and feelings (Backett-Milburn and McKie, 1999). However, this perhaps reflects previous psychoanalytical approaches to children's art, and does not reflect the child-centred ethos usually associated with 'draw and write' (Pridmore and Bendelow, 1995). An additional problem around interpretation of 'draw and write' data might also be ambiguity generated by the artistic skills or handwriting ability of children at this early stage (Pridmore and Lansdown, 1997). In some cases the method might resolve these issues by enabling the 'draw' and 'write' aspects to offer clarity to one another (Caraher et al., 2004; Porcellato et al., 1999). In some studies 'draw and write' data have been interpreted without reference to further information, particularly where large numbers of participants have been involved (Franck et al., 2008; Gabhainn and Kelleher, 2002). These studies have often interpreted the data in a 'face value' manner, usually identifying content purely in terms of objects and people. In addition, some researchers have made major assumptions regarding, for instance, whether children are 'exaggerating' (Box and Landman, 1994). Using a 'face value' approach, without interview data or text, also significantly reduces, or even eliminates, the degree to which emotions might be deduced from children's work (Horstman et al., 2008).

The 'thorny issue' of analysis

Although visually 'attractive', detailed and complex data might be generated by 'draw and write', many researchers appear to have struggled to achieve effective interpretation and analysis (Backett-Milburn and McKie, 1999). In much 'draw and write' research there is a lack of clarity regarding the process that has taken place between data collection and conclusions. It has been noted that 'the emphasis has been methodological techniques and practical and ethical issues at the expense of epistemological and analytical concerns' (Backett-Milburn and McKie, 1999). Within the literature some researchers address the problem of analysis (Horstman et al., 2008), but in many cases the analytical process is implied rather than explicit, or there is ambiguity regarding whether the art, or text, or both has been used (Box and Landman, 1994; Byrne, 1999; Mulvihill et al., 2000). It seems likely that analysis of 'draw and write' data is problematic for many researchers because it involves scrutinising artwork (Backett-Milburn and McKie, 1999). In some research the analysis process is clearly documented (Bradding and Horstman, 1999; Horstman et al., 2008), although the methods used vary considerably. A number of research studies have analysed picture content in terms of objects, people and places. Frequently, quantitative analysis has been used in studies involving very large numbers of participants (Gabhainn and Kelleher, 2002). Some researchers have used picture content analysis in a more qualitative manner, usually by coding and categorising data (Horstman and Bradding, 2002). In some cases analysis has identified emotions or 'what the child is trying to convey' (Horstman et al., 2008), p1005). On occasion 'broad themes' have been identified in artwork (Mulvihill et al., 2000). Several studies have stated that thematic analysis has been used instead of, or in addition to, content analysis (Newton-Bishop et al., 1996; Smith and Callery, 2005).

In all cases there appears to be a problem in linking the data collected in different media; drawings, text, interviews or other sources. As a result the data becomes 'fractured' during analysis. It seems likely that there is a risk of drawings being analysed without constant reference to children's own interpretation, or without recognising the appropriate context, possibly leading to incorrect assumptions.

Case study

As previously stated, the aim of this article is not only to review the existing 'draw and write' literature but also to introduce 'draw, write and tell', which was developed during recent research that explored primary school children's awareness of infant feeding. This article presents a brief description of the study and the factors which underpinned the development of the method.

Children were invited to participate in the research in primary schools in southern England; two schools in a moderately deprived urban area and one school in an affluent rural location. Ethical approval was gained from both the university ethics committee and Local Research Ethics Committee. Families were approached via the school using a letter and information leaflet. Children who offered their own verbal assent to participate, supported by written parental permission, were included. A total of 56 children from three age groups (5/6, 7/8 and 10/11 years) were involved in the study. Literature from other research

suggested that this number would be suitable (Morse, 2000). Facilities were available for children with additional needs, including translation, but these were not required.

One of the authors (CA) undertook all the classroom activities and data collection in order to ensure consistency. She was supported by the classroom teachers and teaching assistants. A participatory storytelling method was used. In each classroom she read and showed a simple story, on large picture boards, to the group of children. The story, which comprised simple words and line drawings, was about a hungry newborn baby. This was designed to assist them in understanding the context of the research question (Davis, 2007). Where some children required reiteration or clarification this was given. The children were asked to create pictures and text to finish the story, showing how they thought the baby might be fed. They were then individually invited to talk in private about their work with CA in a quiet area of the classroom. To begin this conversation she made a positive comment about the child's artwork and then asked the child 'how do you think the baby was fed?' Following the classroom activities all of the data from each child was combined; picture, text and spoken into a written 'commentary'. This involved writing a detailed description of the artwork, focusing on the aspects of the drawing that the child had interpreted the meaning of, and interweaving their verbal comments and text into the description. These commentaries were coded until saturation was reached. Throughout the process of writing the commentaries and coding constant comparison was used.

Defining the method for 'draw, write and tell'

This research explored a complex and potentially sensitive subject. This presented a number of challenges, in terms of enabling children to understand and respond to the research question, without unduly influencing or discomforting them. 'Draw and write' was identified as a potentially appropriate research method. However, on further investigation, it appeared that 'draw and write' was not founded on clear philosophical or methodological 'hard ground', and lacked a consistent system for application or analysis. 'Draw, write and tell' was developed in an attempt to resolve some of the issues identified in previous 'draw and write' research. A flow chart has been devised, based on the literature, which maps out the process for 'draw, write and tell' (figure 1). The essential aspects of 'draw, write and tell' were identified which offered substantial improvements to the original method, and these are presented within the flow chart and described in detail below.

Philosophy, context and consent

As mentioned previously it is essential, prior to undertaking research with children, to have established an underpinning philosophy relating to them as members of society. A participatory method, such as 'draw and write', is consistent with a belief that they are unique, thinking individuals and are capable of expressing their thoughts and emotions. As such it is congruent with an approach that respects children at every stage of the process, particularly around issues such as context and information giving. As discussed previously the child's agreement to participate must be a central element in the process, and this is supported as an inherent part of the philosophy.

The creative process

In addition, it could be argued that, if children are willing to participate in research then it is inappropriate to place controls, particularly if they are 'adult centred' controls, on children's contributions. In some studies there have been time limits (Pridmore and Lansdown, 1997) or restrictions on the materials or layout of children's creative work (Caraher et al., 2004; Eiser and Patterson, 1983). Not only might this affect their creativity and reduce their enjoyment of the activity but it could also be construed as re-enforcing the power differential between child participants and adult researchers. Finally, in keeping with a child centred approach this research did not assume that children would want to share their work, and specifically asked their consent to scan/copy their creative work in their presence, so that they not only had control over the ownership of the art, but were also able to keep the original.

Interpretation

Respecting children as research participants also requires researchers to recognise that children must have control over the information that is gathered about them. As such children's contributions, and their own interpretations of these, represent the limits of what they wish the researcher to know. It could be argued that it is not always appropriate for their views to be overlaid by the opinions of others, which has occurred in some studies where 'proxy' information has been sought from parents, teachers, healthcare professionals or social workers (Mulvihill et al., 2000; Russell et al., 2004). Having acknowledged the importance of children's interpretation of their work it was noted that many studies do not incorporate this element into the research design. Researchers have very occasionally tried to resolve issues of interpretation by including additional research methods that encourage children to describe and interpret their own contributions. These have included group discussions (Hill et al., 1996; Russell et al., 2004) or interviews (Backett and Alexander, 1991; Horstman et al., 2008; Woods et al., 2005). However, in these rare instances these activities were presented as additional to the 'draw and write' method, indeed in some studies this task was not undertaken by all participants (Horstman et al., 2008). In the 'draw, write and tell' method it is regarded as essential to make children's interpretations a central part of the data collection, rather than an 'optional extra'. In addition, the manner in which children's interpretations were acquired needed to fit in with a research philosophy that sought to be child-centred rather than adult-centred. It was regarded as essential that children were enabled to 'tell' the researcher about their work, if they wished, without being constrained by a pre-set series of interview questions. This proved to be pivotal in appreciating that the method might provide a means of exploring the nuances within and between children's voices and perspectives. For example, several children's described of breastmilk as 'the other way' or as an alternative to formula milk feeding. The impact of this might have been underestimated had it not been accompanied by paired drawings which all presented breastfeeding as a smaller or secondary

image to that of formula milk feeding. The reflection of the children's verbal statements within their illustrations led the researchers to appreciate that children were not just casually or inadvertently using particular words and phrases. By contrast there was sometimes apparent dissonance between children's visual contributions and their verbal interpretation. For example, one child drew a picture of a disproportionately large bottle of formula milk and a very small infant. However, her verbal description did not focus on formula milk feeding. Instead she voiced her difficult experience of observing breastfeeding, which had occurred in a situation that she had found traumatic and which she appeared to have found distressing. This illustrated to the researchers that there could be a profound contrast between the thoughts voiced by a child, and their more complex perspective on an issue.

Analysis

One of the problems with 'draw and write' is the creation of two separate streams of data. In some respects 'draw, write and tell' compounds this by generating three; art, text and spoken word. To ensure that all the data are used and interpreted correctly it is essential to 'marry up' the child's interpretation with the content of their drawing and text. The commentary that was developed contained elements the child interpreted verbally or using text, as well as major face value aspects that were an integral part of the picture and fitted in with their description, such as 'mother is holding baby'. However, no assumption, inference or adult interpretation was included. For example, the presence of a 'figure dressed in blue dress' would have been described at face value. When combined with the child's interpretation that this was 'a nurse, well, one like you' (i.e. a midwife) clarity was brought to the scene. Using the Commentary it was possible to code particular objects, people, behaviour and emotions accurately. From this, important distinctions could be clarified by linking together the data streams. For example, in one picture the child (age7/8 years) drew an infant feeding bottle, but verbally explained that it contained expressed breast milk. Separate analysis of the streams of data would have resulted in miscoding, because the vital distinction between a bottle containing breast milk rather than formula milk might have been entirely lost. This has since been observed in other research using 'draw, write and tell' (Author 2011b)

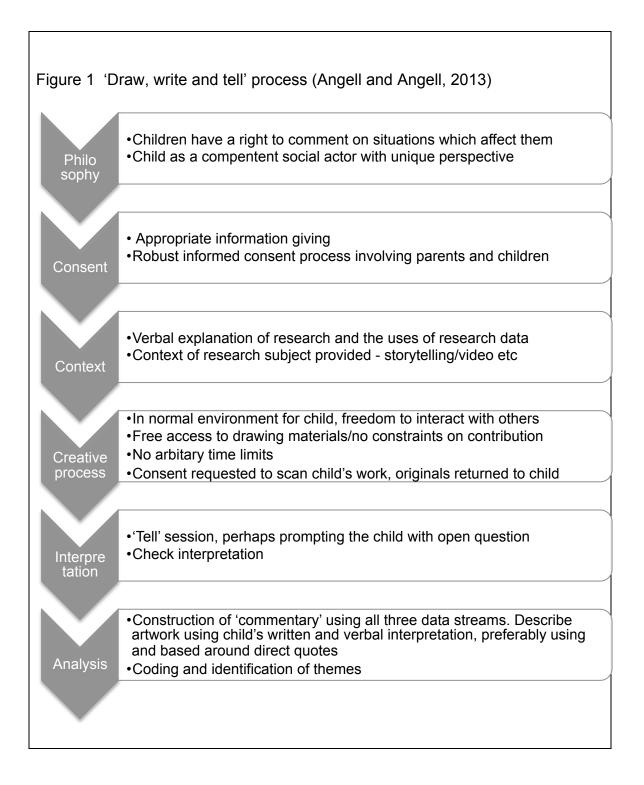
Conclusion

In qualitative research it can be difficult to define what constitutes a 'new method' (Travers, 2009). 'Draw and write' has clearly been a recognised method for some time. However, it has suffered from a lack of underpinning philosophy and has been applied inconsistently. In addition, poor clarity around analysis has led some to question the validity of the method. By contrast 'draw, write and tell' has aimed to 'firm up' the philosophical basis of the method, identifying this as a child centred method, which supports children's thought processes and enables individuals to communicate using a range of methods. It assists, although care is still required, in equalising the 'power imbalances' (Morrow and Richards, 2002) between adult researchers and children, and offers each child an opportunity to subtly negotiate their own level of participation. In addition, 'draw, write and tell' ensures that their own

interpretation, from the 'tell' element, is central to the data collection, because it is an inherent part of the method rather than being erratically employed as an 'add on'. Crucially, the integrative analytic 'commentary' presents a means of blending the three different forms of data collected, so that ambiguity is minimised and all the data are equally utilised and valued. This allows researchers to view 'the whole picture' and identify findings from the data with more confidence. Although this method was developed in a health education field, it could be applied to a range of disciplines. One of the authors has collaborated in a study using draw, write and tell to explore children's perceptions of food advertising (Author, 2013), where it demonstrated the advantages previously observed.

Adults who undertake research that involves children can perhaps never truly understand the world that they are exploring. However, it is hoped that 'draw, write and tell' might provide another 'tool in the box' with which to enable communication between children and researchers.

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