



Being Participatory Through Play

5

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5.1 Introduction

Sometimes things are too difficult to talk about, maybe because a child is too young to know the words or maybe things are just too scary to say out loud. Often children don't know or understand how they feel about something until they "mess around" and explore it a bit. Expressive methods, such as play, drawing, painting, creative writing, and performing arts, can provide the language children need to express their thoughts and describe their experiences.

In participatory research, expressive activities are rarely used in isolation but commonly support other data collection methods such as interviews. Also, some studies incorporate several forms of expression to allow children greater choice. For example, children and young people used variety of arts techniques (e.g., painting, collage, mosaic, dance, poetry, music, sculpture) to respond to "What a hospital should be" [1].

To children and observers, it may seem that such methods are merely fun or distractions. However, just as with other research methods, creative means of data collection must be carefully thought out and thoroughly prepared for during the study planning. Research that is fun and engaging for children aims to make it more accessible while maintaining robustness ([2], p. 96): "research that is fun is indeed a serious undertaking, and the use of arts-based approaches can help to introduce 'serious fun' into research."

This chapter begins with a research example that used three drawing techniques. Other participatory techniques—drawing and visual arts, toys and games, puppets, storytelling and creative writing, and the performing arts—are explored. This is

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followed by a discussion of advantages of using expressive techniques and some of the challenges the researcher might face. The chapter concludes with tips for the researcher and helpful resources.

5.2 Research Example—“Tell Me About It: Drawing as a Communication Tool for Children with Cancer” [3]

Stress and coping in childhood cancer is a popular research topic. A growing number of researchers are shifting their methods from seeking information about children to seeking information directly from them. However, in many instances, children have been asked to complete lengthy questionnaires that often fail to capture the true nature of their experiences. This international study sought to use a developmentally appropriate means, drawing, to help children communicate their thoughts, feelings, and perceptions regarding stress and coping.

5.2.1 Aims of Study

The study had three aims:

1. To explore and compare the nature of stressors of everyday life and disease that children with cancer in the United Kingdom and the United States experience
2. To explore and compare the coping measures they use to manage these stressors
3. To examine the use of drawing to enhance communication

5.2.2 Target Population

Participants were 22 children (13 boys, 9 girls) ages 7–18 years, who were receiving treatment for cancer at a UK site in the Midlands region of England and at a US site in the middle Atlantic region of America. The medical directors of the pediatric oncology services at each site identified children who met the eligibility criteria, and the researcher explained the study and invited them to participate.

5.2.3 Type of Participation and Model Underpinning the Participatory Approach

Children participated in the research by expressing their views through child-centered forms of communication, which consisted of drawing that accompanied interview.

5.2.4 Research Methods/Tools Used and Rationale for Their Use

The study used quantitative and qualitative methods within a grounded theory approach. Triangulation was used to enhance credibility. Data was collected over a 6-month period. Six instruments/methods were—two of which are common to grounded theory research—observation and interview, three drawing instruments, and a background information form.

The researcher conducted a one-time audiotaped unstructured formal interview with children. To obtain specific psychosocial information about each child, focused (or semi-structured) interviews were also conducted with a play therapist (in the United Kingdom) and a child life specialist (in the United States). The researcher also conducted unstructured interviews with nurses and other hospital or clinic personnel.

An unstructured observational approach as a participant observer was used using the following interview guide:

1. I'm going to ask you to do three drawings.
2. If at any time you want to stop, it is okay. You don't need to say why. No one will be mad at you, and nothing bad will happen.
3. First, please draw a person picking an apple from a tree.
4. Please think of and draw the scariest experience, thought, feeling, or dream you have had since you became ill.
5. Please tell me about your drawing.
6. What helped you at that time?
7. Please draw a picture of where you would like to be right now if you could be anywhere you wanted to be. It can be a real place or a make-believe place.
8. Please tell me about your drawing.
9. What advice would you give to children who just found out that they have cancer?
10. Is there anything else you would like to add?

Aspects observed included the physical setting, the participants' activities, frequency and duration, process, and outcomes. Children completed three drawings, which are explained in greater detail later in this paper:

- *Drawing of Person Picking an Apple from a Tree (PPAT)*—Children were asked to draw a picture of a person picking an apple from a tree. Their drawings were scored using Scale 8, Problem-Solving Scale, of the Formal Elements Art Therapy Scale (FEATS) [4]. This scale is found useful in understanding the child's coping ability.
- *Scariest Image Drawing*—This technique, developed by Sourkes [5], was used to provide a starting point for children to discuss their stresses and coping mechanisms. Children were asked to draw the scariest experience, thought, feeling, or dream that they had since becoming ill.

- *Closure Drawing*—Children were asked to draw a picture of wherever they would like to be right then, a real or a make-believe place. The researcher developed this method to help end the session on a brighter note after discussing difficult issues, to help learn more about the child, and to perhaps have the positive physiological benefits that engaging in the arts can bring.

Parents completed a brief background information form. Information included names, gender, and ages of persons living in the child's home, parents' occupations, child's diagnosis, and date of diagnosis.

5.2.5 Ethical Issues

Ethical approval was sought and granted from the NHS Trust Ethics Committee at the UK site and the Institutional Review Board at the US site. Child-friendly colorful brochures were created for each site. The brochures outlined the study details. The wording in the UK version was anglicized with the use of the British spelling of words and British terminology and phrases, and the US version used the American spelling of words, terminology, and phrases. The brochures and the formal consent and assent forms were reviewed with children and parents, and questions were sought and answered.

5.2.6 Findings

Findings revealed that children, regardless of their ethnicity and other cultural components, responded to the childhood cancer experience in a similar manner. The use of drawing enhanced communication through direct visual expression and/or through verbal expression via the “campfire effect”—the result of an activity or experience that provides a focal point shared by the individuals involved that serves to increase conversation in both quantity and intensity. Much like sitting around a campfire, “sitting around the drawing,” allowed the drawing and not the child to serve as an object of focus for both the child and the researcher. This transfer of focus seemed to relax the child by relieving the pressure of being the object of direct verbal communication and led to the sharing of painful thoughts and feelings (see Fig. 5.1).

5.2.7 What We Would Do Differently in the Next Project

It might be interesting to add other modalities, such as poetry, to give children greater choice. Although the number of participants was appropriate for the study methods, a larger sample size and greater diversity among participants would have allowed a more sophisticated statistical analysis. Also, as children's drawings are “in the moment,” obtaining additional drawings from the same children at a later time could reveal interesting comparisons.

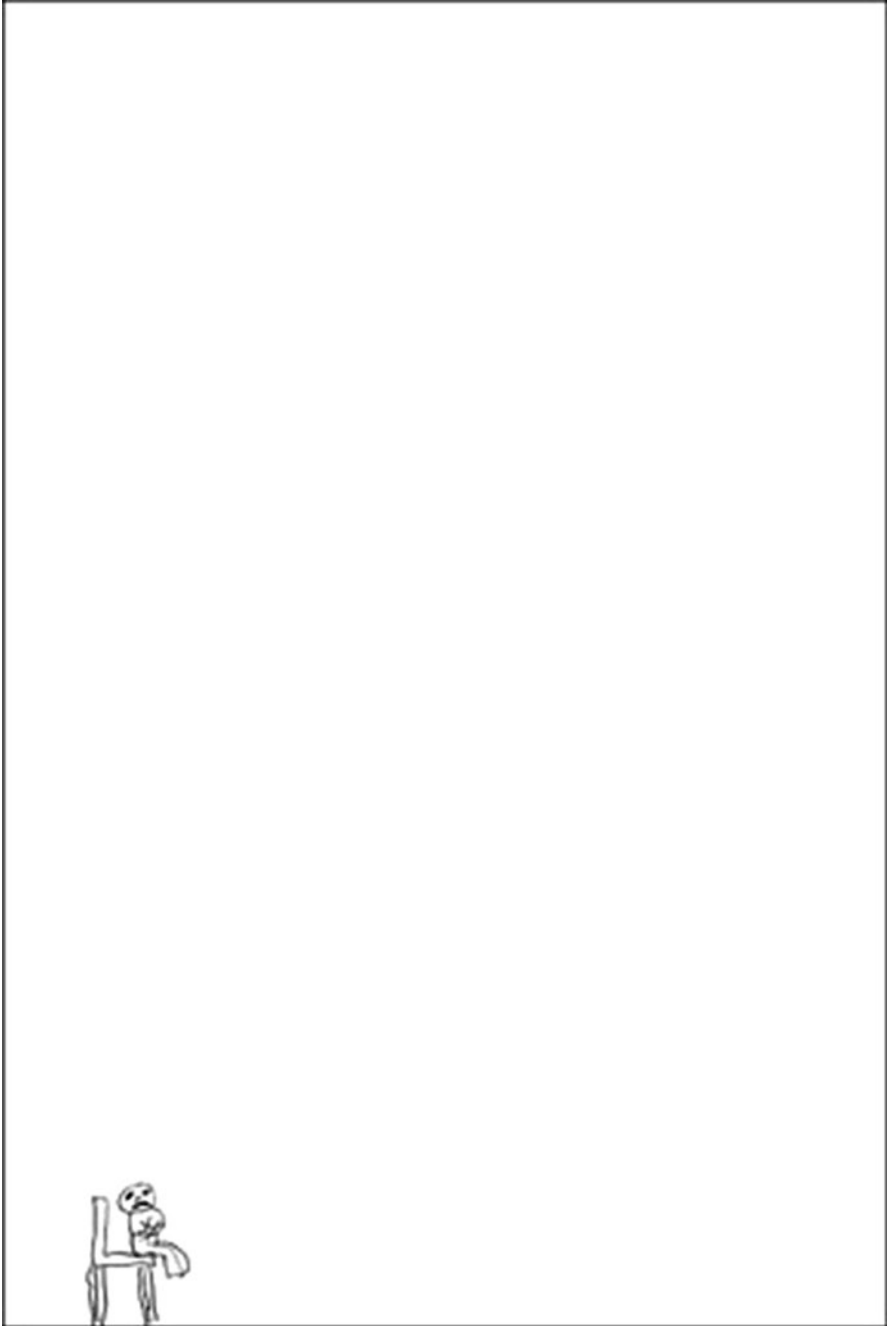


Fig. 5.1 A 12-year-old girl said this is what she looked like when she was told she had a brain tumor: “I was a scared girl,” adding that she was afraid of dying then and “I am again right now.” She sensed she was dying and, with no treatment options left, in fact was but had not been told

5.2.8 Impact on Participants

Participants freely expressed through drawing their appraisal of what was stressful. Some participants said they had never really thought through the experience until drawing and talking about it in the interview. All participants seemed to enjoy the process.

5.2.9 Dissemination Techniques

Findings have been presented at several conferences and in a journal article.

5.2.10 Conclusion

Drawing was effective in producing significant data with children. Because children may experience significant and immediate benefits from engaging in research that involves drawing, such investigations may be an advantage for those who choose to participate.

5.3 Drawing and Other Visual Art Techniques

Drawing and other visual art techniques can draw out information about children's feelings that they may not even be consciously aware of or able to verbally express. When Carney et al. [6] used four methods to elicit children's views of hospitalization, the findings revealed the most concrete information came from a structured questionnaire; however, the visual structured questionnaire (five drawings of hospital events) was most effective in eliciting children's *feelings* about the hospital experience. Weber [7] lists ten reasons for using visual images in research, all of them interlinked:

1. *Images can be used to capture the ineffable, the hard-to-put-into words.* Some things just need to be shown, not merely stated.
2. *Images can make us pay attention to things in new ways.* Art makes us look; it engages us.
3. *Images are likely to be memorable.* Some images are more memorable than academic texts and therefore more likely to influence the ways we think and act.
4. *Images can be used to communicate more holistically, incorporating multiple layers, and evoking stories or questions.* Images enable us to simultaneously keep the whole and the part in view telling a story and helping us synthesize knowledge in a highly efficient way.

5. *Images can enhance empathic understanding and generalizability.* Images literally help us to adopt someone else's gaze, see someone else's point of view, and borrow their experience for a moment.
6. *Through metaphor and symbol, artistic images can carry theory elegantly and eloquently.* The possibilities for using the visual to make effective and economical theoretical statement are often undervalued in research.
7. *Images encourage embodied knowledge.* Visual methods help researchers keep their own bodies and the bodies of those they study in mind.
8. *Images can be more accessible than most forms of academic discourse.* Artistic forms of representation provide a refreshing and necessary challenge to prevailing modes of academic discourse.
9. *Images can facilitate reflexivity in research design.* Using images connects to the self yet provides a certain distance.
10. *Images provoke action for social justice.* No matter how personal or intimate they may seem at first glance, images, by the very nature of the provenance and creation, are also social.

Drawing is the most commonly used visual art modality employed in research with children, either on its own or in concert with other methods, such as interview. Illuminative drawings are simple to administer and allow more flexibility in art materials. Drawings with scoring systems are often used to add a quantitative component to study methods. Painting, collage, and other expressive methods bring additional choices for children to encourage participation.

5.3.1 Illuminative Drawings

Children can use any opportunity to draw as a means of communicating, yet certain drawing techniques have shown promise in promoting expression and enhancing communication. Illuminative artwork [8] is one such method. Using this method, the researcher asks the child to render a drawing based on a certain topic or theme. The researcher does not impose his or her analysis of the individual's work but instead encourages the child to use the artwork as a communication tool. Illuminative artwork can be used in much the same way as metaphors are used to express tacit or preconscious feelings about experiences. The researcher follows up by asking the child to explain the drawing and its significance (see Research Example).

The *draw-and-write* technique is a child-friendly and nonthreatening method of collecting data with children. The child is asked to draw a picture relevant to the subject of the research and write about it. The completed picture and any text (speech bubbles, description) are used as a springboard for discussion and questions on the child's experience, thoughts, and beliefs. Asking children to talk about their work puts them in the role of an expert as they guide the researcher through their drawing and what it represented to them.

Before and after (or pre/post) drawings provide children opportunities to self-report on their experiences regarding an intervention by drawing and then describing what they drew. The first drawing is done before the intervention; the second occurs afterward. Images are sometimes accompanied by a written text. The *retrospective pre-/postdrawing* is a variation. At the end of the intervention, children are asked to think back and draw themselves as they were before the intervention and then to do a second drawing of themselves as they are now. This method has the obvious advantage for times when it is difficult to collect data on everyone prior to an intervention.

The *closure drawing* is used at the end of interview sessions when children have been discussing difficult issues. Children are asked, “Where would you like to be right now if you could be anywhere else in the world.” In addition to ending the interview on a brighter note, engaging in drawing, imagining, and so on has been shown to raise endorphin, immunoglobulin A, and oxygen saturation levels.

Drawing for the child, or *drawing by proxy*, is another way to help children communicate their feelings, especially children who may be too weak or otherwise physically unable to draw. Using this method, the researcher asks children to imagine images or symbols to represent their thoughts and feelings, and the researcher renders the drawing itself. The researcher continuously asks the child for feedback and verification to insure the image is exactly as the child envisions it. As the creative process is a series of decision-making and the child is making the critical decisions along the way, the drawing is truly the child’s invention, and the researcher is a tool acting on the child’s behalf. Rollins et al. [9] conducted a study with hospitalized children using Drescher’s *Moon Balloon* drawing by proxy method (see [10] and Fig. 5.2). Results indicated that drawing by proxy provided an effective method for children to express their thoughts and feelings and that participating in the process improved their present quality of life.

5.3.2 Drawings with Scoring Systems

It has long been assumed that the figure drawn is a unique expression of a child’s experiences and preferences. Critics of projective measures point out that a high degree of inference is required in gleaning information from projective methods and that data quality depends heavily on the researcher’s interpretive skill, thus that of an art therapist. However, with well-developed scoring systems in place, researchers without these skills can feel more confident in their ability to analyze the results—again considering that findings shouldn’t be considered valid without the child’s accompanying narrative, which is driven by the drawings. Four examples of projective drawing techniques with good scoring systems are described here.

The *Kinetic Family Drawing-Revised (KFD-R)* provides information about how children perceive themselves in their family setting. Kinetic (action) drawings are more informative than those obtained from the traditional akinetic instructions. The addition of movement helps mobilize a child’s feelings not only as related to self-concept but also in the area of interpersonal relations. The child is asked, “Please

Fig. 5.2 An 18-year-old girl from El Salvador created images by proxy about things that are causing her stress



draw a picture of everyone in your family doing something, try to draw whole people, not cartoons or stick people. Remember, make everyone doing something.”

Spinetta et al. [11] developed a carefully structured and situation-limited administration a scoring procedure (KFD-R) for interpreting the kinetic family drawings of children with cancer and their families. Useful with adults and children 6 years and older, the KFD-R procedure precludes chance and/or the problematic tendency to over-interpret drawings. The KFD-R scales consist of 19 negatively valenced items—such as barriers between family members, figure size, and facial position of mother—each scored 0, 1, or 2. Results are presented in four scores: family communication, self-image, emotional tone, and an overall score of family support. The range of overall score is 0–35, with higher scores indicating poorer adjustment. See the chapter “The Kinetic Family Drawing in Childhood Cancer” [11] in Spinetta and Spinetta’s *Living with Childhood Cancer* for the KFD-R scoring system. Researchers have used the KFD-R with adult family members as well as with children. Some studies that have incorporated the KFD-R include research with siblings and parents of bone marrow transplant patients [12], siblings of children with cancer [13], and siblings of children with cancer who attended a summer camp program [14].

Bombi et al. [15] developed the *Pictorial Assessment of Interpersonal Relationships (PAIR)* system to analyze interpersonal relationships of children ages

6–14 years. However, Bombi et al. report PAIR can be used with younger children, and Corsano et al. [16] used the instrument in a study with older adolescents. Bombi et al. [15] have used PAIR to investigate children’s friendships, relationships with parents, and relationships with teachers and report good reliability and construct and discriminant validity. The child is asked to draw him- or herself with another person, while they are doing something. Drawings are coded using PAIR’s six scales:

1. Cohesion—the degree of interdependence between the partners
2. Distancing—the degree of autonomy of the partners
3. Similarity—the psychological affinity between the partners
4. Value—the comparative value of the partners
5. Emotions—the mood displayed by each partner and the emotional climate of their relationship
6. Conflict—the disruption of the relationship

The researcher assigns a score based on answers to questions such as “Is one figure looking at the other?” (0 = absence; 1 = presence). Scores are reported for each scale individually. Complete details for scoring can be found in *Pictorial Assessment of Interpersonal Relationships (PAIR)* [15]. In the healthcare setting, Corsano et al. [16] looked at children’s relationships with doctors and nurses. In addition to coding the drawings, they also conducted a qualitative analysis, which considered the choice of partner as doctor or nurse, the position of the figures, the setting of the drawing, and the details enriching the drawing.

Clatworthy developed the *Child Drawing: Hospital (CD:H)* to measure the emotional status of the hospitalized school-aged child (5–11 years of age) [17]. The child is asked, “Please draw a picture of a person in the hospital. I will take your picture when you are finished.” Scoring is divided into three sections [17]:

- Part A (14 items)—Scale ranges from 1 (lowest anxiety) to 10 (highest anxiety). Items include features such as position of person, facial expression, number of colors used, and quality of crayon strokes.
- Part B (8 items)—Adds 5–10 points for the presence of certain items presumed to pathological indices, such as missing body parts or use of shading.
- Part C (Gestalt rating)—The scorer gives an overall response of the child’s anxiety as expressed in the drawing on a scale of 1 (coping or low anxiety) to 10 (high anxiety or disturbance).

The three scores are added together to obtain a total score. Scores can range from 15 to 290. Complete details for scoring can be found in *Child Drawing: Hospital Manual* [18]. Burns-Nader et al. [19] used the CD:H in a study that explored the relationships between hospitalized children’s anxiety level, mothers’ use of coping strategies, and mothers’ satisfaction with the hospital experience. Other studies have measured the impact of preoperative preparation on children’s anxiety [20].

For the *Person Picking an Apple from a Tree Drawing*, the child is asked, “Please draw a picture of a person picking an apple from a tree.” Little had been written about the technique until Gantt and Tabone’s [4] use of the drawing as an assessment procedure when developing the Formal Elements Art Therapy Scale (FEATS), which consists of 14 scales. The Problem-Solving Scale is useful in understanding a child’s coping ability and resourcefulness. This scale measures whether and how the drawn person gets the apple out of the tree. Problem-solving can be related to affect, and scores on this scale can reflect hopelessness and coping ability. The researcher considers questions such as how effective is the solution for getting the apple out of the tree? Is the method used realistic? Drawings are scored on a continuum of 0–5, with lower scores suggesting less resourcefulness and coping ability. For scoring instructions, see *Formal Elements Art Therapy Scale: The Rating Manual* [4]. Some studies that have used the PPAT include research with children with epilepsy [21], children with cancer ([3]; see Research Example), and children with asthma [22].

5.3.3 Other Visual Arts Techniques

As the reason for creating art is self-expression, almost any visual arts activity can serve as a means to generating children’s thoughts and ideas.

Collage refers to a method of cutting up “found” natural or made materials and pasting them on another surface. When collage is used in research, objects are given meaning not from something within them but through the way they are perceived in relationship to one another. For the researcher, collage has some advantages over other visual mediums used for research. Collage is easy for a novice to arts-based methods; we likely all had experience cutting and pasting as children. Children often view making a collage as less intimidating than having to draw or create their own images. And regarding the worth of collage as data, “The ambiguity that remains present in collage provides a way of expressing the said and the unsaid, and allows for multiple avenues of interpretation and greater accessibility” ([23], p. 268).

The types of materials used may depend on the research question. Choice is important, so it is helpful to gather a good supply of magazines, catalogues, and a variety of natural and found items, such as feathers, buttons, string, and perhaps medical items like tongue depressors, cotton balls, tape, gloves, or tubing items. Children may also be asked if they have objects they would like to incorporate. Words from magazines and other publications are often used as well as images. *Scrapbooking* uses collage and has become a popular activity with all ages in recent years.

Creating a *personal container* can also incorporate collage. Children are asked to list things that are of personal interest, all the things that make them who they are. Using these ideas, they collage the outside of a container using images from magazines, photos, and natural or found objects. Children may also want to paint or add words or drawings. The container could be a simple cardboard box, or something a

bit fancier such as a Chinese carryout box, or even something more permanent, such as a wooden cigar box, which would also allow wood burning. Children can use the inside to reflect things people may not know about them, such as a fear of needles, homesickness, worries about getting behind in schoolwork, or positive things, such as their dreams for the future. The researcher can encourage children to include carefully selected items that represent different facets of self to put into the container.

Graffiti walls provide an efficient and inexpensive way to quickly produce a great deal of information from many people. All that's needed is a large sheet of paper taped to a wall and writing/drawing implements nearby. The researcher writes the question on the sheet, with an invitation for individuals to respond with words, drawings, or symbols. The paper is removed when it's determined that data saturation has been reached. Text from the graffiti wall can be fed into a Wordle or other programs to help analyze and present the data. To create ongoing opportunities for graffiti walls, if permitted, walls can be painted with chalkboard paint and chalk used for responses.

Body mapping is the process of creating body maps using drawing, collage, painting, or other art-based techniques that children can use to visually represent aspects of their lives, their bodies, and the world they live in. The body maps are data in themselves but can also be supplemented with writing or interviews. Children can create an individual body map or work in gender/age groups. To create a body map, an outline is drawn around a child lying on a large sheet of paper. The next step depends on the research question. O'Kane [24] gives an example that addresses the question of what children like and dislike. A vertical line is drawn down the middle of the body map; one side represents a happy child and the other a sad child. Children then are asked to use the body parts to share and record likes and dislikes, for example, the eyes: What do they see in their homes/schools/communities that makes them happy or sad? What ways do adults see them that make children feel happy or sad? Why? They continue down to the feet and leg and also add other body parts they want to discuss.

5.4 Toys and Games

The child's familiar world is the world of play. Thus, incorporating toys, games, and other playful approaches within research methods can help children feel more comfortable and perhaps better able to express their opinions and experiences by using an accustomed means of communication.

5.4.1 Toy Props

Researchers have found that the introduction of physical props such as toys into the interview consistently increases the volume of information young children provide [25]. Props can serve both as memory retrieval cues and as communication aids for

relaying emotionally difficult or complex information that may be beyond a child's verbal capacity.

The use of props may have an impact on the accuracy of the information a child reports. For example, in interviews with 5-year-old children with toy props, Salmon et al. [25] found that information reported was significantly less accurate than when children were interviewed with real items from an event. However, in other research, the use of props has not affected accuracy. For example, Goodman et al. [26] interviewed children 5 years old and older about a stressful medical procedure using anatomical dolls and toy props and reported no change in accuracy.

Several explanations have been offered for why the use of toy props may affect young children's accuracy in recall [25]. Young children may have trouble understanding the symbolic nature of toy props, i.e., that they represent real items. Other children may see the props as simply an invitation to play. Toys and play may also send the signal that the researcher is interested in fictitious events of children's imagination.

Nigro and Wolpow [25] point out that toy props offer the interviewer more possibilities than do real props. For most researchers, they are readily available, and relative to no props, they significantly increase children's verbal and behavioral communications. However, their results demonstrate that "real items from an experienced event similarly increase communications without compromising accuracy as much as do toys... Our results suggest that children will communicate more incorrect information with such props [toys], but this increase will be offset by an increased volume of correct information" (p. 563).

5.4.2 Games

Researchers have developed games specifically to encourage children's participation in research. In fact, games can play an important role even before data collection begins. For example, Bray [27] developed an *activity board* to help children understand consent and the research process, and Kirova [28] created *How do you feel* to orient children to their feelings prior to data collection.

Pots and Beans invites children to express their level of agreement or disagreement using tactile resources (e.g., pots and beans, plastic cups and pasta shells, boxes and beads). Each container has a label representing a category, such as an emotion (e.g., anger, joy, fear). The researcher gives children a finite number of beans, shells, or other "counters" to distribute across the containers, putting as few or as many in each container depending upon how closely they associate with the various labels in relation to the verbal question posed.

Regarding ranking choices, although children can usually decide what they like most and what they like least, they typically have more difficulty ranking those choices in the middle. A technique called *diamond ranking* provides a helpful alternative. Prior to the diamond ranking data collection activity, the researcher produces (often with the children's assistance) cards with nine categories or statements. Children then rank the categories according to what they like most (or what is most

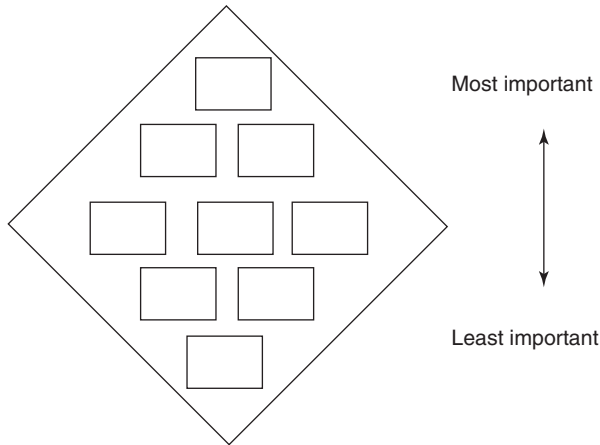


Fig. 5.3 Diamond ranking diagram. Adapted in part from Schofield, M. (2009). “Eleven year olds’ views on school subject and ideal teacher qualities”, <http://childrensresearch-centre.open.ac.uk> [29]

important to them) to what they like least (or what is least important to them) in the shape of a diamond (see Fig. 5.3). The wider area in the middle allows for some categories to be equally ranked.

The *decision-making pocket chart* provides a helpful visual way for children to indicate who currently participates in and influences the decision-making processes in their lives. The tool is often used to contribute to baseline information, which can then be monitored and changes evaluated in areas where children gain more influence in decision-making. The researcher and children create a large grid, listing the “what sorts of decisions” (e.g., where we play, whether we stay in school) on the horizontal axis and “what people,” a list of stakeholders (e.g., mother, father, religious leader), including themselves, who make these decisions, on the vertical axis. Children analyze each decision and, using colored stickers, indicate which stakeholders currently have “a lot” (green sticker), “some say” (yellow sticker), or “no say” (red sticker). With information about the children’s views on decisions and the people who are important to them, the researcher can facilitate a discussion about decision-making process from the child’s point of view.

In the *voting* technique, children are given tokens to cast their votes on a topic without needing to cope with the demands of recording it. Research suggest that confusion can result when children are asked to raise their hands to indicate a choice and that they often tend to raise their hand for every choice available. When children use tokens, the idea is reinforced that only one decision can be reached. This contrasts with polling, which can create undue pressure on children whereas secret ballots might not. However, public voting can encourage peer discussion and consensus.

5.5 Puppets

Puppetry is “the act of using an artificial figure representing a human being or an animal, manipulated by hand” ([30], p. 49). However, sometimes inanimate objects are given animate features and made into puppets. Studies demonstrate that puppets can:

- Decrease children’s fears of the interview process
- Lower anxiety levels
- Help assess children’s knowledge
- Help children to adjust to the environment
- Provide an effective communication and teaching tool ([31], p. 2)

Although many authors emphasize that puppets are more appropriate with younger children, others argue that using a puppet to elicit conversation can be effective with older children as well. Thus, Epstein et al. [30] advocate for researchers to present the use of puppets as a choice for children of all ages.

Three interview techniques incorporating puppets are commonly used, each having a different strategy depending on how the child interacts with the puppet:

1. *Alien Puppet Interview (API)*—The child explains directly to the puppet because the puppet is considered to have no prior knowledge of the topic of interest [32]. Children will often talk to the puppet about things they normally wouldn’t mention in the presence of a more experienced “other.”
2. *Berkeley Puppet Interview (BPI)*—This interactive process helps elicit children’s self-perceptions using two identical puppets [33]. The puppets make opposing statements about themselves before posing the same question to the child [34].
3. *Puppet Interview (PI)*—Children are the puppet masters. They express their own perceptions through the puppet [32].

Gibson et al. [35] used the API technique in their study of children and young people’s experiences of cancer care. A play specialist used dolls and other soft toys as puppets to ask the younger children (4- and 5-year-olds) about their experiences; a second researcher acted as an observer and made field notes during the interview.

The BPI method creates a conversational exchange between “a child and two age-mates” ([36], p. 31). The researcher uses two identical puppets that make opposing statements about themselves. For example, one puppet says, “I’m not shy when I meet new people,” and the other puppet says, “I’m shy when I meet new people.” The researcher then asks the child, “How about you?” Children always hear one puppet endorse a less desirable trait as self-descriptive; they tend to find it easier to acknowledge their own less positive characteristics. In Measelle et al.’s

[37] study on early childhood personality, interviews were videotaped and coded on a 7-point scale depending on the degree to which the free response parallels one of the item halves.

Using the PI technique, Verschueren et al. [38] gave children a large hand puppet (a green crocodile) and asked each child 20 questions in various categories (e.g., social acceptance, behavioral conduct), and the child answered through the puppet. Children's responses were coded as either positive or negative and were evaluated on a 6-point scale.

Researchers who intend to use puppets in data production should receive training to ensure their effectiveness. University theater departments are often willing to train researchers on proper puppet techniques, such as how to develop a character for the puppet, complete with a unique voice, age, and background. The developers of BPI offer workshops for researchers.

5.5.1 Considerations When Choosing Puppets

There are several factors to consider when choosing puppets for use in research [31]. Hand puppets are the type of puppet most commonly used in interviews with children. A puppet should be smaller than the child to limit intimidation and to allow the child to handle it easily. Physically rigid puppets should be avoided as the permanent expression (e.g., sneer, smile) can impede emotional display and perhaps bias the child's interaction. Flexible puppets allow increased interaction through gestures and offer more variation for the puppet's character development. Softer puppets generally have more appeal, which may increase the likelihood that a child would want to touch or play with it.

The puppet's gender, race, and physical appearance may influence the child's conduct in the interview. Choosing a gender-neutral puppet, such as an alien or a monster, over a puppet of the opposite gender allows an easier connection between child and puppet. Colors are important; pink and blue denote gender preference in many cultures. Other characteristics that promote gender stereotypes include sex-oriented exaggerated facial features such as long eyelashes, lush lips, boxy jaws, or hairy eyebrows in conjunction with a non-hairy face [31].

Also relevant is the number of puppets presented to the child. Some researchers suggest the need to give children more choices to increase opportunities to engage with the puppet; others argue that one well-chosen puppet is sufficient. Too many puppets may overwhelm the child.

5.5.2 Making Puppets

Researchers often make or have children make puppets for use in research. In fact, making puppets may be part of the research protocol. For example, in a study of the use of puppets as a strategy for communicating with children with type 1 diabetes, Sparapani and colleagues [39] used a three-step process: (1) constructing the

scenario—a “stage” that simulated the environments in which children with T1DM lived (e.g., school, home, leisure sites), (2) making puppets that represented the child and people encountered daily (e.g., parents, teachers, siblings, friends), and (3) promoting expression of thoughts and feelings using puppets during clinic visits or qualitative interviews. Children received instructions on how to make a puppet and were given puppet-making materials that included pieces to represent body parts; different sizes of soft, colored socks; colored wool strings; cardboard; tissues; crude paper; fake eyes; glue; scissors; and a stapler.

Sposito et al. [40] used puppets in a study on coping strategies hospitalized children with cancer use. In this research, each child made a puppet representing him- or herself prior to the interviews. The researcher also made puppets for use in the interviews and wore a colored apron especially made as the scenario for the puppets.

Often the simplest puppets are most useful in research with children, such as hand puppets made with plain fabric. The researcher can have available fabric, small hats, and other materials children can use to dress them and make them be whatever they would like. Additionally, a puppet can be made very quickly by using inexpensive plastic eyes that loop over the fingers. Disposable gloves of various colors found in medical settings can be slipped on first to add some color.

5.6 Storytelling and Creative Writing

Storytelling is the link between reading literature and writing. Researchers have adapted the short story format, fiction, and other literary devices to most vibrantly communicate data from autoethnographic studies as well as data collected through more traditional qualitative methods.

5.6.1 Storytelling

Storytelling is a nonthreatening means to facilitate the expression of feelings by bypassing a child’s inhibitions, fears, and defensiveness and may reveal feelings of which the child may be unaware. Although some researchers believe that storytelling to elicit feelings can be useful and efficient with children as young as 4 years, others suggest that children are not aware of what makes a story a story until the age of 5 years.

To explore children understanding of illness, Eisner et al. [41] recorded their stories. They suggested that the process of telling a story shifted the equilibrium from the researcher toward the storyteller because stories can be told in the third person, deflecting attention from the personal to depersonalized characters. Further, children with poor literacy skills can usually tell a story even if they cannot write one. Thus, storytelling is perhaps a more socially inclusive or democratic approach to data collection.

The *Barton Hospital Picture Test (BHPT)* is a projective instrument designed to elicit children's perceptions of hospitalization through story and to measure self-reported stress [42]. The instrument, intended for children ages 5–9 years, uses eight black-and-white drawings that represent common types of hospital experiences: (1) admission to the hospital, (2) separation from parents, (3) examination by a doctor, (4) alone in a hospital room, (5) oral medications, (6) injections, (7) operating room, and (8) playroom. The pictures are gender-specific and racially ambiguous. The researcher asks the child to tell a story about each of the eight pictures. Pictures are always presented in the same order. Each picture is presented with a brief identification (e.g., "Here are a boy and his mother going to the hospital. Please tell me a story about this picture."). The researcher encourages children in their storytelling with nondirective prompts. The stories are audiotape-recorded. At the end of the session, children are offered an opportunity to listen to them. Each sense line is coded as "not stress" or one of the four types of stress (i.e., anxiety–fear, anxiety–defense, aggression, dependency). Possible scores range from 0 to 100. Similarly, a standard score is calculated for each of the four types of stress in the story set.

Digital storytelling is a popular intervention with children who are ill or hospitalized. When content is connected to a research question, it can be a good source of data. Children collect or create images and artifacts that have personal meaning. With the help of a facilitator trained in the technique, they compose a video, complete with sound of their choice and sometimes voice over, which then becomes a data source to discuss with the child.

5.6.2 Creative Writing

Of creative writing forms, children may be particularly responsive to poetry because its nature allows them to express themselves more readily in metaphor. The Internet offers many templates and examples for popular poem formats for use as research tools.

One form of poem increasing used in research is *Where I'm From*. The poem goes beyond just a simple description of the writer's hometown and extends into family traditions and beliefs. In addition to providing some useful data for analysis, the format provides a good introduction to learning more about the child. The researcher may want to write one, too, and share it with the child. Below is a 16-year-old Candler's poem that describes where she is from:

I'm from hot dogs, French fries
 and Red Bull, and from my Grandma
 who taught me a lot of family recipes
 like baked chicken or turkey wings,
 collard greens, potato salad, and cornbread.
 I'm from living in Atlanta
 but wanting to live somewhere fast-paced
 like New York City where I'd

have to be more outgoing
I'm from being 16 but feeling 18
and ready to leave high school.
I'm from wanting to be a nurse
or performer in musicals or
fashion designer. You would
see me looking different if
I weren't in the hospital—not
wearing a tee-shirt, jeans, and
scarf around my head.
I'm from listening to all kinds
of music and from one of my favorites,
Jessy J, and how her voice
has a rasp jazz undertone. I would
literally sell everything I own, even my dogs,
to have Christina Aguilera's voice.
I'm from feeling a bit disconnected
in school where I can't completely
relate when everyone is hysterical
about something and the things they
do seem immature. I'm from
knowing that if I were a nurse
I would understand what patients
are going through.

The *Six-Word Memoir* can spark the flow of information with just six words. There is a legend that Ernest Hemmingway was once challenged to write a story in only six words. He responded with “For sale: baby shoes, never worn.” Children are asked to write six words about an experience. With the word limitation, the format encourages thoughtfulness in word selection and helps individuals to process and discuss their experiences.

5.7 Performing Arts

Of all the art forms, music and dance remain the least explored with respect to arts-based methods for collecting research data, and some methods may be too sophisticated and complex for use with by researchers without an arts background. There are, however, some very simple methods that children enjoy that can generate useful data for the researcher to analyze.

Children can write songs to address a research question. Changing the words to an existing song (creating a parody) makes the process easy. Not only the words can be the subject of analysis but also observations of the performance.

Dance can be adapted as a research method for data collection or representation. Dance is particularly well suited to projects focused on discovery and exploration or in multimethod research to add dimensionality to data gathered in more

conventional ways. For example, a dancer can help children create movements to reflect their thoughts, feelings, and experiences. Dance is also an exciting method for presenting research data, thus the term, “dancing the data.”

Drama or theater arts is a natural fit for participatory action research. According to story creation theory, writing a story or play provides an opportunity to create a shared humanity. Lind et al. [43] describe the methods they used to help adolescent girls in a group home create and present a play based on the girls’ experiences. The theater performance of the findings had a profound audience impact, challenging harmful societal assumptions.

5.8 Advantages and Challenges

Play, art, games, and other expressive approaches have benefits for both children and the researcher. Methods can be adapted to meet children’s developmental requirements and capabilities and give children a greater sense of control over and involvement in the research process [2]. The researcher gains greater flexibility in pacing, language, simplicity of explanations, and an ability to follow children’s stories through their creative actions and products. Further, the data collection process is engaging and fun, an essential component in holding children’s attention. On the other hand, play- and arts-based methods may intimidate participants if they lack confidence in their creative abilities. This commonly occurs at around the age of 12 when some children become frustrated if they cannot draw realistically and decide to leave the world of drawing and art behind them. Older adolescents may find such methods patronizing. “Draw and Write” or other supplementary techniques have been found effective in such instances.

As with all qualitative research, participants risk being identified (by themselves and others), and they risk being misrepresented and witnessing their lives and struggles analyzed and objectified. “Each of these risks takes on particular texture when research is represented artistically” ([44], p. 464). Participants should be asked to approve of and consent to what is shared with others, whether through publications, conferences, or exhibitions for the general public. Additionally, researchers should acknowledge and respect children’s drawings and other artistic creations used for research. Driessnak [45] explains that how researchers respond to these items not only gives them value but also provides us with a framework for respecting the children who shared them:

Once children share their drawings, we are presented with a great responsibility. If their drawings are not perceived in this way, they might become susceptible to inappropriate interpretation and exposure. For this reason, I believe that children’s drawings need to be accompanied by the children’s personal narratives so that they can be placed fully in the contexts of children’s lived experiences. (p. 156)

Another challenge researchers who use expressive measures face is the general level of skepticism of the validity regarding experiential knowledge produced by social research in general. The idea that knowledge of any value could be obtained

by methods that have children playing or engaging art activities might make such research seem even more frivolous. On the other hand, the notion that nothing harmful could arise with children being asked to participate in typical childhood activities might sooth the minds of ethics committee members concerning the vulnerability of children and young people and their need for protection.

Researchers need to apply the same degree professionalism of thought and preparation to studies using these methods as they would to more traditional ones. They need to make efforts to see that results are shared in peer-reviewed publications and at professional meetings to confirm validation by the scientific community.

Multidisciplinary research teams are more common today than in the past and should be promoted. Such teams often make studies stronger, are tremendous learning opportunities for everyone, and can expose those outside the researcher's profession to expressive methods and their worth. Finally, artists can make valuable contributions as members of the research team at every stage of the research process, especially by adding authenticity of the art form to the arts-based research tool. In this author's experience, artists take all aspects of research seriously and often prove to be among the most conscientious team members.

5.9 Key Advice

1. Resist the urge to over-interpret children's drawings and other creations; listen to what the child says.
2. Remember that the drawings, stories, and other expressions are the products of the child's creation. Ask for permission to use them in dissemination activities.
3. Be sure to have appropriate preparation for whatever methods used.
4. Consider partnering with artists. For example, a poet who works in schools can help facilitate poetry with children for research.
5. Become familiar with websites, books, journals, and organizations that incorporate arts in health and/or education.

5.10 Conclusion

As the language of childhood, play and other expressive techniques are appropriate and valuable tools for researcher committed to facilitating children's participation in research. Such methods are rarely used alone but are used in support of other more traditional research methods such as interviews.

Drawing is the most common visual arts methods researchers use with children. Illuminative drawing techniques are specifically designed to enhance verbal communication. Projective drawing techniques with scoring system allow researchers to also add a quantitative component. Researchers without art therapy training should avoid interpretation of any art children create. It is what children say about their art work that is important.

Using other expressive methods, such as play, games, puppets, storytelling, creative writing, and performance arts, can increase data in both quantity and depth. Knowing which methods to choose depends on the research question, the target population, and the researcher's skills and resources. The products and processes that result are the child's creations, and children must be treated with great care and respect.

According to Boydell et al. [45], the use of expressive techniques is shifting our understanding of what counts as evidence. They suggest that the inclusion of arts-based approaches offers more than simply adjuncts to typical data collection and dissemination approaches; rather, it presents different ways of knowing: "We believe that this may be a significant moment in the field in which to question whether or not we are witness to a paradigmatic shift in the ways we approach inquiry."

5.11 Useful Resources

- Coad J, Plumridge G, Metcalfe A. Involving children and young people in the development of art-based research tools. *Nurse Res.* 2009;16(4):56–64.
- Coad and colleagues describe how they worked with children and young people to develop art-based techniques and activities for use in a study. It highlights key methodological issues about children and young people's participation in research, the concept of what constitutes an arts-based activity, and how this was applied to developing arts-based data collection tools.
- Knowles JG, Cole A, editors. *Handbook of the arts in qualitative research: perspectives methodologies, examples, and issues.* Thousand Oaks, CA: Sage; 2008.
- Knowles and Cole bring together the top scholars to provide a comprehensive overview of the past, present, and future of arts-based research. The book offers theoretical arguments and illustrative examples that delineate the role of the arts in qualitative social science research.
- Leavy, P. *Method meets art: arts-based research practice.* New York: Guilford Press; 2009.
- Patricia Leavy presents the first comprehensive introduction to arts-based research practices. Each of the six major arts-based genres is covered in chapters that introduce key concepts and tools and presents an exemplary research article by a leading arts-based research practitioner.

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