# Children as active researchers: a new research paradigm for the 21st century?

Mary Kellett

**\*the reference to children throughout this paper includes young people**

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**22nd July 2005**

**Abstract:**

This paper examines the concept of research undertaken by children* and the methodological and theoretical issues this raises. It begins with a rationale for research by children and sets this within a context of participation and empowerment, acknowledging the importance of child perspective and voice and valuing the original contribution that child researchers can make to our understanding of childhood and children's lives. It traces the historical and philosophical precedents that have led to this point and explores the question of whether research by children can be accommodated within existing research parameters or whether it requires a new approach, even a new research paradigm? The paper also addresses issues related to ethics, policy and power relations along with a discussion of the extent to which research by children can be free of adult filters and adult influence. It draws on data from a three-year action research study empowering children as active researchers and features examples of children's original projects.

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**Contents**

## 1.    Introduction

The concept of children* as active researchers is rapidly gaining credence in response to changing perspectives on children's status in society (James and Prout 1997; Hallett and Prout, 2003; Alderson and Morrow, 2004). Such perspectives have shifted in the wake of the UNCRC (1989) towards a recognition of children as social actors in their own right rather than parts of an 'other' such as part of a family or school (Corsaro, 1997; James, Jenks and Prout, 1998; Alderson, 2000; Christensen and Prout, 2002; Taylor, 2002). Articles 12 and 13 of the UNCRC require that children should be informed, involved and consulted about all decisions that affect their lives. This has led to an increased involvement of children as participants and co-researchers (Johnson et al., 1998; Nieuwenhuys, 2001; Lansdowne, 2002; Kirby and Bryson, 2002; Sinclair, 2004) and a growing body of literature on the role of children and young people as researchers (Boyden & Ennew, 1997; Hill, 1997; Alderson, 2000; Jones et al., 2002; Kellett et al, 2004). Despite these initiatives and the policy emphasis given to increased participation and consultation (Hill et al., 2004; Pinkerton, 2004; Green Paper, Every Child Matters (2003) and the subsequent Children's Act (2004), much participatory research is still adult-led, adult-designed and conceived from an adult perspective. Children are party to the subculture of childhood which gives them a unique 'insider' perspective that is critical to our understanding of children's worlds. Yet there is a paucity of research by children, research they design, carry out and disseminate themselves with adult support rather than adult management. This raises a number of questions, not least the fundamental question of whether children as active researchers is itself a realistic concept, and if so what the underlying philosophical, methodological and ethical issues are. These and other dilemmas will be explored in this paper leading to an examination of whether this concept requires a new paradigm with a characteristically different methodological approach from others in our research consciousness or whether it can exist as an 'insider perspective' element within existing paradigms. Empirical findings from an ongoing, action research study (Kellett, 2002; 2003; 2004; 2005; 2005a) will be drawn upon throughout.


## 2.    Children as 'active' researchers

A good place to start is an examination of the term 'children as active researchers' and unpick what this really means, beginning with the historical trail which has led us to this point. The early years of developmental psychology bequeathed a dominant legacy of children as 'objects' of research, of research being carried out 'on' children (Woodhead and Faulkner, 2000; Kellett and Ding 2004). This perspective was fuelled by physical and biological sciences which used the model of animal

research to measure development (Alderson, 1993). As late as the 1980s Skinner's (1972) operant-conditioning principles were still being applied in child research. 'The child is portrayed, like the laboratory rat, as being at the mercy of external stimuli' (James and Prout, 1997: 13). The impetus of the UNCRC (1989) brought about change. Children began to be seen as 'subjects' or 'participants' rather than 'objects' and research 'with' children became common practice.  This was accompanied by a greater emphasis on listening to children, although frequently at a tokenistic level, and to some extent perspectives were still bound up with images of children as 'adults in waiting' and of childhood as a preparation for adulthood.

A realisation of children as social actors in their own right, agents in their own worlds provided the momentum to propel agendas towards research 'with' children and to the gradual acceptance that children could be more than participants in research, they could be co-researchers (Jones, 2004; Nieuwenhuys, 2004). This new era has seen children invited onto steering groups and involved in some aspects of data collection. However, criticism is still being levelled at the tokenism of some of this participation, the adult manipulation, unequal power-relations and the adult focus of such research. It is the adults who frame the research questions, choose the methods and control the analysis. For the most part, children are unequal partners.

This brings us to a consideration of children as researchers in their own right, or 'active researchers' as is the preferred terminology in this paper. Such initiatives acknowledge the importance of affording children and young people a voice which is listened to and heard by adults (Alderson, 2000; Alderson and Morrow, 2004; Fielding, 2004). The Students as Researchers project, in which teenagers were supported in investigating school issues of concern to them, is well documented (Fielding, 2001, 2004), but similarly empowered research is relatively rare and particularly rare for children in the middle years of childhood (Kellett and Ding, 2004; Kellett et al, 2004). Such involvement has considerable potential for children's self-development and political agency. The recently established Children's Research Centre (http://childrens-research-centre.open.ac.uk) at the Open University is a centre dedicated to supporting and promoting research by children. A similarly empowering school-based initiative in Hungary (Zsolnai, 2004; Jaeger and Zsolnai, 2004) values the role of children as researchers. Fifty-one schools in Hungary now have research methods as a taught part of their national curriculum for 10-14 year-olds and students are given dedicated curriculum time to undertake their own research.

Before focusing on some of the intricacies of what children as active researchers entails it is important to examine existing theoretical frameworks and reflect on where this concept sits in the

larger philosophical context.

## 3.    Historical precedents

Child-led research as a potential new paradigm emerges from two important arenas: power and emancipation. These paths have been well-trodden by feminist, ethnic minority and disability groups. The power issues relate to whose interests the research serves, who owns the research and whom the research is for. The emancipatory element challenges the legitimacy of research which does not empower groups (in this case children and young people) who are either invisible or oppressed. Hence the interests of children and young people, as a relatively powerless group, are served when they set their own agendas and lead their own research.

> Those who have in the past so often been the mere objects of investigation, themselves become the agents of their own transformation. (Fielding, 2004, p.306)

Parallel experiences can be traced in feminist research. Feminism has been established as a research paradigm on several premises, one of which is the acknowledgement of the pervasive influence of gender. Feminism challenges the legitimacy of research which does not address disempowered and invisible groups. It deconstructs positivism and replaces this with empowerment, voice and ideology critique (Cohen et al., 2000). The emergence of feminism came about in response to women's disempowered status and minority voice. Ideology critique is central to the feminist approach and in particular the critique that research is based on a masculine way of looking at the world and therefore the ensuing knowledge that is generated is grounded in the male experience (Punch, 2005). Similar to the way in which the element of gender in feminist research shapes the choice of topic, focus and data collection techniques of their research, childhood is the element which shapes all of these when children design and lead their own research.  There is some empathy with the position of ideology critique from children and young people's perspectives in that research is based on an adult way of looking at the world and that the ensuing knowledge which is generated is in the adult experience.  Hence, just as feminism has redressed some of the balance of a male dominated research arena, empowered child researchers could similarly redress some of the balance of an adult dominated research world. Such ideology critique would challenge the legitimacy of research into children's worlds and children's lived experiences where the research is conceived wholly from an adult perspective. Of course, this is a rather simplistic exposition because feminism cannot easily be expressed in homogenous terms. All women belong to the female gender but womanhood means different things to different women and the cultural diversities are vast.

Equally, the female gender is just one identity within multiple identities – a woman can be female and black, female, blind and black, female, blind, black and lesbian etc. The same complexities apply to considerations of childhood. What does it mean to be a child? Should we think in terms of childhood or childhoods? What are the cultural implications? When is a child a child? When does a child cease to be a child? Childhood, just as female gender, cannot be expressed in simple homogenous terms.

## 4. Other philosophical trails

Other research approaches which value and exemplify the 'insider perspective' include disability research and ethnicity research. Increased participant research by disabled individuals has given rise to an impetus of emancipatory research by disabled people. Similar to the discourse that has grown up around white researchers exploring black issues, questions are being asked about whether able-bodied researchers should be undertaking disability research at all (Shakespeare, 1996; Stalker, 1998; Lewis and Kellett, 2004). This challenge is based on the premise that research techniques emerge from a theoretical position reflecting the researcher's beliefs, values and dispositions towards the social world (Gray and Denicolo, 1998). Some would argue that the inability of able-bodied researchers to orient their perspective to one of disability compromises the validity of their research. Others maintain that disabled people cannot effectively represent all populations of disabled people and that there is a danger that those with the severest disabilities might become disenfranchised by power shifting to the less disabled. This is of course equally problematic in the child researcher debate. One would not want to spawn a system that only valued research by children and young people and ignored the validity of other research by adults about children or child participatory research. There is room for all of these perspectives and each should speak to and inform the other. However, the issue being debated in this paper is less about whether research by children should replace more traditional forms of child research and more about whether it can develop within those more traditional parameters or whether it requires a new paradigm outside of them.

There are other parallels to be drawn from the disability emancipatory approach as identified by Stalker (1998) who maintains that conventional research relationships, whereby the researcher is the 'expert' and the researched merely the object of investigation, are inequitable. She further asserts that disabled people have the right to be consulted about and involved in research which is concerned with issues affecting their lives and that the quality and relevance of research is improved when disabled people are closely involved in the process. Disabled writers such as Aspis

(2002) and Zarb (1992) set out criteria for an 'emancipatory research paradigm' that requires changes in the social and material relations of research production. This includes giving control of research funding to disabled people because real power lies in having control over what research gets commissioned. Oliver (1997) goes further by claiming that some research by able-bodied people is a violation of the experiences of disabled people, irrelevant to their needs, fails to improve their quality of life and sometimes even makes it worse. Clearly there are some extreme views here. Whether emancipatory disability research is achievable in the form that writers such as Oliver and Aspis advocate is still open to debate, but the parallels with child research are obvious, as are the dilemmas and tensions. Undoubtedly, research by disabled people and by minority ethnic people have made original contributions to knowledge and enriched our understanding of disability and race issues. This is not to say that all other research about disability or race should be outlawed. From a similar vantage point I would argue for the acknowledgement of research by children as an important element of child research – but not an exclusive element. The imponderable remains about whether this requires a shift towards a new research paradigm or whether child-led research can operate within existing paradigms.

### 5.     Why is it important that children engage in their own research?

Unlike the disability or race premise, in which the able-bodied or white person has no first hand experience of what it is to be disabled or black, there is an argument that we have all been a child at some stage and have all experienced a childhood of some sort. Why, therefore, is it so important that children engage in their own research? Surely adults can do this and can empathise with their one-time child perspective?  The response to this is that adults simply cannot become children again because they cannot discard the adult baggage they have acquired in the interim and will always operate through adult filters, even if these are subconscious filters. It would also be unwise to try and apply principles of a childhood from a generation ago to a contemporary childhood. Above all we need to be able to learn and understand about the lived experiences of children of today.

Children observe with different eyes, ask different questions – they ask questions that adults do not even think of -, have different concerns and have immediate access to peer culture where adults are outsiders.  The research agendas children prioritise, the research questions they frame and the way in which they collect data are substantially different from adults and all of this can offer valuable insights and original contributions to knowledge.

If the case for 'why?' can be made, an equally convincing case needs to be made for 'why now?'

Some of the 'why now?' argument has already been posited in the introduction section of this paper which outlined the UNCRC (1989) imperative, the changing perspectives on children's status in society and the political impetus for increased participation. Hart's (1997) ladder of participation has been criticised for its overly simple linear approach to the concept of participation but it does provide a working framework for fruitful discussion and has been influential in moving the debate forward. One of the outcomes of this debate is that genuine participation cannot happen without some power sharing and that this will only occur when we move beyond consultation and joint decision making to a position where children are empowered to take the lead on some of the issues which directly affect their lives. Children undertaking their own research about matters which concern them is a significant step in this direction.

Another 'why now?' argument is the current resurrection, in some theoretical camps (see Banks, 1998; Mills and Spittle, 2002), of eighteenth century philosophical ideologies around children's innate purity and wisdom (Rousseau, 1762). This philosophical stance argues that the purity of children's thought is only corrupted by exposure to adult values in an adult world. The corollary of this ideological position is for adults to pay more regard to children's perspectives and thus be able to access children's innate wisdom (see Cole, aged 12, http://childrens-research-centre.open.ac.uk). Clearly, this is an extreme viewpoint and one that does not currently have wholesale support but it does posit an interesting reflection point and even the most sceptical de-construction of this concept cannot discard the essential core value of children's perspectives.

## 6.    Barriers to the empowerment of children as active researchers

Sceptics maintain that children are not competent enough to engage in their own research and age is commonly used as a delineating factor within this competence debate. However, this perspective, predominantly from an earlier developmental psychology discipline, which links competence to age and developmental 'stages' is being robustly challenged (e.g.Woodhead and Faulkner, 2000) and supplanted by the principle that social experience is a more reliable marker of maturity and competence. Children's competence is 'different from' not 'lesser than' adults' competence (Waksler, 1991; Solberg, 1996). The claim that children do not have sufficient knowledge and understanding does not stand up to close scrutiny (Kellett, 2005). Undoubtedly adults have greater knowledge than children in many areas of life but with regard to childhood itself - in the sense of what it is like to be a child - it is children who have the expert knowledge (Mayall, 2000; Christensen and Prout, 2002). If the research areas that interest children emanate directly from their own experiences then no adult, even the most skilled ethnographer, can hope to acquire the richness

of knowledge that is inherent in children's own understanding of their worlds.

To dismiss the research efforts of children as simplistic and conclude that adults could research the topics more effectively misses several important points:

- Children succeed in getting responses from within their peer group in ways that would not be possible for adult researchers because of power and generational issues.

- Their work adds to the body of knowledge about children's experiences from a genuine child perspective.

- The dissemination of research carried out by them and, crucially, owned by them, is an important vehicle for child voice.

- The experience of participating as active researchers is an empowering process which leads to a virtuous circle of increased confidence and raised self esteem resulting in more active participation by children in other aspects affecting their lives.

While children's knowledge and understanding of childhood and children's lives is evident, a genuine barrier to children engaging in research is their lack of research knowledge and skills, not least because of issues about validity and rigour. Reflecting on the skills needed to undertake research it soon becomes apparent that these attributes are not necessarily synonymous with being an adult, they are synonymous with being a researcher, and most researchers have undergone some form of training. Many, perhaps most, adults would not be able to undertake research without training. It would appear, therefore, that a barrier to empowering children as researchers is not their lack of adult status but their lack of research skills. So why not teach them? The task of distilling the complexities of research process without compromising its core principles is extremely challenging. This is the focus of a large action research study (Kellett, 2002; 2003; 2004; 2005; Kellett et al 2004) which has been running for the past three years and although it will run for some time longer before definitive answers emerge, interim evaluation findings are extremely positive about the ability of children as young as ten to undertake rigorous, empirical research and the impact of such participation on child self-development. A description of this study, a summary of interim findings and a discussion of issues it raises form the nucleus of the next section of this paper.

7.    Engaging children in research process

The aforementioned action research project began in the autumn of 2002. The focus of the first action cycle was the feasibility of children engaging in their own research and how readily they

could assimilate research methods teaching. How can effective ways of empowering children as active researchers be found? What are the barriers? What is the impact? This was organised around a classical multi-cycle action research design: plan → act → evaluate → reflect.

The first cycle was executed through a pilot study (Kellett, 2003) in an Oxfordshire school with a group of seven able Year 5 children (aged 9-10 years). A primary rather than a secondary school was chosen because of the greater flexibility within the primary curriculum which would enable this kind of creative approach to learning to be accommodated. The initial targeting of able children was pragmatic. It is becoming increasingly difficult for researchers to work in schools for a whole host of reasons and headteachers need to be persuaded of likely benefits for their pupils before agreeing to be involved. In this instance, an argument could more persuasively be made that the project would help meet some of the additional needs of able children, particularly in relation to the development of higher order thinking skills. However, it must be stressed at the outset that children as active researchers is not exclusively for able children. All children who are sufficiently interested in undertaking their own research can be encouraged to do this by adjusting the level of support accordingly and/or 'research-buddying' with other children. The pilot phase has spawned other projects which explored diversity issues including children with learning difficulties engaging in their own research (see Bentley and Gamble, 2005). The choice of Year 5 children (aged 9-10 years) was also pragmatic in the gatekeeper negotiation process. Year 6 (aged 10-11 years) is perceived as a pressure year in the UK because of the national assessments at the end of Key Stage 2. Moreover, a starting point in Year 5 would enable follow-up evaluation of participants through Year 6 before they moved on to secondary schools. The programme was run on a 60/40 curricular/extra-curricular basis using 40 minutes from a lunch break over-spilling into 30 minutes of curriculum time (Literacy). There were twelve sessions of research methods training delivered on a weekly basis over a period of one term by a University lecturer who also had primary school teaching experience (for more details see Kellett, 2005).

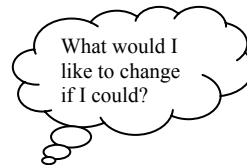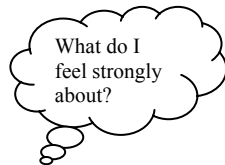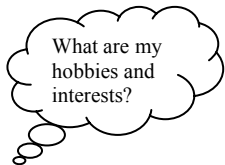8.     The research methods training programme

The research methods training was differentiated for the age and ability of the group and content distilled using interactive games and activities. Knowledge and skills covered in the first three sessions were focused around the nature of research and included:

- An introduction to research, an overview of the different types and approaches, why it is important and why research by children and young people is of value.
- What can be learned from other people's research and how to access, navigate and critique
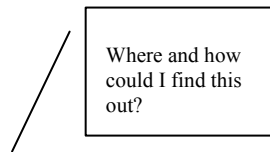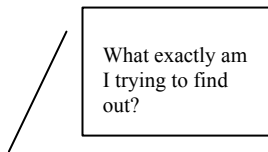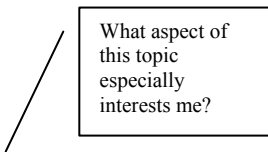
such research.

- The relationship between research and truth.
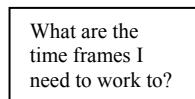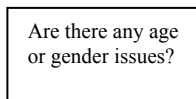- Research ethics.

The aim of these sessions was that children would engage with and internalise three core elements of good research design: that it should be sceptical, systematic and ethical (Robson, 2002), and begin the process of identifying areas of interest for their own research. Teaching aids such as the 'think prompt sheet' in Box 1 were designed to aid this process for participants.

What are my hobbies and interests?

What do I feel strongly about?

What am I curious about?

What would I like to change if I could?

_____
_____
_____
_____
_____
_____

_____MY TOPIC AREA_____

What aspect of this topic especially interests me?

What exactly am I trying to find out?

Where and how could I find this out?

_____
_____
_____
_____
_____
_____
\_\_

MY DRAFT QUESTION_____

Are there any age or gender issues?

What are the time frames I need to work to?

_____
_____
_____
_____

The next four sessions concentrated on acquiring research tools and skills to help the children make informed choices about their research design and the kinds of methods they would use to collect their data. As it was not possible to cover all methods in the given time, common techniques of observation, interview, questionnaire and experiment were used as starting points in the group sessions and alternative approaches such as participatory methods (Thomas and O'Kane, 1998) discussed on an individual project basis. There were opportunities for children to practise these skills in the sessions and as follow-up activities.

Other sessions included some basic teaching in quantitative and qualitative analysis, diverse reporting and dissemination techniques and a final brainstorming session to funnel down to a tightly-focused research question for each project.

During the second term the children engaged in their own choice research study. Six children worked in pairs and one child opted to work alone. Four research studies were completed:

- Investigating the social nature of TV viewing in children aged 9-11 years.
- How are 9-11-year-olds affected by their parents' jobs?
- Hey, I'm nine not six! What it's like in the playground for girls who look much younger than their age.
- A comparative gender study in the use of computers in Year 5 pupils.

### 9.    Evaluation of pilot findings

Participant observation notes, research diary entries, semi-structured interview transcripts and the children's finished research studies formed the basis of the evaluation data. Findings showed that engagement in research had a positive effect on the children's self-development. All of them felt empowered by having their voice heard (see Boxes 2 and 3).

*Doing the research also helped with my confidence.  I was quite shy, but I stood in front of people at the conference and told them about the research' (girl, aged 9)*

*It's important to see things through children's eyes. Children see things differently to adults. I think if an adult had done this research they wouldn't have got the same responses. They wouldn't have asked the same questions.' (girl, aged 10)*

*We learnt so much. If you would have given us a list of words like sceptical or analyse or other research words, before we did the research we wouldn't have been able to tell you. If you asked me now, I'd know that meaning of all of them. It helped me with my English because now I feel more confident with writing. I can write an essay in English. It really helped me. I think the research helped with that and with organising my work too (girl, aged 10)*

**Box 2 Example of quotes from child researchers about engaging in their own research**

*N. was surprised at the interest that others had for her work. They genuinely wanted to know what she thought and what children thought. I remember how upset she was because at the end of the school year the teachers threw the children's work away in a large bin. This was done in front of the children. The clear message was that children's work was not valued. It was shocking. When doing their own research, their work was continuously valued. It was published in a journal. They were invited to conferences. The message that this sent out was that your work is valued.*

*It affected her whole attitude towards going to school, it helped her enthusiasm. It helped enormously.*

*I think the biggest impact that the project has had on R is that it's increased her confidence. I think that's transferred to other things that she does now.*

*[It's] showing them that it's a process where they can make a difference. Rather than them thinking that it's that way and it's never going to change. There can be changes…this has shown them that they are doing things and they can make a difference. They've got a voice.*

*I think it's boosted his confidence and shown him that he can do things on his own, it shows him*

**Box 3 Examples of quotes from parents about their children engaging in research**

A summary of the pilot findings are outlined below (for more details see Kellett, 2003). Engaging in their own research resulted in:

- Raised self-esteem and sense of worth.
- Increased confidence.
- Development of transferable study skills: organisation, management, analysis and evaluation.
- Sharpening of critical thinking skills.
- Heightened ethical awareness.
- Enhanced problem solving ability.
- More effective communication.
- Emergence of independent learning.
- Increased participation in other aspects affecting their childhoods.
- Original and valued contribution to knowledge (see http://childrens-research-centre.open.ac.uk)

## 10.    The second action cycle

The second action cycle looked at whether similar results could be achieved with larger numbers of children. Eighteen children came together from five partnership schools and on this occasion the research methods training was undertaken entirely during curriculum time. This first part of the process was relatively successful and children gained a lot from being able to work with peers from other schools. However, when the time came for them to engage in their own research projects, it proved harder to support them in their disparate locations and some benefits of a nucleus group were lost. It also became more apparent that there were significant power issues in the school

environment itself which affected children's freedom of choice of research topic. As training had been undertaken in curriculum time, schools felt entitled to stake their own agendas and to seek measurable, norm-referenced learning outcomes. This infringed children's sense of ownership and control over their own research. Despite these setbacks some - but not all - of the children produced valuable studies but a number of children became de-motivated and did not complete. Reflections from this cycle focused on how to minimise adult filters and facilitate genuine child empowerment through adult support rather than adult management.

**11.     The third action cycle**

Consequent upon these reflections, the third action cycle focused on power issues and on exploring what might happen if children could be taught research methods training outside of the school context. This resulted in the establishment of the Children's Research Centre (CRC) at the Open University (November 2003), a centre where children could come onto the university campus for their training and be supported by university personnel.  The rationale and ethos of this centre is set out in Box 4.

> *The CRC is all about children by children. Our primary objective is to empower children and young people as active researchers. The CRC recognises that children are experts on their own lives. We value the child's perspective and believe in promoting child voice by supporting children to carry out research on topics that are important to them. The CRC is based at the Open University in Milton Keynes. We offer diverse groups of children and young people a taught programme on aspects of the research process followed by one-to-one support to design and carry out a research project. We also help them to disseminate their research findings. We have links to numerous schools and community organisations and support a variety of outreach programmes. The CRC exists to contribute to the body of knowledge on childhood and children's lives.*

**Box 4 Rationale of the Children's Research Centre (source: http://childrens-research-centre.open.ac.uk)**

Sixteen Year 7 children (12 years of age) from eight local schools formed the first cohort (2004) of the CRC and a further sixteen Year 5/6 children (10-11 years of age) followed in 2005. Interim findings indicate that there are many positive benefits from the 'levelling' of some of the adult-child power relations outside of the school environment. First names were adopted, whether this related to child or professor, and university staff were viewed by the children as supporters or assistants rather than supervisors or teachers. However, some difficulties were also apparent. These related to

access problems (transport arrangements for getting children onto campus frequently broke down), children being tired at the end of a school day (concentration and energy levels) and competing constraints on their time (e.g. homework, exam revision, other extra-curricular activities). While both cohorts resulted in some high quality research being undertaken by some children, other children also dropped out for one or more of the afore-mentioned reasons. Interim evaluation findings indicate a strong correlation between successful engagement with research process leading to a completed research study where children have enthusiastic support either from a teacher in their school or from a parent. Diversity issues also loomed large as the problems outlined above had greater effects on children from disadvantaged backgrounds. Clearly, there is a long way to go before diversity issues can be fully and inclusively addressed.

At the time of writing, the project is still ongoing and the next action cycle plans to develop the community outreach basis of the CRC and evaluate strengths and weaknesses in all three models (school-based, campus-based and outreach-based) in order to facilitate optimal pathways for the empowerment of children as active researchers.

Evaluation of ongoing findings from the 'children as active researchers' project raises a number of methodological, ideological and ethical issues associated with the concept of children undertaking their own research. These are explored in the remainder of this paper.


## 12. Methodological issues

The first of these relates to rigour and validity and underlines the importance of children engaging in some appropriate training so that they can make informed choices about their research projects. The three core principles on which the pilot training of the CRC children has been based are that research should be systematic, sceptical and ethical. Children's research is 'different from' and 'complimentary to' adult research, so while it is appropriate that allowances are made for children's abilities relative to adults, it is not appropriate that their research is exempt from rigour or scrutiny. The issue is what form this takes. Should children's research be peer-reviewed by other children or by adults or by both? And if scrutinised by adults should it be on the same basis as adult research or do we need to devise a new set of parameters for evaluating child research? Completed studies by children (see http://childrens-research-centre.open.ac.uk) illustrate that children collect data from their peers in quintessentially different ways from adults. This, coupled with systematic rigour, produces rich data informed by genuine child-perspective. Box 5 features an extract of raw data from one such child study. The study, *'Hey, I'm nine not six!'* was undertaken by two 9 year-old

girls who were investigating what it was like for two classmates to be nine but look six. As part of their investigation they conducted some systematic playground observation. This involved observing two participants in the playground over a period of two weeks and recording their observations into a Dictaphone. The two young researchers maintain that adults would have collected observation data differently from them because they would not have understood the playground subculture whereas they had an insider perspective of what was really going on. (Carlini and Barry, 2005)

> We have been wondering whether adult researchers would have found out what we did if they had investigated this topic. We think they would have been more experienced at interviewing but on the other hand Rose and Kaz might not have told them as much as they were prepared to tell us because we are the same age as them …Also because we are used to the kinds of games that our age play at break times we can more easily see if something is different or unusual. (Kellett, 2005: 153)

Adult filters are always at work, even at a subconscious level, and the likelihood is that an adult researcher would have paraphrased lines 9-13 of the data in Box 5 to 'she's yelling a lot'. Although this would have been an accurate summary of what was happening it would not convey the richness of the child data nor the graphic picture of frustration building up in the participant at that moment.

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**…** She's yelling louder than the others.

She's crouching down,

She's yelling more.

Yelling more loudly than the others.

Yelling even louder.

She's crouching down again.

Kaz is hanging onto people,

She's gripping onto them.

Yelling loudly again.

Still yelling loudly.

More yelling loudly.

More loudly than the others.

More loud yelling.

She's being picked up and carried like a baby by one of the group.

Someone else has picked her up now.

Someone else has picked her up and is rocking her.

They are holding her by her middle and swinging her around.

Kaz is hanging onto people.

The group are playing tag.  Every time Kaz tries to run someone catches her.

Kaz is gripping onto them, hanging on their arm.

She is still gripping onto them.

Kaz has to stand still because she's caught.

She's yelling more loudly than the others to get free. The others aren't yelling to be got free.

Someone has come straight away to get her free.

Kaz is being hugged now.

More hugging.

More hugging.

No-one else in the group is being hugged.

No-one else in the group has been hugged for the whole of break time. …

**Box 5 Extract of transcribed observation data (source: Kellett 2005 p.172_)**

A second issue concerns the degree to which children, especially primary-aged children, can be autonomous in their own research activity. Depending on the nature of the research topic, there may be logistical and child protection issues which require the presence of an adult when children are collecting field data. It requires great skill to achieve the right balance between adult support and adult management in such situations as too much of one or the other can affect a child's sense of ownership and risk varying degrees of adult-filtered intervention.

A third issue relates to analysis of data. Dilemmas and tensions abound due to the cognitive diversity of different ages and abilities of children. If child perspective and child voice are the most important elements in child-led research then purists would argue that analysis should be undertaken entirely by the children involved. However, considerations of learning theory are also relevant here. Social constructionists such as Vygotsky's (1972) acknowledgement that children can operate at a higher cognitive level when supported in their 'zone of proximal development' by a more able 'other' begs the question as to whether children would undertake more in-depth analysis if this 'scaffolding' were applied or whether such intervention would distort the child perspective. My experience so far suggests that optimal outcomes are obtained when adult support is enlisted to help children particularly with reductionist processes which enable data to be interpreted more easily, e.g. by supporting them to turn quantitative data into graphs where they might more readily spot patterns and trends or by transcribing qualitative data into manageable formats that children can order and group. . This provides an acceptable level of support while retaining genuine child perspective in what they see in their own data. Adult support which 'hi-jacks' the analysis and imposes adult interpretations can seriously distort the child perspective and risks loss of ownership by the child.

Similar issues arise with dissemination and the degree to which adult support could become

manipulative or agenda-driven. Precedents have been set by organisations such as *Children's Express* which have been notably successful in forging their own dissemination pathways. Nevertheless, there are significant issues around adult-child power relations and the extent to which children's own research can ever be entirely free of adult influence and/or control.

## 13.    Ethical and legal issues

Minority status gives rise to additional complexities regarding the role of children as active researchers since children need the informed consent of a parent or guardian before being able to participate in a research training programme and engage in their own research. Tensions can ensue when some children want to become active researchers but are refused parental consent (e.g. parents may want to protect their children's leisure time or be suspicious about possible exploitation). Equally, some parents might put pressure on their children to participate because they decide the experience 'will be good for them' or there will be 'educational benefits' when the children themselves have no real interest in or motivation for research activity. Children as active researchers initiatives are thus vulnerable to predatory 'take-overs' by some adults - and even some politicians - who have their own agendas. Great care is needed to avoid what an empowering experience for children becoming exploitative.

Since the Gillick ruling (1985), issues of informed consent relating to minors have been the focus of extensive deliberation (France, 2004; Alderson, 1993; Alderson and Morrow, 2004) and the concept of children as active researchers adds further fuel to this debate, spotlighting many of the inconsistencies that abide in current age and competency judgements. In the UK, the age of criminal responsibility is ten, but ten-year-olds have no commensurate power, consent, authority or control over any other aspects of their lives. There are many other paradoxes in the legal versus lived experiences of children. Children are legal minors until the age of 18, but many enter the workforce at 16, many more work 'part time' at younger ages, many drive cars at 17. The sexual age of consent is 16, many young people are sexually active at younger ages and many under 16s receive contraception without parental knowledge or consent. Notwithstanding the legal position, minimum standards of ethical practice advocate that researchers should seek the informed consent of participating children. It will be interesting to see if increased incidence of child-led research has any impact on the ongoing debate regarding these ethical and legal tensions.

Child researchers must themselves conform to rigorous ethical standards when undertaking their own research and a great deal of emphasis is placed on ethics during the child researchers' training

programme including discussions, debates and acting out of ethical dilemmas through role play. In general, I have found children to have strong ethical scruples and great sensitivity towards participants. In the study mentioned earlier. *Hey I'm nine not six* the two nine-year-old girls talked extensively to their participants about whether conducting this research might draw attention to the small girls' situation and make things worse for them. They also considered whether being interviewed about the subject might be distressing and were very sensitive in their handling of this, insisting that the participants should not feel under any obligation to answer a question if they felt uncomfortable about it. Furthermore, when it came to identity anonymity of the participants the child researchers actually asked the two girls to choose pseudonyms by which they would like to be referred (they chose the names Kaz and Rose). Most adult researchers do not give this much thought and generally invent a name or use a number/letter identifier whereas the child researchers were sensitive and caring enough to understand that this would enable their participants to feel valued and involved. O'Brien (aged 12), who researched how children of his age are affected by bereavement, also demonstrated great sensitivity and ethical awareness when collecting his interview data (see O'Brien, 2005). Sometimes a child will abandon or adopt a research plan if they realise it is unethical. This happened with two 12-year-old boys who wanted to undertake a study investigating the link between height, weight and running speed of their peers. When they realised that timing children running, measuring and weighing them might cause distress, embarrassment - even humiliation – they changed their plans.

There are still many unresolved ethical issues relating to children as active researchers. Who takes ethical responsibility for a child-led study? The child? The supporting adult? An independent body? And should the ethical standards be designed and policed by adults or by children?  Would children regard adult policing as interference or a necessary framework in which to operate?

In keeping with the theme of empowerment and valuing of child perspective of this paper, it seems entirely appropriate to include an example of a research study by children. This provides data which support earlier claims about what is possible for child researchers to achieve and also gives readers an opportunity to make their own judgements about how such child studies should be evaluated and what contribution they can make to our knowledge and understanding. Therefore, the penultimate section of this paper includes a small study undertaken by two ten-year-old girls about how children are affected by their parents' jobs. The young researchers participated in a 12 session research training programme before starting their study and had support from an adult to convert their questionnaire data into graphs. All other aspects of their report, including the analysis of their data, they undertook themselves. It should be noted that they had been identified by their school as 'able

pupils' and are not necessarily representative of 'typical' 10 year-olds particularly in the literacy skills demonstrated in their writing.

**How are 9-11 year-olds affected by their parents' jobs?  A small-scale investigation**

**Ruth Forrest and Naomi Dent, aged 10**

**Introduction**

We were interested in how parent's jobs affect their children and wondered how children are affected by the kind of hours parents work and the sorts of moods they come home in, for instance if they come home very tired or angry or if they come home happy and bouncy. How does this affect the quality of relationships in the family? We also wondered how many parents worked and how long their hours were. We wanted to investigate this from children's viewpoints, not adults. The research question we decided on was: 'how are children affected by the nature of their parents' work?'  We predicted that most children would prefer their parents to work shorter hours and be able to come to watch them in more school events. However, what we found out surprised us.

**Methodology**

We wanted to find out the views of year 5 and 6 children in our school and thought that the best way to do this would be to design a questionnaire.  A copy of this is appears in Appendix 1. We gave the questionnaire a lot of thought and were aware that this might be quite a sensitive area for some children. Perhaps their parents were unemployed or they only had one parent, so we set the questions so that it could be answered for one or more working parents.

We explained to Years 5 and 6 what we were doing and asked for volunteers to fill in the questionnaire. We told them that these would be anonymous. We also thought about children who might have difficulty reading some of the questions so we said that we would help read questions if anyone wanted us to. We tried to make all the words easy or explain them so that everyone would understand. We got 70 completed questionnaires back out of 90 children we approached.

We wanted to try and get as much information as we could about what children thought about their parents' jobs so the questionnaire used a mixture of questions that had different rating scales. For example the question 'How much do you think your parents enjoy their jobs had five possible answers, *a lot; it's okay; a bit; not much* and *hates it* but the question about the hours that parents work had only 3 possible answers, *just right, too long or too short*. We also designed some statements to find out how strongly children agreed with them or not, *strongly agree, agree, disagree or strongly agree*:

- Parent(s) should not have to work on Sundays

- My parent(s) are too tired to bother with me after they come home from work

- My parent(s) are too stressed to bother with me when they come home from work

- My parent(s) are more irritable when they've been to work

- My parent(s) talk to me more when they haven't been to work

- I wish my parent(s) had more time to come to school events

We worked out percentages so that it would be easier to compare the results and our supervisor helped us to turn these into graphs.
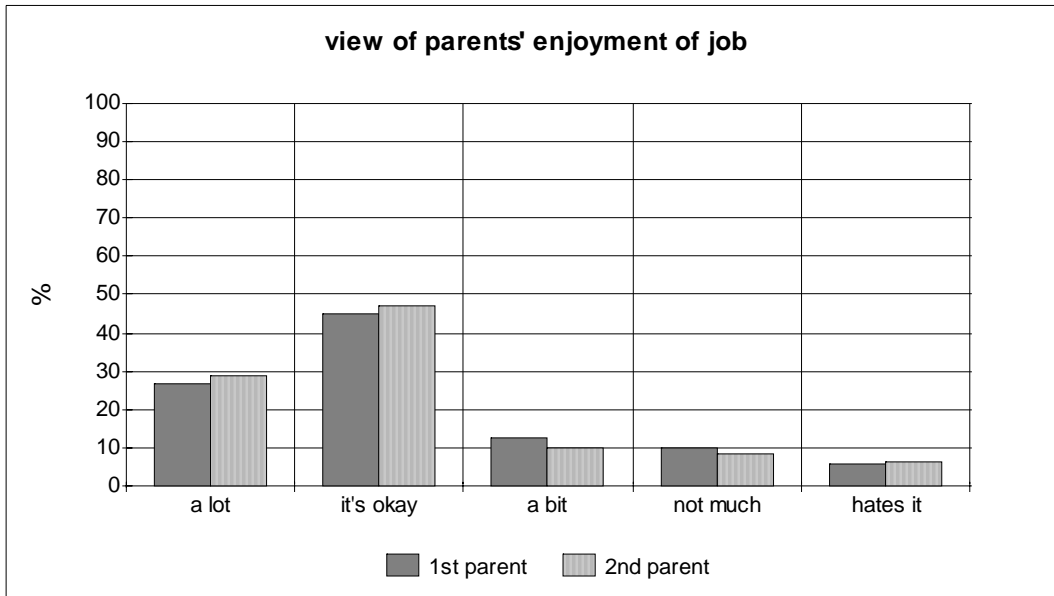
## The Findings



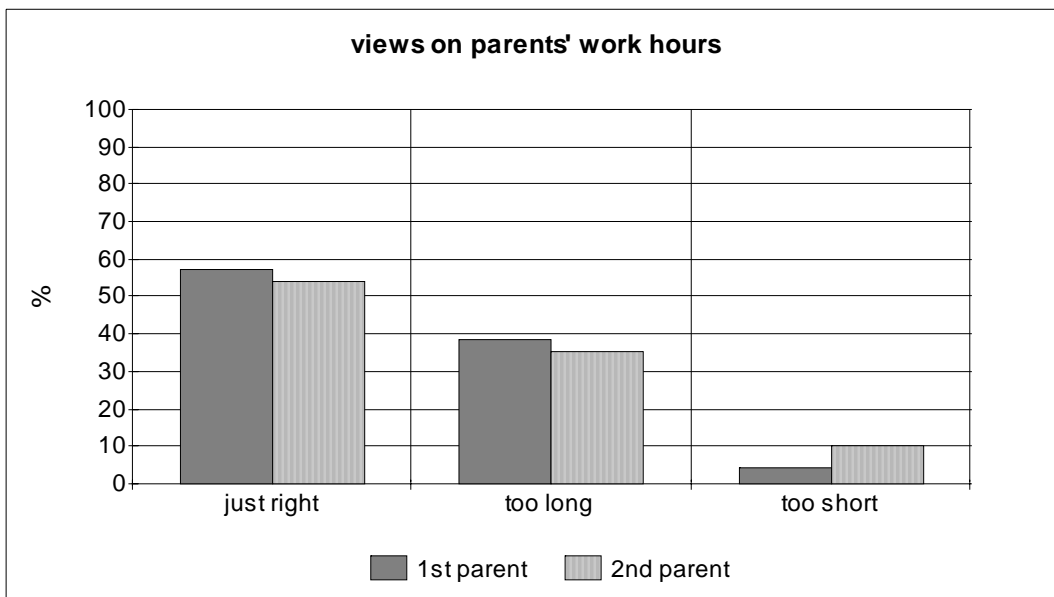**Figure 1 'How much do you think your parents enjoy their jobs?'**

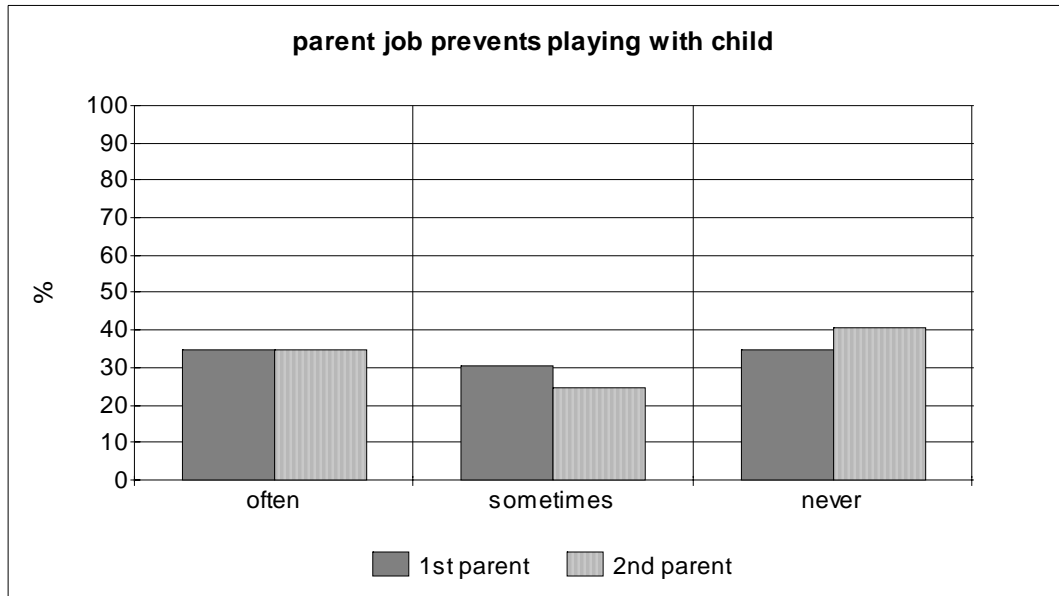Figure 2 'Do you think the hours your parents work are …?'

**parent job prevents playing with child**



Figure 3 'My parent's job gets in the way of them playing with me'
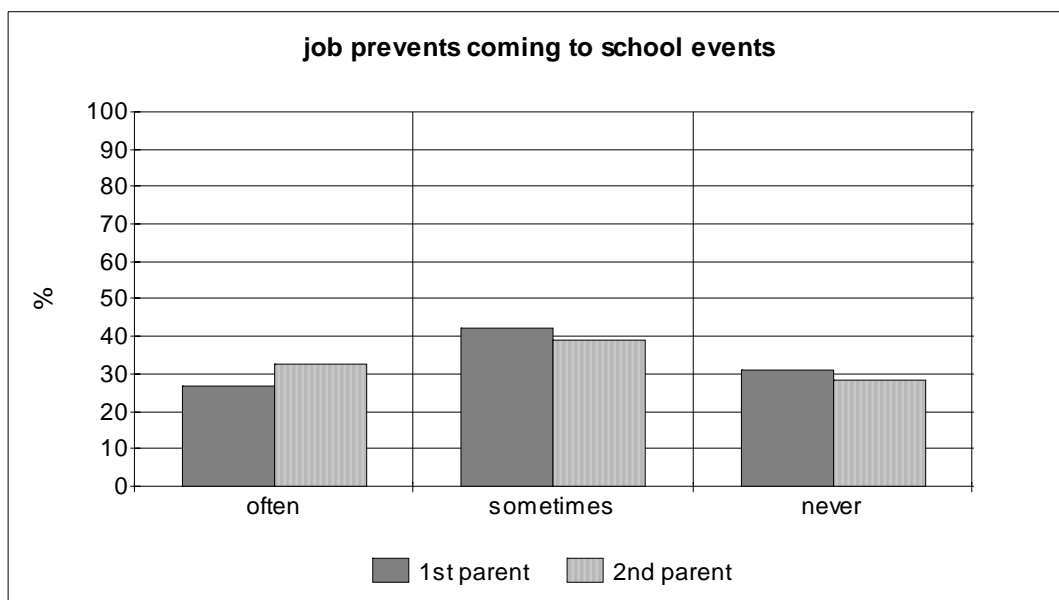
**job prevents coming to school events**



Figure 4 'My parents' work gets in the way of coming to school events
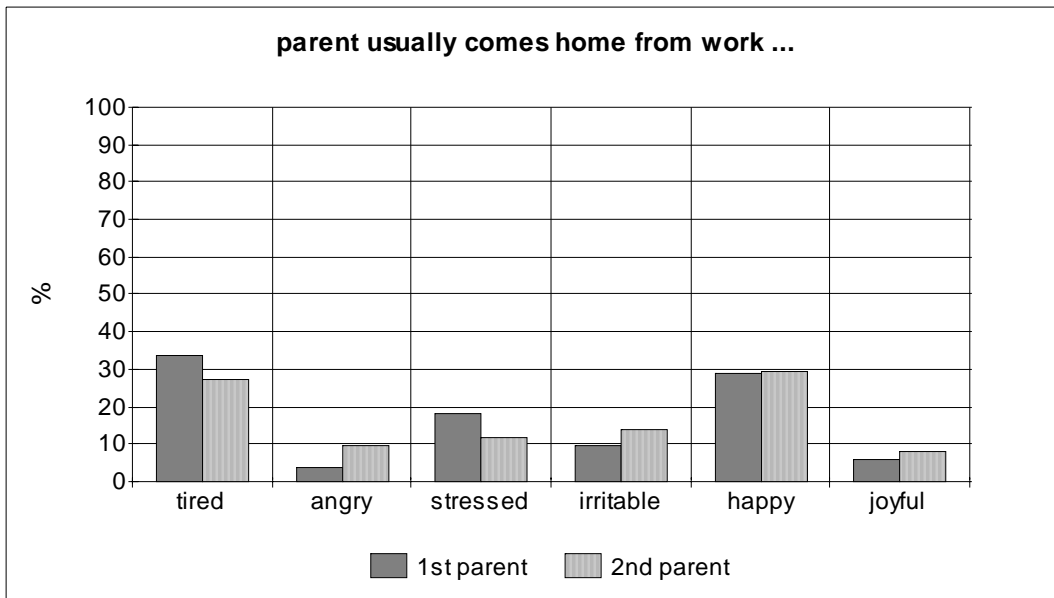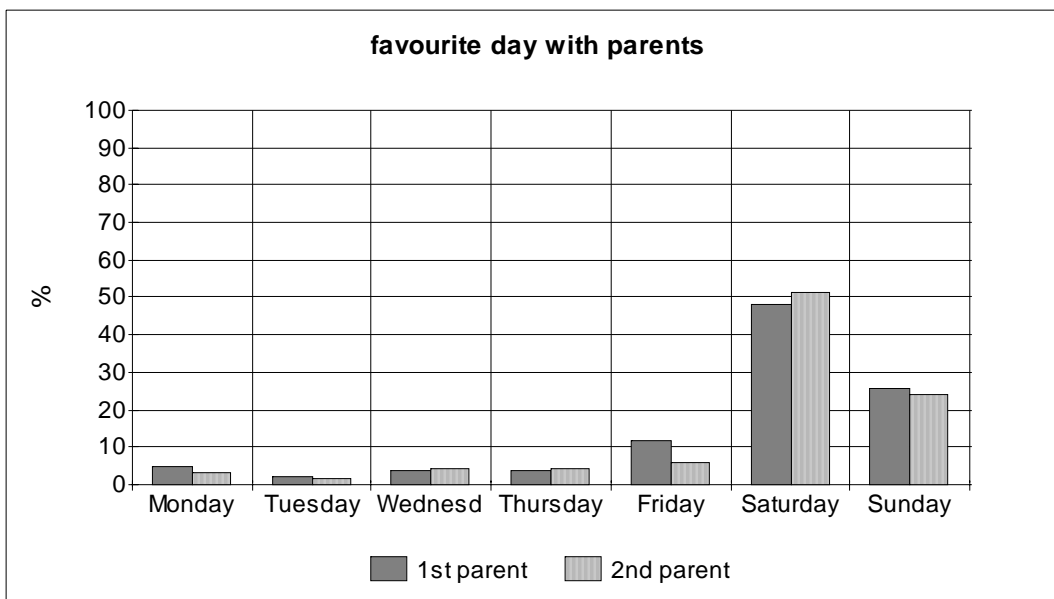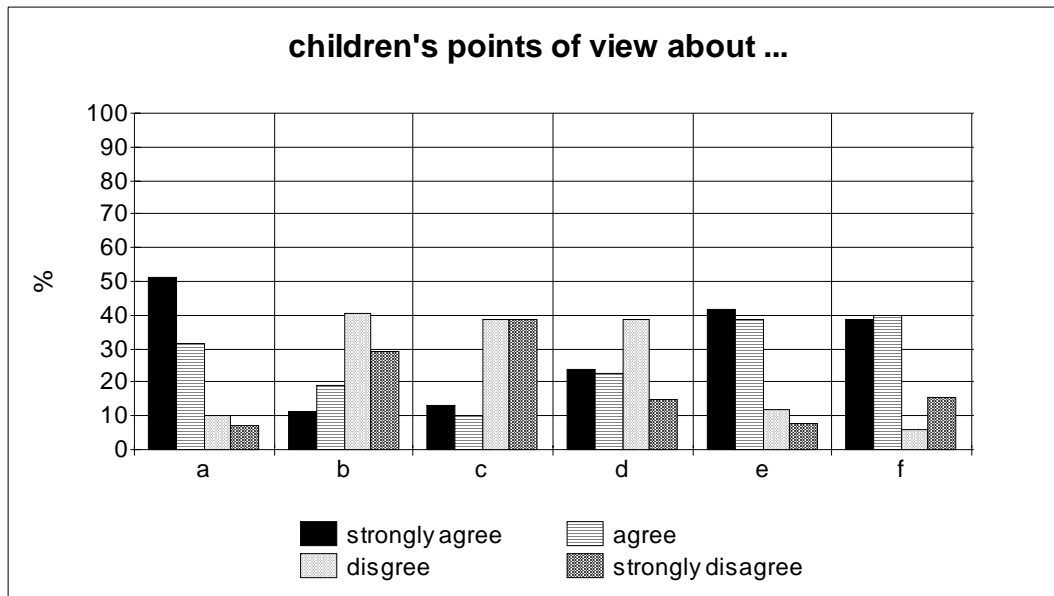
**Figure 5 'My parent usually comes home from work …'**



**Figure 6 'Which is your favourite day with your parents?'**

**children's points of view about ...**

| | a | b | c | d | e | f |
|---|---|---|---|---|---|---|
| | parents should not have to work on Sundays | my parents are too tired to bother with me after work | my parents are too stressed to bother with me after work | my parents are more irritable when they come home from work | my parents talk to me more when they haven't been to work | I wish my parent(s) had more time to come to school events |

**Figure 7 Children's points of view about their parents' work**

We were quite surprised that most children seemed to be quite content about their parents' jobs. We hear a lot about the stress of people's jobs and how this affects the family but this didn't seem to be the case in our investigation. From figures 1 and 2 we can see that nearly half the children thought that their parents jobs and hours were 'okay'. Figures 3 and 4 show that only about a third of children thought that their parents' job '*often*' got in the way of them coming to school events or playing with them, although Figure 7 shows that nearly 80% wish that parents had more time to come to school events. But if you add up the *'often'* and *'sometimes'* categories in figure 4 then about 70% think that parents' work gets in the way of school events at least sometimes. What also surprised us was that there didn't seem to be much difference between parent 1 and parent 2 as we thought that perhaps more dads wouldn't be able to come to school events (on the questionnaire we asked children to complete

parent 1 for dads/step dads (if they had one) and parent 2 for mums/step mums (if they had one). The results in figure 5 were obtained by asking the children to complete the sentence 'My parent usually comes home from work …' with one of the following *tired, angry, stressed, irritable, happy* or *joyful*. Although angry, stressed and irritable were lower scores, it's interesting that more mums seem to come home angry and irritable than dads but more dads come home stressed. But approximately a third of parents came home 'tired' and a third came home 'happy' so it seems that the majority of children in Years 5 and 6 at our school think their parents come home happy but tired rather than angry and stressed.

Figure 7 shows more about how strongly children feel about things to do with their parents' work. It was clear that children don't think their parents should have to work on Sundays (over 80%). Approximately 80% of the children did not think their parents were too stressed to bother with them but fewer (about 70%) thought that their parents were not too tired to bother with them. When parents don't go to work children felt they talked to them more (about 80%). Favourite days with parents were Saturdays (about 50%) and Sundays (about 25%) and these tend to be days when parents aren't generally working so children seem to like this quality time with their parents.


**Discussion**

We were quite surprised by some of the data. Contrary to our predictions, it seemed that most children thought their parents enjoyed their jobs quite a lot and that the hours they worked were 'just right'. Although children 'wished' that parents could have more time to come to their school events they didn't seem to mind too much and the fact that they didn't

feel strongly about this suggests that perhaps they are realistic about the situation and accept it. Interestingly when we tried out our questionnaire on a six-year-old her thoughts were very different compared to the 10 and 11-year-olds. She wanted her mum and dad to be at school events much more and to play with her more at home.

## Conclusions

Although this was only a small project with 70 children from our school we still think it has shown us some interesting data. We had an impression before we started that children would be much more discontented about how their parents' work affected their family life (we're not sure we can explain why, it's an impression that just sort of 'is around') and yet we found quite the opposite. Perhaps this is because of the age. At 9 and 10 we think we are a lot more grown up than adults sometimes think we are. A lot more children thought that their parents' work hours were 'just right' rather than 'too long' even though I think children would  want to spend more time with their parents they are realistic about the situation and understand that parents have to work to earn money. The other really interesting conclusion is that children feel that more parents seem to come home 'tired' than 'irritable' or 'angry'.

If we could do this project over again we would change some things to make it better. Because we tried to be sensitive about some children not having a mum or a dad or having several mums and dads or having a mum or dad who was unemployed we probably made the questionnaire too detailed and complicated. We found that we didn't need all the data we collected and only analysed the parts of the questionnaire that told us about children's

feelings about their parents' jobs. If we could do this again we would probably make the questionnaire much simpler and perhaps only ask about one parent. Also it would be really interesting to do a comparison between what 6-year-olds feel and what 10-year-olds feel about their parents' jobs because we think there would be a big difference. Also it might be different again with 14-year-olds. Perhaps this is something we can investigate in the future.

## 14. Closing reflections

The concept of children as active researchers in their own right is only just beginning to impinge on our consciousness but it is likely to figure prominently in the coming decade. The journey from research *on,* through research *with* to research *by* children is a natural progression accompanying the shifting changes in adult-child power and participation agendas. While this represents exciting times ahead there are many pitfalls to avoid, tensions to address and dilemmas to deliberate over. Some of these relate to concerns about possible exploitation and many to practicalities such as child-protection, informed consent and gatekeeper issues. And what of the future? If children as researchers is dependent on appropriate training programmes will the concept implode without sufficient tutors? Is there a place for peer tutoring where young researchers train other young people? Can child research exist in an adult vacuum or will it disintegrate without adult support at every stage from initial idea to final dissemination?

One of the great imponderables is whether child-led research can continue to grow within existing adult research parameters or whether we need to begin to consider a new paradigm to accommodate it. What is clear is that research *by* children is fundamentally different from adult research *about* children and we cannot use the same norms of reference nor the same terms of measurement and assessment. The time to begin that deliberation process is now before we are overtaken by a wave of child-led research which we are ill-prepared for and have not properly considered how to receive it, measure it or value it.

**References**

Alderson, P. (1993) *Children's Consent to Surgery*, Open University Press: Buckingham.

Alderson, P. 2000. Children as Researchers. In *Research with Children'* Christensen P, James, A.

(eds). Falmer Press: London: pp. 241-257.

Alderson, P. and Morrow, V. (2004) (2nd ed) Ethics, Social Research and Consulting with Children and Young People, Ilford: Barnado's

Aspis, S. (2002) How valid is your research project? *Community Living,* **15,** 4: 17-18.

Banks, S. (1998) *The Missing Link*, New York: Lone Pine Publishing

Bentley, D. and Gamble, L. (2005) 'Young People's Awareness of Poverty in Africa'. Paper presented at *Spotlight on Young Researchers* conference, Open University.

Boyden, J, Ennew, J. (eds). 1997. *Children in Focus: a manual for participatory research with children.* Radda Barnen: Stockholm.

Carlini, A. & Barry E. (2005) 'Hey I'm nine not six! Paper presented at *Spotlight on Young Researchers Conference,* The Open University, 18/04/05.

Children Act (2004), London: HMSO.

Christensen, P, Prout, A. 2002. Working with ethical symmetry in social research with children. *Childhood,* **9**, 4: 477-497.

Clark, A. (2004) The mosaic approach and research with young children. In *The Reality of Research with Children and Young People*. Lewis, V, Kellett, M, Robinson, C, Fraser, S, Ding, S (eds). Sage: London. pp.157-80

Clark, A, Moss, P. 2001. *Listening to Young Children: The Mosaic approach.* National Children's Bureau.

Cohen, L., Mannion, L. & Morrison, K. (2000) *Research Methods in Education*, London: RoutledgeFalmer.

Cole, D. (2004) 'When can we have *our* say', http://childrens-research-centre.open.ac.uk.

Corsaro, W. 1997. *The Sociology of Childhood*. Thousand Oaks, CA: Pine Forge Press.

Fielding, M. (2001) Students as radical agents of change, *Journal of Educational Change,* **2**, 2: 123-41.

Fielding, M. (2004) Transformative approaches to student voice, *British Educational Research Journal*, **30,** 2: 295-312.

France, A. (2004) 'Young People' in Fraser, S. Lewis, V. Ding, S., Kellett, M, & Robinson, C. (eds) *Doing Research with Children and Young People*, London: Sage. pp.175-90

Gillick v West Norfolk and Wisbech Area Health Authority [1985] 3 All ER 402 HL can be found at
http://www.lawcampus.butterworths.com/student/Lev3/weblinked_books/fortin/dataitem.asp?ID=12595&tid=7.

Gray, D.E. and Denicolo, P. (1998) Research in special needs education: objectivity or ideology? *British Journal of Special Education,* **25,** 3: 140-5.

Green Paper (2003) *Every Child Matters,* London: HMSO.

Hart, R. (1997) *Chidlren's Participation: The Theory and Practice of Involving Young Citizens in Community Development and Environmental Care,* London: Earthscan.

Hallett, C. & Prout, A. (2003) (eds) *Hearing the Voices of Children: Social Policy for a New Century* London and New York: RoutledgeFalmer

Hill, M. 1997. Participatory Research with Children. In *Child and Family Social Work.* Blackwell: London; pp171-183.

Jaeger, P. and Zsolnai, J. (2004) Research Training Program in Primary Schools of Hungary. Paper presented at The University of Vesprem, Hungary.

James, A. & Prout, A. (1997) (2nd edn) *Constructing and Reconstructing Childhood,* Basingstoke: Falmer Press.

James, A., Jenks, C. & Prout, A. (19978 *Theorizing Childhood*, Cambridge: Polity Press.

Johnson, V., Ivan-Smith, E., Gordon, G., Pridmore, P. and Scott, P. (eds) (1998) *Stepping Forward: Children and young people; participation in the development process,* London: Intermediate Technology Publication.

Jones, A, Jeyasingham, D, Rajasooriya, S. (2002) *Invisible Families: The strengths and needs of black families in which young people have caring responsibilities.* Policy Press and Joseph Rowntree Foundation: Bristol.

Kellett, M. (2002) '*Empowering able 10-year-olds as active researchers'*. Paper presented at Annual Conference of the British Educational Research Association, Herriot Watt University, Edinburgh.

Kellett, M. (2003) '*Enhancing pupils' learning skills through their engagement with research process'*. Paper presented at Research in Practice Conference of Westminster Institute of Education, Oxford.

Kellett, M. (2004) 'Developing critical thinking skills in 10-12 year-olds through their active engagement in research', *Teaching Thinking Skills,* Issue 14, pp. 32-40.

Kellett, M. (2005) *Developing Children as Researchers*, London, Paul Chapman Publishers.

Kellett, M. (2005a) *Adult free zones: empowering children and young people as active researchers*, Paper presented at CHILDHOODS 2005 conference, Oslo.

Kellett, M. and Ding, S. (2004) 'Middle childhood', in Fraser, S., Lewis, V., Ding, S., Kellett, M. and Robinson, C. (eds) *Doing Research with Children and Young People*, London, Sage.

Kellett, M., Forrest, R., Dent, N. and Ward, S. (2004) 'Just teach us the skills, we'll do the rest: empowering ten-year-olds as active researchers', *Children and Society*, **18**, 5: 329-343.

Kirby, P. & Bryson, S. (2002) *Measuring the Magic: Evaluating nad Researching Young People's Participation in Public Decision Making,* London: Carnegie Young People's Initiative.

*Lansdown, G. (2002) Promoting Children's Participation in Democratic Decision-Making,* Innocenti Research Centre, Florence: UNICEF.

Lewis, V. and Kellett, M. (2004) 'Disability', in Fraser, S., Lewis, V., Ding, S., Kellett, M. and Robinson, C. (eds) *Doing Research with Children and Young People*, London, Sage.

Mayall, B. 2000. Conversations with children: Working with generational issues. In *Research with Children: Perspectives and Practices.* Christensen, P, James, A (eds). Routledge Falmer: London, p.120-135.

Mills, R. & Spittle, E. (2001) *Wisdom Within,* New York: Lone Pine Publishing.

Morrow, V, Richards, M. 1996. The ethics of social research with children: an overview. *Children and Society,* **10** 2, 90-105.

Nieuwenhuys, O. 2001. By the sweat of their brow? Street children, NGOs and children's rights in Addis Ababa. *Africa* **71,** 4, pp. 539–557.

O'Brien, P. 'How children are affected by bereavement' http://childrens-research-centre.open.ac.uk

O'Kane, C. (2001) 'The Development of participatory techniques: Facilitating children's views about decisions which affect them'. In Christensen, P. & James, A. (eds) *Research with Children: Perspectives and Practice,* London: RoutlegeFalmer.

Oliver, M. (1997) 'Emancipatory research: realistic goals or impossible dream' in Barnes, C. and Mercer, G. (eds) *Doing Disability Research*, Leeds: The Disability Press. pp. 15-31.

Pinkerton, J. (2004) Children's participation in the Policy Process, *Children & Society,* **18** (2) pp. 119-130.

Punch, K.F. (2005) *Introduction to Social Research: Quantitative and qualitative approaches,* London: Sage.

Robson, C. (2002) (2nd edn) *Real World Research*, Oxford: Blackwell.

Rousseau, J. (1762) *Emile or On Education* (transl by A. Bloom, Penguin 1991)

Solberg, A. 1996. The challenge in child research from "being" to "doing". In *Children in Families: Research and Policy.* Brannen, J, O'Brien M (eds) London: Falmer Press, p.53-65.

Shakespeare, T. (1996) Rules of engagement: Doing disability research. *Disability and Society,* **11**, 1: 115-19.

Sinclair, R. (2004) Participation in practice: Kaming it meaningful, effective and sustainable', *Children & Society,* **18**, 2: 106-18.

Skinner, B.F. (1972) *Cumulative Record: A Selection of Papers (3ʳᵈ edn).* New York: Appleton-Century-Crofts.

Stalker, K. (1998) Some ethical and methodological issues in research with people with learning difficulties. *Disability and Society,* **13**, 1: 5-19.

Taylor, SA.  2000. The UN Convention on the Rights of the Child. In *Lewis, A, Lindsay, G (eds) Researching Children's Perspectives.* Open University Press: Buckingham.

Thomas, N. & O'Kane, C. (1998) *Children and Decision Making: A Summary Report,* University of Wales Swansea, International Centre for Childhood Studies.

United Nations (1989) *Convention on the Rights of the Child,* United Nations, Geneva.

Vygotsky, L. (1962) *Thought and Language (transl Haufmann and Vakar). MIT Press.*

Waksler, FC. 1991. *Studying the Social Worlds of Children: Sociological Readings.* Falmer: London.

Woodhead, M, Faulkner, D. 2000 Subjects, objects or participants? Dilemmas of psychological research with children. In *Research with Children: Perspectives and Practice.* Christensen, P, James, A (eds). Routlege Falmer: London.

Zarb, G. (1992) On the road to Damascus: first steps towards changing the relations of disability

research production, *Disability, Handicap and Society,* **7**, 2: 125-38.

Zsolnai, J. (2004) Kutatóvá nevelés már tízéves kortól, *Magyar Tudomány*, **49.**