

FOSTERING CHILD-CENTRED APPROACHES TO TRANSPORT RESEARCH, PLANNING AND POLICY DEVELOPMENT: A pilot methodology

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ABSTRACT

Transport plays a significant role in the lives of children and young people, facilitating or constraining their ability to discharge their domestic responsibilities, providing opportunities for earning an income, supporting or inhibiting the development of social networks, and influencing their health and educational achievements. Yet children and young people receive remarkably little attention in transport policy and planning. Since children constitute over half the population of most developing countries, this is a surprising oversight.

Much of our knowledge of children and transport is gleaned from observation and anecdotal evidence. There has been little systematic study of the issues. Children are not seriously considered stakeholders to be consulted in transport-planning activities and their needs are invisible in the decision-making processes of the transport sector. The need to address this oversight cannot be overemphasised.

This article presents a pilot methodology and examines some methodological and ethical challenges emanating from a pilot study involving three countries: India, Ghana and South Africa. The approach is intended to ensure that the voices of children and young people as transport stakeholders emerge sufficiently to influence transport research, planning and policies aimed at enhancing their access to socio-economic opportunities.

Children, transport and development: rationale for focused research

Transport plays a significant role in the lives of children and young people, facilitating or constraining their ability to gain access to socio-economic opportunities. Yet transport research, policy and planning assign little attention to the engagement of children as active stakeholders. This is a surprising omission, given the preponderance of children in the demographic profile of developing countries. In South Africa, although the political environment provides for the recognition of children's rights and their participation

in issues affecting them – as enshrined in the Constitution of South Africa (1996) and reaffirmed in the Children's Bill (2003) – this has not necessarily filtered through to policy implementation. Thus, the need to double efforts to address children's access and mobility needs and constraints through children's active engagement as transport stakeholders cannot be overemphasised.

While anecdotal evidence of children's transport needs and constraints in developing countries exists, there is a dearth of rigorous and systematic research, curtailing its potential influence on policy and strategy development. Thus, a much broader and integrative research approach to children's transport needs and constraints is required that is not limited to the transport needs of school-going children and road safety issues, but investigates a wider spectrum of children's transport and development issues.

Affordable and reliable transport is critical in enabling access to basic services and resources, including healthcare and education. However, geographical isolation, long distances, poverty levels, poor infrastructure and limited transport services inhibit access to services and resources, particularly for children in rural and peri-urban areas (Vasconcellos 1997; Naude et al. 2001). Furthermore, what is often overlooked in transport research is the role played by children as transporters. In many developing countries, children perform domestic and economic responsibilities, including travel and transport over long distances, often carrying heavy loads (Mashiri et al. 2004). Therefore, the need to link children's transport needs and constraints with their livelihood and domestic activities is important (Turner and Kwakye 1996; Rama 1996; Robson 2004; Porter 2004).

Access to education

While education is often considered a ticket out of poverty and squalor, for many rural households this is not realised in practice. For example, there is evidence of a limited uptake of free primary education for a variety of reasons, such as the spatial location of schools, unaffordable transport costs, demanding domestic responsibilities – which often have a bearing on the age at which children start school, their frequency of attendance, punctuality, attention span in class and academic achievement (Porter and Blaufuss 2002; Department of Labour 2003; Mashiri et al. 2004). The need to determine the scope and nature of the impact of transport factors on access to education is thus paramount.

Access to health

Research on children, transport and health has tended to focus on road safety and has largely been conducted in developed countries. However, improved transport can improve access to healthcare as well as other health-related resources such as potable water. Despite recognition of the role children play as caregivers and the facilitative

role that transport could play, especially in mitigating the ever-increasing impacts of HIV/Aids, most children face daunting access problems.

Children's role as transporters

Children's role as transporters, particularly in rural areas, has been linked with health problems caused by head-loading heavy goods (Department of Labour 2003). Studies investigating children's time use have indicated that socio-cultural factors impact on the nature, scope and severity of the work activities children undertake, including family size and composition, birth order, sex of the sibling group, age, social class, location and gender (Rama and Ritcher 2005; Porter 2003). Research suggests that girl children, particularly foster children, carry the heaviest loads (Porter 2003). Studies in rural Ghana showed that girl children were responsible for carrying heavy loads of cassava. Porter notes that this form of children's labour is often overlooked in transport research and literature, since it is often 'subsumed under women's labour' (Porter 2003).

Physical and psychological safety

For girl children in particular, transport issues and choices can be interwoven with issues of physical and psychological safety. Travel by public transport or on foot can involve the threat of sexual harassment, assault or rape. Although the extent and nature of this problem is not well documented, there is anecdotal evidence to suggest that the threats of sexual assault, harassment and rape not only pose a danger for girl children, but can impact on transport choices made by and for them (Mashiri et al 2006; Hamilton 2002).

While anecdotal evidence exists pertaining to the impact of transport on children's lives, there is considerable scope for more in-depth research. However, determining the scope and nature of children's participation in research with a view to broadening and strengthening such research is fraught with methodological and ethical challenges. This article discusses the rationale for undertaking research on children, transport and development, presents a pilot child-centred participatory research methodology and examines some of the methodological and ethical challenges. The article contends that such an inclusive methodology can be crafted to ensure that the voices of children, as transport stakeholders in their own right, emerge sufficiently to effectively influence policies and strategies towards universal access to socio-economic opportunities.

Why children's participation: a case for child-centred approaches

Until recently, little has been known about the ways in which child-centred approaches could be harnessed in improving planning and policy pertaining to children's rights and wellbeing. While child mobility and access issues are increasingly being recognised as areas of concern, little effort has been channelled into applying child-centred

approaches to understanding these issues. In South Africa, children's right to meaningful participation in development planning is enshrined in the Constitution of South Africa (1996) and reaffirmed in section 10 of the Children's Bill (2003). Without children's active input into research on issues that affect them, strategies and policies will continue to marginalise children from the processes that are intended to benefit them.

It is against this background that researchers are beginning to recognise the positive impact of including children's views, observations and ideas in transport policy and planning. Research with children should seek not only to involve children as research objects, but also to ensure that children are afforded the freedom to express and articulate their opinions and aspirations (Alderson 2001).

Some proponents of child-centred participatory approaches, however, do not regard participation alone as sufficient, but call for more commitment to children's engagement as stakeholders in their own right, advocating children's active contribution to the development, implementation and analysis of the research, thus calling for children's support towards their inclusive involvement as active stakeholders in the broader transport sector activities.

Only by longer-term and meaningful involvement of children as stakeholders, prioritising their views and concerns over the assumptions of adult researchers, can children's needs and experiences be understood and addressed. Furthermore, children's marginalisation in research processes that affect them is indicative of, and contributes to, their political and hence socio-economic marginalisation and oppression. The lack of child-centred approaches in development policy and planning can be linked to the disengagement of the marginalised in political processes (Lolichen 2006). Lolichen attributes this lack of appreciation of children's needs to the reluctance and failure of planners and policy makers to understand and appreciate children's ideas, experiences, and aspirations. He advocates for a research agenda whereby children identify the research needs, set the research framework, design the methodology, develop and administer the tools, consolidate and analyse the findings and use these findings to solve their problems in consultation with adults (Lolichen 2006).

The advancement of child-centred participatory methodologies to unpack issues relating to children, transport and development may generate significant research outcomes promoting children's rights and participation. These questions, concerns and issues are the subject matter of the pilot study discussed in this article.

The pilot study: testing a child-centred participatory methodology

In 2004 and 2005, a pilot project was undertaken, funded by the UK Department for International Development (DFID), and led by the University of Durham in collaboration

with Ghana, India and South Africa,. It involved international workshops and country group pilot studies. Its key objective was to develop and test a methodology that could be used to build and buttress knowledge on children's mobility and access needs, through a participatory child-centred field methodology. The methodology was developed through engagement with children and with Concerned for Working Children (CWC), a not-for-profit Indian organisation. It was then tested in the three countries, with a view to informing future research.

Children from Ghana, India and South Africa were introduced, through adult facilitators, to data collection methodologies, including practical and ethical issues pertaining to research, which were then tested and refined through robust discussion and role play. These methods were tested in the three countries to test the toolkit's robustness in diverse conditions and to further refine the tools. The methods varied according to the preference of the volunteer child researchers and other practical considerations such as:

- ◆ Individual interviews with checklist
- ◆ Focus group discussions with different groups of children (according to age, gender, etc.)
- ◆ Observation through route transects
- ◆ Observation mapping
- ◆ Accessibility mapping using flash cards with individual children of different categories (according to age, sex, working/non-working, etc.)
- ◆ Broad village participatory rural appraisal (PRA)
- ◆ Ranking exercises
- ◆ Traffic count/weighing exercise

In 2005 a workshop was held in Ghana which involved adult and child researchers from the participating countries with the aim of consolidating, discussing and presenting children's findings and experiences from the country pilots. It was largely facilitated by CWC, because of its expertise in working with children. It was used to review the processes involved in doing the project, including a review of the data collection methods, and the children's perceptions of their value, the levels of enjoyment in applying them and their ease or complexity of application, as well as children's exploration and discussion of potential solutions (including identifying organisations and persons to be engaged in addressing these issues).

Some of the lessons have been incorporated in a scaled-up version of the pilot (divided into two strands: child and adult-led) aimed at generating a comparative body of qualitative and quantitative data in Ghana, Malawi and South Africa. For the South African leg of the project, a children's training workshop was undertaken in early 2007 with the additional aim of refining the data collection methods that had been

generated in workshops in India (2004), Ghana (2005) and Malawi (2006). Children's training involved practical and ethical issues related to research, and child researchers responded with sensitivity and awareness to the ethical issues explored through discussions and role-play. The trained children are currently employing the methods and tools to undertake the child-led research strand of the broader project on children, transport and development.

The pilot provided a platform to engage with key practical and ethical issues in conducting transport research with and by children, with a view to creating awareness and enabling transport researchers and policy makers to exploit and unlock the potential value of the methodology and navigate the minefields.

Challenges of child-centred participatory research

Ethical issues in social research involving children

Setting sound ethical guidelines in research involving children is essential to protect them from exploitation and the negative effects that may arise from research action, and needs to be upheld and balanced with their active participation. The study revealed that an enquiry such as the pilot could tap into potentially sensitive topics such as school attendance and education levels, healthcare access, sexual assault or harassment and frustrations in accessing socio-economic opportunities.

Ethical issues were raised on two fronts in the pilot pertaining to adult-led research, in which children were key informants and research subjects, as well as those related to research undertaken by children on other children. Research with children, especially those who are marginalised by poverty, probably places an even greater onus on adult researchers and facilitators to design and implement sound research ethics. Thus, while the principles of social research with adults apply to research with children, greater emphasis on protection from physical and psychological harm is necessary.

Issues of informed consent, especially when dealing with marginalised children, must be tackled with great sensitivity to local conditions. Among country groups, power dynamics and socio-cultural norms between children and adults in their communities had to be taken into account to avoid undue pressure on children to participate. Furthermore, the realisation that children were engaged in household socio-economic responsibilities necessitated careful consultation and planning to ensure inclusivity.

Clear communication regarding realistic research participation outcomes was essential. Raising false expectations could result in mixed messages that could jeopardise the research process. Thus, a clear explanation of the project, its anticipated outcomes and sensitivities are 'non-negotiable' in the design and implementation of the research process. For example, asking children whether bicycles would ease their transport plight

could evoke an expectation that a positive response could influence the provision of bicycles by adult stakeholders in the project. The power dynamics between children and adults, particularly between marginalised children and adult facilitators, through offering a sense of false friendship to coax them, necessitates additional sensitivity to ensure that children are not used merely as tokens in the research.

One argument raised during the pilot related to the notion that support and commitment to long-term, integrated capacity building among children as transport stakeholders – and more generally as political stakeholders in their own right – was essential. For example, fostering false or overly high expectations of research outcomes could be mitigated through a commitment of resources to longer-term empowerment of children. Such institutional and resource support could lessen their dependency on adults, allowing them space to identify research and advocate for change around their transport challenges.

The question of ethical research was raised in relation to the child subjects of the child-led research. Although all research participants have the right to ethical research processes and approaches, and vulnerable children may require additional sensitivity and assistance from the researcher, child-led research also involves ethical considerations. To mitigate the impact of these concerns, it is important to ensure that the quality of training of child-researchers is as good as the selection and/or refinement of appropriate methods. The need to allow child-researchers the freedom and space to orchestrate their research meant that constant monitoring was not always advisable, as it would defeat the spirit of children's unencumbered participation. Indeed, such risks could be addressed through the development of appropriate tools with child-researchers in conjunction with quality adult-facilitation in the training of child-researchers in ethical concepts and practices in research. The key challenges here could perhaps be identified as time for adequate child researcher training, financial resources to undertake such comprehensive training, and the availability of good child-centred participatory facilitation skills.

The conceptualisation of research among children

Among the challenges in capacity building among children who are new to the concept of research are the aims and principles of doing research. Discussion and awareness-building around issues of children, transport and development between child researcher and adult facilitators – particularly in developing shared objectives for the research, as well as indicators and methods that could be applied in ascertaining children's transport issues – were deemed necessary. For a child-centred approach to be successful, it had to be done in conjunction with child researchers, who offered predictably new insights into possible transport concerns among children in their communities.

The overall prognosis for the pilot was that the child-centred approach was practical and effective, providing child researchers with the space to participate, develop

objectives, and integrate issues that had not been prioritised in adult-led research. Careful consideration was essential to ensure that the information was packaged in line with the broad policy and strategy thrusts and agenda of planners and decision makers to enlist their support and ensure seamless integration and implementation.

Questions about the validity of the data were raised in terms of common research principles of accurate recording and the need for rigorous research. Some child researchers were reluctant to record variations or contested responses of participants, seeking instead to present a consensus view on, for example, a question on travel distances or to identify and present only those problems that were common to or agreed upon by all participants. Adult facilitation was then necessary to inculcate the need to accurately record the facts as they unravelled them and not imbue such data with their values. (That could be added as commentary.) This challenge appeared to be common to child researchers from the same region, suggesting the presence of inherent cultural tenets to tend towards agreement (and not necessarily what the research revealed). Therefore problems of conceptualisation of 'research' were not limited to a child-centred participatory approach, but were also linked to socio-cultural attitudes and paradigms related to problem-solving, as well as levels of exposure to the notion of research. Capacity building among children new to research, as with adults, cannot be over-emphasised.

Children's abilities

Whereas children's ability to undertake traditionally 'adult' tasks such as research is often questioned, the pilot study indicated that child researchers were capable of conducting research with sophisticated but appropriate tools, presenting it, sharing this knowledge with their peers, and offering new insights through adult-facilitated training and support. Adequate preparation was therefore important to nurture their research skills, familiarise them with broad transport and development issues and empower them to be competent researchers.

Proponents of child-centred participatory research argue in favour of children's significant abilities, given proper facilitation and tools. Lolichen (2006) for example emphasises the need for children to adopt enjoyable, simple and culturally appropriate tools.

The roles of both adult and child researcher should be defined in such research processes with clear distinctions regarding the scope of adult influence on the research process. It was conceded that whereas proactive adult facilitation was imperative, children required a good level of freedom to engage with and practise the methods on their own so that the learning process took root and bore fruit.

Promoting solution finding and mitigating unrealistic expectations

Through child-centred participatory approaches, children's transport needs can be better articulated, understood and appreciated with a view to better policy development and planning.

During the pilot, the need was raised to sustain children through village support structures and life skills beyond the limited life of the study. This included promoting their participation in the broader local political environment (such as village and ward development committees) through problem identification and solution finding in line with the longer-term objective of children's empowerment as researchers and knowledgeable and responsible citizens of tomorrow.

Children as researchers and the issue of child 'work'

The research raised a number of questions about the appropriate scope, nature and remuneration for research undertaken by children. The voluntary nature of research by children must be stressed to ensure that there is no overt or subtle pressure on children to participate (especially those at the lower end of the poverty spectrum). However, such engagement may be described as work that deserves remuneration, especially as the scope of the research is broadened. This realisation needs to be tackled in a sensitive manner to avoid inadvertently pressuring children to participate because they anticipate payment, and not because of their desire to effect change in their circumstances.

Discussions and decisions around a balance between monetary and non-monetary benefits for child researchers are thus deemed inevitable. For example, children that undergo training could be awarded certificates for the skills they have acquired. However, for many children from low-income homes, their time is mortgaged to procuring livelihoods and domestic chores. Hence, the opportunity cost of their time needs to be appropriately evaluated and remunerated.

Overall, a great deal of sensitivity to issues of voluntary participation, the clear communication of expectations, the right to withdraw from research, and the scope and limits of individual children's contributions must be meticulously observed. During the pilot study the scope and nature of the research to be undertaken by child-researchers were therefore discussed and agreed upon by adult facilitators and participating children. As the scope of the research broadens, however, a review of the limitations of child-researchers' contributions should be considered by highlighting children's right to withdraw from the research project at any time and not to be pressurised to contribute more time than they are willing to.

Identifying appropriate child-centred methods

Key processes in the pilot included the identification of research methods to be applied by child researchers, and the assessment of their effectiveness in exploring children's transport and development needs through a child-centred participatory approach. The methods that were introduced to the children, and eventually chosen by the child researchers, were largely qualitative in nature. The only quantitative method used was the traffic count, undertaken by child-researchers in India, where children on a given route were stopped to weigh and document features of the loads they were carrying. This worked very effectively and was enjoyed quite extensively by the children, especially the interest this child-led public research exercise generated in the community.

The more visual qualitative methods were well liked. For example, drawing and mapping exercises proved popular, as the children enjoyed charting their thoughts and observations in a visual format. These included disposable cameras to take pictures to highlight children's transport issues, often accompanied by day-to-day stories prompted by the presentation of the pictures. These stories and images were valuable in showing, from a child's perspective, the experiences and challenges encountered in their day-to-day lives in a way that may not be possible through, for example, a set of questions delivered by adult researchers.

The children also reported that they enjoyed methods undertaken in groups, in particular where groups were separated according to gender, with limited or no adult involvement. Such conditions enabled them to discuss the issues more freely and meaningfully, and thus the level of abstraction was much higher. At one-on-one interviews the children sometimes lost interest relatively quickly after a certain pattern of responses had been established. Focus group discussions tended to capture interest for longer periods of time, with children continuing the discussion until issues were exhausted and playful elements started to creep in. Checklists of broad issues to be covered, developed by the child-researchers themselves with the assistance of adults, were successfully employed as prompts for questions, and to ensure that key issues were covered during the lively and diverse interactions. This allowed free-form discussions to take place, while pursuing and teasing out the priority issues.

Gender separation was particularly useful in focus group discussions through which the gendered nature of transport and development issues became most apparent. Girls often raised issues around rape and sexual harassment while walking to socio-economic activities: issues that seldom arose with the same level of detail when boys were present. In addition, gendered transport and travel tasks were more fully explored in separate groups, and mitigated against the dominance of certain gendered issues that was risked in gender-mixed groups.

As a rule of thumb, methods demanding high levels of attention from child-researchers or assuming high levels of knowledge surrounding the meanings, politics and signifiers of research practice itself would be less effective with child-researchers, and would be better undertaken by adult researchers.

Conclusion

The pilot study generated a raft of key lessons and discussion points, some of which are currently being employed in the broader study:

- ◆ It was crucial for the child-researchers to select and adapt the methods they learned through adult facilitation
- ◆ Certain research methods (requiring high levels of research knowledge and experience and/or certain forms of complex comparability) were best undertaken by adults.
- ◆ Child-researchers' level of comfort with specific methods coupled with their enjoyment in applying them was paramount
- ◆ Issues of gender and age should be considered to ensure child-researchers and their research participants felt free to explore issues in depth
- ◆ Quality training and experienced adult facilitation was important to encourage and elicit the best in the children, whose capabilities emerged very strongly in a supported environment
- ◆ Last, the need for visionary, longer-term children's empowerment and capacity building to better implement a rigorous, but ethical child-centred participatory research approach cannot be over-emphasised

While numerous challenges emerged, in particular among participating countries where the research method was entirely new, a key outcome was the acknowledgement of the immense radiating possibilities of child-centred participatory research, as an empowerment tool as well as a powerful research tool, and the significant, if innate, capabilities of children to undertake research and share their knowledge among their peers, given a supportive environment and skilled facilitation. Developing capacity in this way is not an overnight process, but a deliberate and delicate long-term process demanding that implementers apply dedication and singleness of purpose and passion.

Note

- 1 This article is based on an on going project being undertaken by the CSIR, funded by the Economic and Social Science Research (ESRC) together with the Department for International Development (DFID). At the time of writing the three authors were all researchers at the Council for Scientific and Industrial Research (CSIR). Buiten is now with the University of Pretoria. They

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