

## Ethical Dimensions of Child Memory Research

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Research ethics reveal the tension between psychology's goal of advancing human welfare and its methods for doing so. Psychologists study various facets of normal and atypical functioning in order to (among other things) devise effective treatments, create preventive strategies, and orient social policies to promote human welfare. But their investigations sometimes threaten individual well-being, such as when research participants are stressed, deceived, or placed at risk of harm in studies of therapeutic or policy relevance. To obtain usable knowledge in an ethically responsible manner, researchers sometimes modify research protocols to safeguard the rights of research participants, even though doing so often abridges the quality of the findings yielded by their investigations. Professional concern with research ethics thus underscores psychology's commitment to advancing human welfare through scientific methods that respect human rights, even at a cost of limiting new knowledge.

These tensions between the goals of psychological inquiry and the methods of research are especially apparent when children are research participants. Because children do not understand the research process as well as adults, they cannot as competently protect their rights, and consequently adults are enlisted to do so for them. But children's limited social power and the incentives for their involvement in research make every proxy consent (by parents or other adults) an inadequate assurance that their needs and interests will be safeguarded. Parents' interests and perspectives are not always identical with those of offspring. For these reasons, some (e.g. Ramsay, 1976, 1977) have argued that young children can never be ethically permitted to participate in research that does not have direct therapeutic benefit for them. This conclusion seems overreaching, however, given the broad range of important research questions involving children for which results can have significant benefits to other children as well as future generations, such as research on teaching and learning, the prevention and treatment of psychological dysfunction, and the identification and prosecution of child maltreatment. In many cases, studies on these topics expose children to risk of harms that seem very minor when compared with the broader potential societal benefits of the knowledge they yield. Even so, this risk-benefit calculus remains very challenging because children who are research participants cannot easily defend their interests or voice the harms they may experience in research contexts.

We applaud Herrmann and Yoder's effort to foster collegial dialogue about research ethics among investigators concerned with child memory. Their initiative is

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especially valuable in a professional climate in which psychologists often experience the ethical review of research as a coercive enterprise, conducted by Institutional Review Boards that are insensitive to scientific concerns and that seem to be guided as much by an institutional preoccupation with civil liability as by a reasoned ethical responsibility to children. As a consequence, ethical review is often experienced as an absolute (approval or disapproval) rather than a graded concern in which investigators are applicants rather than participants. Like Herrmann and Yoder, we believe that psychologists are most sensitive to the psychological dimensions of risk and vulnerability in research involving children, and thus should be primarily responsible for initiating collegial exchanges concerning the ethical dimensions of their research to inform external ethical review.

In that spirit, our comments are oriented toward developing the questions they posed and offering somewhat different perspectives on the ethics of 'implanted memory' research with children.

### RISK ASSESSMENT

As an ethical basis for their concerns about research on child memory that entails suggesting false recollections of past events, Herrman and Yoder argue that children have a right to create their own memories. In a manner similar to how adults would reject 'mind control' as research participants, they argue that children should also not be subject to the induction of false memories.

Two ethical principles are the foundation for their concerns. The first principle, *respect for persons* (a chief aspect of which is autonomy), requires that researchers respect the wishes and decisions of research participants, both expressed and implied. This is the basis for provisions for informed consent, confidentiality of research materials, the freedom to withdraw from research participation, limits on deceptive research practices and the use of debriefing following research. Respect for persons means that if it is reasonable to assume that children would prefer not to have false memories induced in them, then ordinarily this should not occur in research. The second ethical principle underlying Herrman and Yoder's concerns is *non-maleficence*, the maxim that it is wrong to intentionally inflict harm on another. To Herrman and Yoder, a young child's realization that an adult has induced false memories could contribute to a loss of self-esteem, diminished respect for adult authorities, loss of a sense of cognitive self-control or competence, stress, and potential other immediate and long-term harms. To the extent that these harms can be anticipated by researchers, children should ordinarily not be subject to them.

If the ethical analysis of child memory research proceeded no further, it would be arguable that most research entailing memory suggestion with children is ethically impermissible. But risk assessment is considerably more complex. It requires inquiring, for example, about the scope and gravity of the harms to which children are potentially exposed. All research potentially entails stress (due, among other reasons, to the realization that one's behaviour is being monitored), but is it as ethically significant if these stressors are comparable to those experienced by children in everyday settings (e.g. in school)? Arguably not. Risk assessment further requires considering developmental changes in children's capabilities in relation to the potential harms of research (Thompson, 1990, 1992), which Herrmann and Yoder appropriately address. However, risk assessment also requires inquiring into the

probability of the harms potentially deriving from research participation. Herrmann and Yoder outline a variety of risks that may possibly accompany children's involvement in research concerning memory suggestion, but acknowledge that little is known concerning whether they actually occur, thus hampering accurate risk assessment.

To sharpen the assessment of risk in research involving children, the US Department of Health and Human Services issued agency regulations in 1985 (DHHS, 1983) that adopted most of the prior recommendations of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (NCPHS, 1978, 1979). The DHHS regulations currently guide the work of Institutional Review Boards across the country. An important feature of these regulations is the definition of 'minimal risk' in research involving children. According to these regulations, minimal risk involves risk of harm not greater than that 'ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests' (45 CFR 46.102[g]). Research entailing 'minimal risk' is acceptable contingent on the permission of the child's parents and the child's own assent; and research involving greater than minimal risk can be acceptable contingent on additional provisions. Determining whether research entails minimal risk or a 'minor increase' over minimal risk entails, according to the National Commission, both a common-sense estimation of risk as well as the researcher's prior experience with similar procedures and, when available, statistical data concerning the effects of these procedures on research participants.

Although there are significant limitations on these regulations (Thompson, 1990, 1992), they provide one avenue towards a more sensitive risk assessment that is developmentally graded and calibrated according to the child's everyday life experience. In evaluating research entailing memory suggestion with young children, therefore, it is useful to thoughtfully ponder the extent to which these research procedures expose children to risk that is greater than what they ordinarily encounter in daily life. How often do young children find that their recollections of events differ appreciably from those of others? How often do others (such as their mothers) remind children of events they had apparently forgotten? How often are their recollections elaborated, modified, or 'filled-in' by the adult's account? How often do they find that adults remember events that children do not believe actually happened? Although directly relevant data are lacking, there is considerable research evidence that early memory is a socially constructive process in which the child's personal representations are elaborated, refined, and often reconstructed by the verbal discourse provided by adults when they converse with the child about these events (see Nelson, 1993; Hudson, 1990; Thompson, 1998, for reviews). In other words, early memory is often a product of shared conversations between young children and significant adults that results in a jointly-constructed representation of the child's personal experience. Based on this research, it appears that children quite often experience that their own recollections are modified, corrected, and elaborated by adults who share their experiences. More research is needed on these issues, however, especially with respect to the phenomenology of young children's experience of their own memory.

### **RISK IN RELATION TO BENEFITS**

Herrmann and Yoder focus on the potential risks of children's participation in research involving memory suggestion, but this is an incomplete analysis from the

perspective of research ethics. After all, if potential risks were alone sufficient to ethically prohibit research involving children, little research would be permissible despite its therapeutic or policy relevance. Partly for this reason, conventional ethical analysis of research entails a risk–benefit calculus: can the level of risk to research participants be justified by the anticipated benefits of research results? If so, the research is ordinarily deemed ethically permissible.

There are two general kinds of benefits derived from research. One concerns the broad social benefits of the knowledge yielded by research for the creation of social programmes, policies, and institutions that advance human welfare. Research on child memory involving false suggestion is intended to advance general knowledge concerning memory development, and it has also been designed to address public policy problems concerning the reliability of young children's eyewitness accounts, the effects of repeated interviews on account reliability, the impact of therapeutic suggestion on the credibility of young children's recall, and the procedures relevant to child sexual abuse investigations. As courts throughout the country have wrestled with perplexing allegations of child sexual abuse in preschools, for example, significant questions concerning the reliability of young children's accounts of abuse (which often provide the only substantive evidence of abuse allegations) and the influences upon their recollections have been raised. To answer these questions, researchers have designed studies of young children's recall in which memory representations are repeatedly assessed over time, often involving interviews in which inaccurate memories are suggested. These studies are empirical analogues to the kinds of repeated questioning by parents, teachers, or police investigators, or therapeutic sessions with psychologists, in which adults may inadvertently or deliberately implant false beliefs in young children's recollections in their efforts to get at the truth of what actually happened.

As Herrmann and Yoder note, these studies have shown that it is indeed possible to induce young children to believe that events occurred that never really happened. The ethical question they pose is whether it is time to halt such research now that this conclusion has been verified, especially in light of the potential risks to which children are exposed in these procedures. The answer depends on the scientific and public importance of the questions yet to be explored, such as the source of the misleading information and the relationship of the source to the child, and the nature of the interview questions to which children respond in offering their accounts. Each new empirical foray requires its own risk–benefit calculus in the light of these considerations. We are impressed, however, that initial questions have usually led to more complex answers than initially anticipated in this field of research, and that follow-up investigations have usually been necessary to clarify and correct initial conclusions that may have had misleading policy applications. The study of young children's memory has proceeded far beyond the initial conclusion that young children are simply poor mnemonists to the realization that their memory capabilities depend on a complex constellations of factors. These include the nature of the event, subsequent questioning, reinstatement processes, relational influences, individual characteristics of the child as well as of the interviewer, and other influences that are relevant to how children are treated by investigators, therapists, and the courts. Recognition of these complexities has already affected how children are treated by investigators, therapists, and others who are involved in child sexual abuse cases.

The societal benefits of this research are potentially significant, but reflect only one aspect of the calculation of benefits. A second concerns the benefits realized by the children themselves. It is arguable that the benefits directly enjoyed by research participants should have greater weight in the risk–benefit calculus than are the benefits to society at large (Thompson, 1990, 1992). After all, justice principles warrant that those who undergo the risks of research participation should also enjoy its benefits. Yet in most psychological research, especially studies involving children, risks are usually conceptualized in terms of research participants, while benefits are portrayed as societal.

What benefits might children experience from their participation in memory suggestion studies? Apart from the pleasures of completing research tasks and the small prizes that may follow, little is known of the further benefits that children may experience in research contexts. Do they perceive research participation as an altruistic act by which they assist the researcher? Do they appreciate the relevance of their contribution to a broader understanding of children's memory, or to enabling courts to assist children? Do they receive affirmation from parents that research participation is a worthwhile experience? Do they enjoy the research protocol itself? Obviously, the answers to such questions depend, to a great extent, on the child's age and background, but psychologists' inability to elucidate the potentially diverse benefits of research participation to children reveals how little attention has been devoted to this topic. Nor do they know much about how to enhance these benefits, such as through additional procedures that do not entail new data gathering, or by helping the child to understand the research process. Especially when research procedures entail potentially significant risks, or are incongruous or meaningless to the young children who participate, incrementing the benefits of research participation through creative procedures (such as storyboards that describe the research questions at the child's comprehension level) can recalibrate the risk–benefit calculus.

An important issue raised by Herrmann and Yoder concerns the potential harms to young children of debriefing, during which children are told that events that they believed to have actually occurred are false. In studies of memory suggestion, for example, debriefing involves revealing to children that certain memories were induced (although sometimes this occurs during the research procedures themselves). As the authors correctly note, young children are likely to have difficulty understanding such debriefing (or dehoaxing) information because of its cognitive complexity. Dehoaxing prior misinformation requires recursive reasoning (i.e. knowing that the researcher knew that you would think this way when she did something, but now something different is revealed to be true requiring a retrospective reassessment of past events) that young children may experience as confusing rather than clarifying. Although there is some evidence from research on developing theory of mind that older preschoolers are capable of understanding the nature of deception (see e.g. Astington, 1993; Flavell and Miller, 1998), the developmental course of more complex forms of recursive reasoning is likely to be significantly more extended.

Furthermore, dehoaxing exemplifies 'inflicted insight' in which not only are prior events correctly clarified but the individual is revealed to have been fooled or otherwise exposed in a negative light. Although the principle of respect for persons requires such procedures when adults are research participants to ensure that they do not remain deceived about research whose purposes they would otherwise understand, it is not clear that dehoaxing is a research benefit for young children who are

unlikely to understand—and thus to benefit from—such a revelation. Indeed, Herrman and Yoder point out numerous ways that young children can potentially be harmed by the realization that they were intentionally misled by an adult, especially when they are unable to understand the broader conditions of research inquiry (and its value) warranting such misinformation. Furthermore, it is likely that the intended benefits of dehoaxing procedures depend significantly on the child and how the information is provided to the child.

In this light, the answer is not to prohibit research with young children involving even mild deception (*contra* Herrmann and Yoder) but rather to re-examine the nature and purposes of debriefing when children are research participants. At times, this may involve more carefully designed procedures (perhaps involving illustrated or videotaped materials) to explain the purposes of deceptive research procedures, with thoughtful follow-up questions to assess children's understanding. At times, this may entail additional exercises (perhaps with a parent as participant) in which the fallibility of *adult* memory is demonstrated. On other occasions, a reconsideration of whether any kind of debriefing constitutes a research benefit for young children is warranted.

## CONCLUSION

The problems of debriefing (or dehoaxing) misinformation affirms a broader point in Herrman and Yoder's analysis: children cannot be treated just like adults as research participants. Because their capabilities, perspectives, and needs are different, children approach the research context uniquely and encounter a different constellation of research risks and benefits from their participation. This means that psychologists must carefully consider how a research paradigm is experienced from a child's-eye view in their ethical assessment.

However, being ethically responsible does not necessarily mean being risk-averse. What is difficult about research ethics is not conceptualizing potential harms to research participants but engaging in the complex calculus of values and concerns that balances risks against the benefits to research, in which risks and benefits are both societal and personal to research participants. Although we believe that a more complete ethical analysis of research on memory suggestion with young children reveals greater potential benefits, and perhaps more benign risks, than those perceived by Herrman and Yoder, we argue also that researchers should be more creative in their consideration of how children experience such procedures. In looking more incisively at the potential risks outlined by Herrmann and Yoder, and the potential benefits that children may derive from research participation, it is possible to create a vigorous but ethically responsible research climate.

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