For many HCI researchers, validating their experiment or study protocols from an ethics point of view is a routine operation, an essential step when planning their research. While this formal process varies by country, the underlying principles are universal. For a large amount of HCI research—controlled lab-based usability evaluations of a user interface—the ethics review process is a simple formality: receiving approval from an administrative body responsible for ensuring all research follows sound ethical principles. In Canada, research ethics boards (REBs) exist in all universities and are guided by a formal policy created by the three federal research-funding agencies [1]. In other countries the research ethics guidelines are less centralized (for example, specific to each university); nonetheless, the principles and implementation share many common aspects across countries and disciplines and are the subject of increased scholarly attention (as illustrated by workshops such as [2].)

We are now witnessing an increase in field studies within HCI, attributable to a significant increase in efforts dedicated to mobile interactions and the use of information technology (mainly mobile) in developing countries or to provide various types of support (such as language, medical, and educational support) to at-risk or marginalized user groups. Such research is bound to run into the same ethical challenges as those faced by researchers in the social sciences—dilemmas (or “moral panics,” as termed by Will van den Hoonaard [3]) encountered while conducting fieldwork that could not have been anticipated during the planning and formal approval process. Balancing practical research concerns with formal ethics requirements is common in the social sciences. However, these challenges have been mostly foreign to HCI researchers (many based in computer science...
Contemporary HCI research involving vulnerable participants has its own unique ethical challenges. These are becoming more prominent and do not fit the ethical templates to which we are accustomed.
these group interactions. Despite the departure from the privacy protocol outlined in our original application, we decided to continue collecting data in this manner since privacy risks were minimal—the adult learners were already sharing many other personal details in the classroom.

Voluntary participation. Human-subject experiments require participants to enroll voluntarily and without coercion. Not all the learners in the classroom enrolled in the study. Some did not want the burden of having a device that was not theirs; others were in the literacy program only for short periods of time. Yet almost all these non-participants used our application, as most participants willingly lent them their devices in the classroom (as well as to others outside the classroom who were also not part of the study). While nobody was pressured to enroll in our study, the non-participants who used the borrowed devices became, in a way, involuntary subjects. Their interactions with classmates were described to researchers by the study participants, and, on occasion, directly to researchers by these non-participants. This raises the ethical (and moral) question of whether data collected from non-participants should be included in researchers’ analysis.

Exposure to risks and harms. Informing participants of any risks to which they are exposed is an essential ethical component of any study. Typically in HCI research, such risks are not greater than those encountered by using computing devices in everyday life; such statements still must be disclosed to participants before they enroll in the study. However, formal disclosure of risks is constrained when the application or device to be evaluated is used by non-participants, a very common occurrence in our field study.

Data collection. During the data collection we also found ourselves in situations where we needed to improvise with respect to the approved protocol. The initial plan was to administer questionnaires at the end of the study as part of an interview. However, the participants’ literacy levels made this difficult. Even questions phrased, with the help of teachers, at appropriate literacy levels did not elicit meaningful answers; participants did not answer them at all or they provided answers from which no useful information could be extracted. Instead, researchers had to adapt, on the fly, the questions to the literacy level of individual participants—often rephrasing questions, or setting them in the context of a personal story in order to elicit an answer.

Another departure from protocol was the “unplanned” data collection that occurred in places outside the classroom. Being in a small city, we encountered participants in various public places. Participants took advantage of such encounters not only to ask various technical support questions but also to relate their experiences using the application. Again we faced the dilemma of whether to ignore this data; in fact, we suggest it would be impossible and perhaps even unethical for researchers to ignore valuable data when conducting their analysis.

Participant-researcher rapport. One of the most significant challenges, both from an ethical and a moral perspective, was the familiarity between researchers and participants that developed naturally during six months of daily visits. A positive consequence was that participants were unreservedly providing feedback to researchers; however, participants also expected researchers to become more intimately involved in the class proceedings (for example, by answering questions, sharing personal details, and attending the holiday party). Participants regarded researchers as members of the community formed around the classrooms, exemplified by a request made by a participant for a ride to a medical appointment after class. While all efforts were made to ensure unbiased data collection (as discussed in [6]), it was difficult to maintain a social distance between researchers and participants—for example, the loan of the mobile device to one participant was extended beyond the data-collection period as her school-age child started using the device (and our application) for homework.

Looking forward. Contemporary HCI research involving vulnerable participants has its own unique ethical challenges. These are becoming more prominent and do not fit the ethical templates to which we are accustomed. Our own challenges during our field study with low-literacy adults that we have reflected on here illustrate the difficulty of balancing formal ethics requirements with the practicalities of HCI field research. We believe it is upon us, as a community, to take an active role in managing such challenges by becoming more aware of the ethical implications of conducting field research, especially with vulnerable populations. We invite colleagues to join the interdisciplinary efforts of creating ethical guidelines and formal review processes that are flexible and reflective of the diversity of research methods and real-life cases we encounter.

ENDNOTES

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