



Review article

Exploration of Gender Norms and Socialization Among Early Adolescents: The Use of Qualitative Methods for the Global Early Adolescent Study



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Article history: Received August 31, 2016; Accepted July 18, 2017

Keywords: Early adolescents; Cross-cultural research; Qualitative research; Narrative methodology

A B S T R A C T

Purpose: The Global Early Adolescent Study (GEAS) was launched in 2014 with the primary goal of understanding the factors in early adolescence that predispose young people to subsequent sexual risks, and conversely, those that promote healthy sexuality across different cultural contexts. The present article describes the methodology that was used for the first phase of GEAS, which consisted of conducting qualitative research to understand the gendered transitions into adolescence and the role that gender norms play within the key relationships of adolescents. Researchers from each of the sites that had completed data collection were also elicited for their feedback on the key strengths, challenges, and lessons learned from conducting research among 11- to 14-year-old adolescents. The purpose of this article is to present the description of each of the methods that were used in GEAS, as well as the researchers' perspectives of using the methods among early adolescents in their sites.

Methods: The GEAS is being implemented through a collaboration of university and nongovernmental institutions from 15 cities: Assiut (Egypt) Baltimore (U.S.), Blantyre (Malawi), Cape Town (South Africa), Cochabamba (Bolivia), Cuenca (Ecuador), Edinburgh (Scotland), Ghent (Belgium), Hanoi (Vietnam), Ile-Ife (Nigeria), Kinshasa (DRC), Nairobi (Kenya), New Delhi (India), Ouagadougou (Burkina Faso), and Shanghai (China). Approximately 30 in-depth interviews among adolescents and 30 in-depth interviews with their parent/guardian were conducted at each site, with adults and adolescents interviewed separately. To build trust and increase engagement among the adolescent participants, we used two different visual research methods: (1) timeline

IMPLICATIONS AND
CONTRIBUTION

The first phase of the Global Early Adolescent Study confirms the usefulness of qualitative research methods among 11–13 year olds across diverse cultural settings. Lessons learned provide further direction for understanding how best to capture the voices of early adolescents, particularly for topics that may be too abstract for this age group.

Conflicts of Interest: The authors have no conflicts of interest to disclose.

Disclaimer: Publication of this article was funded by the World Health Organization through support from the Packard Foundation and United States Agency for International Development. Additional support came from the Bill & Melinda Gates Foundation. The opinions or views expressed in this supplement are those of the authors and do not necessarily represent the official position of the funders.

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exercise which was small group based and (2) the Venn diagram exercise which was conducted individually and used at the start of the in-depth interview.

Results: The visual aspects of both the timeline and the Venn diagrams not only helped to produce data for the purposes of the study, but also were a successful way of engaging the adolescent participants across sites. While the narrative interviews produced extremely rich data, researchers did notice that there were a few challenges among the younger adolescents. Challenges were related to the length of the interview, comprehension of questions, as some of the questions were either too abstract or asked adolescents about an experience they had not yet had and therefore could not address or articulate.

Conclusions: Conducting the first phase of GEAS revealed important insights for research with participants who are in this developmental phase of early adolescence. Methods that involve greater engagement and those that are visual were shown to work well irrespective of the cultural setting.

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The period of adolescence is one of the most critical stages of human development. During this time, the decisions that are made and the behaviors that are formed can have life-long repercussions. While there has been substantial attention and research that has focused on 15–19 year olds, adolescents between the ages of 10 and 14 years have comparatively received far less acknowledgment. Instead, the majority of programs have been designed for older adolescents who may already be engaged in health compromising behaviors. Such approaches are problematic in several ways. They overlook the needs of younger adolescents who face the greatest risks and complications related to unhealthy behaviors (e.g., pregnancy and sexually transmitted infection risks). They also fail to consider adolescent health behaviors along a life course trajectory that begins before a specific behavior is initiated [1]. In fact, between the ages of 10 and 14, young people undergo some of the most significant and rapid physical, emotional, social, and cognitive changes of their lives. Recent neurobiological research shows that when children begin their pubertal transition, the brain undergoes significant reorganization of neural circuitry that impacts an individual's processing of emotions, risks, rewards, and social relationships [2,3].

The way in which adolescent males and females experience these biological and social changes depend on gender; cognitive abilities; educational, emotional, life experiences; and cultural and social contexts [4,5]. Yet, information on how these factors manifest and inform gender differences across contexts is quite limited, especially from low- and middle-income countries. An especially interesting, yet unknown aspect of early adolescence, is how adolescent boys and girls establish relationships that ultimately shape their sexual and overall health from early to late adolescence.

The Global Early Adolescent Study (GEAS) was initiated in 2011 and launched in 2014 with the primary goal of understanding the factors in early adolescence that predispose young people to subsequent sexual risks, and conversely, those that promote healthy sexuality across different cultural contexts. Applying a gender lens to the research, the study also seeks to understand how expressions of gender norms are related to sexual behaviors among boys and girls in different cultures. This is particularly important since it is during early adolescence that girls' and boys' lives start to sharply diverge in terms of independence, mobility, schooling, and domestic responsibilities [5]. The present study was purposively designed to be cross-cultural

so as to enable the exploration of both contrasts and generalizations. Indeed, only through comparative research, the interactions between culture, social context, and health processes can be accurately identified [6].

The design of GEAS occurred in two phases: the first phase was constructed as exploratory based on qualitative research methods, while the second is being designed primarily as a quantitative, longitudinal survey. For the first phase, adolescents, aged 11–14 years, and a parent/guardian were invited to participate in the study to address three key objectives: (1) to understand transitions into adolescence (from the perspective of adolescents and their parent/guardians) with a focus on gendered challenges and opportunities; (2) to understand changes in interpersonal relationships (with parent/guardians, siblings, extended family, peers) during transitions into adolescence, with attention to the role of gender norms and behaviors; and (3) to explore how young adolescents adopt and enact gendered behaviors and roles (what is appropriate for an adolescent girl or boy) with attention to the contrasts between young people's discourse and that of their parent/guardian. All articles included in this special supplement are based uniquely on data that were part of the first phase of GEAS and have addressed at least one of the above objectives.

The present article describes the methods that were used for the qualitative research in the first phase, including the overall design process, training, sampling, recruitment, data collection, and analyses. Given that GEAS is one of the largest comparative studies conducted among adolescents in this age group, this paper also describes the use of qualitative methods among early adolescents, including the key strengths, challenges, and lessons learned from the perspectives of the GEAS researchers, as well as from insights gathered from the field of adolescent research.

Methods

Research design

The GEAS is being implemented through a collaboration of university and nongovernmental institutions from 15 cities: Assiut (Egypt) Baltimore (U.S.), Blantyre (Malawi), Cape Town (South Africa), Cochabamba (Bolivia), Cuenca (Ecuador), Edinburgh (Scotland), Ghent (Belgium), Hanoi (Vietnam), Ile-Ife (Nigeria), Kinshasa (DRC), Nairobi (Kenya), New Delhi (India),

Ouagadougou (Burkina Faso), and Shanghai (China). The cross-national and cultural comparative nature of this study is central. By definition, a study is comparative “when individuals or teams set out to examine particular issues or phenomena in two or more countries with the express intention of comparing their manifestations in different sociocultural settings (institutions, customs, traditions, value systems, lifestyles, language, thought patterns), using the same research instruments either to carry out secondary analysis of national data or to conduct new empirical work [7].” Given that so little was known about early adolescence from a global perspective, from the study’s inception, there was interest not only from our funding agencies, but also from the research team to include diverse cultural and geographical sites in the study. While existing research relationships largely influenced the choice of sites, the strategy from the beginning was to have broad representation with a specific focus on the Global South.

For this special supplement, data from 10 of the 15 sites were analyzed, as the other sites were still in the process of collecting and/or analyzing the data at the time of supplement preparation. Table 1 includes a brief summary of the sites included for the supplement.

The development of the research protocol was achieved by an iterative, collaborative process among the research team. A series of face-to-face meetings were first held among the core research team and qualitative consultants to initially develop the methodology. This was then shared via email and online discussion meetings to obtain both written and verbal feedback from each of the research teams. The research protocol was finalized after feedback from the research teams from each site had been incorporated.

Consent procedures were standardized across sites. Written consent was obtained by using a combined written parental/guardian consent and child assent form. The World Health Organization Ethical Review Board, the Johns Hopkins Bloomberg School of Public Health IRB, and each site’s human subjects ethics review committee approved all research protocols.

Sampling

A purposive sampling frame was used to select the adolescents and their parents/caregivers in all sites. Male and female adolescents, aged 11–14 years old, who lived in a specific area of the selected cities and who had a legal guardian, were eligible for the study. Recruitment varied across sites. In some sites, the research team used community-based organizations to assist, while in other sites, schools, after-school organizations, or primary health care centers were used as the primary recruitment venue. Additional information on recruitment is provided in the individual articles in this supplement.

Data collection

Approximately 30 in-depth interviews with adolescents matched with an equal number from their parents/guardians were conducted at each site, with adults and adolescents interviewed separately. To build trust and increase engagement among the adolescent participants, we used two different research methods at the start of the sessions that were designed to engage adolescents in a more “game-like” manner: (1) timeline exercise which was small group based and (2) the Venn diagram exercise (VDE) which was conducted individually and used at the start of

Table 1

Summaries of sites included in analyses (10 out of 15)

Assuit, Egypt	The city of Assuit has a population of around 400,000 people, although the study is based on the Al-Fath and adjacent El Walideya communities of Assuit, Upper Egypt. Two out of five residents are below the poverty line.
Baltimore, U.S.	Study is taking place in East and West Baltimore neighborhoods. Poverty in the selected areas is estimated at 25% with a predominantly African-American population (85%).
Cuenca, Ecuador	Cuenca has a population of approximately 400,000, with more than a third of the population (half of a million) under the age of 20 years. More than half of the teenagers start to work between the ages of 10 and 14 years.
Edinburgh, Scotland	Data collection was carried out in Edinburgh, one of the largest cities in Scotland with approximately 496,000 residents. In the city, approximately 18% of children were estimated to be living in poverty in 2012.
Ghent, Belgium	Ghent has a population of 250,000, with around 10% living in poverty. The study is conducted in the poorest neighborhoods of the city where mainly migrant Muslim families live.
Ile-Ife, Nigeria	Ile-Ife is in the Osun State of western Nigeria and is the headquarters of Ife Central Local Government Area. The study is being conducted in the poorest areas of the city, where most houses are made of mud and residents work in the informal economy.
Kinshasa, DRC	The study site, Kinshasa, is the third largest city in Africa with a population of 9 million. An estimated 62% of the urban population lives in slum areas.
Nairobi, Kenya	Data collection was carried in the Korogocho informal settlement within the Nairobi Urban Health and Demographic Surveillance System. Korogocho is one of the most congested slums with over 250 dwelling units per hectare. In 2013, Korogocho had a total estimated population of 31,784 of which 10% were adolescents aged 10–14 years.
New Delhi, India	The study is taking place in the urban slums of Sender Nagri and Nand Nagri, with a population of over half a million residents, most of whom are rural migrants.
Shanghai, China	GEAS is being conducted in the Ganguan community in Putuo District of Shanghai, which consist of a total of 20 neighborhoods. The population is approximately 105,000, with 15% being migrants.

the in-depth interview. Both methods were adapted from a toolbox of participatory learning for action methods that had been used previously among early adolescents in Zambia [8]. The timeline involved groups of four to five young adolescents who were asked to draw the important events of a typical person’s life on a timeline—starting from birth until adulthood. Discussion focused on gender differences (i.e., what events might be different and how might trajectories differ between boys and girls). The discussion was designed to explore how young people came to understand the demarcation of childhood and adolescence and the verbal and nonverbal messages they received that indicated they were “no longer a child.” For the VDE, individual adolescents were asked to indicate the key relationships in their lives by drawing circles on a piece of paper, in which bigger circles represented those relationships that were most important. As part of the VDE, adolescents were also asked to show which relationships were positive (with a smiley face) and which were negative (with a sad face). The subsequent in-depth interview then allowed for further exploration of these relationships.

Embedded within the in-depth interviews was a narrative methodology that explored “the storied nature of adolescent experiences,”—a methodology that has been used extensively in the social sciences to tap the language, perceptions, and stories people associate with events. An advantage that this method has for young adolescents over more traditional interview

approaches is that it allows adolescents more agency, as they control what they discuss and the stories that they share with researchers [9]. For the purposes of GEAS, narrative questions were used to collect stories about changes in adolescents' interpersonal relationships as they grow up, as well how they learned about certain "rules" and behaviors about being a boy or a girl. The specific narrative questions included the following:

- Narrative: Do you remember a situation where you realized that you were no longer a child and that your mum/dad was treating you differently than before?
- Narrative: Is there a situation or memory that reminds you that things are different in your relationship with them (your siblings) now? If yes, can you tell me a story about this?
- Narrative: Can you tell me a story about when you did/talked about something with your friends today that you did not when you were a small child?
- Narrative: Can you tell me about when you realized that you liked a boy or a girl in a "romantic" way?
- If I wanted to be a girl (or a boy), are there certain rules I should follow? Can you describe these "rules" to me? Narrative: Can you tell me about a time when you learned one of these rules for how to be a girl or a boy?
- What happens to girls and boys who do not act like girls and boys, who break these "rules"? How might people treat them? Narrative: Can you tell me about a time when this happened to you or a friend of yours? What happened exactly—tell me the story of what happened? How did it make you feel?

Similar types of questions were asked of parents about their adolescent child (i.e., "Can you tell me a story when you knew your child had become an adolescent?"). This allowed us to compare adolescent and parent perspectives on similar topics.

Training

To ensure that researchers followed the same research protocol across sites, members of the research team from each site attended a 4-day training-of-trainers workshop and used a standardized training manual (available upon request). The training utilized adult learning principles, in which concepts were first introduced and then small group exercises and large group discussions were used to solidify the concepts. Adolescent actors, who role-played specific scenarios, helped researchers practice the interview guides and provided feedback about additional follow-up questions that could have been asked to obtain "richer" data about their situation. Following this training, each site was responsible for conducting their own research team training using the standardized methods and training documents that were provided them for their training. As part of each site's local training, data collection instruments were pretested with a small sample of adolescents and parents to ensure questions were worded and translated correctly. To further assist the sites, monthly phone calls among all the researchers were held and provided an opportunity for each site to share their "lessons learned" about their training and preparation for the study.

Analysis

All recordings of the interviews were transcribed verbatim, translated into English, and uploaded in Atlas.ti (Scientific Software, Berlin; version 7). Translations were checked for quality by

the local PI at each site, who conducted random "quality checks" by comparing the English and the local language transcriptions side by side. A specific labeling structure was also established for the transcripts to indicate whether the transcript was from a parent or adolescent, male or female, and for adolescents, the specific age at the time of the interview. There was also a unique ID code in the transcript label that could link parent data with their adolescent data. As an example, a 12-year-old female adolescent and mother from the same household would receive the transcript labels: Fi12_A01 and Momi_A01. Once all the translated transcripts were uploaded into Atlas.ti, an inductive thematic analysis approach was used, where the investigators from each site first read the transcripts to identify the primary themes that were emerging [10,11]. An initial core set of codes was then developed by the lead qualitative investigator (K.M.) and shared with all the investigators across the sites. As more transcripts were read across sites and coders across the sites shared feedback on the initial codes, the core set of codes was continuously revised. A final set of "core" codes was produced once consensus was achieved among all coding teams. This core set of codes was used for the coding schemes across sites; within each site, additional subcodes were created that were site specific. At each site, two researchers coded the transcripts using an incremental, stepwise process, which first involved applying the core set of codes and then developing more analytical subcodes. At each of these steps, a comparison of the codes within each coding team revealed if there were coder discrepancies; any discrepancies that did occur were discussed with the lead qualitative investigator from that site until consensus could be achieved. Coding concluded when all relevant data were assigned to a code [12]. To compare the codes across sites, matrices of the key codes were created to examine patterns, not only within a site, but also across sites and participant groups.

Trustworthiness of the data

Several techniques were used to ensure trustworthiness of the findings [13–15]. As stated previously, researchers at each site participated in the same training and practiced using the actual data collection instruments to reduce potential researcher bias. We also triangulated the findings across methods and sources to confirm emerging themes (i.e., themes that had emerged in the timeline exercise were also echoed in the in-depth interviews among adolescents, as well as with parents). In addition, in sites that had translations conducted, the site PI conducted specific quality checks of the translations to ensure the English translations matched with the local language. Finally, consistent with the peer debriefing strategy, the initial core set of codes and set of preliminary findings were presented and discussed with members of the entire research team to verify both the coding structure and the interpretation of the findings across sites, which is consistent with the peer debriefing strategy [15].

Implementation of the Methods: How Well Did the Methodology Work Among Adolescents?

GEAS participants

Data collection began in the summer of 2014 and concluded in August 2016. To date, a total of 614 interviews have been conducted across the 10 sites included in this supplement, of

Table 2

Number of interviewees across 10 sites

Site	Number of girls	Number of boys	Total adolescents (girls + boys)	Number of female caregivers	Number of male caregivers	Total caregivers (female + male)
Assiut	17	20	37	37	0	37
Baltimore	19	14	33	19	4	23
Cuenca	14	16	30	24	6	30
Edinburgh	16	16	32	7	0	7
Ghent	18	12	30	27	1	28
Ile-Ife	20	18	38	20	17	37
Kinshasa	16	16	32	32	0	32
Nairobi	15	15	30	29	3	32
New Delhi	15	16	31	15	12	27
Shanghai	17	17	34	21	13	34
Sum	167	160	327	231	56	287

which 327 were among adolescents (an additional 250 have been collected subsequently in other partner sites and will be analyzed and reported elsewhere). Table 2 shows the distribution of adolescent and parents interviewees across sites—which formed the analytical basis for the articles included in this supplement.

GEAS researchers' perspectives

To understand how well the methods worked among adolescents across the sites that had completed data collection and to provide additional evidence for the validity of the methods across this diverse population of early adolescents, an open-ended questionnaire was distributed to researchers in each of the 10 sites that asked them to reflect on the key strengths of the methods, the weaknesses, and lessons learned after collecting data among early adolescents. All but two sites (Edinburgh and Kinshasa) provided feedback on the questionnaire. To identify patterns across sites, matrices of the responses from the researchers were developed and organized by topic area and site. The summary of these findings is presented in the sections that follows.

Key strengths of the methods. Most of the researchers across the sites thought that the timeline and the VDEs were important methods for building trust and rapport between researchers and young adolescents prior to initiating in-depth interviews. Underscoring this point, researchers in Cuenca, Ecuador, felt that the timeline exercise was just as informative as the in-depth interview as it provided adolescents with a “game-like” and relaxed atmosphere for them to respond freely to the researcher's questions. In Baltimore, research colleagues indicated that the discussions of the timelines revealed insights into gender norms, with the male discussants commonly taking the lead and female adolescents withholding observations. In Shanghai, researchers felt that the timeline helped them and adolescents alike get to know each other quickly, which was especially important for the youngest adolescents who tended to be shy when being interviewed. In New Delhi, while the timeline was an important participatory group activity, researchers did notice that the discussions tended to be dominated by the older adolescents (the 13 year olds), and consequently, researchers had to use a variety of probing techniques to ensure that younger adolescent voices were heard. Interestingly, in Ghent, researchers noted that many adolescent boys and girls who

participated in the timeline were more vocal in that exercise than they were for the actual interview.

The VDE, however, was perceived mainly as a device to help the interviewer understand the key relationships in the adolescent's life, which formed the basis for many of the interview questions. In fact, in New Delhi, researchers reported that the method helped adolescents to initiate the discussions about the relationships within their family and that several of the questions in the interview guide were immediately addressed as part of the VDE. Researchers in Cuenca also noted that when adolescents drew circles, it reduced boredom as the participatory nature of the method kept them engaged.

Key challenges of methods. Researchers from four sites (Ile-Ife, Cuenca, Baltimore, and Nairobi) felt that adolescents were most challenged by the questions asked within the narrative interview. For example, one question asked adolescents to imagine waking up one morning to find out that they were the opposite sex. In Ile-Ife and Ghent, despite having to rephrase the question, researchers felt that such hypothetical reasoning was beyond the capacity of many young adolescents. Likewise, in Baltimore, researchers felt asking young adolescents about romantic relationships that they never experienced was too abstract to elicit responses. Additionally, many of the narrative questions that asked adolescents to recall specific stories were challenging for many adolescents. This was especially true when asked about stories that reflected learning about gender appropriate norms and expectations. A response from a researcher in Cuenca summarized this well:

Perhaps the most complex part for younger [adolescents] are the questions about gender norms and socialization as they did not relate to these abstract concepts and felt that ‘you do not really have to learn’ these rules.

Similarly, researchers in many sites felt that the interview was too long for this young age group, as they found that many of the adolescents were getting bored and requested multiple breaks throughout the interview.

Key lessons learned. When researchers across the sites were asked about the key lessons learned and the advice they would give to other researchers working with very young adolescents, their feedback centered on three main topics: (1) the need for an experienced interviewer; (2) the use of the timeline and the VDEs to help build trust; and (3) the need to be flexible.

The need for an experienced interviewer: Among all the researchers who responded to the questionnaire, there was a clear need to have interviewers who are not only familiar with very young adolescents, but also highly skilled in interviewing. Some researchers noted that interviewers should come from the same communities as well as be young in age to relate better to the adolescents. Below are some examples of these perspectives:

The competence of the interviewer is very critical. For very young adolescents, besides the common interviewer qualifications, a good interviewer should know the popular topics which very young adolescents are interested in and have empathy with their opinions, which can help very young adolescents treat the interviewer as a friend and open up to him/her. (Shanghai researcher)

The age of the interviewers was important for rapport building with very young adolescents. Young interviewers should be engaged for interviewing very young adolescents. (New Delhi researcher)

Similarly, other investigators who have conducted research among this age group have noted the importance of having an interviewer that has familiarity with this age group, particularly in being able to use the same “slang” and language so as not to “speak over the head of the adolescent” [16].

The use of the timeline and the Venn diagram to build trust: Researchers across the sites commented on how well the timeline and Venn diagrams worked to build trust and rapport between the researchers and the adolescents and that these types of methods are particularly suitable for very young adolescents. In New Delhi, however, researchers felt that some of these methods and techniques could be better tailored to the sex of the respondent, as they had more difficulty with the boys than girls in sharing stories. Similarly, in Assuit, Egypt, researchers felt that the success of these methods depended greatly on the personality and intelligence of the adolescent respondent.

The need to be flexible: Finally, across sites, researchers reported how important it was for the research team to be flexible in terms of the timing (and allowing for more time not only for the method itself, but also in asking questions to the adolescents), in being available to implement the methods when adolescents are most available, and allowing the adolescent to take breaks for snacks and a brief rest.

Discussion

This study was one of the first cross-cultural studies to examine how very young adolescents perceive their transitions into adolescence, including the changes in their interpersonal relationships, as well as how they come to “learn” and understand themselves as being a boy or a girl. Given that there has been an overall dearth of cross-national research among this adolescent subpopulation, especially across diverse cultural settings, it was important to understand, methodologically, how best to collect data. A few survey researchers who have included this age group have noted difficulty with reading comprehension in very young adolescents’ ability to understand and answer questions [17]. In addition, it has been found that young adolescents are especially sensitive to answering questions about their everyday behavior or their relationships with their family

members or friends; and their self-reports of their attitudes and behaviors have been noted to be less reliable than those of older adolescents [17,18].

To overcome some of these challenges, this first phase of GEAS relied on qualitative research methods, which by their nature are designed to elicit the meaning and perspectives that often underlie the attitudes and behaviors [17]. While most quantitative methodologies advantage older adolescents and adults with a higher capacity for social and communication skills, qualitative methods that can foster greater trust and rapport between researchers and participants appear to be more successful with this young age group [4,18]. The findings from our study revealed that this was generally true, particularly for the timeline and the Venn diagram. Indeed, within the field of qualitative research, participatory research methods are increasingly being used with children and adolescents as they can facilitate rich discussions with young adolescents by providing them with opportunities to express themselves through different channels, such as through games and drawing [19].

The visual aspects of both the timeline and the Venn diagrams not only helped to produce substantive data, but also were successful ways of engaging the research participants. Most importantly, the use of the participatory research methods seemed to work better than the narrative interview for the youngest adolescents, as developmentally, they may have been better able to express themselves visually than verbally. Additionally, for very young adolescents, the participatory nature of these methods may have equalized the power differential between the adolescent and researcher, which could have contributed to adolescents feeling more comfortable in expressing their opinions. Research with children and adolescents is often a matter of “finding the right way to ask a question,” and having a visual image to act either as an elicitation technique or data can make an enormous difference in their engagement and response [17].

The fact that there was such congruence among researchers about their perceptions of how these methods worked for this early adolescent population is also important to address. While this is likely because methods that are more visual and participatory are simply best suited for this early adolescent age group, the comparative analyses were strengthened from the successful collaboration and coordination across the research teams. In fact, one of the biggest challenges in conducting cross-national research is the coordination of all the research teams involved, taking into account the different cultural and scientific backgrounds [20]. From the onset of this study, however, a communication strategy was established that allowed for continuous feedback. This entailed hiring a project coordinator, holding monthly virtual meetings and annual in-person meetings, and exchanging emails and documents across the research teams, at times, on a daily basis. The level of detail that was provided to the research protocol likely also contributed to this successful collaboration. After the in-person training, each research team was provided with a field coordinator’s manual which documented all the steps in the research process, including background information on qualitative research; an interviewer’s manual, the field guides, the consent forms, note-taking sheets, a coversheet form for each interview, and a documentation checklist. This allowed for greater standardization in implementing the methods across sites and,

consequently, improved our ability to adequately compare perceptions about the methods across sites.

Overwhelmingly, researchers agreed that they learned a great deal from very young adolescents from this first phase of GEAS. One researcher from Ile-Ife stated: “Neglecting them (the very young adolescents) to focus on the middle and late adolescents is detrimental to their development into healthy adults.” The results of this first phase suggest that, irrespective of the culture, collecting information from this early adolescent stage works best if data collection activities are participatory and visual; and, if adolescents are to be interviewed, questions should be worded using familiar phrases and based on topics already experienced by them. Additionally, in this age group, adolescents are easily bored; and both the length and structure of the data collection need to be considered to minimize respondent fatigue and maximize engagement. This early adolescence stage is, indeed, a pivotal moment in development; and learning how best to capture their voices in research and in practice is a critical step in our understanding.

Acknowledgments

The authors would also like to thank Drs. Caroline Moreau, Marni Sommer, and Rebecka Lundgren for the in-depth feedback provided to the draft of this article.

Funding Sources

This work was undertaken as part of the Global Early Adolescent Study, a 15-country study lead by Johns Hopkins Bloomberg School of Public Health in collaboration with 15 global institutions. It was funded in part by the David and Lucile Packard Foundation (grant no. AID-OAA-A-15-00042), the Bill and Melinda Gates Foundation (grant no. OPP1134835), and United States Agency for International Development through the World Health Organization, and additionally supported through the William H. Gates Sr Professorship, Johns Hopkins Bloomberg School of Public Health.

References

- [1] UNAIDS. Seen but not heard ... Very young adolescents aged 10–14 years. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS); 2004.
- [2] Crone EA, Dahl RE. Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nat Rev Neurosci* 2012;13:636–50.
- [3] Braams B, Van Duijvenvoorde A, Peper JS, Crone EA. Longitudinal change in adolescent risk-taking: A comprehensive study of neural responses to rewards, pubertal development, and risk-taking behavior. *J Neurosci* 2015; 35:7226–38.
- [4] Igras S, Macieria M, Murphy E, Lundgren R. Investing in very young adolescents' sexual and reproductive health. *Glob Public Health* 2014;9:555–69.
- [5] McCarthy K, Brady M, Hallman K. Investing when it counts: Reviewing the evidence and charting a course of research and action for very young adolescents. New York: Population Council; 2016.
- [6] Kohen M. Cross-national research as an analytic strategy. *Am Sociological Rev* 1987;52:713–31.
- [7] Hantrais L, Mangen S. Cross-national research methods in the social sciences. London/New York: Pinter; 1985.
- [8] Shah M, Zambesi R, Simasiku M. Listening to Young Voices: Facilitating participatory appraisals on reproductive health with adolescents. Focus on Young Adults and Care International in Zambia. Geneva: World Health Organization; 1999.
- [9] World Health Organization. The narrative research methodology: Studying behavior patterns of young people by young people. Geneva: World Health Organization; 1993.
- [10] Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77–101.
- [11] Guest G, MacQueen KM, Namey E. Applied thematic analysis. Thousand Oaks: Sage Publications; 2012.
- [12] Denzin NK. The research act: A theoretical introduction to sociological methods. New York: McGraw-Hill; 1978.
- [13] Creswell JW. Qualitative inquiry and research design: Choosing among five designs. Thousand Oaks, CA: Sage Publications; 1998.
- [14] Lincoln YS, Guba EG. Naturalistic inquiry. Newbury Park, CA: Sage Publications; 1985.
- [15] Nastasi BK, Schensul SL. Contributions of qualitative research to the validity of intervention research. *Spec Issue J Sch Psychol* 2005;43:177–95.
- [16] Weber L, Miracle A, Skehan T. Interviewing early adolescents: Some methodological considerations. *Hum Organ* 1994;53:42–7.
- [17] Morrow V. Using qualitative methods to elicit young people's perspectives on their environments: Some ideas for community health initiatives. *Health Educ Res Theor Pract* 2001;16:255–68.
- [18] Boyden J, Ennew J. Children in focus: A manual for participatory research with children. Stockholm, Sweden: Radda Barnen; 1997.
- [19] Clark CD. In a younger voice: Doing child-centered qualitative research. New York, Oxford: Oxford University Press; 2011.
- [20] Kuntsche E. Culturally different and yet alike – Introduction to the special issue “early adolescent health in cross-national perspective. *J Early Adolescence* 2012;32:5–13.