

Cognitive Evaluation of the UNICEF Early Child Development Index (ECDI) and Inclusive Education Modules in the United States, India, and Jamaica

PAUL SCANLON, PhD

KRISTEN MILLER, PhD

National Center for Health Statistics¹

¹ The authors would like to thank Meredith Massey for organizing the research in Kingston, Jamaica and for collaborating on analysis, as well as Sathi Alur, Varsha Hooja, and Ami Gumashta from ADAPT in Mumbai, India, and Rebecca Tortello, Donneth Edmondson and Joye Cardoza-Brown from the UNICEF Jamaica Office in Kingston, Jamaica.. The authors would also like to thank the cognitive interviewing teams in India (Shabnam Rangwala, Manju Thakur, Rahila Shaikh, Shobha Sachdev, Shabbira Moosabhoy, Gulab Sayyed, and Rukssana Sayeed).

This report details the findings of a cross-country evaluation of two question modules: one developed by UNICEF about Early Childhood Development, and one developed by the Washington Group (WG) and UNICEF on Inclusive Education for Children with Disabilities. The Early Childhood Development Index (ECD) was designed to be administered to parents of children between two and 5 years of age and asks a series of questions about the child’s social and physical behaviors. The Inclusive Education (IE) module was designed to be primarily administered to parents of children between six and 18 years of age, and includes questions about the parent’s attitudes towards inclusive education, the child’s school environment, and reasons why the child does not attend school (if that is the case).

This multinational cognitive evaluation occurred across three sites, and included 140 respondents from the metropolitan areas of Washington DC in the United States of America, Mumbai in India, and Kingston in Jamaica. The cognitive interviews for this project were conducted at three separate times, with the testing in the United States occurring in February of 2016, the testing in India occurring in late March and early April of 2016, and the testing in Jamaica taking place in late April of 2016. Respondents across all three field sites were recruited to ensure diversity across the respondent’s gender and socioeconomic status, as well as the child’s gender, age, and disability status.

This report first presents a brief overview of cognitive interviewing methodology and the theory behind the question response process, and then describes the research design for this particular project. General, cross-item findings are then discussed, followed by a detailed analyses of each questionnaire section.

METHODOLOGY

Cognitive Interviewing Methodology and the Question Response Process

Cognitive interviewing is a qualitative method whose purpose is to evaluate survey questionnaires, and determine which constructs the questionnaires’ items capture. The primary benefit of cognitive interviewing over non-qualitative evaluation methods is that it provides rich, contextual data into how respondents interpret questions, apply their lived experiences to their responses, and formulate responses to survey items based on those interpretations and experiences (Miller et al 2015). Thus, cognitive interviewing data allows researchers and survey designers to understand whether or not a question is capturing the specific social constructs originally intended, and gives insight into what design changes are needed to advance the survey’s overall goals.

Additionally, the documented findings of cognitive interviews provide data end users the context needed to more fully understand the quantitative trends that emerge from survey data.

The underlying theory that directs the conduct of cognitive interviews is that of the question response process.

Individuals typically interpret survey questions through a four-step process: They first comprehend the underlying construct, then recall the information needed, judge their answer, and finally map their answer onto one of the available response categories, as visualized here in Figure 1.

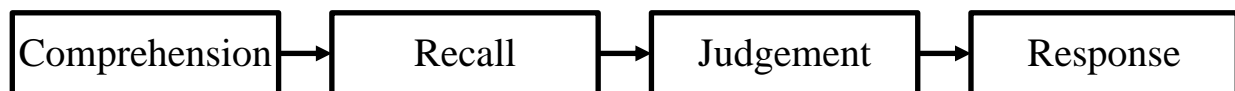


Figure 1: The Basic Question-Response Process Model²

² Tourangeau, 1984

In reality, these four stages of response are not always in the exact order shown in the basic model, and oftentimes respondents either jump around (by, for instance, considering the response categories before judging what they should or should not report on the survey) or repeat steps (if they decided to try and recall new information after they've judged what they should or should not report on the survey). Additionally, some respondents skip steps in the model, and provide a response to the question that does not necessarily take all the constructs and information provided in the question text or instructions into account (referred to as a “heuristic response”). Nonetheless, the overall goal of cognitive interviewing is to uncover the specific ways respondents perform each of these four steps.

Cognitive interviews are typically administered as one-on-one, in-depth, semi-structured qualitative interviews. Respondents are first asked survey items, and then probed about their answers and the thought processes behind them. While some cognitive interviewing relies on “think aloud” prompts, which ask respondents to speak through their thought processes as they are answering the survey, this project instead uses retrospective, targeted probes that attempt to ascertain exactly which constructs the respondents are considering, and how they are judging and formulating their response. This semi-structured design uncovers not only these constructs, but also question response problems that often are unseen in a survey environment—including interpretive errors and recall inaccuracy. By asking respondents to provide textual verification of their responses, and about the processes by which they formulated their answers, these elusive errors are revealed.

Typical cognitive interviewing projects use purposive samples, including respondents that have specific characteristics—such as race, education, or occupation—that are assumed to be relevant to the questions being evaluated. When studying questions related to inclusive education, for instance, the sample would likely consist of both parents who have school-aged children with disabilities and parents who have school-aged children with no disabilities, allowing for the discovery of both false positive and false negative answers. Because of the limited sample size, not all demographic or occupational groups will be covered in the sample, and the analysis of cognitive interviewing does not provide generalizable findings in a statistical sense.

As a qualitative method, the analysis of cognitive interviewing data involves the iterative synthesis and reduction of the findings—beginning with a large amount of textual data (the raw transcripts and notes from the interviews themselves), and ending with cognitive schemata and conclusions that serve the overall purpose of the study. The analysis of cognitive interviewing can be conceptualized in five incremental stages: conducting the interviews, producing interview summaries, comparing data across respondents, comparing data across sub-groups of respondents, and drawing conclusions. As each step is completed, data are reduced such that meaningful content is systematically extracted to produce a summary that details a question’s performance. This process is facilitated and managed using the Q-Notes software, developed by NCHS³. Q-Notes is a qualitative analysis software specifically designed for cognitive interviewing, and allows users to seamlessly conduct each of the five analytic stages noted above.

It is the ultimate goal of a cognitive interviewing study to produce this conceptual understanding, and it is through data reduction that this type of understanding is possible. This end analytic product is often best understood as a cognitive schema, examples of which are presented throughout this report and illustrated in a standard format. As shown in a prototypical cognitive schema below in Figure 2, the phenomenon or construct under consideration is shown on the left-hand side of the figure, and the various pathways respondents use to understand or judge this phenomenon branch off to the right. Each of these rectangles represent the different patterns of interpretation or judgement, depending on the individual schema, that respondents within the cognitive interviewing sample used

³ See <http://wwwn.cdc.gov/qnotes>

when responding to a question. Occasionally, the actual survey answers that each of these patterns of interpretation produced across the sample are also shown, and are represented by ovals to the far right-hand side of the figure.

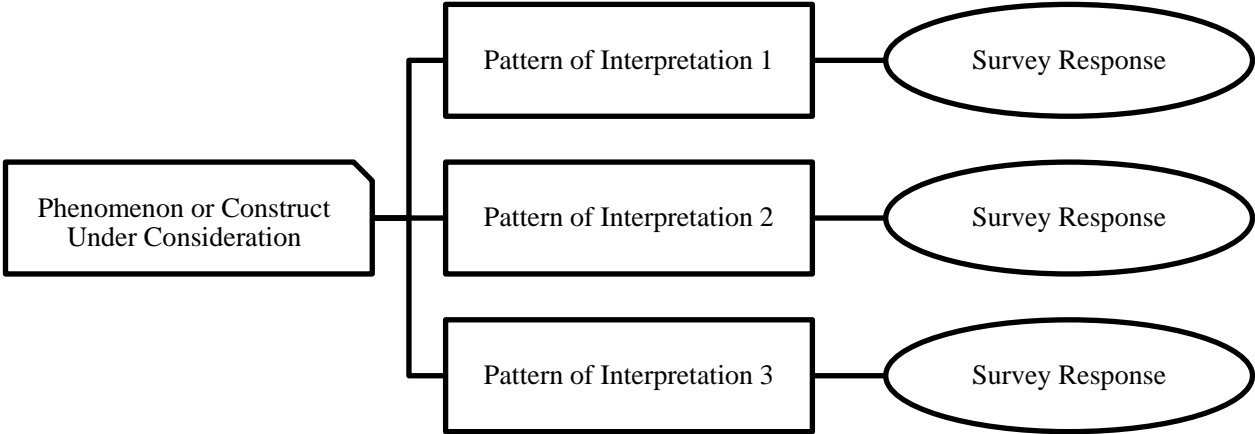


Figure 2: Prototypical Cognitive Schema Used Throughout This Report

Sampling and Respondent Characteristics

For the evaluation of the IE and ECD modules, a purposive sample of 140 parents was recruited across the three field sites to participate in cognitive interviews. The respondents were recruited with an eye towards producing a diverse sample across a number of characteristics, including gender, and the disability status of their children. Respondents in the United States were recruited through a variety of media, including newspaper and online advertisements, while respondents in India and Jamaica were recruited directly by ADAPT and the Kingston UNICEF Program Office respectively. Table 1 below breaks down the sample by country and gender, while Table 2 breaks down the sample by country and child’s disability status (as reported by the parent).

Table 1: Respondent and Child Subject Gender by Country

| | Female Respondent | | Male Respondent | |
|----------------------|-------------------|------------|-----------------|------------|
| | Female Child | Male Child | Female Child | Male Child |
| United States | 5 | 3 | 1 | 1 |
| India | 22 | 22 | 1 | 17 |
| Jamaica | 23 | 25 | 3 | 14 |

Table 2: Child Subject Disability Status by Country

| | Disability | No Disability |
|----------------------|------------|---------------|
| United States | 3 | 7 |
| India | 41 | 21 |
| Jamaica | 31 | 34 |

The combined IE/ECD questionnaire used in this project was comprised of four separate sections: the Functioning Section (which included a subset of the Washington Group’s extended set of child disability questions), the ECD Section, the IE Attitudes Section, and the IE School Section. All respondents received the Functioning and Attitudes Sections. Only parents of children aged 2 to 4 (2 to 5 in India) received the ECD Section; only parents of children aged 5 to 18 (6 to 18 in India) received the IE School Environment Section. Additionally, the IE School Section included separate sets of questions for parents of children who attend school and for those who do not—the IE School Environment and IE Out-of-School Sets, respectively. Table 3 shows the breakdown of respondents who received these various questionnaire sections by country.

Table 3: Respondents Who Received Each Section by Country

| | ECD Section | IE School Environment Set | IE Out of School Set |
|----------------------|--------------------|----------------------------------|-----------------------------|
| United States | 0 | 10 | 0 |
| India | 25 | 21 | 18 |
| Jamaica | 20 | 45 | 0 |

The 10 interviews in the United States were conducted in the National Center for Health Statistic’s Questionnaire Design Research Laboratory in Hyattsville, MD, and were video recorded. The 62 interviews in India were conducted at ADAPT in the Bandra area of Mumbai. The 65 interviews in Jamaica were conducted in a public library and in a hotel in Kingston. Because of resource and logistical constraints, the interviews in India and Jamaica were not systematically audio or video recorded. However, notes were immediately entered into Q-Notes following each interview, so that details including direct quotes, could be retained. All interviews were conducted in the spring of 2016. Each interview was a maximum of an hour in length, and respondents were provided with a token incentive after completing the interview.

OVERALL RESULTS

The overall findings for this cognitive interviewing project are presented here by questionnaire section.

Functioning Section

The functioning section, which was largely comprised of the WG extended disability set for children was not a focus of the cognitive testing. However, two changes to the standard set were made for testing in Mumbai and Kingston: the inclusion of a question asking whether or not a child could “speak at all” and the addition of the word “very” in the affect questions.

The question “Can your child speak at all?” was designed to screen out non-verbal children from the communication questions (which ask “When [name] speaks...”), due to the belief that these questions could be sensitive for respondents with non-verbal children. However, during probing, a number of respondents who did have non-verbal children found this new question in and of itself to be insensitive, and argued that their children had alternative ways to communicate beyond verbal language. Additionally, this question inconsistently screened in and out respondents, as some parents counted non-verbal communication as the ability to speak, while other parents limited their interpretations to verbal speech.

The other change to the standard WG questions was to add the word “very” to the question “How often does [name] seem *very* sad or depressed?” During cognitive testing in the United States, the “sad or depressed” question (which at that point did not include the “very”) captured low-levels of sadness in addition to more severe sorrow and depression. The inclusion of the word “very” was designed to limit the interpretation to more severe sorrow and depression. Analysis of the current round of interviews indicate that this change had the desired effect and respondents tended to limit their interpretation of this question to more severe cases of these emotions.

Early Childhood Development Section

The Early Childhood Development (ECD) section was tested in both Mumbai and Kingston. These evaluations reveal that the section is confusing and would benefit from refinement and further testing. In large part, the confusion that the respondents expressed appears to stem from the fact that questions in this section are unnecessarily complex and require parents to interpret and make judgements about multiple constructs at once in order to answer a single question.

For example, the first question in this section asks respondents whether their child can “...identify or name at least ten letters of the alphabet.” As noted below in the detailed analysis, a number of respondents understood this as a double-barreled question—asking about the child’s ability to *both* identify (which was usually understood as the ability to *read*) and name (which was typically interpreted as the ability to *say*) letters. Because of this structure, some respondents answered the question “no” and upon probing revealed that while they knew their children could speak letters (or even full words), they could not yet read. Furthermore, a few parents who answered “no” admitted upon probing that they did not really know their child’s ability to understand individual letters, as that was something they did at school and not at home. These instances of potential response error could be avoided by asking respondents questions that are clearly about a single activity that is common within the household.

Respondents also expressed difficulty when trying to map their children’s experiences to the binary yes/no response options for the ECD questions. For instance, most respondents expressed some confusion or frustration with the ECD section’s question about playing (“Is [name] sometimes too sick to play?”). Again, as detailed below, most parents noted that *all children* are sometimes too sick to play, and they felt constrained by the yes/no options. Parents of children who did not have any sort of disability or who were in overall good health wanted to be able to express this, while still answering the question accurately. We can compare this question to the Washington Group’s play question (“Compared to other children of the same age, does [name] have difficulty playing?”). Instead of using a binary yes/no set of responses, it uses the typical WG response scale of “no difficulty,” “some difficulty,” “a lot of difficulty,” and “cannot do at all.” By providing a more realistic set of response options, the WG question allows the parents to express the nuance of their lived experiences. This, combined with the fact that it does not ask the parents to assess their children’s level of sickness *in addition to* their ability to play, led to a much more focused set of interpretations (and much less respondent confusion) in the WG playing question than the ECD one.

Inclusive Education Attitudinal Section

The analytic purpose of this section is unclear, and it should be either eliminated or totally redesigned. Three major problems emerged surrounding this section: the questions appear to be non-differentiating, the questions tended to annoy and frustrate the respondents, and there is little evidence that attitudes captured in this section relate to respondents’ behaviors.

Across all three locations, 140 respondents were administered this set of questions. Of these respondents, only one answered the questions asking about the right to education “no,” and upon probing it emerged that she simply did not understand the question and did in fact believe that both boys and girls have the right to primary and secondary education. Additionally, four other respondents answered “it depends”—three of whom were basing their answer on whether a school could adequately support a child with disabilities and the other one asked to change her response to “yes” upon probing. In short, these attitudinal questions do not differentiate across the sample, and appear to add burden without revealing any true differences in respondents’ thoughts about the genders’ rights to education.

The current design of this section asks respondents separate questions about boys’ and girls’ rights to both primary and secondary education. As noted above, these four questions do not reveal differences between the respondents. Because of this, many respondents commented that the questions felt repetitive. Analysis of behavior codes indicate that this repetition frustrated respondents. Furthermore, a number of respondents indicated annoyance or unease with these questions because they separated boys and girls—some respondents wondered why the education system would think about boys and girls separately. Others reacted negatively during the attitudinal questions about boys’ education and asked why girls were excluded (as this is an interviewer-administered questionnaire, respondents have no idea that parallel questions about girls directly follow the ones about boys). Additionally, the terms “primary” and “secondary” were not universally understood, and (particularly in Mumbai and Kingston) caused confusion.

As noted below in the detailed analysis, the attitudinal question about inclusive education (“Do you think that children with disabilities should only go to special schools for those with disabilities”) differentiated much better than the previous questions about the right to education. However, the term “special school for those with disabilities” caused some confusion, and does not seem to be a universal concept.

Besides the issues with frustration, confusion, and definitions noted above, the attitudinal questions did not appear to relate to respondents’ behaviors. This was best seen in the Mumbai interviews, where a number of respondents reported that all people have the right to education and to be in school, while later reporting that they did not have their children enrolled in school because they were disabled. This disconnect between a belief in a right and an action may have to do with variation in the interpretation of the term “right”—with some respondents thinking about hypothetical human rights, and others thinking about legal requirements. These problems may lead both to poor-quality data and an increased likelihood of respondent drop-outs.

Inclusive Education School Environment Section

Overall, the school environment section performed well, and respondents generally understood the questions in similar ways and did not exhibit many response problems or errors. However, as explained in more detail in the Out-of-School section below, there is no screener question that directs respondents into either the in- or out-of-school sections. A clear set of inclusion criteria for both of these sections is necessary.

In addition, it should be noted that problematic or clearly out-of-scope interpretations emerged in a few questions (such as those asking about special services, school tuition, lodging, the presence of books at school, whether there were too many students in a class, and whether the school was responsive) which may lead to incomparable data. These questions may require minor modifications, depending on their analytic intent.

Inclusive Education Out-of-School Section

Of the three Inclusive Education sections, this section proved to be the most difficult for respondents and requires the most attention. This section was only tested in India. Importantly, respondents receiving this section—those whose children are not attending school—were the least educated, some from rural areas of India. These respondents had little experience with the question-answer format of the survey interview and, as a result, were easily confused. Additionally, it is worth noting that, to a certain extent these are sensitive questions; all of the parents had previously reported the belief that all children have a right to be in school, yet their child is not in school. Though not explicitly stated, it is possible that some of the frustration and, in some cases display of anger, was caused by the regret or embarrassment of their child not being in school. Reworking the section so that it is straight-forward, simply-worded with as few questions as possible is recommended. Eliminating double-negative questions as well as those that require respondents to speculate would simplify the question-response process for respondents.

In addition, the out-of-school section of the questionnaire currently suffers from two major structural issues: its inclusion criteria and the fact that it is asking parents for information about which they are uninformed.

The most basic issue confronting the administration of the out-of-school section as it stands currently is confusion surrounding the inclusion criteria. Currently, question SE1 (the first question in the school environment question), asks the *interviewers* to determine the in- or out-of- school status for the respondent's child. However, this question neither asks the respondents to identify the school status of the child (though the interviews are, presumably asking them in some fashion), nor does it provide any solid criteria by which a child should be assigned to either in-school or out-of-school status. Interviews in India revealed that these two concepts are not clear-cut or intuitive. For example, respondents and interviewers were unsure whether to classify a student that was *enrolled* in a school, but *did not attend* regularly as either in- or out-of-school. Similarly, others were confused where to place a student that had been registered in a school, but had either moved or been removed from the school since the beginning of the school year. Other parents and interviewers wondered what level of attendance or participation meant that a child was in- or out-of-school—must they always attend, usually attend, or would just occasional attendance put a student in the in-school section? These inclusion criteria must be decided and clearly laid out in one or more gateway questions.

Beyond the inclusion criteria for the section, the content of the out-of-school questions does not match the way respondents conceptualize the reasons their children are out of school. The best example of this mismatch between how respondents think about their children's situations and the way the questionnaire is structured is in the ordering of items OS3 through OS26. In the cognitive interviewing sample in India almost every parent who had an out-of-school child noted that it was because they could not either get the child accepted by a school or because they had to remove the student from school because of safety and social issues surrounding the school's physical or social environment. However, the first series of these "reason" questions asked about non-germane concepts—frustrating and confusing the respondents, who felt like they could not tell their story.

DETAILED ANALYSIS

Functioning Section

The Functioning Section of the questionnaire (comprised of questions from the Washington Group on Disability Statistic's Extended Set on Functioning⁴) was not a focus of this question evaluation project as these questions have been tested extensively elsewhere⁵. These questions were not systematically probed, and no findings are presented here.

Early Childhood Development Section

ECD1 Can (Name) identify or name at least 10 letters of the alphabet?

क्या (नाम) कम से कम दस अक्षरों के नाम बता सकता / सकती हैं?

1. **Yes**
2. **No**
3. **Don't Know**

A great deal of variation emerged across the respondents who received and answered ECD1. Overall, they employed four separate patterns of interpretation, as shown below in Figure 3. Each of these patterns represents a different question that respondents believed ECD1 to be asking. Those questions are:

1. Can (name) both identify/read and name/say 10 or more letters?
2. Can (name) either identify/read and name/say 10 or more letters?
3. Does (name) know 10 or more letters?
4. Does (name) use language to identify or name objects?

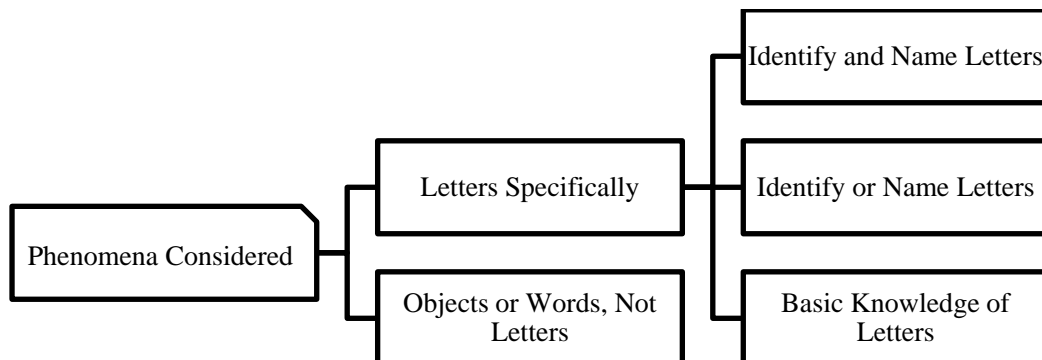


Figure 3: Cognitive Schema for EC1

⁴ See http://www.cdc.gov/nchs/washington_group/index.htm

⁵ See Massey et 2014; Massey et al 2015; Miller, 2016

Most respondents across both countries used the first pattern described above; only respondents from Jamaica used the third pattern, while only respondents from India used the fourth. Survey responses varied depending on the pattern used by respondents, and thus the data obtained from this question are not necessarily comparable.

Identify and Name Letters

Perhaps the clearest variation in how respondents interpreted this question is between those who understood it as asking about two separate concepts together (i.e. “double-barreled”) or about a single construct. Respondents who understood ECD1 as double-barreled thought it was asking them whether or not their children could both read and say ten or more letters. Thus, their child’s ability to do one of these, but not the other, was necessary but not sufficient for them to answer “yes.” For example, one respondent from Jamaica answered the question “no” and explained that her 3-year old child could recite the full 26-letter English alphabet, but could only actually read two letters. Likewise, another mother from Jamaica answered “no” and noted that while her 4-year old knows all the letters in the alphabet and can say them out loud, he can only identify the five vowels at this point in his learning. This interpretation was not limited to respondents who answered ECD1 negatively. For instance, one parent in India answered “yes” and explained that her 6-year old child could not only say all the letters in sequence, but could also read them all on a page.

Identify or Name Letters

Other respondents understood the “or” in the question text to signify that the question was asking if their child could either read or say 10 letters. These respondents believed that a “yes” response indicated that their child could either identify letters or name letters, and that just one of these abilities was sufficient to answer in the affirmative. One parent from India explained her “yes” response by focusing in on her child’s ability to read all 26 letters, while another from Jamaica answered “yes” and noted that her daughter could say the alphabet from A to Z (even though she sometimes misses a few letters or goes out of sequence). All respondents who used this pattern of interpretation answered “yes” to ECD1.

Basic Knowledge of Letters

A few respondents—all from Jamaica—did not emphasize the specific terms “name” or “identify,” but instead understood ECD1 in a more general way—whether or not their children had basic knowledge of the alphabet. In doing so, these parents focused not on the particular actions their children took to demonstrate knowledge of the alphabet, but rather on their general sense of their child’s language abilities. For example, one parent who answered “yes” simply explained that their child went to school, and therefore knew the alphabet. Another respondent who answered “yes” explained his answer by saying: “[My child] knows all the letters of the alphabet, every single one. He’s really good on that and has no problem at all with them. He’s a really bright child and can learn anything!”

Use Words to Identify Objects

A number of Indian respondents took an alternate approach by not focusing on letters at all, and rather understood the question to be asking about their child’s ability to identify objects with words. For instance, one mother who answered “yes” reported that her child is able to “tell the names of her mother, father, grandfather and grandmother, and is also able to tell [me] what she wants.” In other words, this respondent reasoned that since her child was able to identify all these people in her life, the answer to ECD1 must be “yes.” Other respondents thought about their children’s inability to communicate about objects or events when answering this question and arrived at “no” responses. For example, one mother who answered “no” did not consider letters at all, but instead

noted that her child cannot say anything. Likewise, a father who answered “no” said that his 2-year old child was too young to communicate with language, and while he can point at some objects, he does not use words to identify most things.

Unsure of Child’s Ability to Identify Letters

In addition to these four patterns of interpretation, a few respondents noted that they were unsure how to answer because identifying and naming letters in the alphabet were tasks completed mostly at school, and not at home. For example, one respondent from Jamaica who answered “no” explained her response by saying that while her child could communicate as well as other children his age, she had not heard one way or the other about how he was doing with learning his alphabet at school. Although she had not been told by a teacher that her son could not name 10 letters, she simply did not know and decided that “no” was the best answer.

ECD2 Can (Name) read at least four simple, popular words?

क्या (नाम) चार आसान और जानेमाने शब्द को पढ़ सकता /सकती है?

1. **Yes**
2. **No**
3. **Don’t Know**

Respondents almost universally understood ECD2 as asking whether or not their children could read simple words such as “cat,” and “bat,” or very common words such as names, colors, or everyday objects. A minority of respondents thought about “picture reading”—that is, understanding words that are shown alongside pictures of those objects. But while most respondents considered reading—i.e. recognizing something printed on a page instead of just understanding a concept—they judged their children’s abilities in a number of ways.

Respondents used five interpretive patterns when answering ECD2. These patterns include considering whether or not their child 1) recognizes or reads words, 2) speaks or repeats words out loud, 3) can read with pictures as an aide, or thinking about their child’s 4) age or 5) disability status. These five patterns can be conceptualized into two major pathways: respondents either based their answer on one or more indicators of their child’s actual ability to read, or they based their answer on some mediating characteristic of their child (specifically their age or disability) and not their actual ability to read. These two pathways, and the associated patterns of interpretation, are shown below in Figure 4 along with the survey responses that each pattern elicited.

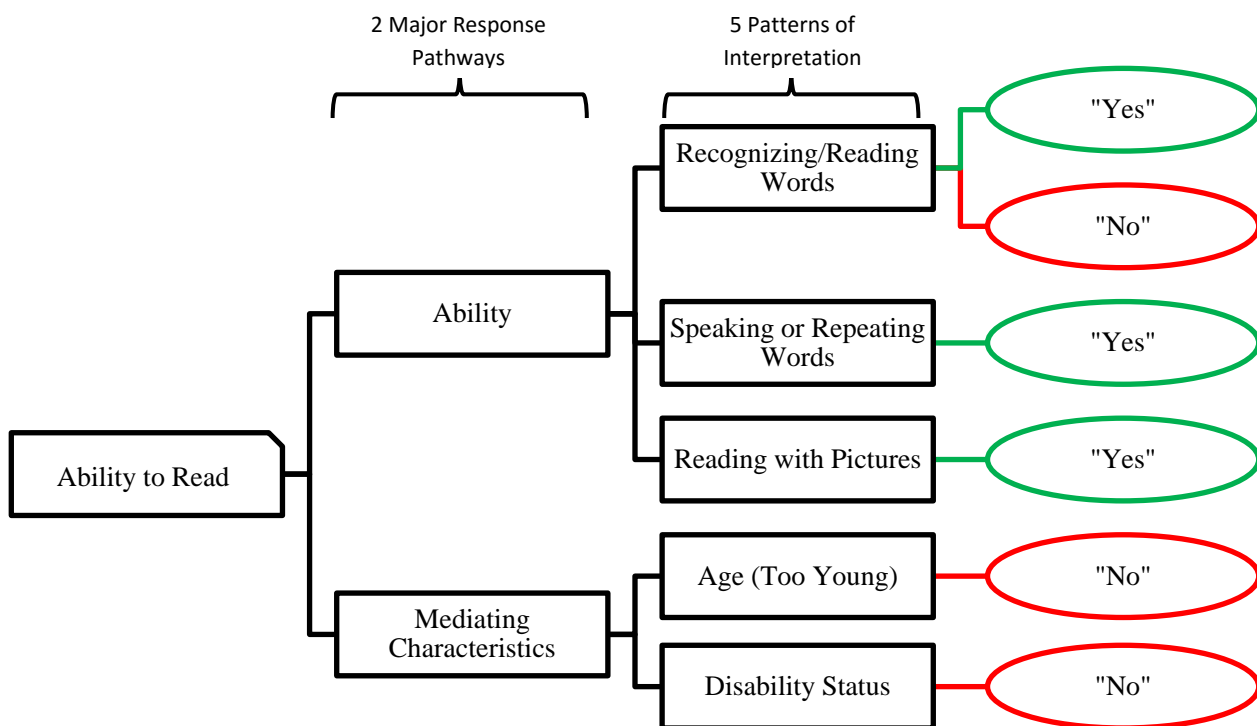


Figure 4: Cognitive Schema and Associated Survey Answers for ECD2

Recognizing or Reading Words

Other parents based their answers on whether or not their kids showed any indicators of reading ability. Most of these respondents considered whether or not their child could recognize or read a word on a page. For example, one Jamaican mother who answered “no” said:

I have not seen her do this, I am not sure if she does this at school, but she hasn’t done it at home. She recognizes some words when we spell it out loud.

This mother used a very common line of reasoning across the respondents: their child could speak words, and therefore understand words, but could not yet read—therefore judging their answer to be “no.” On the other hand, if respondents had seen evidence that their child could not only speak, but could also explicitly recognize printed words, they would answer “yes.” For example, one Indian mother explained her “yes” answer by noting that her son can not only recognize real-life objects and say their names (such as table, chair, door, etc.), but that he can also point out two- or three-letter words in magazines or newspapers and say them out loud.

Speaking or Repeating Words

Other respondents did not strictly consider their children’s abilities to recognize printed words *per se*, but rather indicators that they had some comprehension of printed language. The most common indicator that respondents mentioned was the fact that their children were able to speak or repeat words that their parents read aloud to them. For instance, one Jamaican respondent explained her “yes” response by saying that she will read and point to words or letters on a page and her daughter will repeat the word or letter along with her. Similarly, an Indian mother explained that as she would read to her daughter, her daughter would say the letters she pointed out, and could oftentimes pull the letters she said aloud together into a word.

Reading with Pictures as Aids

A number of other respondents explained that they were thinking about how their child could “picture read”—that is, read a word that is presented in a book alongside a picture of that object. So for instance, the word “cat” would be shown below a picture of a cat, and the child would then be able to say “cat” without the parent saying it first. For example, one mother from India who answered “yes” explained that her son could “read pictures” of objects like balls, cats, the sun, and apples from a book. Upon further probing, this respondent was not sure whether her son could do this without the pictures, but she still believed that “yes” was the correct answer. Interestingly, other respondents (using the “recognizing printed words” pattern explained above) explicitly did not judge such picture reading to count towards ECD2. For instance, one mother from Jamaica said that her daughter could read words like “cat” if the word was presented alongside a picture. However, if there was no picture, the child could not read the word. Thus, this mother decided that the correct answer was “no.”

Age or Disability Status

A few respondents did not base their response on any indicators of their child’s ability to read, but rather based on their child’s young age or disability status. The only respondents to answer this way were parents of very young (2- or 3-year olds) or severely disabled children. All the respondents who based their answer on their child’s young age or disability status answered ECD2 “no.” For example, one Indian respondent who answered “no” simply said that his son was too young to read. Likewise, another parent who answered “no” expressed surprise at the question, saying “he’s too young to be reading.” The same quick judgement was evident for respondents who were only thinking about the fact that their child had a disability. For instance, another Indian respondent who answered “no” simply said that his son was “so disabled,” with a mother explained her “no” answer by saying that her son could not make sounds with his mouth at all, and thus cannot read aloud.

ECD3 Does (Name) know the name and recognize the symbol of all numbers from 1 to 10?

क्या (नाम) १ से १० तक के अंको चिन्ह और नाम को पहचानता/ पहचानती हैं?

1. Yes
2. No
3. Don’t Know

Respondents understood Question ECD3 in a very similar way that they did ECD1, and just as in that question a large amount of variation emerged in how they interpreted and judged their response. This variation again appeared to stem largely from the fact that many respondents believed ECD3 to be asking both about whether or not their child could name and recognize numerals 1 through 10. The patterns of interpretation that emerged in the responses to ECD3 are shown below in Figure 5 (which is quite similar to Figure 3 above in the analysis of ECD1). In addition to the double-barreled interpretation, a minority of respondents conceptualized this question as asking about whether or not their child could either say or read numerals 1 through 10.

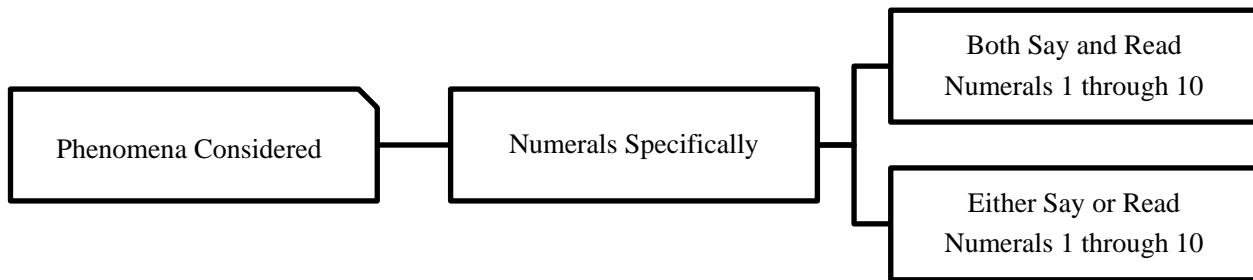


Figure 5: Cognitive Schema for ECD3

The most noticeable differences between the overall response schema seen here for ECD3 and that shown above for ECD1 is that there is no numerical equivalent to the “Objects or Words, Not Letters” pattern in this later question. In other words, all the respondents understood ECD3 to be asking specifically about numbers and not more complex concepts (such as mathematics, for instance). It should be noted that in ECD3, all respondents understood the phrase “know the name” in the question text to mean “say.” Furthermore, all respondents understood the word “recognize” in the question text to mean “read,” just as they all understood the word “identify” as “read” in ECD1—if the goal in using two different words across these two questions’ texts was to signify different cognitive abilities, respondents do not understand it that way.

Both Say and Read Numerals

While only some respondents understood ECD1 to be double-barreled (and asking about identifying and naming letters), most respondents across both the Indian and Jamaican samples believed that ECD3 was asking about their child’s ability to both name and recognize numbers. This pattern of interpretation led to both “no” and “yes” responses. For example, one Indian father explained that his child (who has a learning disability) speaks clearly and can recite the numbers 1 through 10, but cannot read them yet. Because his son could only name, and not read the numbers, he answered “no.” Likewise, a mother of a 3-year old in Jamaica (who did not report any disabilities) answered “no,” and said that while her daughter could count from 1 to 10 out loud, she could only read 1 through 5. She therefore reasoned that she had to answer “no.”

This interpretation also led to “yes” responses to ECD3 if the respondent judged that their kid could both say and read the numerals 1 through 10. For instance, one Indian respondent explained his “yes” answer by saying that his 5-year old son could say 1 through 10 in sequence and identify the digits on his sister’s homework assignments. A mother from Jamaica said that her son “always goes to his chart and says them [the digits on the chart] and he can point them out too. He definitely knows them.”

Either Say or Read Numerals

Other respondents understood the question as an “either/or” type question, and judged that a child who showed the ability either to say or to read numbers counted towards a “yes” in ECD3. For example, one respondent from Jamaica who answered “yes” explained her response by saying that her daughter can say all the numbers from 1 to 10, but can only read from 1 to 6. However, this mother reasoned that since her daughter could name enough numbers, she should answer “yes.”

ECD4 Can (Name) pick up a small object with two fingers, like a stick or a rock from the ground?
क्या (नाम) अपनी दो उंगलियों से छोटीसी वस्तु को जैसे कि लकड़ी या कंकड़ जमीन से उठा सकता / सकती हैं?

1. Yes
2. No
3. Don't Know

Respondents universally understood Question ECD4 to be asking whether or not their children could grasp or pickup small objects:

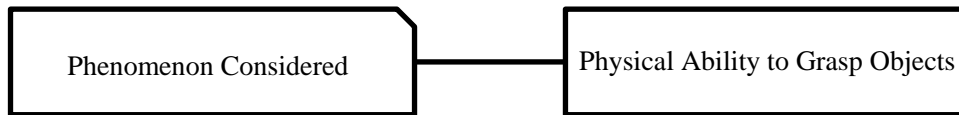


Figure 6: Pattern of Interpretation for ECD4

Respondents considered a variety of small, everyday objects when judging whether or not their children could or could not grasp things, including toys, rocks, candies, utensils, and keys. For example, one mother in India explained her “yes” response by saying that her son picks up and plays with his toy car a lot, and appears to be able to hold it tight. Another respondent, from Jamaica, answered “yes” and noted that “...she can even use chopsticks!” On the other hand, a father from India based his “no” answer on the fact that while his daughter can hold a set of keys between two fingers if somebody places them there, she cannot pick them up from a surface on her own.

ECD5 Is (Name) sometimes too sick to play?

क्या (नाम) ज्यादा बीमार रहने के कारण खेल नहीं पाता /पाती हैं?

1. Yes
2. No
3. Don't Know

ECD5 is complex, and a great deal of variation and confusion emerged across the respondents’ interpretations. This complexity and resulting confusion stems directly from two issues. First, instead of just asking respondents to report their children’s behaviors, ECD5 asks them to additionally make a value judgement about their health (“...sometimes too sick to play”). As a result, respondents used three distinct overall interpretations of the question. The same double-barreled/single-barreled interpretive split seen above in ECD1 and ECD3 exists in this question too: Some respondents considered both sickness and playing, while others considered either only their child’s ability to play or only their child’s health.

In addition to this set of three non-overlapping patterns, respondents have to map their child’s experiences with being sick and playing onto the restrictive yes/no binary answer categories. In short, many respondents noted that their children were indeed occasionally too sick to play, but still answered ECD5 “no” because they believed that a “yes” answer did not accurately represent the complex lived experience of their child.

As illustrated below in Figure 7, the three patterns of interpretation mentioned above are associated with six separate conceptualizations (or patterns of judgement) upon which respondents based their survey answers. The ovals on the right side of the figure represent the survey responses associated with each pattern, and it is clear that a “yes” or a “no” response can mean absolutely different things to different respondents depending on their interpretive pathway:

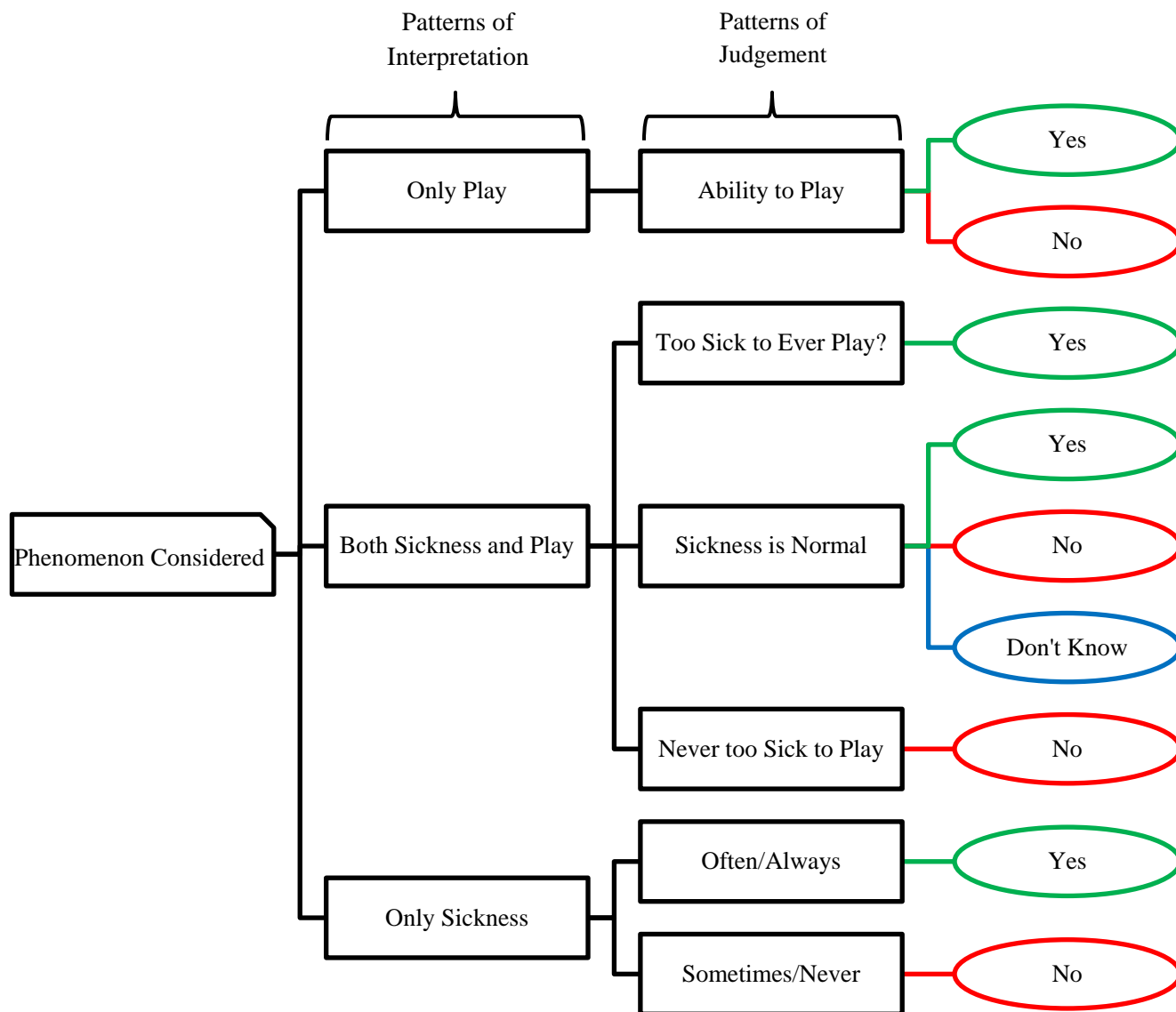


Figure 7: Patterns of Interpretation and Judgement, and Associated Survey Answers, for ECD5

Play Only

A number of respondents interpreted this question as asking only whether or not their child played. When judging their response, these respondents only considered their children’s abilities to play and did not take their health into account. For example, one Indian father answered “no” and said his daughter “was always ready to play” and did so all the time with both him and his wife. Similarly, a Jamaican respondent who answered “no” noted that her daughter “loves to play” and always jumps at the opportunity to do so.

Sickness and Play

Most respondents understood ECD5 to be asking about both their child's health and their ability to play. Within this interpretation, respondents based their survey answer on three separate ways of thinking about the interaction between sickness and play.

First, some respondents made a judgement based on whether or not their child was always too sick to play. The only parents who used this pattern were Indian respondents answering about a child with disabilities, and all answered the question "yes." For example, one father explained his "yes" response by noting that his son is too severely disabled to play at all, even when other children are in the house. Likewise, another father reported that his "yes" answer was due to the fact that his son always had to lie down, and could not move around to play.

Other respondents who were thinking about both sickness and play based their answer on the fact that their child was never too sick to play. These respondents all answered "no," and indicated that their child's health never actually prevented them from playing. For example, one Jamaican mother said "no" and reported that her son will still play, even if he gets sick. Similarly, an Indian mother said: "When he is sick, he plays. Even though we say, 'do not play! Lie down!' He will not listen and will play inside and go outdoors...to play with his brother and other children."

Finally, most respondents who interpreted this question as asking about both sickness and play judged that their children were sometimes too sick to play. However, respondents who used this pattern of judgement did not answer ECD5 in a uniform manner: Some answered "yes," most answered "no," and one mother was unsure how to map her response to either of the options and simply said, "don't know."

For example, one Jamaican mother answered "yes" and explained that upon occasion her daughter gets a fever and is therefore unable to play. An Indian father reported that while his son normally plays a lot indoors, if he is not feeling well, they will take him to the doctors and he will not play until he is feeling better. Because sometimes his child cannot play, he decided that the correct answer was "yes."

On the other hand, a larger number of respondents decided that just because their child was sick sometimes, this was normal for children and the correct answer to ECD5 was "no" For instance, an Indian mother answered "no" and explained that her child did not get sick very often, but when she did, she does not play. However, this parent said this is the same as all children, and therefore did not see a reason to answer the question in the affirmative. Upon hearing this question, another Indian exclaimed, "What child is never too sick?" She reported that while her daughter did not play when she was recovering from illness, this is the same as all children, and thus answered "no."

Sickness Only

Other respondents limited their interpretation of ECD5 to only their child's health, and did not consider their ability or propensity to play at all. These respondents were answering the question, "Is your child too sick?" Within this pattern of interpretation, parents judged their response based on how often their child was sick or ill. Respondents who said their child was always or often sick all answered ECD5 "yes," while parents who reported that their child was only sometimes or was never sick answered the question "no."

For example, one Indian respondent who used this pattern answered "yes" and said his son "is sick most of the time" and gets colds and other illnesses multiple times a month. The family doctor has told the parents to take extra care with this child because he is so weak.

Respondents who only considered sickness and answered “no” were more or less reporting that their child was not sickly, and that he or she was in general good health. For instance, one Jamaican mother answered “no,” and when asked to explain said that her son is “less sickly” since gluten was removed from his diet, and that he was feeling good under his current strict dietary regime. This parent did not consider play at all, but rather limited her response to the child’s health at the time of the interview. In a similar vein, an Indian mother answered “no” and said: “He never falls sick. Maybe just once in a while.” Another Jamaican mother explained her “no” answer by saying that her child is not a sick child, “even though he puts everything in his mouth, he never gets sick. I’m not sure how he doesn’t!”

ECD6 Does (Name) follow simple directions on how to do something correctly?

क्या (नाम) सही निर्देश से अपना काम आसानीसे कर सकता / सकती है?

1. Yes
2. No
3. Don’t Know

EC6 was a complex question that many respondents found to be confusing. Variation emerged across four separate points in the response process:

- 1) What the respondents thought the question was asking about overall
- 2) What it means to “follow” directions,
- 3) The definition of “simple directions”
- 4) Whether, and how, to include the term “correctly” into the judgement of their response.

As noted above in the analyses of the previous ECD questions, because respondents’ answers are dependent on the specific combination of the patterns they use to interpret each of these four points, the data this question collects will not necessarily be comparable across a sample.

Overall Intent of the Question

Respondents largely used one of two completely separate interpretations of the intent of Question EC6 to frame the rest of their response process: Simply put, some respondents believe this question was asking about their child’s physical abilities, while others understood it to be asking about their cognitive or mental facilities.

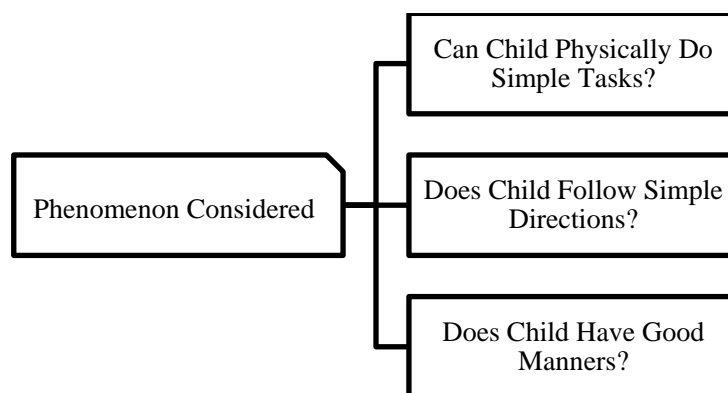


Figure 8: Cognitive Schema Showing How Respondents Interpreted the Overall Intent of ECD6

Physically Do Simple Tasks

Respondents who focused on their child’s physical abilities largely considered whether or not they either had a physical disability, or were too young to complete simple tasks. For example, one mother from India said her “no” answer was due to the fact that her son had a severe physical disability that prevented him from doing simple tasks, such as self-care activities. Another Indian respondent answered “yes” and explained that although his son could not do much physically because of a mobility disability, he could do some tasks albeit slowly. Likewise, a Jamaican mother indicated that her “yes” response meant that her daughter could physically pick up objects such as cups if asked to do so.

Follow Simple Directions

Other respondents understood ECD6 to be asking not if their kids could physically do tasks, but rather if they could understand and follow direction. These respondents considered whether or not their children obeyed commands. For instance, one Indian father answered “yes” and explained that if he asked his son to do things such as take a book next door to a neighbor, his son was able to understand the command and carry it out. Similarly, a mother from Jamaica answered “yes” and said that her daughter understands and complies if given instructions such as “Stop playing in the dirt!”

Besides these two major interpretations, one Jamaican respondent understood the question in a completely different way—asking about their child’s manners. She explained her “yes” answer by saying that her daughter “can be reserved at times, but is communicative and polite most times.”

Comprehension of “Follow” Directions

Two patterns of interpretation emerged across how the respondents comprehended what it meant to “follow...directions.” They interpreted this phase as either the ability to do something (whether or not the child wanted to do it), or as their child’s propensity to actually follow directions, as shown below in Figure 9:

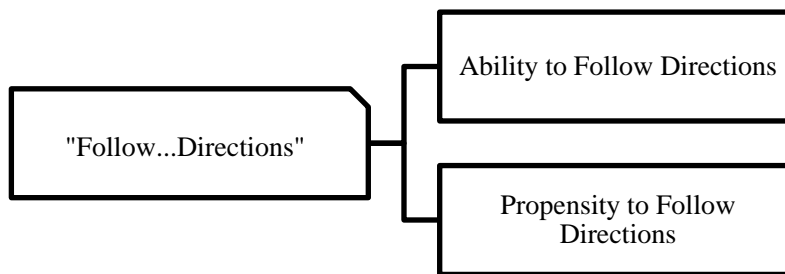


Figure 9: Cognitive Schema Showing How Respondents Interpreted the Phrase “Follow...Directions” in ECD6

A similar split interpretation has emerged in other surveys’ questions administered to parents about their children. Some parents’ instincts are to focus not strictly on functional ability, but rather on their child’s behavior⁶.

Here, while most respondents strictly considered their child’s abilities to actually follow directions, a few thought about their child’s propensity or disposition to follow instructions without a hassle. For instance, one respondent from India explained her “no” answer by saying that her son refuses to listen to her instructions and instead will turn his face and not listen to her. Interestingly, this pattern did not always lead to “no” responses—in one case,

⁶ See in particular the interpretations of children’s ability to “hear” versus their propensity to “listen” in Massey et al (2014) and Massey et al (2015).

an Indian respondent explained that his son was severely physically disabled and could not accomplish any physical tasks at all. However, he answered “yes” and explained that he could tell his son wanted to help and follow directions, even though he generally could not.

Comprehension of “Simple Directions”

In add-on to defining “follow...directions,” some respondents (all of whom were answering about children with disabilities) went on to explicitly define what they were counting as “simple directions.” In other words, they attempted to establish the threshold between a simple and a complex instruction. However, there was little consistence between the respondents on where this threshold lay. For example, one respondent from India explained his “no” answer by saying that while his daughter could follow instructions such as “look up” or “look down,” she could not do anything more complex. However, another Indian respondents answered “yes” and explained that his son could follow very basic instructions such as “turn around,” but nothing more complex.

Interpretation of “Correctly”

Finally, after respondents determined if ECD6 was asking about physical or cognitive ability, and what counted as following simple instructions, they had to formulate their responses by interpreting and applying the final phrase in the question text—“...do something correctly.” The parents did this in three ways: by interpreting the phrase meaning instructing their children on the correct way of doing something, by interpreting the phrase as meaning their child did a task in the correct manner, or by ignoring the phrase “...do something correctly” entirely.

Given Correct Instructions

A strict reading of the full question text indicates that it is asking for parent to determine if their children follow directions when they are told the correct way of doing something. However, very few respondents understood it this way, and the only ones who did were from Jamaica (and thus presumably native English speakers). For example, one mother who answered “yes” said that her daughter could be taught new tasks and then do them the way she was taught—such as writing her name or putting dishes in the sink.

Followed Instructions Correctly

While most respondents did consider the word “correctly,” they tended to understand it to be indicating that they should judge whether or not their child followed instructions correctly. For example, one Jamaican respondent who answered “no” noted that she was thinking about the fact that her son will attempt to do the homework his teacher sets for him, but he does not do it correctly—thus she should answer ECD6 in the negative. Another mother, this one from India, similarly answered “no” and explained that since her daughter usually got answers wrong when she was asked questions. This respondent therefore reasoned that her daughter could not follow instructions correctly.

On the other hand, another Indian respondent explained her “yes” answer by noting that if she asked her son to go get her 10 clothes pins, he would come back with the 10 pins—thus he was not only obeying her commands, but doing so accurately. Likewise, a Jamaican father answered “yes” and explained that his daughter not only did the tasks that her parents set for her, but also did so correctly. For instance, he said that if his wife told their daughter to go put on a specific dress, she would do that.

Did not Consider the Word “Correctly”

Still other respondents did not consider the word “correctly” at all, and instead judged their response simply based on whether or not their child tried to carry out a task when given the instruction to do so. For example, one Indian mother noted that while her 2-year old did not always do things accurately, she was able to attempt whatever instructions that she was given. Because her daughter tried to carry out directions, this respondent determined that “yes” was the correct response, even if her child did not always do things correctly.

ECD7 When given something to do, is (Name) able to do it independently?

जब कुछ करने के लिए दिया जाता है तो क्या (नाम) खुद से कर सकता / सकती है?

1. Yes
2. No
3. Don't Know

Question ECD7 was understood differently across different subgroups of the cognitive interviewing sample, indicating that the data this question collects may not be comparable across all groups. Jamaicans and respondents answering about children without disabilities understood the question in a single way—asking whether or not their child could do tasks without supervision. In addition to this one, other Indian respondents used one of two other interpretations: whether or not their child was willing to do tasks, and whether or not their child made any attempt to do a task. The differences between how these two groups interpreted this question can be seen below in Figures 10 and 11:

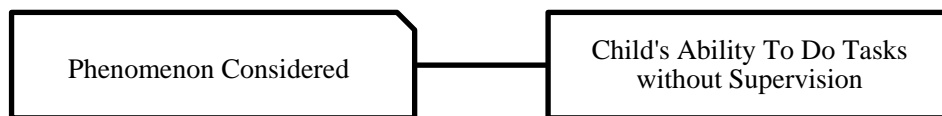


Figure 10: Cognitive Schema for ECD7 for Respondents from Jamaica and Respondents with Children without Disabilities

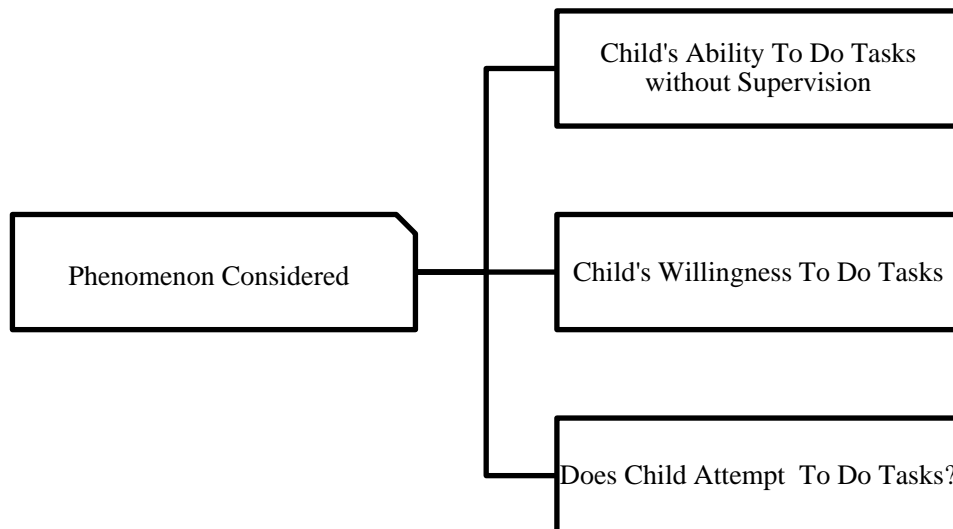


Figure 11: Cognitive Schema for ECD7 for Respondents from India with Children with Disabilities

Ability to Do Tasks without Supervision

Most respondents, across both countries, interpreted the question as asking whether or not their child could do tasks on their own without supervision. For example, one Jamaican father answered “yes” and said, “He may be told to go to the potty, and he does it by himself. He is allowed to feed himself, so when given a fork and told to do it, he does.” Likewise, an Indian mother responding about her daughter who did not have any disabilities answered “yes” also thinking about her child’s ability to perform activities of daily living—specifically noting that she can get dressed and undressed and go to the toilet on her own.

While all Jamaicans and all respondents who were answering about children without disabilities used this pattern of interpretations, some Indians responding about children with disabilities used it as well. For instance, one Indian father answered “no” and explained that his 2-year old child was just too small to do most things by himself—thinking specifically about feeding and dressing. He noted that his son had started going to a physiotherapist, but still could not do things unassisted. Other respondents simply explained that their child could not do any physical activities, and therefore could not do anything independently. Another Indian father explained his “no” answer by saying that his son cannot do anything independently because he cannot do even simple tasks such as bring a utensil to his mouth or holding a phone to his ear.

Willingness to Do Tasks

Two other patterns of interpretation emerged across the Indian respondents answering about children with disabilities. First, a couple of respondents based their answers on whether or not their child was willing to do things independently, rather than their ability to do so. For example, one mother explained her “no” answer by saying that her son is just stubborn: “If I give him any work, he will not listen. If I tell him 10 times [to do something] he still will not listen. He does this because he is too stubborn!” Similarly, a father who answered “no” explained:

If we tell him to draw, he will not...If told to remove his pants, he will not. He can remove socks and shoes on his own, but he needs more verbal instructions. If told only once, he will not listen. If he is called when he is outside, he will wait two minutes [to come in]!

Attempt to Physically Do Task

Additionally, one other Indian respondent based her answer not on whether her son did things independently, or if he was willing to do so, but rather on whether or not he tried to do tasks on his own. In explaining her “yes” answer, she says if he is asked to bring her something, he will try pushing it as much as he can, given his physical disability. Although he is usually not able to get the object all the way to her, the mother decided that trying counted for an affirmative answer to ECD7.

ECD8 Does (Name) get along well with other children?

क्या (नाम) दूसरे बच्चों के साथ घुल मिलता / मिलती है?

1. Yes
2. No
3. Don't Know

Respondents used multiple patterns of interpretation and judgement while answering Question ECD8. While most respondents thought the question was asking about their child's behavior when socializing, others thought more generally about whether or not their child was a social person. Additionally, some respondents also based their response on how often their child had quality or positive interactions with others. After interpreting what it meant for their child to socialize, parents then considered how often their child did this when determining if they should answer ECD8 "yes" or "no."

Overall Intent of the Question

Overall, respondents considered three different phenomena when interpreting the question, and in doing so generally understood the question to be asking one of the three patterns noted above, as shown below in Figure 12:

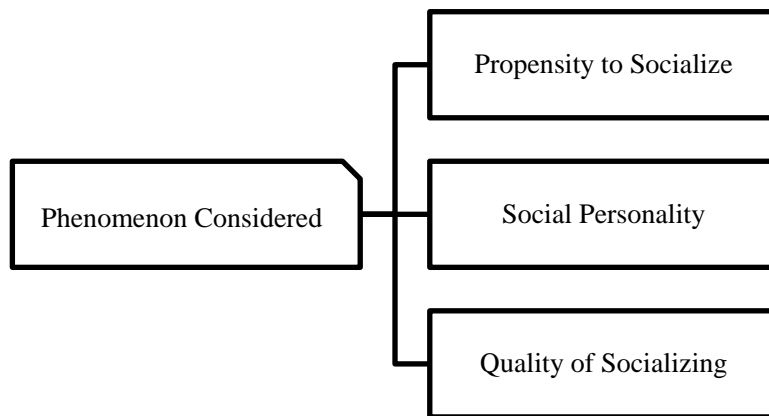


Figure 12: Cognitive Schema Showing How Respondents Interpreted the Overall Intent of ECD8

Propensity to Socialize

Some respondents considered whether or not their child socialized with others at all, without considering the quality of the interactions. For example, one respondent who answered "no" explained that "he stays alone—he does not even mix with his brother, he just like to be alone." On the other hand, another respondent answered "yes" and explained that his son interacts with other children at school, and even though he has not yet developed the concept of "friendship," he does socialize with others. This respondent based his "yes" not on the quality of that interaction at school, but rather on the simple fact that it takes place.

Social Personality

A few respondents did not focus their interpretation of the question on their child's behavior *per se*, but rather considered whether or not they had a social personality. In focusing on their child's personality, these

respondents more or less based their answer on their children’s enjoyment of social interactions. For instance, one Indian mother explained that her “no” answer was because her son is a generally unsocial person and is scared to hang out with others. She noted that he goes to a play group run by an NGO and interacts with other kids there, but that she does not think he enjoys it and thus answered ECD8 “no.”

Quality of Socializing

Most respondents understood that the question was asking not just about the act of socializing, but also about the quality of those interactions. For example, one Jamaican mother explicated her “yes” response by saying that her son has play dates that go well, and that other children will often come to their house to play with her son. Respondents based their characterization of the quality of their child’s interactions on direct observation (as seen in the previous example with the play group), on indirect knowledge, or on both. For example, another Jamaican respondent explained her “yes” answer by saying that her daughter not only played well with other children in play groups, but that she had also never received any notices from teachers that her daughter did not interact well with her peers at school.

Frequency of Positive Socializing

After interpreting the overall intent of the question, a number of respondents went on to make a judgement about how frequently their child had quality interactions. In short, these parents were attempting to set the bar above which they could answer the question “yes,” and below which they would have to answer “no.” As seen previously (such as in the question about playing, ECD5), some respondents did not know how to accurately map their child’s behavior to the binary yes/no answer categories. Because of this, three separate patterns of judgement and response emerged, shown below in Figure 13 along with their associated survey responses:

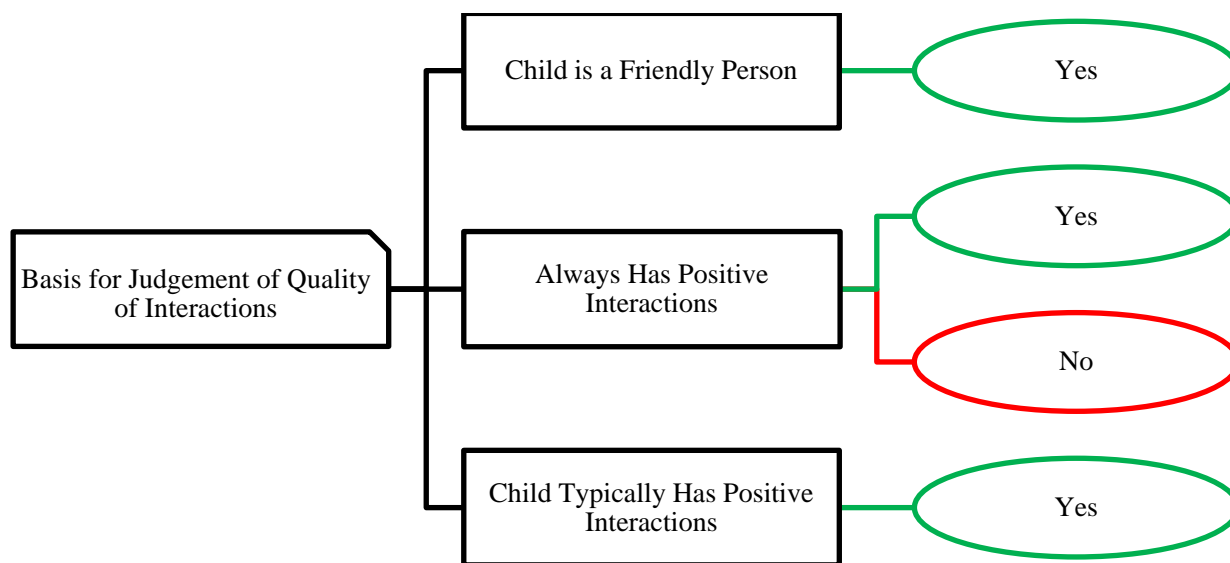


Figure 13: Cognitive Schema of the Interpretation of Frequency of Positive Socializing and Associated Survey Answers for ECD8

Is Child a Friendly Person?

Most respondents based their judgement on the fact that their child had a friendly or social personality, and therefore answered “yes” indicating that they interacted well with others. For example, one Indian mother simply explained her “yes” answer by saying, “He is friendly and makes friends. He talks to them nicely.” Similarly, a Jamaican mother answered “yes” and said that her son gets along with others “...too well! He makes friends very

easily” and is “not afraid to walk up to complete strangers, even adults, and introduce himself.” Respondents basing their answer on this pattern did not concern themselves with the frequency of their child’s quality interactions, but instead focused only on their personality.

Does Child Always Have Positive Interactions?

In a similar way, other respondents explained that their child always interacted well with others. For instance, an Indian respondent explained her affirmative response by saying that her son *never* hits other children, even if he himself gets hit, and that he is always sharing with others. On the other hand, a couple of respondents used this pattern of judgement and answered ECD8 “no” because their children did not always get along with others—even if they did most of the time. For example, one Jamaican mother said that her son had occasional mood swings (theorizing that he just sometimes woke up in a bad mood), and when that happened he does not like interacting with others and he t that “surely” mood into his interactions with peers at school. This respondent decided that those occasional mood swings were enough to make her answer to the question “no.”

Does Child Typically Have Positive Interactions?

Finally, other respondents took the opposite approach to this last mother, and decided that even though their children were not always on their best behavior, they typically interacted well with others, and therefore they should answer the question “yes.” For example, one Indian mother said “yes” and went on to note that while her daughter sometimes fights with other children, she will get over the fight after a while and go back to playing. A Jamaican father employed similar logic when he said that his daughter was sometimes reserved and did not like interacting all the time, but that she normally was polite and communicative. Likewise, another Jamaican respondent explained her “yes” answer by reporting that even though her son sometimes fought with other children, he was well-liked and other children tended to call out to him and ask to play if they were walking down the street.

ECD9 Does (Name) kick, bite, or hit other children or adults?

क्या (नाम) बच्चों को या दूसरे बच्चों को हातो या पैरो से मारता / मारती, काटता/कटती है?

1. **Yes**
2. **No**
3. **Don’t Know**

All respondents across both India and Jamaica understood Question ECD9 to be asking about their child’s propensity to be aggressive by hitting or biting others. However, when judging this question, respondents used two distinct patterns, and can be understood and answering two different questions:

1. Does your child ever become aggressive?
2. Is your child an aggressive person?

The real variation emerges here when the parent believes that his or her child sometimes or occasionally kicks, bites, or hits others. As seen in the schema below in Figure 14, which shows how the respondents’ survey answers relate to their children’s frequencies of aggression across both of these patterns, respondents whose children sometimes or occasionally were aggressive answered ECD9 both “yes” and “no.” This variation could lead to this question eliciting data that are not comparable across the respondents who employ different patterns of interpretation.

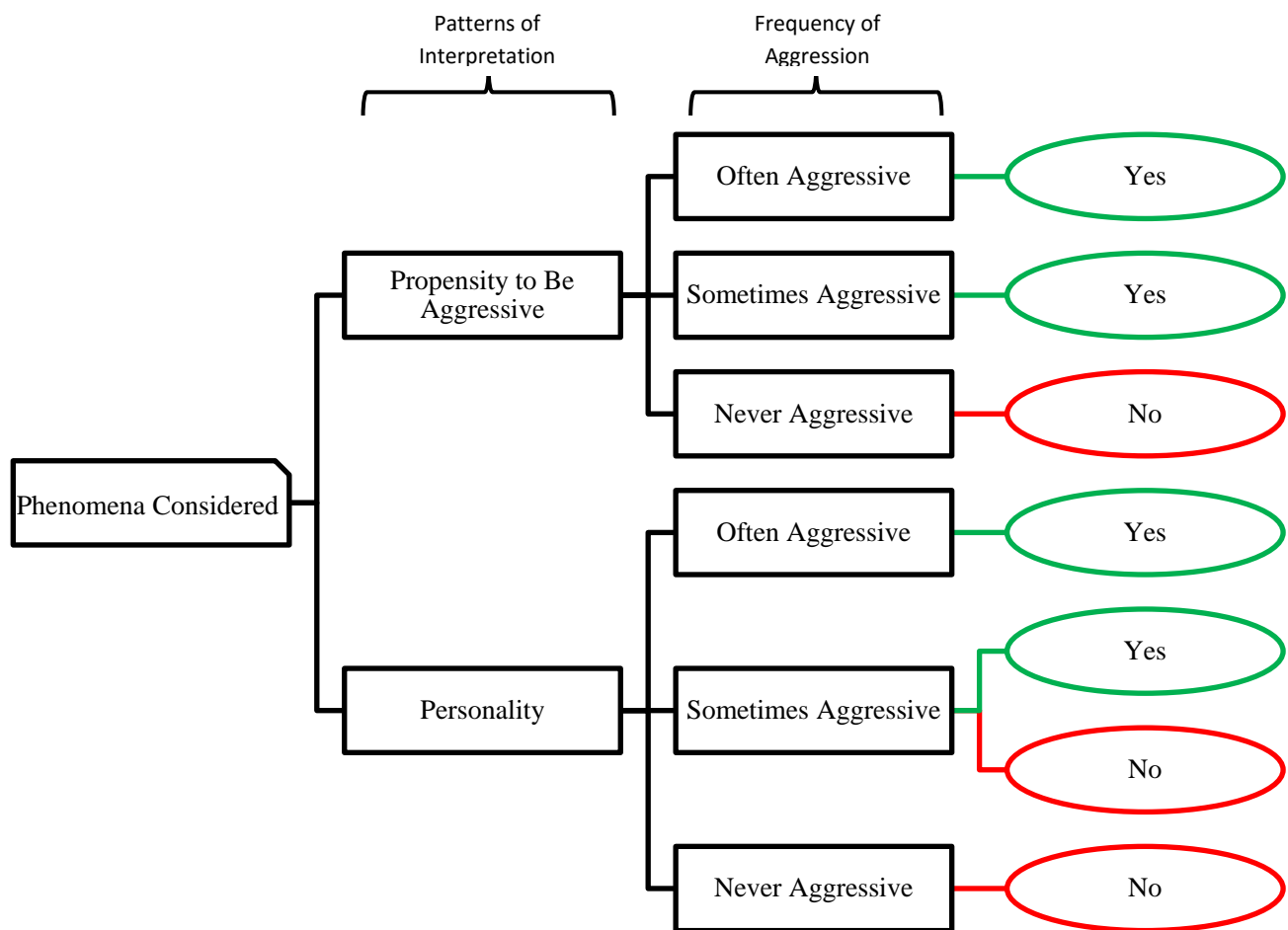


Figure 14: Cognitive Schema Including Associated Survey Answers for ECD9

Propensity to Kick, Bite, or Hit

Respondents who employed the first pattern—believing that the question was asking whether or not their child ever kicked, bit, or hit anyone—took an absolute stance when judging their response: if their child ever displayed this behavior, they had to answer “yes.” In some cases, this was easy because the child was a serial aggressor. For example, one Jamaican mother answered “yes” and stated: “He fights with his brother and provokes him, but his brother also provokes him too. He will hit him, but never bite.” In the opposite vein, an Indian mother explained her “no” answer by saying that her daughter was “never” aggressive, and that even when the neighborhood children picked on her and tried to provoke her, her child would not fight them back.

Because of this absolute interpretation of the question, respondents who noted that their children only occasionally fought or were aggressive only when provoked also answered “yes.” For instance, one Jamaican respondent said that sometimes when her daughter did not get her way, she would act out and hit family members, but would never really do this to people outside the family such as teachers or friends. However, since she did occasionally hit, the respondent decided that the correct answer was “yes.” Another Jamaican parent said “yes,” and that “There have been conditions under which [she] does those things. Generally not, but she has been known to do those things if she want [to get] her way.” Similarly, an Indian mother responded “yes” and noted that she thought the question was asking if her daughter was ever aggressive, and explained that sometimes she is when she has to defend herself, but not otherwise. This respondent did not think this behavior was abnormal, and said that all 5-years acted like this.

Aggressive Personality

Another set of respondents, however, understood the question differently and instead based their answers on whether or not they perceived their children as aggressive individuals. For the respondents whose children were oftentimes or never aggressive, there was not much difference between this pattern and the previous one. For instance, one Jamaican parent noted that her daughter was an aggressive person who fought a lot with other kids and whose nickname was “War Ship;” therefore answering “yes.” An Indian father on the other hand answered “no” and reported that his son was “a well-behaved child” who just was not aggressive.

However, in opposition to what was seen above, respondents employing this pattern did not always answer ECD9 “yes” if their child only sometimes kicked, bit, or hit others. Rather, although these children did in fact show aggression at times, some respondents judged that this was not their true character, and answered the question “no.” For example, an Indian father answered “no” and first said that his son does not bite anyone. However, upon further probing, he revealed that if his son gets hurt or if someone tries to get aggressive with him, he will hit out or hit back. This respondent went on to say that such behavior was normative, not only among other children but among adults as well, and decided that he should answer “no.” In a straightforward example of the limitations of the yes/no binary answer categories, another Indian father explicitly said that if there was a “sometimes” option he would answer using that, but instead choose “no” because although his daughter sometimes scratched other people, he did not consider it to be a problem. Likewise, a Jamaican mother said that her son “only does those things [kick, bite, and hit] in fights” and does not fight on a regular basis.

ECD10 Does (Name) get distracted easily?

क्या (नाम) का ध्यान जल्दी ही भटक जाता है?

1. Yes
2. No
3. Don't Know

In Question ECD10, a difference again emerged between how respondents from Jamaica interpreted the question and how respondents from India did so, which could negatively impact that comparability of its data. In Jamaica, respondents universally understood the question to be asking whether or not their child could maintain focus or keep their attention on a task or event. However, just like what was seen above in EC7, respondents in India used a larger set of interpretations. They not only understood the question to be asking about whether or not their child could maintain focus, but also about their child’s ability to retain knowledge and whether they were or were not abnormally distracted for their age. These two schema are shown below in Figures 15 and 16:

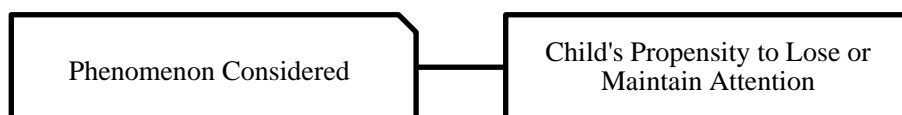


Figure 15: Cognitive Schema for ECD10 for Respondents from Jamaica

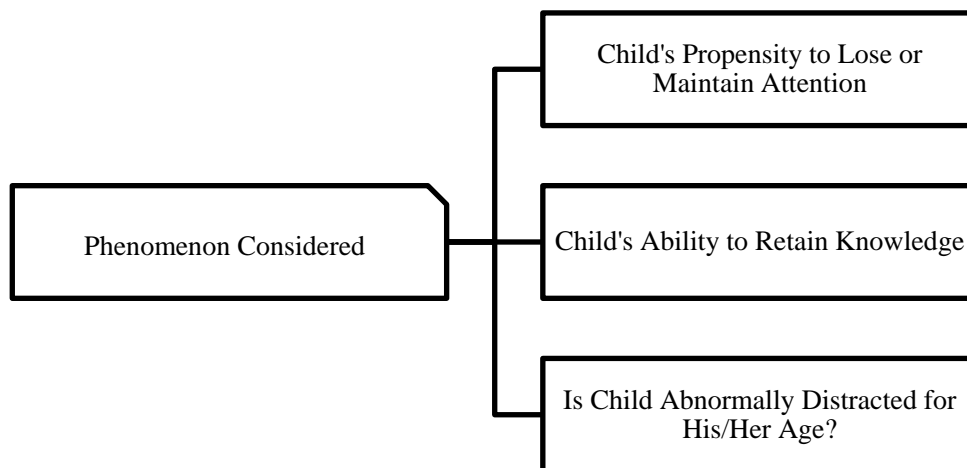


Figure 16: Cognitive Schema for ECD10 for Respondents from India

Propensity to Lose or Maintain Attention

Jamaican respondents all interpreted ECD10 to be asking whether or not their child was able to maintain his or her attention. For instance, one respondent who answered “no” said that when his son was doing things such as watching television or playing with his toys, it was generally hard to distract him and pry his attention away. Another Jamaican mother noted that her son:

...is very focused. For example, he is always playing with his legos. You have to go to him when he is playing legos or watching something on his iPad, because he is into what he is doing. Even doing homework, he sits until it is complete and nothing will distract him.

Jamaican respondents used similar logic when arriving at a “yes” answer. For example, one mother who answered “yes” explained that if she was speaking to her son and he heard some sound come from somewhere else, his attention “immediately switches” to the new sound and he ignores his mother. Another respondent noted that her daughter was very easily distracted, and if they asked her to do chores and came across a game or some other fun activity, she would completely forget the chore and start playing.

Most Indian respondents also used this interpretation. For instance, one father who answered “no” noted that his daughter would always complete tasks and did not tend to let her attention wander. Another respondent answered “yes” and explained that if the child was doing an activity that “is not of his choice,” he would lose interest and attention as soon as something more enjoyable presented itself.

Ability to Retain Knowledge

However, two alternative interpretations also emerged across the Indian cognitive sample. First, some respondents understood the question to be asking if their children could retain knowledge after they had learned something. For example, one mother of a 4-year old explained her “no” response by saying, “Once he was taught something, he will keep it in his mind.” Similarly, another mother answered “no” and reported that her child “does not forget anything that has been told to her. She remembers everything, even after a month.”

Abnormally or Normally Distracted for Child’s Age

Additionally, a couple of other Indian parents interpreted this question in a similar way to the “aggressive personality” pattern seen above in ECD9—understanding ECD10 to be asking whether or not their child was

abnormally unfocused or inattentive. To make this decision, they compared their child with other children of the same age. For instance, one mother who answered “no” said that her son was just as distracted as any other 2-year old, and his level of attention was appropriate for his age. Likewise, a father who answered “no” says that his son appears to be a child with “proper mental growth” and that he does not appear to have anything but normal levels of distraction for a 5-year old. Just as seen in ECD9 with the parents who were considering whether or not their children had aggressive personalities, the parents using this pattern of interpretation in ECD10 are making value judgements, and not strictly answering about their child’s actions.

Inclusive Education Attitudes Section

AT1A Do you agree with the following statements?

All boys have the right to attend elementary school

इन वाक्यों के बारे में आप क्या सोचते हैं?

हर लड़के को प्राथमरी स्कूल जाने का मूल अधिकार है।

1. Yes
2. No
3. Don’t Know

AT1B All boys have the right to attend middle/high school

हर लड़के को सेकेंडरी और उच्च स्कूल में जाने का मूल अधिकार है।

1. Yes
2. No
3. Don’t Know

AT1C All girls have the right to attend elementary school

हर लड़की को प्राथमरी स्कूल जाने का मूल अधिकार है।

1. Yes
2. No
3. Don’t Know

AT1D All girls have the right to attend middle/high school

हर लड़की को सेकेंडरी और उच्च स्कूल में जाने का मूल अधिकार है।

1. Yes
2. No
3. Don’t Know

AT1E All children with disabilities have the right to attend school

सभी विकलांग बच्चों को स्कूल जाने का मूल अधिकार है।

1. Yes
2. No
3. Don’t Know

There was no variation across the three countries’ samples in their response: only one out of the 140 respondents answered “no” to just one of the five AT1 questions. (Upon probing, it was revealed that even this ‘no’ response was actually an error; the respondent misunderstood the question.) Many respondents did not reflect upon the question or consider potential extenuating circumstances, but instead gave quick off-the-cuff “yes” responses, answering within one of two patterns of interpretation presented below in Figure 17:

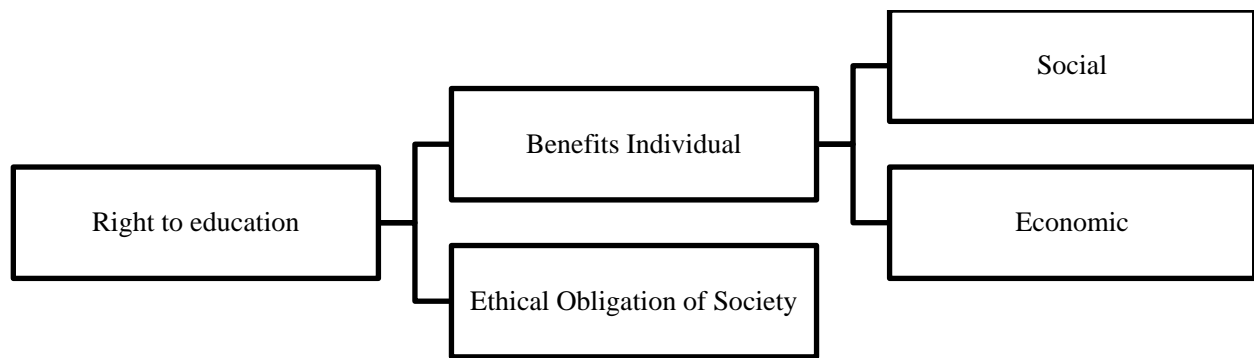


Figure 17: Cognitive Schema for AT1A, AT1B, AT1C, AT1D, and AT1E

Benefits to Individual

When asked to explain their answers, most respondents described the social and economic benefits of an education. For example:

Children need to interact and learn. There are things that you cannot learn from home such as socializing.

To further their education, they can get a better life—meaning to get a job so that you can maintain yourself for instance like to buy food stuff, clothing, help your parents.

They will learn discipline. They will learn to go to the wash room on their own. They will learn how to take care of their things. They learn to behave with teachers, will be good with their friends and learn sharing.

Ethical Obligation of Society

Outside of the ‘benefits’ theme, some Indian respondents approached the question within a human rights framework, that is, they understood the questions as asking about education as an ethical obligation as opposed to an added benefit. India had recently passed a Right to Education Act which stipulates education as a human right and allows government funding for each child’s education. The more affluent Indian respondents tended to be more aware of this law and, therefore, were more inclined to interpret the question through this lens. The interviewer notes below describe how this framework informed one respondent’s interpretation of “right” to attend school:

The understanding of the right to attend was interpreted as: 1) Should be allowed by parents and society to attend school, 2) If the parents do not have the means then the government should cater to these needs being fulfilled, 3) This entails free education; free food in schools and everything a child needs to go to school, 4) If the parents cannot afford to educate the child, they should be taken care of by the government or other bodies, mainly the government.

It was clear from interview notes that less educated respondents were unaware of the Right to Education Act and were even confused by the terminology used for the word “rights.” In fact, 12 out of the 64 Indian respondents did not understand the question to the extent that the interviewer felt the need to explain the question. For example, one interviewer’s notes state:

I asked her the meaning of ‘Right’ in Hindi ‘*mool adhikar.*’ She said, “I don’t know the meaning of *mool adhikar.*” I broke the word and asked her if she knew the meaning of ‘*adhikar* to which she said it means “this is mine.” [She then said] “I don’t understand *mool adhikar.*”

Similarly, another interviewer describes a respondent’s confusion with the terminology:

Though the respondent said yes she started telling about the frequency of toileting. After repeating the question she blankly said, “I do not know and I cannot understand.” (Maybe the respondent was comprehending the “*mool*” phonetic sound that matches the Hindi word for urination “*Mootra*”.) The respondent was unaware and could not comprehend the question at all. I did not want her to feel embarrassed hence went to the next question. The statement and the concept of the question was too advanced and complicated for her to comprehend and answer. She blindly said Yes.

It is important to note that, while essentially all respondents answered “yes” to all of the AT1 questions, in follow-up discussion some respondents offered qualifications to their answers, specifically to the questions about girls attending secondary school (“if the family is able to afford it”) or children with disabilities attending school (“if they are capable of learning”). Thus, respondents’ answers might not have portrayed their actual opinions or thoughts about equal access to education. Of note, there were a number of Indian respondents whose children were not attending school and whose interviews illustrate the range and complexity of issues influencing parents’ decisions to send their disabled child to school; even these parents did not consider extenuating circumstances when providing their initial answers to the set of questions.

Although the questions are broken into parts (i.e. by level of schooling, by gender, and by disability status), most respondents did not appreciate the reasoning behind five separate questions about access to education. This was particularly true for those respondents approaching the question within the benefits framework as opposed to ethical obligation. Thus, without considering extenuating circumstances, many respondents interpreted each of the five questions as asking the same: “Ideally, should all children be educated?” Notes from an Indian interview, for example, illustrates how one respondent interpreted the girl’s middle school question as being the same as the previous three questions:

“Yes. Yes. Yes. All children must go to school.” It appeared that she was getting irritated by the repeated questioning. She responded “of course all children should go to school as school teaches them about life and prepares them for their life ahead. What they need to learn when they are small and when they become bigger can be taught to them in school so they should go to both schools primary and secondary.

Because respondents understood the five questions to be essentially the same, they frequently expressed irritation that the questions were repetitive, stating “I already told you,” or “as I answered in the previous question.” Many interviewer notes describe respondents as being bored or annoyed: “She seemed to get irritated and said why same questions again and again?” And, “She put her hand on her forehead in frustration with the same question.” Another set of notes stated, “The answer seemed mechanical.... Perhaps the same question on rights being asked twice for each of the two genders had led to boredom.”

On the other hand, when asked first about boys’ education, some respondents became either confused, asking “why do you ask about boys alone?” or angry as they believed that the survey was disregarding the importance of girls’ education. For example, one set of interview notes states:

The respondent did not like this question and refused to pick any of the options. She asked why the question was only for boys and said that all children have the right to attend school. Her answer would be yes if the question had asked about the rights of all children attending school.

Similarly, another set of notes states:

She appeared shocked with this set of questions because it separated boys and girls. She said, "Why don't you ask about all children?" She said that, of course, children should go to school.

Breaking the question into levels of education also caused confusion for some respondents. Not realizing that the following question would ask about secondary school, some respondents thought it odd to be asked only about primary school. One respondent from Jamaica, for example, stated "of course, boys should attend primary school because they need that if they want to go on to secondary school." Another set of interviewer notes describes this same type of confusion:

The mother did not quite understand the question and so [I] repeated it multiple times before [she] answer[ed]. Her response was "it is a right because everybody must learn and going to primary school is a stage. They must attend primary school before they attend high school."

By far, however, the most amount of confusion regarding education levels pertained to the specific terminology for early and late childhood schooling. Despite the fact that vocabulary was specifically chosen in the three testing areas to be country-appropriate, some respondents were still unsure of the terminology. This occurred in each location. The following set of notes from a Jamaican interview illustrates this confusion as well as the impact question interpretation:

The parent paused and asked what I meant by primary, "What do you mean? Like prep school?" She explained that she asked because she views "primary" as government owned public schools while "prep" can be both privately and publicly owned. She thinks that children have the right to attend either "primary" or "prep (preparatory)" school depending on their parents' financial situation. When I explained that the question refers to the level of education (grades 1-6) regardless of whether it is at a "primary" or "prep" school, the parent responded "yes". She added "that all children have the right to learn/attend school; learning starts at prep school."

AT2A Do you think that children with disabilities should only go to special schools for those with disabilities?

क्या आपको लगता है की विकलांग बच्चो को खास स्कूल में ही जाना चाहिए जो विकलांग बच्चों के लिए बनाया गया है?

1. Yes
2. It Depends
3. No
4. Don't Know

More than the other attitude questions above, respondents tended to weigh out and consider extenuating circumstances when formulating their answer to this question. The primary point of consideration for respondents was the extent of a child's disability. For example, a set of interview notes from Jamaica note:

She stated that she has seen children with mild autism and they are very intelligent. She used her autistic cousin as a contrast to an intelligent autistic person saying that he is unresponsive and they had to get help for him. Also, she stated that there is a very intelligent child at her daughter's

school and that he walks funny. Since he can manage the work, he should attend the normal school.

Respondents also considered type of disability that a child might have. For example, some respondents stated that blind or deaf children would be better served at a special school where there are staff who are specifically trained in braille and sign language. Children with mobility problems, on the other hand, would not need this type of assistance and so would not need a special school. Similarly, children with behavioral disabilities, some respondents surmised, might be best suited at a special school if their disability was so severe that it negatively impact other students. Because respondents were offered the response category, “it depends,” this extent of potential extenuating circumstances did not generate burden for respondents.

The central point of difficulty for this question was respondents’ conceptualization of “special school,” specifically, that not all respondents felt that they had a clear enough understanding of the term. For example, one set of interview notes states:

First he said “what is special school?” Then I had to [describe] about special schools. He has not seen any special schools, and there is no special school that exists in her village.

Inclusive Education School Environment Section

The Inclusive Education School Environment questions had been previously tested, and in general performed well in their current iteration. However, as detailed below, a few questions may require minor modifications or additional testing in order to ensure that the data they produce are comparable across populations. These questions include SE3 (“...tutoring or other special services”), SE24 (“...safe at school”), SE6 (specifically the terms “school tuition,” “lodging,” and “tutoring or special services”), SE9 (“...books at the school...”), SE12 (“...too many students...”), and SE22 (“Is the school responsive...”).

SE2 What is the main type of school that (name) attends?

(नाम) मुख्यतः किस तरह की स्कूल में जाता है?

- 1. Regular classroom in a regular school**
- 2. Special classroom in a regular school**
- 3. Special school for children with disabilities**
- 4. Other**

Respondents generally understood Question SE2 to be asking about the type of school their children attended:



Figure 18: Cognitive Schema for SE2

Most respondents understood “special school for children with disabilities” to indicate a school for children with disabilities and “regular school” to mean a school for the general population. In general, Indian respondents noted that they were thinking of “municipal schools” when they heard “regular school,” while most Jamaicans and Americans used the term “public schools.” One Indian respondent appeared to have difficulty with the question, and specifically asked the interviewer what a “regular school” was. The interviewer then described it as a “normal” school, and he said his son went to one.

Respondents who answered using the third answer category—“Special classroom in a regular school”—were thinking about a classroom, or a set of rooms, that are set aside within a general population school for children with disabilities.

SE3 Does (name) receive tutoring or other special services?

क्या (नाम) को खास किस्म की पढाई या अन्य सेवाएँ मिलती है?

1. **Yes**
2. **No**
3. **Don't Know**

Question SE3 not only caused respondents across all three countries confusion, but was also interpreted in a number of different ways, indicating that the data it collects may not be comparable. Most confusion appeared to stem from the term “special services,” although a few Indian and Jamaican respondents also did not understand the word “tutoring.”

Confusion

A large number of respondents, across all three countries, indicated that SE3 confused them. Specially, they noted three areas about which they were unsure: 1) the phrase “special services,” 2) the word “tutoring”, and 3) whether the question was only asking about in-school services, out-of-school services, or both.

“Special Services”

The most common source of the respondents’ confusion was the term “special services” in both English and Hindi. For example, one Indian respondent who eventually answered “no” explained that she had no idea what the words “special services” or “tutoring” meant. The interviewer tried translating the words into both Hindi (the interview was conducted in English) and Marathi (a very common language in the Indian state of Maharashtra), but the respondent still did not know. Eventually, she thought it may have to do with the financial assistance that the government provides to families of children who have a disability.

A Jamaican mother refused to answer and simply asked “What is that?” after being administered the question. Upon further probing, this respondent revealed that her child received speech therapy a few times a month, but did not connect this to the phrase “special services.” Likewise, after receiving the question, an American mother said: “What does special services include?” When asked to say what she thought it might mean, this respondent went on to say:

I think it means an after-school program, ‘cus he used to do tutoring. So he does tutoring and extra credit work after school...I’d say yes.

“Tutoring”

A couple of Jamaican respondents did not know what the word “tutoring” meant. One respondent who refused to answer explained that she did not know what the word meant, even upon probing. Similarly, another Jamaican mother who eventually answered “no” said that she did not know what “tutoring” was. Upon further probing, this respondent decided to focus instead on “special services” and decided that the question was asking about tuition assistance and government vouchers for back-to-school supplies.

Location of Services

In addition to confusion over the definitions of “special services” and “tutoring,” a few respondents expressed that they were confused about whether the question was asking about in-school services, out-of-school services, or both. In all of these cases however, after a respondent noted this confusion, they went on to answer “yes”—deciding that the question was asking about either in- or out-of-school services. For example, one Indian respondent who asked for the question to be repeated and asked the interviewer if it was asking about in- or out-of-school went on to answer “yes” and explain that he was thinking about the tutoring that his wife gave to their daughter at home (even though she did not receive any tutoring in school).

Interpretation of the Overall Intent of the Question

Figures 19 and 20 are the cognitive schemas displaying the full range of interpretations of “tutoring and other special services” that emerged across the Indian and Jamaican/American samples, respectively (potentially out-of-scope patterns of interpretation are highlighted in red):

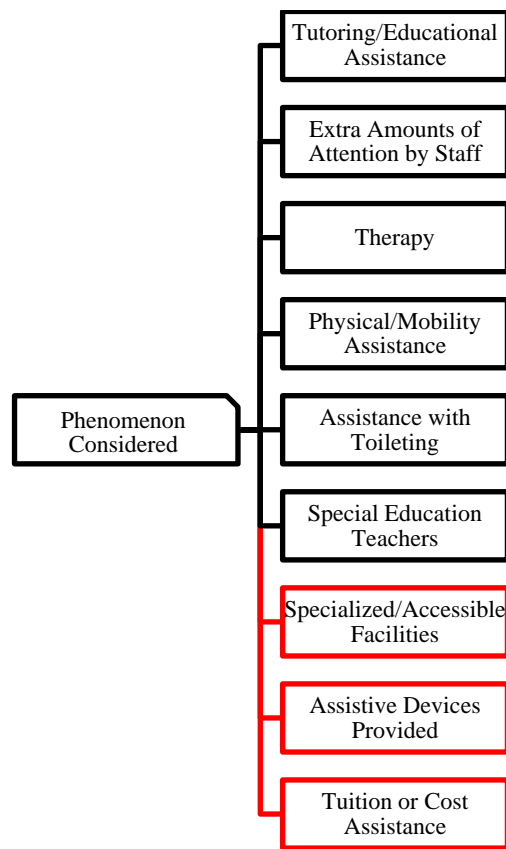


Figure 19: Cognitive Schema for Indian Sample for SE3

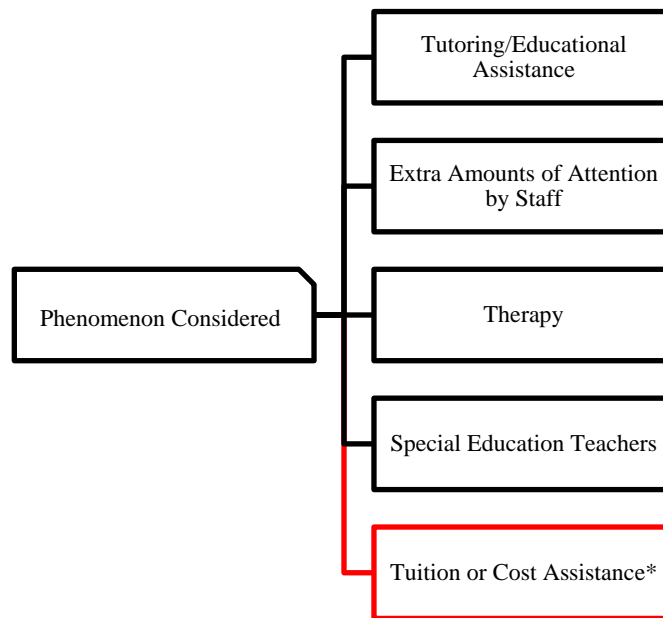


Figure 20: Cognitive Schema for Jamaican and American Samples for SE3 (*Present only in Jamaican Sample)

Respondents conceptualized “...tutoring and other special services” in a number of ways—most of which appear to be in-scope, as they are about activities that a child receives or participates in that helps them succeed in school. However, a few potential out-of-scope interpretations emerged (primarily in the Indian sample) that took into account the wider school environment, and did not focus specifically on person-to-person services. For example, one Indian mother answered “no” and explained that the school did not give her son a wheelchair, even though he needed one. Another Indian respondent answered “no” and explained that he was thinking about whether or not there were ramps or other accessibility features built into the school. While most respondents thought about person-to-person services—such as whether or not their child received therapy, educational assistance, or extra attention from school staff—the fact that these potentially out-of-scope interpretations emerged indicate that the term “special services” could be better defined.

SE4A Does (name) need help to get to school?

क्या (नाम) को स्कूल पहुँचने के लिए मदद की आवश्यकता है?

1. Yes
2. No
3. Don't Know

Most respondents across all three countries understood Question SE4 to be asking them whether or not their child needed assistance from them (or from other adults) to travel from their home to school, as can be seen below in Figure 21. However, some Jamaican and American respondents understood the question to be asking about the broader concept of “getting” their child to school and focused on aspects other than transportation.

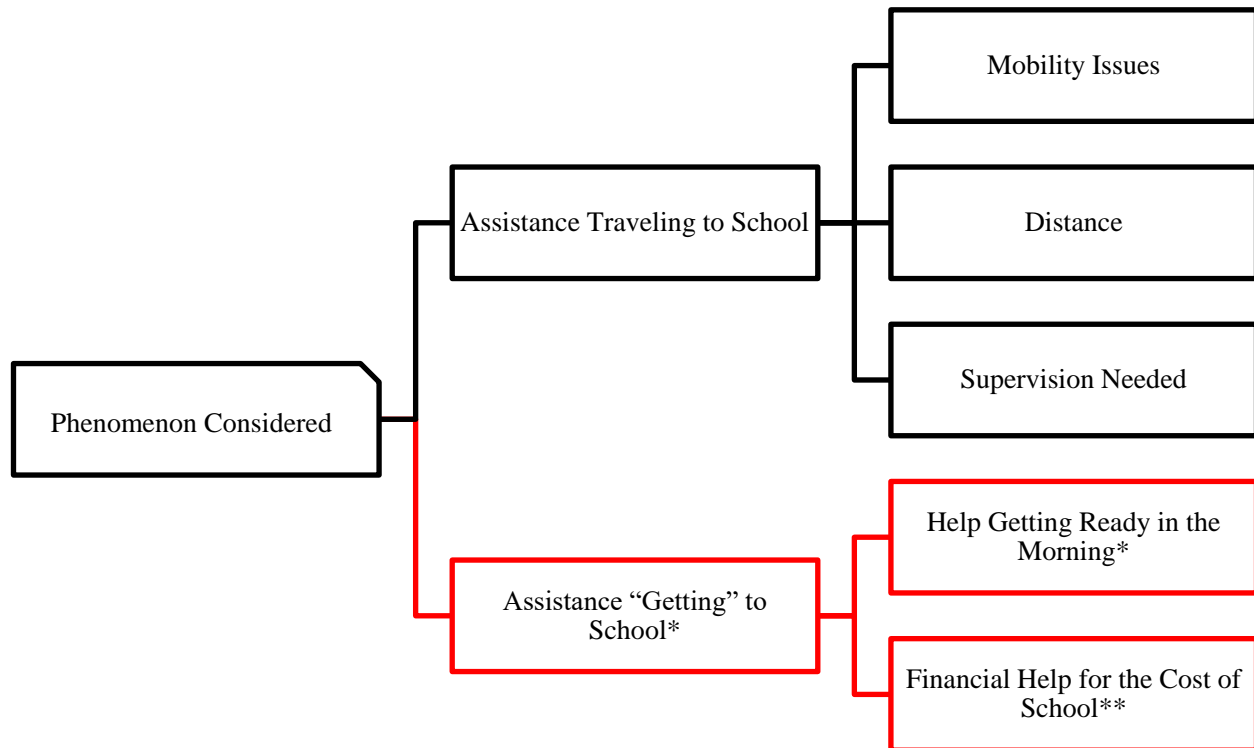


Figure 21: Cognitive Schema for SE4A (*Present Only in Jamaican and American Samples; ** Present Only in Jamaican Sample)

Assistance Traveling to School

Most respondents across all three countries understood SE4A as asking whether or not their child needed help or assistance in traveling from their home to school, and in doing so used three major patterns of interpretation. Some respondents considered whether or not their child needed physical help because of a disability. For example, one Indian mother who answered “yes” noted that her child had physical difficulties and “could not do anything without support” from walking to even sitting. Another mother said that her son “has no mobility issues” and is able to get to the bus to travel to school.

Other respondents considered whether or not their child had to be provided with transportation in order to get to school because of the distance from their house. Most of these respondents thought about whether or not they had to drive their child to school; for example, one American mother who answered “yes” said “I have to drive him” because the school was far away. This respondent noted that either she had to drive her son, or he had to take the bus, but could not just walk on his own to school because of the distance. A Jamaican father who answered “no” explained that while he previously had to walk their daughter to school when she was younger, she could now do it on her own because it was not far from home. Most of these respondents only thought about whether or not they (or their family members) had to transport their children because of distance, and did not count the use of public transportation towards an affirmative response. For example, one Jamaican respondent who answered “no” said that while his son travels part of the way to school with his mother (from their home to the mother’s office), the son will take either a taxi or transit from the mother’s office to school. This respondent reasoned that because neither he nor his wife had to make any extra trips to get his son to school, the correct answer was no. Likewise, an Indian mother answered “no,” explaining that her daughter “moves on her own—she travels alone on public transport.”

Many respondents based their answer on whether or not they thought their child needed adult supervision walking to school. This pattern was particularly present among parents of younger children, who would note that their child “was too young” or “too small” to travel to school on their own. One Indian father said “yes” and said that his son is walked to school by his mother every day. Likewise, a Jamaican mother noted that she answered “yes” because her son “is too young to travel independently. It would be unsafe for him to travel alone.” These respondents appeared to base their answer on whether or not they or some other adult had to supervise their children, not just whether or not their child could walk by him or herself. For instance, an Indian respondent answered “no” and explained that her 6-year old daughter was too young and distracted to travel by herself, but that she no longer had to do it herself:

She cannot go alone. She will go wandering and she will get lost. I used to go with her and then I trained her [the way to the school]...she still cannot go alone, so she goes with other children from the same vicinity.

Although this child did not travel by herself and needed to walk with other children from the neighborhood, this mother reasoned that because she herself did not have to supervise the trip, the correct answer was “no.”

Assistance “Getting” to School

Some American and Jamaican respondents did not understand the question to be asking specifically about travel to and from home and school, but rather the overall act of getting their child to school in the morning. These respondents employed two specific patterns of interpretation when answer SE4A—either thinking about the need to motivate their child, or their financial burden of getting their child into (and keeping them in) school.

A few respondents understood this question to be asking whether or not their child needed help getting ready or motivated to go to school in the morning. One respondents from Jamaica answered “yes,” and when asked what she was thinking said that her daughter “needs help to get ready in the morning” because she prefers to not go to school at all. Likewise, an American mother who answered “no” thought this question was about her son’s motivation to get to school in the morning: “Haha, no we’ve grown past that part..” When asked to clarify what she was thinking about, she said, “Yes, motivation [to get to school].” Another American mother who answered “no” said something similar when asked to state in her own words what the question was asking: “Can she get up in the morning and go to school or does she need help? You know, motivation...She gets herself ready, has some food and walks out to the bus stop.”

One Jamaican mother understood this question to be asking about whether she receives financial assistance that helps her get her child to school. This respondent explained that she does not have a job, and it is therefore difficult for her to finance her son’s education at the moment—thus reasoning that “yes,” the child needs help to financially get to school.

SE4B If Yes, is this because

यदि हाँ तो इसका कारण है (जो भी लागू हो उसे रेखांकित करे)

1. **(Name) is too young to go alone**
2. **It is too far to go alone**
3. **It is unsafe to go alone**
4. **(Name) has a disability that makes it difficult to go unassisted**

Question SE4B was administered to the 32 respondents who answered “yes” to SE4A. Respondents all interpreted the four answer categories in comparable ways.

Too Young

Respondents all interpreted the first answer category, “...too young to go alone” to be asking whether or not their child was not old enough to make the trip from their house to school by themselves. Most of the respondents who answered using this answer category interpreted the previous question (SE4A) using the “supervision” pattern of interpretation (see Figure 21 and the analysis of SE4A) and then carried that interpretation forward into SE4B.

Too Far

All respondents understood this category to be asking whether they thought their child needed assistance to get to school because of how distant the school was from their house. However, they did not have a universal definition for what counted as “too far,” and took a number of factors into account when trying to determine this. For example, one respondent from Jamaica said that while the school was not really that far (it was only a 3 minute drive), it was too far to walk in the hot sun. Another respondent from India explained her “yes” answer by saying that the school was a kilometer away. However, other respondents used a much higher bar when judging what was “too far.” For instance, another Jamaican father answer “no” and explained that his son took 45 minutes on public transit to get to school, but that was not “too far” in his estimation.

A few respondents conflated this answer category with the third one—“It is unsafe to go alone”—explaining that “it is too far to be safe.” Most of these respondents factored in barriers such as bad neighborhoods or highways when making their judgement that something was too far. For example, one Jamaican parent said “yes” and explained that the streets were very busy between their house and the school, thus making the walk “too far.” Another Jamaican mother explained her “yes” answer by not only talking about physical distance (“one end of Kingston to the other”), but also about personal safety, saying that “It is unsafe to travel alone for this distance for any child.”

Unsafe

Respondents understood the third answer category to be about whether or not their child would be in danger were they to travel from their house to the school alone. In general, respondents considered two types of dangers: crime and traffic. Respondents who were thinking about crime basically determined whether or not any “bad” or notably high-crime areas were between their houses and the school. For example, one Jamaican mother who said “yes” to this answer category explained that she perceived her area as “violent” and she said that people might take advantage or harm her child on his way to school if she did not take him. An Indian mother who answered “yes” thought specifically about crime against women and girls saying, “She cannot be allowed to go alone—the environment of the community is unsafe for girls.” Another Jamaican mother said “no” and explained that there was a police station that her daughter would have to pass on the way, so it was therefore safe from crime.

Most respondents conceptualized “unsafe” in terms of traffic and considered whether or not their child would have to walk along or cross highways or other high-traffic roads to get from the house to the school. For example, one Jamaican father answered “yes” and exclaimed, “People drive dangerously on the road!” An Indian father, in a similar way, said “yes” and noted that the road between the house and school was a busy highway and therefore someone always had to assist his daughter in her trip to school.

Disability that makes it Difficult

Respondents universally understood this answer category to be asking whether or not the reason they had to assist their child in getting to school had to do with a disability. In doing so, most respondents not only noted whether or not their child had a disability, but also how that disability affected their ability to travel by themselves. For instance, one Indian father explained that his son’s cognitive disability limited his ability to understand the rules of the road and therefore could not travel alone: “He does not understand how to cross a road. He does not follow the traffic rules—he may just cross without thinking.” A Jamaican parent of a child with cerebral palsy explained that because of the disability her daughter was unable to walk at all and always had to be picked up to get to school.

Other respondents again considered crime and safety in this answer category, and explained how they thought that their child’s disability might make them more vulnerable than other children in public, thus preventing them from going to school alone. For example, one Jamaican father explained that his son’s disability made him a “target” for harassment or crime.

SE5 How long does it usually take (*name*) to get to school?

(नाम) को स्कूल पहुंचने के लिए ज्यादातर कितना समय लगता है?

1. Less than 30 minutes
2. 30-60 minutes
3. More than 1 hour
4. Don’t Know

Respondents almost universally understood Question SE5 as asking about the time it takes their children to get from their house to their school, although a few did include the time it took their child to get ready for school in their calculation:

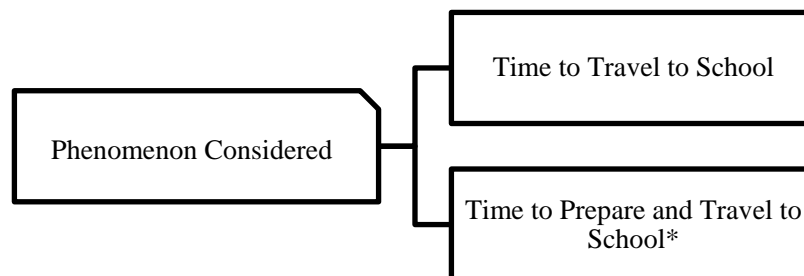


Figure 22: Cognitive Schema for SE5 (*Present Only in Indian and Jamaican Samples)

Travel Time Only

Respondents thought about the entire process of getting from the house to the school. For children who just used one mode of transportation (walking, biking, driving a car, etc), their answer reflected just the time in (or using) that mode. For example, one Indian respondent answered “Less than 30 minutes” and explained that “it only takes five to 10 minutes to take him to school,” thinking about the time it takes for the respondent to walk with her son. A Jamaican father who answered “Less than 30 minutes” was thinking about the total time it took him to drive his daughter to school in the morning, noting that it was typically a 20-minute car trip. Similarly, an American mother answered “30 to 60 minutes” and explained that her son takes the city bus from the house to the school, and the time depended a little bit on traffic.

Respondents who used multiple modes of transportation included the full time in transit, including any stops to switch from one mode to another. For example, one Indian mother who answered “More than 1 hour” explained that her son took a bus to school, but had to switch from one bus route to another. She said that the total time on the busses was a little more than 45 minutes, but she said he typically has a 15-minute wait at the bus stops that she included in her calculation. Likewise, a Jamaican father answered “More than 1 hour,” saying that it takes his son about two and a half hours each day to get to school, since he goes with his mother to her office first and then gets a taxi or a bus from the office. He said that his son usually waited about 15 minutes at the mother’s office before the taxi would come, which he included in his total time.

Preparation and Travel Time

Just a couple of respondents employed an alternative interpretation of SE5, including not just the time it takes for their child to get from the house to the school, but also the amount of time it takes for them to get ready in the morning. For example, one Indian mother who answered “More than 1 hour” explained that she was including the 15-30 minutes that her son took to get ready every morning, and decided it was best to “log a response that covered this time too.” Similarly, a Jamaican father who answered “More than 1 hour” counted not only his son’s trip to school on a bus, but also the average amount of time he took each morning to wake up and get out the door.

SE23 Is (name) safe travelling to and from school?

क्या (नाम) के लिए स्कूल जाना और आना सुरक्षित

1. **Yes**
2. **No**
3. **Don’t Know**

Respondents displayed a very consistent interpretation of Question SE23, all believing that that question was asking about their child’s safety on his or her actual route to school, as shown below in Figure 23:

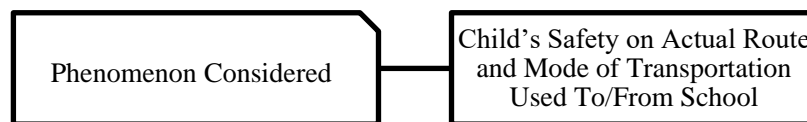


Figure 23: Cognitive Schema for SE23

The respondents all considered the actual route and mode of transportation their children took to school (as reported previously in SE4A). For example, one Indian father answered “yes” and went on to say, “Yes he is safe. I take him to school on my bike...but he is safe as it is a short distance.” This father had previously in SE4A noted that the child could not go to school by himself because of both his age and the safety of the route—thus, in SE23, the respondent is only thinking about the child’s safety when they go together, and not his hypothetical safety were he to travel alone.

This pattern—where respondents only considered the student’s actual route and mode, and not their hypothetical one were they to go to school without assistance—emerged across all three countries and across parents of children with and without disabilities. In fact, all respondents who said their children could not go to school by themselves because “It is unsafe to go alone” in SE4B answered “yes” they are safe on their way to/from school in Question SE23.

SE24 **Is (*name*) safe at school?**
 क्या (नाम) स्कूल में सुरक्षित है?

1. **Yes**
2. **No**
3. **Don’t Know**

Respondents of children without and with disabilities employed slightly divergent interpretations when answering Question SE24 that may affect the comparability of its data. As can be seen above in the illustrations of the two schema below in Figures 24 and 25, respondents with children without disabilities all focused their response directly on the construct of “safety” by considering either intramural safety (i.e. bullying) or extramural safety (i.e. neighborhood crime). While some parents of children with disabilities used this safety specific interpretation, many others considered safety in broader terms—generally thinking about whether or not their child was “taken care of” in school.

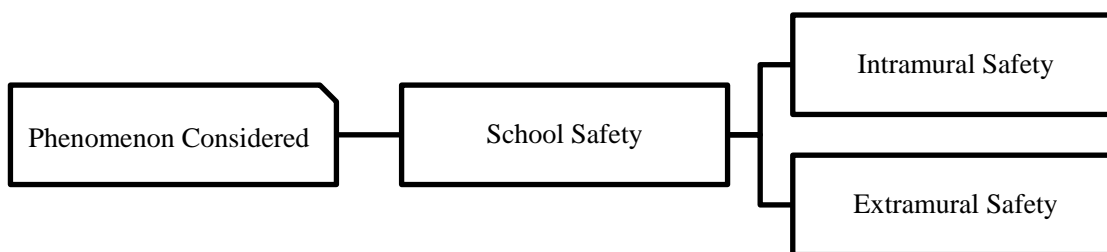


Figure 24: Cognitive Schema for SE24 for Parents with Children without Disabilities

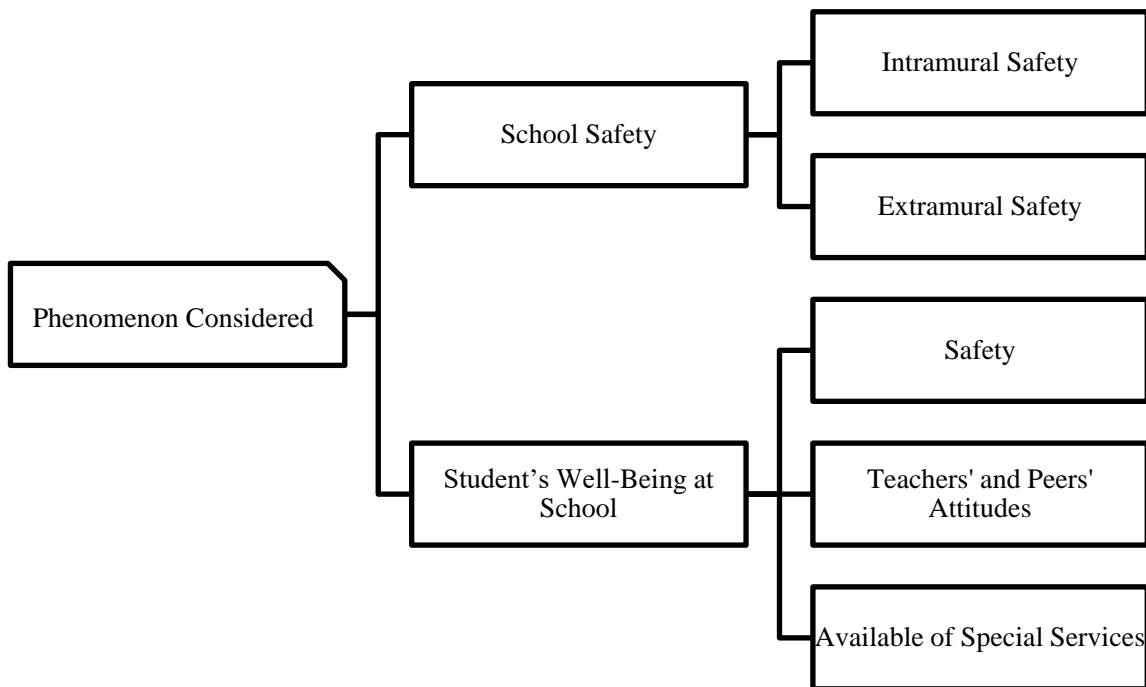


Figure 25: Cognitive Schema for SE24 for Parents with Children with Disabilities

Intramural Safety

Most parents of children without disabilities, and a few respondents who had children with disabilities, based their responses on intramural safety—that is their child’s security within the school environment itself. This was typically expressed in terms of whether or not their child was bullied by other students. For example, one Jamaican mother noted that there “is no bullying” at the school, and even though it is a “mixed” (i.e. inclusive) school, the children without disabilities do not harass the children with disabilities. An Indian father who answered “no” explained that “I don’t know if he is safe, but at times he is bullied in school and the other boys blame him for what he has not done. And if I complain [to the school], they will tell me to keep him at home.” Likewise, a Jamaican mother said:

At times he is not safe as the higher functioning students tend to take advantage of the lower functioning students and bully them. If this happens to him he would respond aggressively as he tends to be a very aggressive child at times

Extramural Security

Other respondents, including all of the American ones, instead conceptualized “safety” in terms of security against outside crime. For example, one American mother explained her “yes” answer by thinking about the physical security her son’s school building has:

They don’t play when it comes to [metal] detectors. Right when you walk through the door. They have detectors all over the front of the school, they also take the cell phones from the kids and lock them until they leave the school.

Another American answered “Don’t Know” and explained that she was thinking about the potential for school shootings and crime. When asked to explain her response, she said,

Because of all the school shootings, even though they do have buzzer where you have to go in and tell [the school office] who you are. They still don't know who I am while I'm outside. They don't know I'm there for my child—I could have a gun, so I don't feel she's 100 percent safe.

Other parents considered both inter- and extramural security when answering SE24. For example, one Jamaican mother answered “yes” and noted:

The surroundings are safe, and there is a good teacher-student ratio. The teachers keep track of the kids—where they are, how they interact—so the classroom is also safe. The furniture is appropriate and there is not anything in there that could hurt him.

Students “Taken Care Of”

Besides the two safety-specific patterns described above, some parents of children with disabilities focused on their child's overall well-being at school. In considering this, they not only thought about intra- and extramural safety as explicated above, but also whether or not the school was an inviting environment for their child, whether the school could provide special services for their child's needs, and whether or not their child was accepted by other students. For example, an Indian father answered “no” and explained that, “There were no facilities for [his son] at the school. If he soiled himself or fell down, there was no one to look after him.” This father went on to note that his son was the only child with a disability in the school, so he did not have high expectations for the services the school would provide. In a similar way, a Jamaican father who answered “yes” said:

The teachers are like mothers, they take good care of the children. The children are placed on a large mat on the floor so that they do not fall from chairs and get hurt. There are newly constructed classrooms with air conditioning and bathrooms inside the classrooms.

So again, this father not only thought about the physical safety of his son, but also about his overall well-being within the school environment. Other parents, however, did not appear to directly consider safety at all, but instead just thought about the general environment. For instance, one Jamaican parent who answered “yes” said: “The environment is specially made for children with disabilities. The teachers are also trained to look after them.” Similarly, an Indian parent who answered “yes” was thinking about the fact that the teachers at the school appeared to care for her daughter: “Yes she is fine. All look after her. If she does not go [to school], then teacher sends classmates to ask why she did not attend.”

It is possible that this broader pattern of interpretation could be limited if SE24 was placed after the questions that ask specifically about their child's teacher's (SE7, SE8 and SE10) and peer's (SE 21) attitudes.

SE6 During this school year, did your household pay for the following items?
 इस साल की पढाई के दौरान क्या आपके घरवालों ने नीचे लिखे वस्तुओं के लिए पैसे दिए है?

1. **School tuition**
2. **Transportation to and from school**
3. **School meals**
4. **School materials and supplies**
5. **Lodging**
6. **Tutoring or special services**
7. **Assistive devices, for example braille textbook, hearing aid or wheelchair**

Respondents all understood SE6 to be asking about the costs they incur because of their child’s schooling. However, divergent interpretations that could affect the comparability of the question emerged across a few of the seven categories of expenses—specifically tuition, meals, and lodging.

School Tuition

The term “tuition” was not universally understood to mean just the cost of admittance into a school; some respondents included concepts such as extracurricular fees, suggested annual donations to a school, and pocket money as shown below in Figure 26:

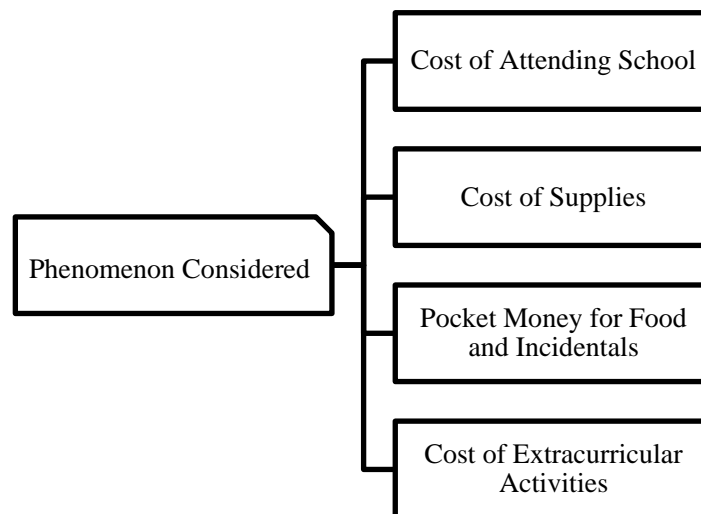


Figure 26: Cognitive Schema for "School Tuition" in SE6

Cost of Attendance

At a minimum, all respondents included the cost charged for attendance and teaching (i.e. the strict denotation of “tuition”) in their answer. Most respondents in India and Jamaica used the term “school fees” to explain what they were thinking about, whereas the word “tuition” was used by the American respondents. For example, one respondent from America who answered “no” explained that her son had a scholarship to go to a private school and therefore she did not have to pay any tuition herself. An Indian father who answered “no” explained that his daughter went to a municipal (i.e. public) school, and therefore the family did not have to pay for school fees. Because all respondents considered this cost at a minimum, none of the “no” responses to this category are false negatives. Likewise, a Jamaican mother who answered “yes” said upon hearing the question, “Tuition? That means school fees, right? Yes, we pay for it.”

Other Costs

While there can be confidence in all the “no” answers to the “School Tuition” category of SE6, some parents who answered “yes” were considering fees beyond just the cost of admittance and teaching. For example, a number of Jamaican respondents counted “auxiliary fees” or annual contributions to their school as a tuition cost and answered the category “yes.” For example, one Jamaican mother who answered “yes” said she was thinking of “...the auxiliary fees—that means you pay for little incidents like book rentals and so on.” Likewise, an Indian father who answered “yes” explained that while his daughter went to a municipal school, he had to pay for books and school uniforms at the beginning of the year.

A couple of Indian respondents also included what they called “*tiffin*,” or pocket money in their interpretation. For example, one Indian mother said that she pays about 11,000 rupees a year in pocket money in order for her daughter to buy snacks on the way home from school.

In addition, a few respondents included the cost of additional or extracurricular services such as extra tutoring or therapy sessions. For example, when asked to explain his “yes” response, one Jamaican mother said that she was including “speech therapy, swimming [classes] and social coaching.”

Transportation To and From School

Respondents all considered the total costs they incurred in order to get their children to or from school:

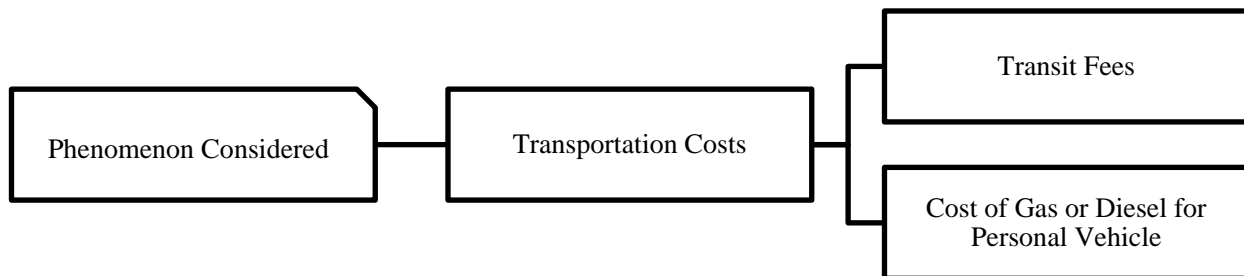


Figure 27: Cognitive Schema for "Transportation To and From School" in SE6

Respondents included things such as transit (train tickets and bus passes) and any special fees they paid to the school to cover transportation costs. Additionally, a few respondents considered the cost of gas or diesel for their own vehicles if they drove their children to school.

School Meals

While most respondents limited their interpretation of “School Meals” to food purchased at the school itself, a few others counted the food they prepared at home as well as shown in Figure 28:

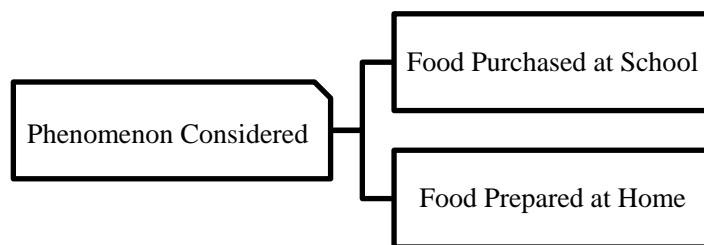


Figure 28: Cognitive Schema for "School Meals" in SE6

Food Purchased at School

Most respondents only thought about whether or not they had to pay for school meals—that is food provided or purchased at the school itself. For example, one Indian mother answered “no” and said, “They give them food to eat at school, and we don’t have to pay.” She went on to explain that the school provided items such as eggs, bananas, and vegetables, but any bread had to be sent from home. However, because the respondent was only thinking about the cost of food provided by the school, she reasoned at “no” was correct.

Many respondents used the term “lunch money” and explained that they would pay the school for this service on a regular basis. For example, a Jamaican mother answered “yes” and explained that she gives her son “lunch money” to pay for the cooked meals at school. Likewise, an American mother who answered “yes” explained what she was thinking: “Lunch time...the school offers credit—they give you an account and you load money on it online. They’ll then notify you when the account is low.”

Most respondents who sent their children’s meals from home did not count this cost towards “School Meals.” For instance, an Indian father answered “no” and said that his daughter packs her lunch and takes it to school. Another Indian explained her “no” response by saying that her son only eats food she prepares for him from home, and he does not pay for food at school.

Food Prepared at Home

However, a few respondents did count the cost of the food they prepared at home when answering this category. For instance, one American mother answered “yes” and said she was thinking about the lunch she packs for her daughter in the morning. Likewise, a Jamaican mother who responded “yes” said she was thinking about the fact that “We [the family] give her lunch to take to school every day.”

School Materials and Supplies

Respondents universally understood this category to be asking about costs besides the fees they pay for attendance and any food costs. Respondents included items such as books, book rentals, school uniforms, stationary, and writing implements.

Lodging

A number of respondents across all three countries initially expressed confusion when asked about lodging costs as their children did not go to boarding schools. For example, one Indian respondent who appeared to be confused asked the interviewer, “How could there be a cost for staying when [her daughter] comes home every day?” She eventually decided to answer “no.” In a similar vein, a Jamaican respondent stated “I don’t

understand” and asked for the question to be repeated and then explained. After the interviewer told her that it was about money spent on room and board at a school, this respondent answered “no.”

Upon probing, it became clear that only one of the respondents in the entire cognitive sample sent their child to a boarding school; however, 14 respondents answered “yes” to this question. Figure 29 shows the patterns of interpretation the respondents used when answering this category of SE6, along with the survey responses that each of these patterns elicited in the cognitive sample:

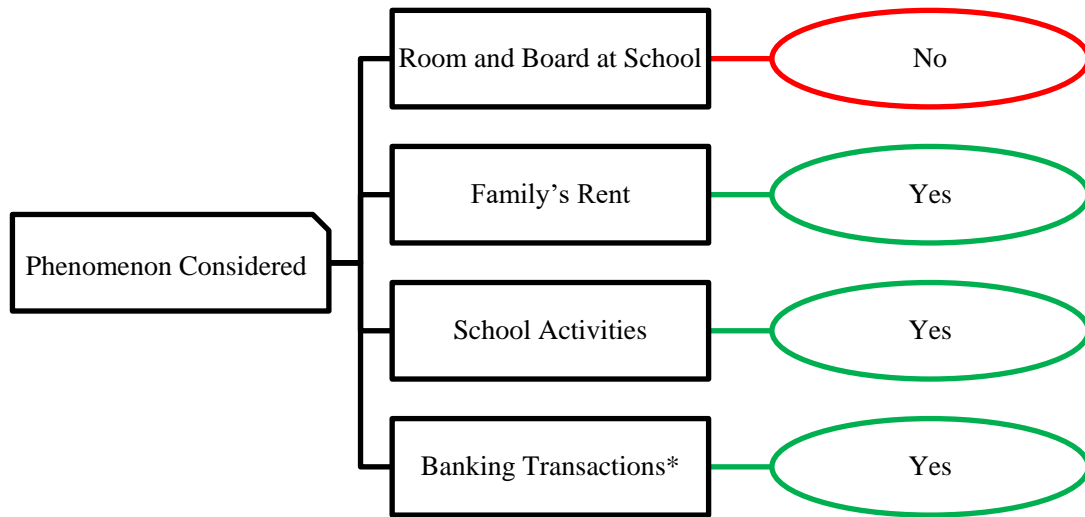


Figure 29: Cognitive Schema for "Lodging" in SE6

Room and Board

Most respondents understood this question to be asking about room and board for a child staying at a school. Since none of their children actually boarded at school, they all answered “no.” For example, one Jamaican mother who answered “no” said that her household does not pay for lodging at school. Similarly, an American who answered “no” said she was thinking about, “Boarding school...I thought of staying overnight.”

Rent

A few respondents who answered “yes” to this category counted the rent they pay for their family home. For example, one Indian father who answered “yes” said, “We pay for the rent for the [family] house, so yes.” Likewise, a Jamaican respondent used similar logic and said, “[Her son] lives at home, so yes I pay for lodging.”

School Activities

One respondent from India who did not know what the term lodging meant at all answered “yes” and asked the interviewer if the question was asking about extracurricular activities at the school, such as overnight trips.

Banking Transactions

Most Jamaican respondents who answered “yes” explained that they were thinking of “lodging” as a form of financial transaction with a bank. For example, one Jamaican interviewer explained a respondent’s answer in her notes by saying:

The respondent asked if this meant savings? She then proceeded to explain that the school allows the children to save and when the money accumulates it is taken to a financial institution and lodged. She continued to say that parents can also lodge their monies there as well.

Likewise, another Jamaican respondent’s initial reaction to hearing this question was to ask the interviewer, “What is that miss? Like a bank account?” The term “lodging money” is a popular expression in British English and related dialects (including Jamaican English) that refers to what would be known in American English as “depositing savings.”

Tutoring or Special Services

Respondents had a much more limited interpretation of the phrase “Tutoring or Special Services” here as it related to costs than they did in SE3 above. All respondents interpreted this as asking about programs or activities they paid for in addition to any tuition costs. Respondents included activities such as out-of-school tutoring, college prep classes, and physiotherapy.

Assistive Devices

Respondents universally understood this category to be asking whether or not they had to pay for devices such as wheelchairs, special textbooks, or hearing aids.

SE7 Do (name)’s teachers care about (his/her) success in school?

क्या (नाम) के टीचर उसकी सफलता के बारे में ख्याल रखते हैं?

1. Yes
2. No
3. Don’t Know

Very little variation emerged across how the respondents in all three countries interpreted Question SE7. In general, they believed that they were being asked whether or not their children's teachers were responsive and supportive. As shown below in Figure 30, respondents did conceptualize this support in a variety of ways, including whether or not their teacher displays a caring attitude, initiates communication with the parents, is responsive to individual needs, or whether they are able to teach the child new concepts. These patterns all appear to be in-scope and should produce comparable data.

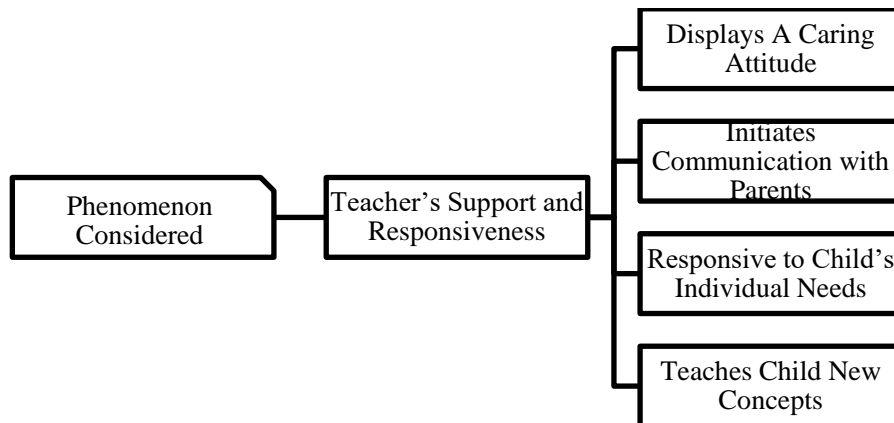


Figure 30: Cognitive Schema for SE7

Some respondents considered how well their child's teacher's treated their kids, like one Indian mother who answered "yes" and reported that, "My child tells me when I ask him about his teacher that she takes good care of him." Similarly, a Jamaican respondent explained her "yes" response by saying that she is pleased by the amount of care and attention her daughter's teachers give all the students in the classes. On the other hand, a Jamaican father answered "no" and said, "The teachers don't care about the success of [his child]."

Some respondents focused more on how well the teacher responded to the educational needs of the students, and how supportive they were towards the students' educational goals. For example, one Indian parent of a child with special needs explained that "yes" the teachers cared about her son's success by crafting special work assignments for him, such as making individual tests and not using word problems in math class. Others mentioned how the teacher would reach out to them if their children were or were not understanding certain concepts or were misbehaving in class. For instance, one American respondent who answered "yes" said: "Well, we have daily reports. When she does something good, they celebrate it. You get notes...Like I would get a note if she followed directions or finished a task."

Many parents simply based their answers on their children's educational progress—more or less basing the answer on whether or not their child had hit certain levels of knowledge or achievement. For example, one Jamaican father answered "yes" because the teachers have given his child "extra work" because she was so advanced, and an Indian mother simply related that her daughter had "good grades." Likewise, an American explained her "yes" answer by reporting:

Because she gets good grades. She always tells me how she like the teachers and how much she's learning in school. She comes home and talks about how some of the teachers do not teach good, but she says that the majority do [teach well].

SE8 Do (name)'s teachers help (him/her) learn?

क्या (नाम) के टीचर उसे सीखने में मदद करते हैं?

1. Yes
2. No
3. Don't Know

Most respondents interpreted Question SE8 in a very similar way to the previous question, SE7. Only two respondents switched their answers from "yes" to "no" or vice versa. The one respondent who switched from "Yes" in SE7 to "No" in SE8 explained that while her son's teachers were supportive, he was very disabled and could not learn in that school environment: "No help is received...it may be that the teacher is not well-equipped or technically trained to teach the child [because of his disability]."

The respondent who switched from "No" in SE7 to "Yes" in SE8 said that while she did not believe that the teachers at her daughter's municipal school cared very much, her daughter was still learning things such as writing, though at a slower pace than would be expected if she had good teachers.

SE9 Are there books at the school that (name) can use?

क्या (नाम) के स्कूल में किताबें हैं जिसका इस्तेमाल (नाम) कर सकता / सकती है?

1. Yes
2. No
3. Don't Know

Some variation emerged across how respondents answered Question SE9. Three major patterns were used, with some parents thinking about whether their school had any books located at the school, other respondents thinking about whether the school provided any books as part of the tuition (or free of charge), and still others thinking about whether their school had specific books that were appropriate for their child:

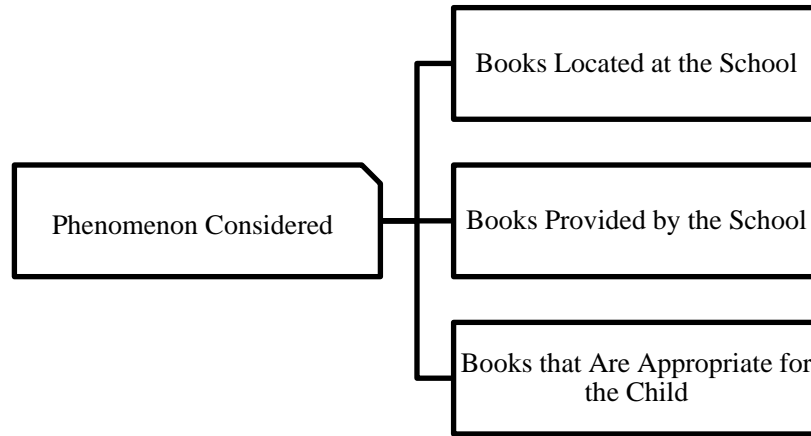


Figure 31: Cognitive Schema for SE9

Books Located at the School

Most parents considered whether or not their child’s school had books available in the school building, and included things such as textbooks and libraries. For example, one Indian father answered “yes” and explained that there are books in the school which his son could read and borrow for a few days. Likewise, another Indian respondents explained his “yes” answer by saying, “The books are there, but he can’t read, so what use are the books?” Similarly, a Jamaican mother said:

There are books in the classroom. Additionally, there have been occasions when the teacher has taken books from a more advanced classroom and given them to [her daughter] to read.

On the other hand, another Indian respondent answered “no” and explained that while her daughter had books at home that she took to school, there were not any located at the school itself: “There are no books in the school to use. The children are supposed to carry [their books] in every day.”

Books Provided by the School

A number of other respondents considered whether or not books were provided to the students as part of their fees (or taxes), or whether they had to buy books for the students themselves. For instance, one Jamaican mother responded “no” and explained that she had to purchase her son’s books. This mother’s interviewer noted that “The mother said that she buys all the books that the child uses. He leaves some of them at school, because they’re too heavy to travel with all the time.” Another Jamaican mother who answered “no” used similar logic and explained that she has to buy all the books that her son uses for school.

This pattern did produce “yes” responses however when the respondents thought about books provided by the school or by the government. For instance, another Jamaican respondent answered “yes” and said that the government provides books (at her son’s public school), but that she also sometimes buys books and takes them to

the school or gives them to her son. For her, the fact that the school provided any books at all was enough to produce a “yes” response.

Books that are Appropriate for the Child

Just a few respondents, and all of them parents of children with disabilities, answered this question “no” and explained that they were thinking that there were no books at the school (or, in a few cases, anywhere) that were appropriate for their child because of their cognitive disability. For instance, one Indian respondent explained her answer by saying that the question did not really apply to her, because her son was too disabled to read, and therefore there were not any books appropriate for him. Another respondent used similar logic when she said, “No. He does not know anything, so what will he do [with books]?”

SE10 Do (name)’s teachers make (him/her) feel welcome in the classroom?

क्या टीचर (नाम) को कक्षा में स्वीकार करते हैं?

1. Yes
2. No
3. Don’t Know

Respondents understood Question SE10 in almost the same way that they did SE7: namely, are their students’ teachers supportive and caring? All but one of the respondents who received this question answered “yes.” They considered things such as whether the teacher or teachers give their children the attention they need, whether they have accepted him or her and tried to include them in the class’ activities, and whether or not they show signs of caring about the student as an individual. For example, an American respondent explained her “yes” response by saying:

Well, they just all do, they go out there way to contact me. Even [her daughter] started to notice it. For example, when she started getting sick the teacher would come up to me saying “Oh, is she, okay”. Then the next year, you know prior to the school year, we let them know her needs. Then, they started emailing me every day saying, “would this help?”

An Indian mother thought about how her teacher helped her daughter progress in school:

Very. Extremely. She used to get bad marks, but now we see progress. She [the teacher] encourages [her daughter] to answer, even if she is wrong. She tells her she is partial right!

An Indian father thought about his child’s state of mind when answering the question, and said,

She likes going to school and is happy in the mornings! She has never said that she has any issues with any of her teachers, and they have never told me that they have any issues with her.

The respondent who said “no” to this question was actually thinking about the general classroom environment and not the teacher in particular. She was specially thinking about how her daughter did not get along with the boys in her class: “She doesn't like boys. She always complains about the boys.”

SE11 Do (name)'s teachers come to class regularly?

क्या (नाम) के टीचर कक्षा में रोज आते हैं?

1. Yes
2. No
3. Don't Know

Respondents universally understood this question to be asking whether or not their child's teachers come to class every day or nearly every day. Across the entire cognitive sample, only two respondents—both from the United States—answered “no.” Both of these respondents were thinking about extended absences, and how some teachers just appeared to stop coming to class. For instance, one respondent explained her “no” answer by saying,

Two of them don't. We just talked about this yesterday. She [her daughter] was saying how she had a substitute, and I said, “Where are they?” She said one of them has a young baby and her and the husband take off when the baby is ill.

SE12 Are there too many students in (name)'s class?

क्या (नाम) के कक्षा में बहुत ज्यादा विद्यार्थी हैं?

1. Yes
2. No
3. Don't Know

Respondents expressed confusion and judged their responses in a range of ways, calling into question the comparability of Question SE12's data. A number of respondents indicated they were not sure what they were being asked, answered “Don't Know,” or simply refused to answer because they either did not feel qualified to answer or were unsure what counted as “too many” students in a class. Additionally, those respondents who did provide answers did not uniformly interpret the term “too many students.”

Confusion

Confusion over SE12 stemmed from two principal sources: respondents either felt that they were not qualified to answer, or they were unsure of how to judge what was or was not “too many” students.

Felt Unqualified

Many respondents expressed that they were not the best people to ask about whether or not there were too many students in their child's class because they either were not sure how many people actually were in the class, or because they did not feel qualified to say how many students a single teacher should be responsible for. For instance, one respondent who answered “Don't Know” said that she thought the average class size was 28 students, but she was not sure and thus did not think she should say “yes” or “no.” Similarly, another respondent who expressed confusion simply said, “I am not aware [of the number of children]” and refused to provide an answer at all.

Others expressed that because they were not teachers or academic professionals, they felt uncomfortable qualifying what was or was not “too many” children per teacher. For instance, one mother who eventually answered “no” initially expressed confusion when administered the question, noting that she thought this question would be better directed to her child's teacher rather than her. In this respondent's mind, the question was one

about whether or not the teacher was able to cope with her class load, something she could not say for sure as an outsider. Another respondent's initial reaction to this question was to say, "I'm not sure if I am qualified to answer that...I would say no, but you could easily disagree I think."

Unsure About What Counts as "Too Many"

A couple of respondents explained that they were confused by what exactly counted as "too many" or not too many students in a class. For instance, one Jamaican father who ended up answering SE12 "Don't Know" said that he knew that his son's class had 23 students, but he was not sure whether that was too many or the right amount.

Interpretation "Too Many"

While respondents all understood the question as asking about the whether there were too many students in their child's class, they used two different ways to determine their answer. Some respondents attempted to quantify the level at which a classroom had "too many" students, while others relied on observation of teachers and their impressions of how well these teachers were able to control the classroom.

Quantifying "Too Many"

Most respondents attempted to count the number of children in their child's class and then judge that number against an acceptable classroom population level. For example, one respondent who answered "no" explained her logic in the following way:

There are 10 students to one teacher in his class. Too many students is 30 students to one teacher. Early childhood should be 15 students to two teachers, but that's not in Jamaica.

Variation emerged, however, because respondents did not universally agree on where the boundary lay between what they consider an acceptable number of students, and what they consider to be too many students. For instance, one respondent who answered "no" said there were 41 students in his daughter's class, while another who said "yes" explained that the 30 students in her daughter's class was too many. Because no standard is given in the question text, each respondent must make their own personal decision about how many students are "too many," thus leading to potentially incomparable data.

Observation of Class and Teacher

Some respondents did not attempt to quantify and judge the limit between what was an acceptable amount of students and too many students, but rather simply based their responses on whether or not they felt like there were too many students or if it appeared that the teacher was overwhelmed. Typically, they based these observations on what they saw when they dropped their children off for the day or picked them up. For example, one mother who answered "yes" explained that she sees a lot of students in the classroom when she goes to drop things off at the school. Likewise, another respondent explained her "yes" response by saying, "Well, when I pop into the school, I see too many kids. I think the class is overpopulated...the teacher can't focus on that many kids." Another parent who answered "yes" based his answer on the number of families he saw at the parent-teacher conference night, explaining that he did not know the class was so large until he saw how crowded the conferences were.

SE13 Are there seats for every student in (name)'s class?

क्या (नाम) के कक्षा में हर बच्चे को बैठने की सुविधा / कुर्सी है

1. Yes
2. No
3. Don't Know

Almost all respondents understood Question SE13 to be asking whether or not there was enough sitting room or places for students to sit in their classrooms. For instance, one respondent from Jamaica who said “yes” explained, “There are enough chairs in the class, so every child has a seat.” Another respondent explained his “yes” response by saying, “There are more than enough seats, and there are even space seats. So every child has their own chair and desk, they don't have to worry about that.”

Respondents did not limit their interpretation to the presence or absence of chairs however. In India, it is common for students in the earlier grades to use mats, and most respondents counted these towards their answer. For example, one mother responded “yes” and explained, “It's a big class and all the children have enough space to sit. They all sit on the floor.” Similarly, another Indian respondent noted that the students in his child's school sat on benches, and multiple students sat on a single chair: “There are seats, but not one for each. Three children sit on one.” This respondent answered “yes,” reasoning that each student had a place to sit, even though they did not have a chair of their own.

Only one respondent in the entire cognitive sample answered SE13 “no.” This respondent understood the question to be asking specifically about chairs, and not just places to sit. She explained her “no” response by saying there are no chairs in the classroom, and all of the children sit on mats on the floor.

SE14 Does (name)'s classroom have enough light for (him/her) to do (his/her) work?

क्या (नाम) के कक्षा में काम करने के लिए काफी रोशनी है?

1. Yes
2. No
3. Don't Know

Most respondents appeared to simply understand Question SE14 as asking whether or not their child's classroom was well-lit, and did not consider the final phrase of the question “...for (him/her) to do (his/her) work?” For example, one respondent from Jamaica said “yes” and noted “There are ceiling lights, open windows, and open doors. So yes, there is enough lighting.” Likewise, an American explained her “yes” answer by saying, “Yeah, it's a shiny room...when the [window] blinds are up, the sun is there and the light comes in. When I've gone in, it's very clear.”

Only two respondents answered this question no, and just as with the respondents answering “yes,” they were simply basing their answer on whether or not they felt the classroom was consistently lit. One Indian respondent who answered “no” explained that the school was in an area with rolling blackouts, and the electric lights that would go out. He then noted, however, that his daughter and the other students “manage” the blackouts and still get their work done. In a similar vein, an American respondent who answered “no” went on to describe what she thought of as the dim lighting in her son's classroom: “No the lighting is poor...Well the school is very old, and the lighting is like a dim yellow. I asked them [the school administration] about that, and they said that's just the

way the lights are.” However, upon further probing, this mother revealed that the dim lights did not affect her child’s ability to see in class.

Just as seen in the previous question about class size (SE13), however, a number of respondents indicated that they did not have enough information to answer this question, and instead chose to either answer “Don’t Know” or not answer at all. For example, one parent who refused to answer noted that her son was going to a new school, and she had not yet been inside of it so she could not say whether or not there was enough light. Another respondent who answered “Don’t Know” explained that while she had been in the classroom, she did not make a mental note of the light and could not say one way or the other.

SE15 Is (name)’s classroom warm or cool enough for (him/her) to do (his/her) work?

क्या (नाम) की कक्षा में काम करने के लिए तापमान ज्यादा गरम या ज्यादा ठंडा है?

1. Yes
2. No
3. Don’t Know

Respondents approached Question SE15 in a very similar way to what they did in the previous question about classroom light (SE14). Almost all respondents simply considered whether or not the school’s temperature was regulated, again ignoring the final phrase of the question that asks about the impact of the temperature on their child’s work. For instance, one Jamaican father answered “yes” and explained that the school tends to keep the doors and windows open for ventilation, but if it got too hot they would turn the air conditioning on. An Indian father answered “no” and said that he was thinking about how hot the classroom got, even when its fan was running. Likewise, an American answered “yes,” and when probed on what she thought the question was asking about, she reported:

I’m thinking about air conditioning when it’s hot. They have that through the school. They also have heat. I am trying to think if she [her daughter] ever said she was too cold. I know she hasn’t said she was too hot.

Again, just as in the previous question, a couple of respondents refused to answer or replied “Don’t Know” because they did not have first-hand knowledge of the classroom’s climate. For example, one Jamaican father answered “Don’t Know” because although he knew that the school was in a very warm area of Kingston, and he therefore assumed that the school was warm, he did not know for sure.

SE16 Is there too much noise in (name)’s classroom for (him/her) to do (his/her) work?

क्या (नाम) के कक्षा में काम करने के लिये बहुत शोर है?

1. Yes
2. No
3. Don’t Know

There was a slight variation in how respondents interpreted and responded to Question SE16, particularly in comparison to the previous questions about classroom conditions (SE14 and SE15). While most respondents continued using the same pattern of interpretation seen throughout the previous four questions, and ignored the phase asking about their child’s ability to do work, other respondents did take the classroom noise’s impact on

their child’s learning into account. The interpretive schema that emerged from the analysis of this question is show below in Figure 32:

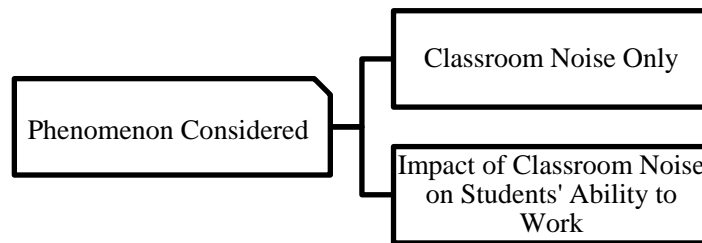


Figure 32: Cognitive Schema for SE16

Classroom Noise Only

As seen previously in the questions about classroom light and climate, most respondents understood SE16 to be asking simply whether or not their child’s classroom was noisy. For example, one respondent from Jamaica answered “no” and reported: “The teacher does not allow the children to make noise. Sometimes other kids [in the school] make noise, and there is also noise from the outside.” Since the classroom itself was not noisy, this parent decided her answer should be “no.”

On the other hand, a respondent from the United States answered “yes” and explained, “It’s just five-year olds. They’re just loud. It’s noise and then more noise. It can get crazy in there!” Likewise, an Indian respondent said “In every school there is noise! And it is noisy there [in her son’s school], as there are 100 children in the class!” Both of these respondents based their “yes” response only on the fact that the classroom was loud, and not on whether or not that noise affected their child’s performance.

Impact of Classroom Noise

Other respondents moved beyond simply considering whether or not the classroom was loud, and did attempt to take into account the impact of noise on their child’s ability to do work. For instance, one respondent from India who answered “yes” explained that not only was the classroom loud, but that her daughter would stop her studies to take part in the ruckus—thus distracting from her work. Another respondent who answered “no” explained that the special-needs classroom that her son was in was noisy, but that the teacher was able to work around the noise and still teach the children well. Likewise, an American who answered “no” explained that while her daughter was a big talker, and a major contributor to the classroom noise, she did not think it affected her learning. She reported that:

[Her daughter]’s a talker, and she’s in a classroom with other talkers so it’s loud... Well, I haven’t gotten any reports from teachers about her not doing her work or turning in assignments.

Thus, while the classroom itself was noisy, this parent reasoned that since her daughter still did all of her assignments, the noise must not affect her ability to do work.

SE17 Does (name) move around the school easily?

क्या (नाम) स्कूल में इधर उधर आसानीसे घूम सकता / सकती है?

1. Yes
2. No
3. Don't Know

Respondents universally understood Question SE17 to be asking about whether or not their child could physically move around the school. For example, one American who answered “yes” to this school explained what she thought the question was asking by saying, “I think you are asking about a disabled individual.” She reported that her child had no mobility issues, and thus the correct answer was “yes.” On the other hand, another mother who answered “no” explained:

The class [room] is on the second floor and [her daughter] needs assistance to move around. Therefore, she finds it difficult to move around the school easily.

Other respondents focused on the physical layout of the school and the classrooms, and considered how they either helped or hindered their child’s movements. For example, one Jamaican parent responded “yes” and went on to explained:

He can’t move by himself, but if he’s pushed in his wheelchair, he can be moved around without a problem. The school has ramps and is very spacious.

SE18A Does (name) use drinking water facilities at school?

क्या (नाम) स्कूल में की पानी पीने की सुविधा को आसानी से इस्तेमाल कर सकता/ सकती है?

1. Yes
2. No
3. Don't Know

SE18B If no, why?

यदि नहीं तो क्यों?

1. There is no place to get water at the school
2. The water available is unsafe
3. There is safe water, but (Name) cannot get to it
4. Don't Know

Respondents understood the first drinking water question, SE18A, using three separate patterns of interpretation—thinking about the safety of the water, whether or not their child actually used the drinking water facilities at school, and their child’s ability to physically access the drinking water facilities. This schema is shown below in Figure 33:

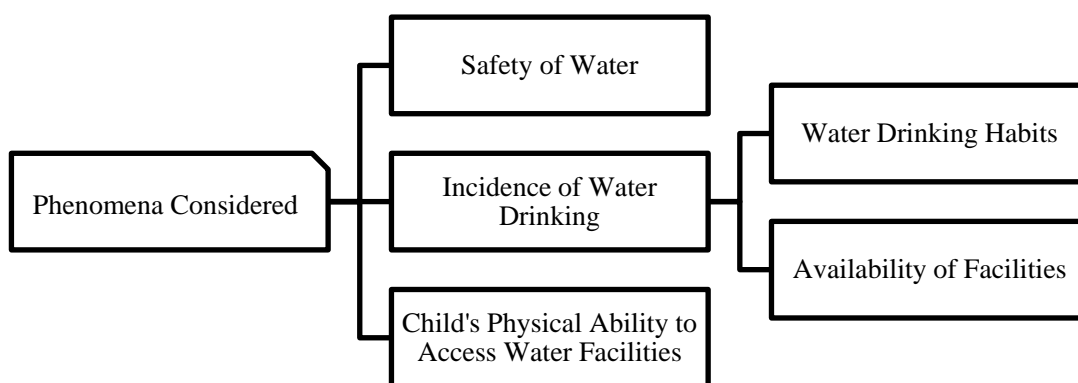


Figure 33: Cognitive Schema for SE18A

Safety of Water

As the figure illustrates, respondents understood the question in one of three ways. First, some respondents understood the question to be asking about the quality of water at their child’s school, specifically, if the water at the school is safe to drink. The majority of these respondents were from India and Jamaica where water quality is poor and requires filtering. When answering the question, almost all answered “no” explaining that the child is given filtered water from home to take to school. One respondent, who answered “yes” to the question, stated that the water is unsafe to drink, but her daughter uses it to wash her hands.

Respondents who answered SE18A “no” using the safety pattern of interpretation largely answered SE18B using the “Water available is unsafe” answer category.

Incidence of Drinking Water

Secondly, some respondents believed the question to be asking about their child’s habit of drinking water during school—either thinking about their child’s actual drinking habits or the actual availability of water drinking facilities at the school. When considering habits, respondents thought about drinking either school water or water brought from home. For example, one respondent, asserting that it is necessary to drink water in order to be healthy, stated that his child takes water to school as well as drinks from the school fountain. Another respondent answered “no”, stating that her child “hates to drink water at home or at school.” Interestingly, there were multiple respondents who answered “Don’t Know,” because, they explained, they are not at school with their child and cannot observe whether their child actually drinks water. Except for one respondent whose child attends a school that tested with high levels of lead, respondents from the US (where water safety is generally taken for granted) interpreted the question in this manner.

A few other respondents also considered the simple question of whether or not drinking water or drinking water facilities were available at the school. For instance, one respondent from Jamaica who answered “no” explained that oftentimes the municipal pipes that carried water to the school were dry, so she had to send water from home with her child every day.

Respondents who interpreted SE18A to be asking about the incidence of water drinking mainly answered SE18B using the “There is no place to get water” answer category.

Physical Accessibility of Water Facilities

Finally, some respondents understood the question to be asking about accessibility for those with disabilities, specifically asking whether their child is able to access the school’s water facilities. All of these respondents had children with severe disabilities and needed special assistance to attend school. Among these respondents, some considered accessibility without the assistance of teachers or helpers, while others included the help.

Respondents who answered SE18A “no” using this accessibility pattern of interpretation all answered SE18B using the “There is safe water but (name) cannot get to it” answer category.

SE19A Does (name) use a toilet at school?

क्या (नाम) स्कूल में शौचालय का उपयोग करता / करती है?

1. **Yes**
2. **No**
3. **Don’t Know**

SE19B If no, why?

यदि नहीं तो क्यों?

1. **There are no toilets at the school**
2. **(Name) is not able to use the toilet without help**
3. **The toilets are broken or too dirty**
4. **Don’t Know**

Respondents understood SE19 in two ways (in comparison to the three major patterns that emerged in the previous question about drinking water facilities, SE18)—thinking about the incidence of toileting and the accessibility of toilets. Respondents did not think about the safety of toilet facilities like they did for water facilities.

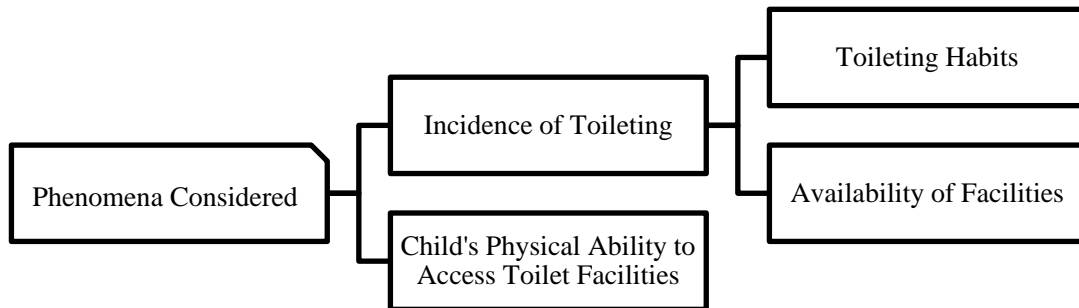


Figure 34: Cognitive Schema for SE19A

Incidence of Toileting

Just as with the water question previous, a number of respondents thought about the incidence of toileting at their child’s school, specifically considering their child’s habits and whether or not toilet facilities were available at the school. While respondents did not think about safety in the same way as they did for drinking water, a number of respondents explained that their children’s toileting habits were based around the fact that the school had (or were perceived by the child to have) “dirty” or “unclean” facilities. Because of this, many respondents answered “no”

and noted that their child would only use the bathroom when they got home from school for the day, and not at the school itself.

Just one respondent (from India) based her answer on the fact that the school had no toilet facilities. She said the school did not have restrooms for either boys or girls, and therefore her daughter could not go to the bathroom at school at all.

Respondents who interpreted SE19A as asking about the incidence of toileting and went on to receive SE19B answered that question using either the “There are no toilets at the school” or “The toilets are broken or too dirty” answer categories.

Physical Accessibility of Toilet Facilities

Just as seen before in the drinking water facilities question, some respondents—all parents of children with disabilities—interpreted this question as asking them about whether or not their child could physically access the toilet at their school. A few respondents who answered “yes” indicated that their child had assistance, such as from a classroom aide, which allowed them to access the facilities. Respondents who answered “no” focused on the fact that the toilets either were not constructed in a way that permitted physical access by their child or that their child could not physically move themselves to the toilet’s location in the school building.

Respondents who answered “no” to SE19A and used this accessibility interpretation all went on to answer SE19B using the “(Name) is not able to use the toilet without help” answer category.

SE20A Does (name) use areas at the school where children play and socialize?

क्या (नाम) बाकि बच्चों के साथ मिलकर स्कूल में खेलने की जगह का इस्तेमाल करता / करती है?

1. **Yes**
2. **No**
3. **Don’t Know**

SE20B If no, why?

यदि नहीं तो क्यों?

1. **There are no areas at the school**
2. **(Name) cannot get to the area**
3. **It is too difficult for (Name) to use the area**
4. **Don’t Know**

Respondents universally understood Question SE20A as asking whether or not their child used the common areas at their school. In doing so, they thought about areas such as the common corridors, courtyards and playgrounds, lunchrooms, and other intramural areas where children are able to congregate. When answering this question, respondents considered one of three things: did the school have common areas for socializing, was their child able to use the areas, and did their child actually use the areas:

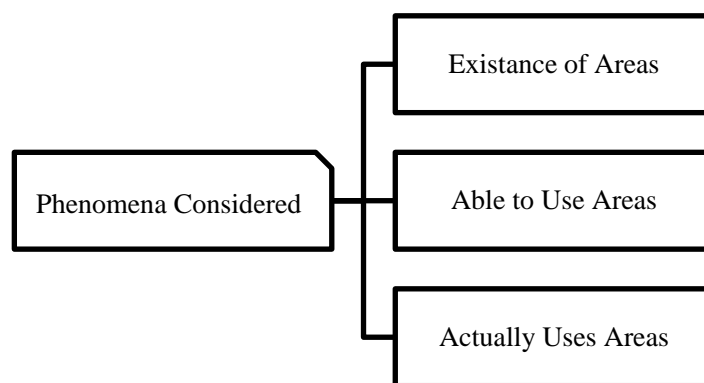


Figure 35: Cognitive Schema for SE20A

Existence of Common Areas

One respondent based her response on whether or not the school actually had any common areas in which the children could play. This respondent explained her “no” answer by saying that the school is only the classrooms, and it does not have any common areas such as playgrounds or gyms in which her child and her peers could socialize.

Able to Use the Common Areas

Some respondents based their response on whether or not their child was able to use the common areas to play and socialize. Many of these parents were thinking about how their child’s disabilities may or may not prevent him or her from using the commons. For example, one respondent from India who answered “no” explained that:

The areas are down on the ground floor, while [his son]’s class is on the third floor. Since [his son] cannot walk, and can only crawl, it is not possible for him to go down. They children do play with him during the break [in class].

On the other hand, another respondent answered “yes” saying that while her son has a mobility disability, he is able to get to and use the common areas when his teachers help him get there.

Actual Use of the Common Areas

Most parents interpreted the question as asking whether children did or did not use the common areas to play and socialize. In doing so, parents considered their child’s socializing habits, and most decided that “yes” they did indeed socialize at school. For instance, one respondent who answered yes explained what she thought the question was asking by saying, “Areas where they play and socialize? Yes. Does he use it? Yes!” Another respondent answered “yes” and thinking about her daughter’s propensity to socialize noted she was thinking about “The playgrounds and the hallways, and wherever her friends hang out. She will be there with her friends.”

One respondent who answered “no” was thinking about the fact that her child is not social by nature, and would rather not play with the other children at school: “There is a playground and all the children play in the playground...but he does not like children and he refused to go play with them.”

SE21 Does (name) feel accepted by (his/her) classmates?

क्या (नाम) को कक्षा में साथ पढ़ने वाले बच्चों ने स्वीकार किया है

1. Yes
2. No
3. Don't Know

Respondents largely understood Question SE21 to be asking about whether or not their child was friends with or got along with his or her fellow students. Most respondents simply thought about whether or not their child had friends at school or related stories about their friends. For example, one mother explained her “yes” response by saying:

Well, she never complains, and she’s always saying, “Oh Mom, we had fun today!” She never comes home and says “this is what happened.” She never comes home with negativity.

Other respondent based their answers on the fact that they had received reports of their child being bullied. For example, one father explained his “no” answer by saying:

The children do not accept him. They do not play with him...as he was disruptive [in class]. They knew he had a problem, and they do not want him next to them. He was made to sit alone on a separate bench.

Likewise, another respondent said “no” and reported that “They are always blaming him, and sometimes they call him ‘mad’ or hit him.”

A few respondents explained that they were unsure because they were not in school every day, and thus did not feel comfortable answering one way or the other. For instance, one respondent said that she was not sure how either the students or the teachers interacted with her son, she just knew what he told her and any reports that came home from the teacher. She did not feel like she had enough information, and thus answered “Don’t Know.”

SE22 Is the school responsive if you have concerns about (name)’s education?

अगर (नाम) की पढाई के बारे में आपको किसी तरह की परेशानी है तो क्या स्कूल उसका उत्तरदायित्व लेता है

1. Yes
2. No
3. Don't Know

A clear distinction between how respondents in India and respondents in the United State and Jamaica understood and responded to this question emerged. While all the American and Jamaican respondents (along with most of the Indian respondents who completed their interview in English) understood Question SE22 in a single way—whether or not the school communicated with, and responded to, the parents—other interpretations emerged in the Hindi-language interviews. Besides thinking directly about communication between the school and themselves, some Hindi-speaking respondents also thought more generally about the quality of the school’s curriculum or whether or not the school appeared concerned with their child’s education.

This difference, combined with the fact that nearly half the Indian respondents who received this question either expressed confusion or answered “Don’t Know,” indicates that the Hindi translation may be partially at fault.

Upon retrospective review, it appears as though the Hindi is strictly translated as “Whether the school takes *responsibility* for your concerns about (name)’s education.” The difference between the word “responsive” in the English versions and the word “responsible” in the Hindi version may have contributed to some of the variation detailed below. Figures 36 and 37 show the cognitive schemas used by the English-language respondents and the Hindi-language respondents, respectively:



Figure 36: Cognitive Schema for American and Jamaican Respondents for SE24

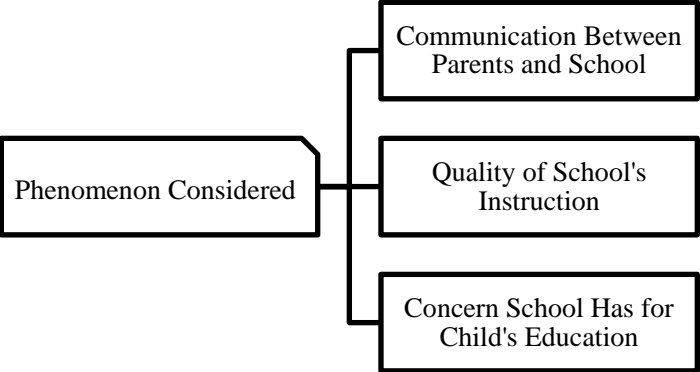


Figure 37: Cognitive Schema for Indian Respondents for SE24

Communication between Parents and School

Most respondents—including all of the respondents in the United States and Jamaica—understood this question to be asking whether or not they were able to have meaningful communication with their child’s school when a problem or issue arose. In doing so, respondents considered not only whether they could reach out to teachers or school administrators and get a response, but also whether the school proactively communicated with them about their child. For example, one Jamaican mother who answered “yes” explained that besides the two or three parent-teacher conferences they have ever year, they can always reach out to the teacher directly if they have any questions, and have always been able to find amicable solutions for any problems her son is having. In a similar vein, an American who also answered “yes” said that she thought this question was asking whether “They’ll email or call you back,” thinking about the teachers at her daughter’s school. She went on to explain her response by giving a specific example:

I had to email a teacher because [her daughter] had too much homework, and it was late at night—like 11 at night. I told her that it was ok if she didn’t finish, and the teacher called me and told me it was ok, saying, “I’ll give her some time at lunch to finish it.” The teacher also asked me if [her daughter] appeared to be stressed out.

Some respondents from India used this interpretation as well. For example, one respondent who answered “yes” explained that she had met her son’s principal, that the principal and teacher treat her son like all the other students, and that they have promised her that they will make sure her son completes his education. Another respondent who eventually answered “Don’t Know” was considering how responsive the school would be if she

had an issue, and explained that she dealt mostly with the school counselor, and had not tried to reach out to the teachers or principal.

Quality of School's Instruction

A couple of respondents from India explained that they thought the question was asking about how well the school teachers their child. For example, one parent explained his answer by saying, “the school looks after [her child] and teaches him well.” These respondents did not focus on the word “responsive” in the question text at all, but instead on whether or not their child was getting a good education. One mother who eventually refused to provide a yes or no response explained that her son did not understand anything he was taught because of his disability. She said that she did not blame the school or the teacher, she did not perceive it as their fault.

Concern for Child's Education

Other Indian respondents interpreted this question as asking about whether or not they thought the school was concerned with their child's education, similar to how some of the respondents interpreted SE7 and SE8 (whether or not teachers care about the child's success and whether or not teachers help the child learn). Again, like the “Quality of School Instruction” pattern above, these respondents did not think about communication between the parents and the school. Rather, they focused on the amount of effort the school administration or teachers put into their child's education. For instance, one respondent who answered “no” explained that “the teacher is only interested in intelligent students and they ignore [her son]...the school does not take interest in his progress.” This interpretation—thinking about the attitudes of the school staff—was relatively common in the Indian sample. For example, another respondent who answered “yes” explained that her daughter's teachers pay attention to her and want to help her with her studies.

Don't Know and Refuse

Besides the three patterns of interpretation noted above that emerged from the Indian respondents, a number of others refused to answer or provided “Don't Know” responses because they could not understand the question, even after some interviewers attempted to restate the question using simpler phrasing. For instance, one interviewer's notes for a respondent that answered “Don't Know” said:

The respondent was not able to understand the question. Even after repeating and simplifying the question, the respondent was not able to figure out what the question is all about.

Another respondent who refused to provide an answer at all simply exclaimed, “I am not able to understand the question” and asked the interviewer to move on with the questionnaire.

SE25 Do you expect (*name*) to successfully complete this current school year?

क्या आप (नाम) की यह वर्ष की पढाई पूरी करने की आशंका रखते है?

- 1. Yes**
- 2. No**
- 3. Don't Know**

Respondents universally understood this question to be asking whether or not their child would reach his or her academic goals at the end of the school year. Most respondents conceptualized their child's academic goals as graduating to the next level or grade, but others—particularly parents of children with disabilities—considered other goals such as staying in school or learning and progressing to more advanced physical and social skills. For example, one respondent from Jamaica answered “yes” and explained that while she is not expecting her child to succeed in the normal academic sense, he is learning a lot of life skills at his school and she believe that this will continue.

Inclusive Education Out-of-School Section

Of the three Inclusive Education sections, this section proved to be the most difficult for respondents and requires the most attention. This section was only tested in India. Importantly, respondents receiving this section—those whose children are not attending school—were the least educated, some from rural areas of India. These respondents had little experience with the question-answer format of the survey interview and, as a result, were easily confused. Additionally, it is worth noting that, to a certain extent these are sensitive questions; all of the parents had previously reported the belief that all children have a right to be in school, yet their child is not in school. Though not explicitly stated, it is possible that some of the frustration and, in some cases display of anger, was caused by the regret or embarrassment of their child not being in school. Reworking the section so that it is straight-forward, simply-worded with as few questions as possible is recommended. Eliminating double-negative questions as well as those that require respondents to speculate would simplify the question-response process for respondents. Considerations for improving this component of the questionnaire are provided throughout this discussion.

Criteria for Inclusion

Eighteen respondents were asked the set of out-of-school questions, although it is not clear that all should have been screened into the section. Attention to the screening process is needed as well as interviewer clarification as to which respondents should receive each section. In 6 cases, respondents indicated that their disabled child was indeed enrolled in school, but interviewers were uncertain if they should actually count because of:

- 1) The type of school that the child was attending: In two cases, respondents' older children were enrolled in the ADAPT program which is a pre-school for disabled children, not an accredited school for older children.
- 2) Sketchy attendance at a normal school: In a few cases, respondents indicated that their child was attending regular school, but when asked to elaborate, they described their child attending only one or two times a month for a couple hours and being seated away from the other children. The Right to Education Act passed in India provides funding to schools that have disabled children registered, however, it does not stipulate criteria that schools must follow in order to receive that funding. Therefore, children may be enrolled in school but not actually attending in a meaningful way.

For these six cases, interviewers opted to ask the respondent both sets of questions. Because these parents deemed their child as attending school, however, it did not make sense for them to receive questions about their child being out-of-school. Keeping these respondents (i.e. those who report their child as attending school) in the in-school section, while also adding an attendance question, may be the best way to pick up these experiences.

In another case, a child was temporarily out of school because the family had recently moved to Mumbai; the child was receiving private tutoring for a couple months while awaiting the start of the next school year. Because

the section is oriented to those who will not be attending school into the foreseeable future, none of the questions pertained to this respondent's experience. In this case, it may have been optimal to screen the respondent into the in-school section with instructions to report on experiences from his previous school.

In another case, a respondent's child was not attending school because there was not enough money to send the child to private school; the respondent believed that not attending school at all was a better option than sending the child to a government school. (Interviewers confirmed that, because government schools have a poor reputation, this would not be an unusual situation in India). Financial cost, not disability status, was the reason the child was not attending school, therefore, the many disability-related questions were not salient. It may be optimal to reorganize the section to first determine a general cause for being out-of-school before asking the more disability-specific questions.

Inclusion Criteria for Home Schooling.

Of the 21 respondents who were asked the question, only five reported their child to be receiving schooling at home. Many of the respondents, particularly those with severely disabled children, answered 'no' and described trying unsuccessfully to teach their child. For example:

We tried teaching her but she does not sit at one place, and nothing she understands.

I tried to teach him. We give him paper, pencil. He eats it, starts crying and [gets] angry. Although we have tried, we have not achieved.

He does not enjoy it. He does not listen to us. We have tried to teach him but he gets angry and does not listen.

Those who reported home schooling primarily described informal schooling, describing themselves or siblings teaching the child to recognize letters and numbers. For example, one set of interview notes states:

The child has been at home for a year and a half. The parents have tried to teach him at home sporadically. Basically the alphabets, colours, shapes, games. He imitates whatever his brother does.

Notably, these respondents were not using any particular curriculum or program that would result in an accredited degree. In some cases, it appeared that respondents interpreted "schooling at home" as broadly as to include parents helping a child in their coursework, with one respondent reporting that he helped his child with school work until he reached calculus which was beyond his ability to help. In only one case—the respondent who reported using a traveling teacher—did the description appear to be a formalized education program. In this instance, the respondent and his child (who did not have a disability) moved to Mumbai and were told that the child could not be enrolled in school until the next school year; they were paying for a private tutor until the child could formally attend school.

Question Salience

Lack of salience, that is, questions not pertaining to respondents' experience, was a major cause of respondent confusion. Questions were most suited for respondents whose children were disabled and who also had previously attended school; because their children had been in school, they were familiar with school logistics and special programs necessary for children with disabilities to attend school. These respondents therefore experienced the least amount of difficulty answering the out-of-school questions.

On the other hand, those with children who had never been to school were unable to conceptualize what “special service or assistance” could be; they had never heard of such things as “speech therapists” or “sign language interpretation” and could not imagine their meaning. Thus, when asked such questions as, “Does the school not have a program that meets (name)’s learning needs?” these respondents had no orientation for providing an answer. For example, one set of interviewer notes explains:

She was not sure what the question meant. When read again, she asked what it meant. On the third reading she said that she did not know what her son needed.

Even more so, many of the questions required respondents to have school experience to formulate an answer. For parents who had never sent or attempted to send their child to school, many of the questions were simply unanswerable. Another set of interview notes, for example, states:

The mother was thoroughly confused about the question and asked why she was being asked about a programme when he was not in school! When explained that this was to know if she thought that the school would be able to teach him and help him develop in other ways, she said he cannot speak or pick up anything.

Many of the questions in IE Out-of-School Section fall, more or less, into this category of needing at least some experience to answer. Those questions include:

- OS5 It is unsafe for (name) to travel to/from school?**
क्या (नाम) का स्कूल में आना जाना असुरक्षित है?
- OS6 It is unsafe for (name) to be in school?**
क्या (नाम) का स्कूल में रहना असुरक्षित है?
- OS7 Is school too far away?**
क्या (नाम) की स्कूल बहुत दूर है?
- OS8 Is no one available to travel with (name) to/from school?**
क्या (नाम) के साथ स्कूल में आने जाने के लिए कोई नहीं है?
- OS9 Are transport services inadequate?**
क्या यातायात के साधन अपर्याप्त है?
- OS10 Are the special services or assistance (speech therapist, support worker, sign language interpretation) that (name) needs to attend school not available?**
क्या (नाम) को खास सेवाएं जैसे की स्पीच थेरेपी , सहायक , चिन्ह भाषा, इंटरप्रेटर जो (नाम) के लिए आवश्यक है स्कूल उपलब्ध नहीं है
- OS11 Does (name) not have assistive devices/technology (braille textbook, hearing aid, wheelchair, etc.) That he/she needs to attend school?**
क्या (नाम) को स्कूल में सहायक वस्तुएं जैसे की ब्रेल लिपि किताबे, सुनने की मशीन और वीलचेयर इत्यादि जिसकी उसे जरूरत है उपलब्ध नहीं है
- OS12 Do teachers not know how to teach a child like (name)?**
क्या (नाम) को टीचर पढ़ा सकते हैं?
- OS13 Do teachers mistreat (name) at school?**
क्या टीचर स्कूल में (नाम) के साथ बुरा व्यवहार करते?
- OS14 Was (name) refused entry into the school?**
क्या (नाम) को स्कूल में दाखिल करने के लिए मना किया गया था?
- OS15 Can (name) not move around the school or classroom?**
क्या (नाम) कक्षा और स्कूल में इधर उधर घूमने में कठिनाई होती है ?
- OS16 Can (name) not use the toilet at school?**

- OS5** **It is unsafe for (name) to travel to/from school?**
क्या (नाम) स्कूल में शौचालय का उपयोग नहीं कर पाता / पाती ?
- OS17** **Does the school not have a program that meets (name)’s learning needs?**
क्या स्कूल का पाठ्यक्रम (नाम) की जरूरतों को पूरा नहीं कर पाता?

Clearly some of these questions were more easily answered than others; some (but not all) respondents were able to speculate, for instance, about the safety or their child traveling to school without their child actually traveling to school. On the other hand, some questions were simply unanswerable without experience. Interviewer notes, for example, pertaining to the Question OS13 (“Do teachers mistreat (name) at school?”) succinctly illustrate the extent to which respondents are unable to answer without actual school attendance:

“I did not get into the school, so I don’t know;”

“The respondent said her child has not attended any school;”

“Never went to school, so I cannot say;”

“The child has not been to a mainstream school.”

One respondent noted that it was impossible for her to answer the question because it was not possible for her to speculate about unknown teachers, saying: "Since he had not gone to school, this question cannot be answered. How can I say if the teachers will be good or not?"

Because they were asked numerous questions in a row that required speculation that they could not factually answer, many respondents became confused and frustrated. Notes from this section describe frequent examples of respondents asking for questions to be repeated and interviewers being compelled to provide explanation or, in some cases, shorten interviews. Multiple times, instead of notes, interviewers simply wrote “N/A” (Not Applicable).

The section may have been most agonizing to respondents whose children were refused admittance by the school because of a disability. Table 4 below presents the interview notes from the question-response interaction of a respondent whose child was not allowed admittance to school because of his autism.

Table 4: Interview Question and Notes for a Respondent with a Child Autism

| | |
|-----------------|--|
| OS4A | We are interested in understanding the main reasons why (name) does not attend school. Does (name) not attend school because there is not enough money to pay the costs of (his/her) schooling? |
| Response | No. He has autism and no school besides this preschool will admit him. He cannot talk and cannot understand. |
| OS4B | Does (name) need to work, earn money or help out at home? |
| Response | No. [He is] too [young] for that. |
| OS5 | It is unsafe for (name) to travel to/from school? |
| Response | No school will admit him so how can I say whether it is safe or unsafe? |
| OS6 | It is unsafe for (name) to be in school? |
| Response | Maybe if a school did admit him I am not sure if the other children would tease him and harass him. He would not be able to fend for himself. |
| OS7 | Is school too far away? |
| Response | No school will take him so how can I answer this question? She was feeling a bit exasperated when asked this question. |

| | |
|----------|---|
| OS4A | We are interested in understanding the main reasons why (name) does not attend school. Does (name) not attend school because there is not enough money to pay the costs of (his/her) schooling? |
| OS8 | Is no one available to travel with (name) to/from school? |
| Response | I am there, but what's the point [since] no school will take him. Until they take him, how can I answer this question? |

Double Negative Errors

As it is structured, the out-of-school section presents respondents with a series of double-negative questions; respondents are asked if their child does *not* attend school because of something *not* occurring. This format frequently confused respondents and generated a great deal of error across the questions. For example, a respondent whose child had been attending school, but who was forced to quit because of her disability, answered “no” to the question “Does the school not have a program that meets (name)’s learning needs?” Interviewer notes, however, clearly indicate this as a false negative response—the school actually does not have a special program:

The teacher is not trained to teach [the] child with a disability. No brail teacher. No special teacher. Even the teacher who is teaching the normal [students] is not sensitized or trained to teach disabled or to take care of disabled children.

The confusion caused by the double-negative format added to the confusion caused by the lack of salience described above. For example, the first double-negative question (OS4), “Because there is not enough money to pay the costs of (his/her) school?” caused confusion because respondents were not always aware of education costs, and needed to exert added effort to figure out the appropriate response option (i.e. “yes” or “no”) given the double-negative. Interview notes illustrate this difficulty:

She had no idea and asked if the schools charge money. Her other eight children have studied in the free schools run by the Municipal Corporation and have been given books, uniforms free so she presumed that [her disabled son’s] education would also be paid for by the government.

There was a long, long pause. The question was read to him at least 4 times but [he] was not able to comprehend.

The respondent could not comprehend the question initially. But after repeating, she thought and could answer the option as No. She said he went to municipal school, no fees had to be paid, yet he did not go to school.

Particularly for respondents who were not familiar or comfortable with the question-answer format, the exercise became frustrating and futile. For example, a set of notes describes one respondent’s reaction after being asked the toilet question, to which she answered erroneously “yes”:

The respondent was getting angry. She was confused and irritated with the question. [She] showed no interest and even wanted to quit. After further probing, she said “he can go to the toilet.” Here the answer was different, not matching. On asking, she said [she] did not understand. The question was confusing for the respondent. The respondent was fed up.

Given the amount of error as well as the out-right irritation of respondents, restructuring the section to eliminate the double-negative format would be optimal. This could be done by reformatting the questions to the affirmative and by asking respondents questions directly about their actual situation: For example, by asking, “Is there someone available to take (name) to school?” as opposed to “Is no one available to travel with (name) to/from school?” or “Is there a school nearby that (name) could easily get to?” as opposed to “Is school too far away?”

Causality

The final cause of confusion for respondents was that, in some cases, their understanding of why their child was not in school did not consistently mesh with the logic of the questioning. In the case of the child with autism in Table 4 above, for example, the respondent’s understanding of why her child is not in school is because “he was refused by the school.” The line of questioning confused her because it asked her about reasons outside of her understanding of the situation. It did not occur to her that the school’s refusal could be tied to a host of reasons, and that, in fact, her son could be in school if there were special programs and services to accommodate him. Interestingly, another respondent whose child was also refused admittance, believed that the reason was that they did not have enough money to send their child to a school that would accept him.

When examining interview narratives as a whole (as opposed to separate questions), it becomes apparent that the reason a child is not in school is complex and not easily parsed out. In actuality, the reason is a set of social circumstances that emerges through a larger explanation. One set of interviewer notes, for example, illustrates this point:

According to the respondent the child has gone to a special school for only 10 – 15 days. But as the parent noticed that the child was learning bad things like rocking, flapping of hands, shouting, clapping, etc. by looking at other children from the school. They just stopped sending him to school. The child is now 14 years of age and is out of school. After leaving that special school, he started attending a mainstream government school where he would just go and sit. But this also did not last long. He was enrolled in the government school. The parents are not aware of the fundamental laws and don’t know where to go to make complaints of this. There were no special services in the school. There was no learning happening.

Reading through the sets of notes, it becomes clear that respondents do not always have a clear understanding of the cause or causes. Yet the premise of the section is that parents know this, as evidenced through this section’s introductory text: “We are interested in understanding the main reasons why (name) does not attend school. Does (name) not attend school because...”

It is possible that respondent irritation is, in part, caused by the fact that they are unable to account for their child’s lack of schooling. Truly, they wanted their child to be in school, but because of various circumstances that they may or may not be able to recognize, this could not occur.

As was suggested in the discussion of the double-negative format, reformatting the questions to the affirmative and by asking respondents questions directly about their actual situation could alleviate much of this problem. Causality, then, could be determined by analysis of survey data as opposed to the aggregation of respondent perceptions.

WORKS CITED

- Massey, Meredith, Chepp, Valerie, Zablotsky, Ben, and Lauren Creamer. 2014. "Analysis of Cognitive Interview Testing of Child Disability Questions in Five Countries." National Center for Health Statistics. Hyattsville, MD. Available at <http://www.cdc.gov/QBank/Report.aspx?1138>.
- Massey, Meredith, Scanlon, Paul, Lessem, Sarah, Cortes, Luis, Villarroel, Maria, and Marko Salvaggio. 2015. "Analysis of Cognitive Testing of Child Disability Questions: Parent-Proxy vs. Teen Self-Report." NCHS. Hyattsville, MD. Available at <http://www.cdc.gov/QBank/Report.aspx?1159>.
- Miller, Kristen, Chepp, Valerie, Willson, Stephanie, and Jose Luis Padilla (eds). 2014. *Cognitive Interviewing Methodology*. John Wiley and Sons: Hoboken, NJ.
- Miller, Kristen. 2016. "Summary of Washington Group Questionnaire Evaluation Studies." In Altman, Barbara M (ed). *International Measurement of Disability*. Pages 69-84. Springer: London, UK.
- Tourangeau, Roger. 1984. "Cognitive Science and Survey Methods." In Jabine, Thomas B, Straf, Miron L, Tanur, Judith M, and Roger Torangeau (eds). *Cognitive Aspects of Survey Design: Building a Bridge between Disciplines*. National Academy Press: Washington, DC.