# Cognitive Testing of the Strengths and Difficulties Questionnaire (SDQ) Interviews Conducted August 22 - September 1, 2000 in the Questionnaire Design Research Lab, NCHS Sponsored by: NHIS/NIMH

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#### Overview

This report describes research designed to evaluate the feasibility of adapting the Strengths and Difficulties Questionnaire © (SDQ), a British children's mental health assessment instrument, for use on American national household surveys. The evaluation is based on 18 indepth, semi-structured cognitive interviews that were conducted in the Questionnaire Design Research Laboratory (QDRL) at the National Center for Health Statistics (NCHS).

Developed by Dr. Robert Goodman (Professor of Brain and Behavioural Medicine, Department of Child and Adolescent Psychiatry, Institute of Psychiatry, London, England), the SDQ is a brief behavioral questionnaire designed for use by researchers, clinicians, and educators to identify children with clinically significant conduct disorders, emotional problems, and hyperactivity.

The instrument consists of two sections. The first section contains 25 questions regarding both positive and negative behaviors in children. The items are scored in 5 sub-scales: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationships and pro-social behavior. The second component, titled the SDQX, is designed to measure the impact of any emotional or behavioral problems in various arenas of the child's life (i.e. family, school, friendships, and leisure time activities). Both portions of the instrument are being included in the 2001 National Health Interview Survey (NHIS).

This report will first outline the QDRL research objectives as well as the methods used for collecting and analyzing the interview data. The report will then present general findings regarding the feasibility of using the instrument within the NHIS and the changes necessary for the SDQ to be successfully administered in the NHIS format. Finally, a question by question

review will detail the ways in which participants interpreted each question as well as point out potential problems or difficulties and possible solutions.

#### **QDRL Research Objectives**

A primary objective of this project was to identify potential problems in the Strengths and Difficulties Questionnaire that could appear within a survey format to an American audience. Potential problems might include unclear or unknown terms, inadequate response options, complex question structures, expressions that do not translate well from British to American contexts, and difficulties in administering the questionnaire in a face-to-face mode.

A secondary objective was to examine the ways in which participants interpreted questions and the ensuing types of experiences or behaviors they considered as they formed their response. Examining the interpretive processes may uncover potential sources of response error and assess how well each question measures the intended analytic concept.

#### Method

Sample. The NCHS Cognitive Methods Staff conducted and analyzed data from 18 indepth, semi-structured cognitive interviews. Participants were recruited from an advertisement in the Washington Post. Potential participants were women whose children (under the age of 18) had a range of diagnosed, undiagnosed, and suspected mental health problems. Recruited participants were paid 35 dollars to participate in the study. The final sample consisted of 18 mothers between the ages of 21 and 53. Half of the participants identified themselves as African American; the other half identified themselves as White. Eight were married, 4 were divorced, and 6 had never been married. Ten participants reported an annual household income of \$30,000 or above. All participants held at least a high school diploma; nine held at least a bachelor's degree.

Their children, whom the SDQ questions referred to, ranged from 5 to 17 years of age. Seven were boys; eleven were girls. Of the 18 children discussed in the interviews, 5 were diagnosed with some kind of a mental health problem and 3 were suspected by their mothers of having a problem. The remaining 10 children had no diagnosed or suspected difficulty.

Interviewing procedures. Interviews were conducted face-to-face in the NCHS Questionnaire Design Research Laboratory. The length of the interview ranged from 30 minutes to an hour. For the interview, participants were asked each SDQ item and were then asked to explain their answer. Typical follow-up questions included, "How so?" and "Why do you say that?" If a participant's response seemed vague or unclear, the interviewer asked: "Can you give an example to describe what you are talking about?" The culminating text from the interview related how participants understood or interpreted each question and also outlined the types of experiences and behaviors participants considered in providing an answer.

Analysis. Analysis was conducted from detailed notes and transcribed passages of the

interviews. The text was collated by question so that comparisons could be made systematically across all participants.

Two levels of analysis were performed. First, distinct occurrences in which participants misunderstood terms or expressed difficulty or confusion while answering were noted. Second, the following interpretive patterns were examined: 1) participants' interpretations of key words, 2) the types of behaviors that participants counted as positive responses to particular questions, and 3) the degree of variation among participants' interpretations.

To analyze the interpretive aspects of question response, the constant comparative method, a standard method for analyzing qualitative data (Lincoln and Guba, 1985; Strauss and Corbin, 1990; Creswell, 1998), was employed. By comparing across all cases, individual responses were categorized according to a participant's particular interpretation of a question. From these categories, interpretive aspects (e.g. the consistency and degree of variation) of each question were examined. Additionally, by comparing and generating categories, analytic themes emerged within particular questions, and these themes could then be compared across questions.

#### **Findings**

Because the SDQ© is presently in widespread use and has already undergone statistical validation (Goodman, R. and Scott S., 1999; Goodman, R., 1997), the project brought unique constraints and challenges to our analysis and resulting recommendations. The QDRL often works with draft questions that are in development and are relatively flexible to change. Because of the need to maintain comparability with other fielded versions of the SDQ, whenever possible, we recommended only minor changes or, even less intrusively, suggested interviewer instruction to improve question administration.

Not all of our observations or analysis, however, are directly geared toward immediate changes. Our observations about how participants answer questions may be useful for interpreting the meanings of quantitative data, may suggest issues to be explored in future validation studies or may suggest changes that could be made in later versions of the instrument. Finally, it is also our hope that examination of the interpretive processes of question response to SDQ items would provide a better understanding of the interpretive properties of questions in general, thereby contributing to the field of question design and the improvement of survey measurement.

#### **Summary of Recommended Changes**

The types of recommendations made for change consist of four categories: 1) issues concerning British English to an American audience, 2) issues concerning age-appropriate wording, 3) interpretive inconsistency, and 4) administrative difficulty.

British to American English. While there was relatively little meaning or interpretation difficulty because of the use of British English, we did find several words that our American participants found awkward. These words included "hot temper," "gets on better," and "quite

true." For these words, we suggest replacement words that are more suitable to an American audience and that we believe do not alter the intended meaning of the question.

Age Appropriate Wording. We found several questions that, while working well with mothers of younger children, were problematic to mothers of older children. These questions included Q4, Q5, Q8, Q13, and Q16. The degree and type of difficulty experienced by these participants varied among the questions. For example, the use of the words "temper tantrum" and "clingy," in Questions 5 and 16 respectively, were viewed by participants as being inappropriate for teenagers. For the most part, however, the wording did not dramatically distort the true intention of the question and only caused participants to consider an age-appropriate equivalent to "clingyness" and "temper tantrums." On the other hand, question intent was altered in Question 4, "Shares readily with other children (ages 4-11)/youth (ages 12-17) (treats, toys, pencils)." While parents of younger children considered whether their child shared *possessions* such as toys, games and snacks, parents of older children considered whether or not their child shared their *feelings, ideas and talents*. For these types of wording problems, we recommend minor word changes or, in some cases, omitting the identified word(s) altogether.

Question 8, "Many worries, often seems worried" and Question 13, "Often unhappy, depressed or tearful" presented a different type of difficulty for participants with adolescent children. Participants reported that because their teens do not often communicate their feelings, the were unable to adequately judge their child's emotional state. Consequently, participants struggled to provide an answer that they deemed accurate. For these questions, we recommend focusing the participant toward the word "seems," changing the wording of Q8 to "Many worries OR often seems worried" and Q13 to "Often seems unhappy or depressed."

<u>Interpretation Inconsistency</u>. We found several questions in which interpretations of key words were particularly inconsistent among participants and may also be inconsistent with the analytic intent of the question. These questions include Q3, Q5, Q6, Q15, Q21 and Q3 of the SDQX. In Question 6, for example, "rather solitary, tends to play alone," some participants answered positively to the question not because their child prefers to play alone, but because there are no other children in the neighborhood and the child is often forced to play alone. For the most part, we recommend only minor wording changes to amend these interpretive inconsistencies. In a few isolated cases (and here we especially note Q21), the interpretations among participants is substantially inconsistent, even contradictory, and in these cases we recommend clarifying the analytic intent of the question and re-writing the question according to that clarification.

<u>Administrative Difficulty</u>. We found a few items that, while most likely posing little or no difficulty within a self-administered mode, were somewhat problematic within a face-to-face interview. For the most part, these questions required only little adjustment such as refining the parenthetical statement, adding the word "OR," and providing interviewer instruction. These questions include Q2, Q4, Q8, Q16, Q17, Q19, and Q20.

Finally, substantial administrative difficulty was found in the SDQX. Because of its length and complexity, Question 1 was difficult for participants to answer, and participants often asked for

clarification from the interviewer and for the question to be repeated. Consequently, Q1 was especially burdensome to both participant and interviewer. While we strongly suggest that this question be divided into four separate questions, we recommend that, at a minimum, a flash card be administered with the question to ease the interview interaction.

Interpretations of response categories also created difficulties in this question. Many participants believed that their children experienced difficulties that were normal or average. However, by agreeing to the response category "minor difficulty," participants were screened into questions about the impact of these difficulties. Participants were somewhat bewildered by these questions since they did not view these minor difficulties as actual problems.

#### **Summary of Interpretive Characteristics**

We found two general characteristics regarding the interpretive properties of SDQ questions: breadth of the frame of reference and response relativity. Both properties pertain to frame of reference, by which we mean the behaviors, incidents, or items that are considered or referred to as respondents construct an answer to the presenting question. While frame of reference pertains to the items that respondents consider, we maintain that it is actually the question that elicits respondents' considerations, and that altering or refining the question can alter or refine the items that respondents consider.

<u>Breadth of the Frame of Reference</u>. The concept refers to the breadth or range of possible behaviors, incidents, or items that *may* be considered by respondents as they construct an answer. The breadth of a question's frame of reference can range from very narrow and limited to relatively broad and indefinite.

While most of the SDQ questions (as they were interpreted by participants) prompted participants to consider a relatively limited range of behavior, some questions prompted a much broader, less bounded frame of reference. For example, in Question 15, "Easily distracted, concentration wanders," participants considered a fairly broad range of potentially relevant activities, including "doing homework," "watching tv," "watching movies," "crossing the street," "doing household chores," "reading a book," "playing computer games," "being disciplined," and "paying attention in class." This question can be compared to Question 11, "Has at least one good friend," in which the considerable items were only "good friend." The questions we identified as having a particularly broad frame of reference included: Q1, Q8, Q15, Q21 in the main SDQ and Q4 in the SDQX.

While we are unable to ascertain whether or not breadth of the frame of reference, be it limited or broad, generates response error, we have identified two concerns regarding questions with particularly broad frames of reference. Because respondents can consider such a large range of potential examples of behavior while answering, they may experience difficulty committing to a final response. For the identified questions, participants often complained about this issue in their interviews. For example, in Q15, many participants struggled to provide an answer, complaining "it depends on what the activity *is.*" Many participants stated that their children

only had distraction problems when the activity was something that they did not enjoy. Second, because the pool of examples to consider is larger, participants may be more likely to find both true and untrue examples. We hypothesize that questions with broad frames of reference may lead respondents toward the middle category ("somewhat true"), as they are more likely to find a variety of behaviors that justify both positive and negative answers.

Response Relativity. The concept of response relativity refers to the degree in which responses are dependent on or interconnected to some other tacit phenomena. That is, respondents' answers are based not only on the particular phenomena in question, but they are also based on an additional component, extraneous to the question's analytic intent. The relative component may be respondents' particular definition of key words (such as their definition of "obedience" or what constitutes "lying"), personal subjectivities (such as respondents' personal standards for obedience or what they believe constitutes normal behavior in a child of a certain age), or respondents' consideration of some other concurrent factor (such as consideration of the seriousness of consequences, for example when evaluating whether or not their child steals or lies). The SDQ questions that we identified as having a high degree of response relativity include Q1, Q2, Q7, Q10, Q18, Q20, Q22.

We hypothesize that questions with a high degree of response relativity generate some amount of measurement error because responses are based on an additional, more subjective component. In these types of questions, variation in responses may occur, not because children's behavior varies, but because the relative component differs among respondents. For example, in Question 20, "Often volunteers to help others (parents, teachers, other children)," participants' conceptualizations of "volunteering" varied immensely. Some participants held relatively strict understandings of the term, that volunteering meant specifically "making an offer to help." For others, making an offer was not necessary, and only agreeing to help when asked counted as volunteering. Finally, other participants had even more lenient interpretations. One mother, for example, defined volunteering as simply doing chores and even included doing work for payment.

#### 1. Considerate of other people's feelings

<u>Problems/Issues</u>: The question has a broad frame of reference and is subject to the problem of response relativity.

<u>Interpretations</u>: Relatively few participants directly addressed whether or not their child considered others' feelings, but rather provided illustrations of behavior that they believed would ultimately impact others' feelings. The range of possible behaviors was relatively broad (in comparison to the range of possible behaviors considered in other questions) and varied immensely across participants. These types of behaviors (both positive and negative) included: "saying rude things," "being self-centered," "not sharing," "giving presents," "holding a grudge," "wanting relationships with others," and "being a good listener."

(Saying rude things)

"Because sometimes she will be very outspoken. It just depends on who she is around. Saying things off the top of her head for example, 'Why are you here?' 'You're not going with me!" Somewhat True

(Sharing)

"Because he is an only child, he is used to have everything centered around him. I noticed at school or at summer camp, he'll take things and want to play with them and won't even consider whether or not any of the other children want to play with them." Somewhat True

(Concerned about relationships with others)

"Because she is a child who is very concerned about how other people view her. She has struggled with self-esteem, a child who really is interested in other people and in trying to be liked." Definitely True

Additionally, participants' responses were relative to what they considered average, age-appropriate behavior as well as their own personal standards for being considerate. Therefore, answers varied depending on children's behavior, but also on participants more subjective evaluation of what counted as normal, considerate behavior for a child of their age. For example:

(Answer based on stricter definition of being considerate)

"Generally, he's a very considerate child. But sometimes. There's a particular little boy that he plays with and they just don't get along well. His mother and I decided that they can't play together. And he'll say things like, 'I'm never going to play with him again. I'm never going to invite him over again.' It's average 7 year old stuff. But I still think it is inconsiderate." Somewhat True

(Answer based on more lenient definition of being considerate) "I would say definitely true, although I would say after the fact. He would say something or do something to hurt someone he is playing with. I would need to point it out to him what he did. So he would need to be reminded, but then he would realize what he did." Definitely True

#### 2. Restless, overactive, cannot stay still for long

<u>Problems/Issues</u>: This question is subject to the problem of response relativity.

Two additional issues created difficulty. First, one participant's child is on medication for ADD. Her answer is Definitely True when her child is off medication (which he has been for the past 3 months because of summer vacation), but is Somewhat True when he is on medication (which he has just started for school). Consequently, the participant had difficulty answering the question because she did not know what reference period to use.

Second, the three elements of the question are not always considered synonymous. One participant, for example, had difficulty providing an answer because her child is definitely restless, but can stay still for long and is not overactive.

<u>Recommendations</u>: Clarify the role of medication. Eliminate the word "overactive," which seems to be interpreted somewhat differently from other words in the question.

<u>Interpretations</u>: For the most part, participants based their answers on their child's ability to sit for a duration of time. A typical answer involved a mother describing the way in which her child watched television, played with the computer or did school work:

"When she is watching tv, if she is watching something that she likes, she will sit there all day. Now she goes to the bathroom, of course she will do that. But she will... if it is something that interests her, she will sit there all day. Now sometimes, she will get her toys and have them by her side, as long as she is right there by the tv. But sometimes she doesn't have anything right by her, she just sits there and watches tv." Not True

Like Question 1, participants' responses to this question were relative to what was considered average, age-appropriate behavior as well as their own personal tolerance level for activity. Therefore, participants' answers varied depending on children's behavior, but answers also varied depending on participants more subjective evaluation of what counted as acceptable behavior for a child of their age.

[Laughter] "Definitely true. I don't know about over active. We have a very active household and I've always encouraged them to bounce off the walls and be rowdy. So they can't sit still for long, but that doesn't bother me." Definitely

True.

"When we're home and I'm content to sleep in and sort of flip the channels on the TV. And at 7:30, he's up and he's ready to go out and do something. He's ready to cook or he's ready to go ride his bike. He's always ready to go do some kind of activity. And for the most part that is the way it is. Then there are some days that he is pretty subdued, so that's why I say somewhat true." Somewhat True

#### 3. Often complains of headaches, stomach-aches, or sickness

<u>Problems/Issues</u>: Differing understandings of the intent of the question may be a problem. Some interpret the question in terms of how sick the children actually are (regardless of how much they complain), others by how much they complain (whether or not they are really sick).

<u>Recommendations</u>: Clarify which interpretation is needed; re-write question for needed interpretation, for example: "Often complains or has...," "Often has...," or place an emphasis on "complains," possibly "Often complains of unreal or imagined illness."

<u>Interpretations</u>: Participants based their answers on two interpretations of the question: whether or not their child *complains* of sickness (real or unreal) and whether or not their child *is* often sick (with headaches, stomach-aches or sickness).

(Complains of sickness)

"She always complains everyday about something. You have no idea if she really is sick or not because everyday she complains—stomach ache, headache, back hurts, hurt her leg— everyday." Definitely True

(Is sick)

"She's too young to get head aches; she's 5 years old. I don't know if I should say somewhat true. Every once in a while she complains about stomach aches.... it's once in a while. I don't even know when the last time she's had a stomach ache.... She will get stomach aches... I mean when she gets stomach aches, she will let me know. Last night she actually had a little stomach virus, you know, just for the day, but she will vomit, of course. But that's not all of the time...." Somewhat True

#### 4. Shares readily with other *children* (ages 4-11)/youth (ages 12-17) (treats, toys, pencils)

<u>Problems/Issues</u>: Aspects of child's self, such as feelings, ideas and talents, were included in conceptualizations of sharing. Some parents interpreted "sharing" in the abstract sense, partially because the parenthetical examples are not read in a standardized manner. Furthermore, the examples are not as suitable for older youths.

<u>Recommendation</u>: Clarify whether aspects of self should be included. If only possessions are to be included, change to "Share possessions readily..." change examples to "games, CDs, toys or snacks," and eliminate the parentheses so the examples are always read by the interviewer.

<u>Interpretations</u>: Participants' answers were based on whether or not their child shared possessions and/or dimensions of their self. For the most part, interpretations of what constituted sharing varied depending on the age of the child. Parents of younger children considered whether their child shared possessions such as toys, games and snacks. Parents of older children, however, in their attempt to provide suitable, age-appropriate answers, included possessions (e.g. cds and clothing), as well as aspects of their self (e.g. feelings, ideas and talents).

(Sharing POSSESSIONS: Parent of 5 year old)

"I've seen other children who don't want to share their toys and it's just not a nice thing. It's nicer to share your toys, and he does."

#### (Sharing SELF: Parent of 16 year old)

"If you were talking to the mother of a 4 year old, then I think you would be taking a very different avenue. Is she willing to let her friend use her doll? At 16, I am thinking is she willing to share her time and talents and conversation and enthusiasm for the world. She has tons of friends. She can't shut anybody out because... she can't do that... that larger sense. And that is a very different answer." Definitely True

#### (Sharing POSSESSIONS and SELF: Parent of 11 year old)

"Sometimes she shares. It depends on what she has to share. She refuses to share the tv and the remote. But would share her thoughts about how she feels about things, sometimes her feelings... if she is upset, she will share her feelings." Somewhat True

#### 5. Often has temper tantrums or a hot temper

<u>Problems/Issues</u>: Participants did not always have a clear understanding of "hot temper." One woman, for example, stated that she thought hot temper meant having a fever.

"Temper tantrum" is not as suitable for older children.

Recommendation: Change to "Often loses temper."

<u>Interpretations</u>: Women were fairly consistent in the ways in which they interpreted the word temper tantrum; generally, interpretations included "stomping," "screaming," "crying" and "losing control."

"I just bought her this Tweety Bird watch, and I didn't want her to wear it until school started. But she wanted to wear it now. And grandma didn't see any harm in wearing it now. And I was afraid that she was going to lose it because she is very careless about her stuff. She just forgets where she puts things. And I told her now that she could wear it when school started next week. And she said, "Grandma said it was ok." And I said, "No." And she just jumped up and down and started stomping her feet and started to cry and ran to her room." Definitely True

Parents of older youth, however, stated that the word "temper tantrum" was unfitting. Instead, they described their child's inappropriate anger as "angry outbursts," "loses patience," and "blows up."

"Right now she is getting ready to go to college, her mind is in 14 different places. And when you talk to her, she'll sometimes blow up because she doesn't know where she wants to go or what she wants to do. And she's confused and she knows she's got 14 millions things that have to be done before Sunday. Sometimes she just gets like she wants it her way.... Temper tantrum is really for little kids. Laying on the floor, kicking, banging their head against the wall... that kind of stuff." Somewhat True.

Finally, a few participants struggled to give an answer because they did not know how to interpret the word "often." Two mothers stated that they would prefer to say "Rarely True":

"It's between somewhat true and not true. It is rarely true... I realize that you need this kind of response so that you can do the statistics, but... when you have these kinds of questions, the person that's giving the response feels that you're somewhat or definitely... and you have to categorize them and one day they'll fit in one category and the next day... so it's just hard." Somewhat True

"I would add a fourth category and say rarely true. It is less than somewhat true

but it is true." [when pushed she said not true] "It does happen, like it just happened on Monday. Cause he gets allergy shots and he was tired and it was the end of the day and he hates getting his shots. And so he really got angry about having to get the shot. He told the doctor that he hated her and that she was mean to him and that he was going to hit her back." Not True

#### 6. Rather solitary, tends to play alone

<u>Problem</u>: Some participants answered Somewhat True or Definitely True, not because their child preferred to play alone, but because they are an only child or they do not live near other children.

Recommendation: Change to: "likes to be solitary; prefers to play alone."

<u>Interpretations</u>: Participants' answers were based on two interpretations: 1) whether or not their child preferred to play alone and 2) whether or not their child played alone because circumstances prevent him/her to play with other children.

(Prefers)

"Even if he is solitary, like he wants to read a book or plays a game alone, he's in the room with other people. He likes to be close." Not True

(Prefers)

"My son will want to go outside, but she [my daughter] would rather stay in the house and watch TV. I was like that as a child. She just likes to be by herself." Definitely True

(Because of circumstance)

"He's an only child, so a lot of the time he doesn't have anyone to play with. But he certainly enjoys other people's company. I don't know if that's a good question to ask someone who is an only child." Somewhat True [The woman stated that she would answer Not True if the question asked: "likes to be solitary; prefers to play alone"]

Some parents who based their answers on their child's circumstances interpreted the question as asking: "Is your child capable of playing alone?" and their answers ultimately described the *positive* ways in which their children occupied themselves:

(Because of circumstance)

"On our block, our house faces the street and [using her hands to illustrate] there's a house over here, but it faces this street and there's a house over here but it faces the next street. So we're kind of an island unto ourselves here.... So we have to call friends over. And when you call friends over you have to go drive

over and pick them up or you have to drop your son off there, and it's difficult. He loves to go fishing and he goes crabbing. He can bait his own hook. He loves that. He loves to play alone and he does love to play with other children. [She stated that if there were more children in the neighborhood, she believed that her son would spend less time alone.] Definitely True

#### 7. Generally obedient, usually does what adults request

<u>Problem</u>: The question is subject to the problem of response relativity; responses depended on participants' definitions of obedience and their personal standard of acceptable behavior. A few participants struggled with the question, stating that people have different expectations and definitions of obedience.

One participant noted that "obedient" was a "derogatory" word and was the "type of word used to describe a puppy." She suggested using the word "well behaved."

Recommendation: Eliminate the word "obedient."

<u>Interpretations</u>: Although the question allows participants to consider a broad range of behaviors, participants' actual frame of reference for this question was surprisingly limited. Most participants only considered the behavior of their child when asked to do household chores or to finish their homework.

Participants' responses were also based upon degree of leniency as well as the ways in which they defined "being obedient." Definitions of obedience tended to center around whether or not a child completed a task immediately, number of times he/she needed to be reminded, and how the child responds after being asked to complete a task:

(Answer based on stricter definition of obedience; answered Not True because child must be asked more than once to complete a task)

"You have to tell her over and over and over and over again. If I've said it a million times, 'If I tell you once, I mean for you do it. I don't want you to think about it, I don't want you to pout about it, just go ahead and do it!' [she pauses] And then she's so slow when she does it. I mean a task that she could do in five minutes she stretches it out for an hour and a half.... Obedient means when you ask a child to do something she will say, 'Yes Mom' or 'Yes, Mam.' Or if now isn't a good time she will say, 'Can I do it in 15 minutes because I would like to finish this?' And that is ok." Not True

(Answer based on more lenient definition of obedience; answered only Somewhat True because child must be asked more than once to complete a task) "It's kind of confusing, because he will do what an adult requests, but he might not do it the first or second time. You might have to tell him a couple times

before he actually does it." Somewhat True

(Answer based on very lenient definition of obedience; answered Definitely True, although child must be asked more than once and may not complete the task) "If she don't feel like doing something, she don't say anything. She will go and do it half way and come back and say, 'Mom, I'm finished.' [Interviewer asks, "And she usually does?] No. I'll say, 'clean the table' or 'clean the floor,' and she only do it half way and say it's complete. Then I'll go check and it's not done. [Interviewer asks, "And you still say that means she does what she's told?] Yes."

(Answer based on more lenient definition; Definitely True although she complains)

"If you ask her to do something, she's going to pout and she's going to... you know, 'You're always asking me'... But, she will do it. She just has to verbalize that she's not happy about it." Definitely True

(Unable to give answer; child must be asked more than once and may not complete the task)

"Yes... well.. Although... I could ask her 187 times to clean up her room. Will it happen? No. But that is not something that really, really bugs me. So I don't fly off the handle about it. I could ask her 57 times not to put the glass down on the table. Will it ever happen? Nope. No connection. In one ear and out the other.

#### (Unable to give answer)

But on the other hand, she's the kid that anyone would look at and say, 'oh she's a perfectly behaved young lady.' ... I find that impossible to answer because on the large issues she always does what adults... what society requests. She is perfect in that sense. On those little scale issues, clean up your room, take out the garbage, why did you paint your nails on the living room couch? because now there's nail polish all over it... blank. So if you're perfect in that large sense, how can you get all bent out of shape over those other things?" [Asked how would you answer this question:] "That would be one of those things that I would scribble all over the form saying I can't answer this because... I would write a paragraph telling all of this....."

#### 8. Many worries, often seems worried

<u>Problems/Issues</u>: Responses are based on a broad range of potential worries. Mothers of adolescents experienced more difficulty answering; they believe their child does worry, but their child does not vocalize their worries.

Recommendation: Rewrite: "Many worries OR often seems worried." Although this seems like

a very simple change, it may be vital in order to successfully transform this instrument from a self-administered clinical questionnaire to one that can be easily read aloud by an interviewer.

<u>Interpretations</u>: Participants based their responses on a broad range of potential worries: "getting into college," "family stress," "mortality," "report cards and grades," "wetting the bed," "getting into trouble," and "home life being disrupted." The most common theme, however, involved relationships with other peers and included a range of sub-themes: "being called names," "being treated meanly," "not being liked," "not being popular," and "not having the right clothes." Despite the range of potential types of worries that participants could consider, only a couple expressed difficulty answering because of the broadness.

Mothers of adolescent children, however, tended to have the most difficulty with the question. Their children, they stated, do not confide in them. One mother, for example, explained that her daughter does not display emotion and goes to great lengths to "put on a tough front." She stated that she "probably does worry," but does "not see her worry directly." Consequently, it was difficult for these mothers to report whether or not their child actually *has* worries, but could easily report that their child *often seems worried*.

#### 9. Helpful if someone is hurt, upset or feeling ill

Problems/Issues: We observed no noteworthy problems with this question.

<u>Interpretations</u>: Participants tended to have consistent interpretations of "being helpful" and included *being attentive and responsive*, *expressing concern* and *giving care*. Typical answers involved the respondent telling a short, evaluative narrative about a particular experience in which the child witnessed another person being hurt, ill or upset. Participants' illustrations, for the most part, are from the recent past (i.e. within the past week).

(Expressing concern)

"He was concerned about his father last night because he was sick." Definitely True

(Being attentive and responsive)

"Oh, an example would be this morning. His sister was upstairs and it sounded like she was in distress upstairs, this morning. 'Mark! Mark! Come upstairs!' I said, 'Mark go upstairs. See what your sister wants.' 'Oh, she's fine. She doesn't need me.' And it did turn out that she just wanted him to hear some music on the radio but he didn't know that." Somewhat True

(Giving care)

"If you are feeling ill, she will stay away. Cause she doesn't know what to do. She'll just say, 'You're not feeling well, ok I'm not going to bother you. I'm going to leave you alone.' That's what she does." Not True

A couple mothers, primarily those of older children, noted that while their child may be unhelpful to family members, they do show concern and helpfulness to friends and other peers. This discrepancy, however, did not impinge on their ability to form an answer.

"Ah yes, as long as it is one of her peers. A sibling, a parent, maybe, maybe not." [Said she was not kidding about family, but because she can really empathize with peers, she says definitely true.] Definitely True

#### 10. Constantly fidgeting or squirming

<u>Problems/Issues</u>: We observed no noteworthy problems with this question.

<u>Interpretations</u>: In comparison to Question 2 ("Restless, overactive, cannot stay still for long"), the question elicited a somewhat broader frame of reference. While participants primarily based their Q2 answers on their child's ability to sit for a duration of time, answers for this question were based on a broader range of fidgeting behaviors, including "being bouncy," "constantly playing with objects (e.g. pencils, the radio)," "wiggling feet," and "nervous twitching," as well as having "unfocused attention."

Interestingly, a couple mothers based their answers on what they foresaw as the purpose or intent of the survey, that is, making a clinical judgment about their child. For example, one mother stated up front that she believed the survey "was looking for an ADHD child," and was inclined to answer "Not True" because of this belief. Similarly, another mother stated:

"Actually it was definitely true but in my mind I processed it as somewhat true because I didn't want to mislead the survey into thinking that she couldn't focus on something because she can." Somewhat True.

#### 11. Has at least one good friend

Problems/Issues: One person considered the child's dog as a "friend."

<u>Interpretations</u>: In general, participants' responses were based on relatively consistent interpretations of "good friend." Answers were based on evaluations of the length and quality of their child's friendships as well as the number of friends.

(Number of friends)

"She has one little girl... But she is more solitary. She doesn't have too many outside friends. Most of them are family." Somewhat True

(Length and quality)

"One minute she is talking about this girl named Yvonne and then the next day

she is saying that Latisha is her best friend, then the next day this other girl is her best friend. I said, 'well don't you have one best friend?' They all are best friends? Her best friend always changes. I guess whoever sits down and talks to her, whoever is nicest is her best friend." [Participant stated that she was concerned that, because her daughter kept switching best friends, she may not really have a good friend.] Somewhat True

While this question was straight-forward for almost all participants, one included the child's dog as a friend.

"Definitely true, his dog. Does a pet count? He doesn't really mention anyone at school that he is big buds with. We have a dog... he doesn't just hang out with the dog all of the time, but the dog sleeps next to him the bed. And I think Fred the dog would be his best friend." Definitely True

#### 12. Often fights with other children (ages 4-11)/youth (ages 12-17) or bullies them

Problems/Issues: We observed no noteworthy problems with this question.

<u>Interpretations</u>: Participants interpretations, specifically of the term "bullies," were fairly consistent. Descriptions of "bullying" included: "using physical presence to impose your will," "taking things from people," "being physically aggressive," "getting somebody to do what you want them to do even if they don't want to."

Those mothers whose children did not bully had, for the most part, brief answers; they simply stated that there were no incidents to report. Those who answered positively, however, typically illustrated a particular experience:

"Her brother, if she wants him to do something and he doesn't agree with her. I can give you a good example. Going to school one morning, I sometimes didn't have time to walk them out to the bus stop because I will still be getting ready for work. And I will send them out... and the one day I had just happened to open up the door because I heard her brother out in the hallway [yelling] 'Stop! Stop!' And I seen her pushing her... And I seen her doing it. And I opened up the door and I said, 'Now why did you do that?' 'I didn't touch him!'" Somewhat True.

#### 13. Often unhappy, depressed or tearful

<u>Problems/Issues</u>: Mothers of adolescents had difficulty answering if they believed their child is depressed or unhappy, but is not tearful and does not outwardly express emotions.

Recommendations: Change to "Often seems unhappy or depressed."

<u>Interpretations</u>: For the most part, participants' interpretations of "unhappy, depressed or

tearful" were consistent. As in Question 8, the greatest difficulty with this question pertained to participants' ability to judge their children's feelings. Parents of adolescents, especially, tended to report that their child does not readily share or display their emotions. Consequently, they struggled to provide an answer that they deemed accurate.

"It's hard to answer those questions when there are three components. [Interviewer: Ok, let's take it one part at a time, happy?] She doesn't articulate. So she does not say things. So, do you want me to guess? [Interviewer: Why don't you do the best you can] Ok... I guess I'd say somewhat true then. [Interviewer: What about depressed?] Well, I'd have to go only with what the psychiatrists says... and no. [Interviewer: Tearful?] Oh no. She NEVER cries. And she prides herself on that. She plays soccer and she's been told that she is the toughest person on the team."

Another mother suggested that she believed her daughter is depressed, not because she is tearful, but because she "scowls and is mean to other people." She stated that she believed this kind of negativity, not necessarily tearfulness, was symptomatic of depression.

#### 14. Generally liked by other *children* (ages 4-11)/youth (ages 12-17)

Problems/Issues: We observed no noteworthy problems with this question.

<u>Interpretations</u>: Participants' interpretations of "generally liked" tended to be relatively consistent. Parents based their evaluations on the type and quality of interaction their child had with peers. Descriptions of being liked by other children included: "getting invited to parties," "other kids saying hello when he walks into the room," "getting along with team members," and "hanging out with other children."

#### 15. Easily distracted, concentration wanders

<u>Problems/Issues</u>: Responses were based upon a broad range of activities. It is possible that some of these are outside the intent of the question.

<u>Recommendations</u>: Evaluate the interpretations of the question that we observed; if the question is intended to measure only distractibility from work, then limit the frame of reference to "while doing chores or homework."

<u>Interpretations</u>: In comparison to other SDQ questions, parents considered a fairly broad range of potentially relevant activities in their responses. The most popular commonly mentioned activities were "doing homework" and "watching tv," but also included "watching movies," "crossing the street," "doing household chores," "reading a book," "playing computer games," "being disciplined," and "paying attention in class." For example:

"I'm thinking about... I know that if he's watching television, which is about the only thing that will keep his attention for a fair amount of time. Just the smallest thing... if I start to run the vacuum, that will distract him. If the phone rings, that will distract him." Definitely True.

"She just lacks focus... for school work, household chores... just reading a book." Definitely True

Because of the broad range of activities parents could consider, many participants struggled to provide an answer, complaining "it depends on what the activity *is.*" Many participants stated that their child only had distraction problems when the activity was something that he/she did not enjoy:

[Participant went back and forth from not true and somewhat true.] "If it is something that he wants to do he doesn't get distracted ...like looking for bugs... it's not a problem... But he's 7, and he doesn't have much focus. If we are crossing the street, I'll have to get him to pay attention." Somewhat True

"That can't be true because she couldn't possibly have the academic record that she does in the program that she does if she didn't have a spectacular attention. On the other hand, because she doesn't particularly like to do this academic work, she would prefer to be distracted. But she's an extremely intelligent kid and can get away with being distracted. But I guess for what you are looking for, I would say that she is not distracted. She has great powers of concentration.... Because this is a health questionnaire. The way her attention wanders is not unhealthy." Not True

"It depends on the subject. He would be distracted doing his ABCs, but not watching tv." Somewhat True

#### 16. Nervous or clingy in new situations, easily loses confidence

<u>Problems/Issues</u>: "Clingy in new situations" was not perceived as being synonymous with "easily loses confidence;" many respondents wanted to give two separate answers.

The word "clingy" did not fit older children's behavior.

Recommendations: Change to "Nervous in new situations, easily loses confidence."

<u>Interpretations</u>: Many participants did not perceive "nervous or clingy in new situations" and "easily loses confidence" as similar concepts. "Nervous/clingy" implied being hesitant about or not wanting to venture too far away from home or parents, while "losing confidence" implied being unsure or doubting one's skills or talents. Because of these differing interpretations,

almost half of the participants were inclined to provide two separate answers. One mother, for example, stated "yes, he was somewhat nervous about going to basketball camp," but "no, he did not lose confidence." In fact, she reported, he was "over-cocky in his abilities." Another participant, when asked to provide only one answer for the question, stated that she was unable:

"She certainly loses confidence, but she's not clingy in new situations..... I cannot answer that question... because part of the question is yes, and part of the answer is no." No answer

In addition, the concept of "clinginess" (generally interpreted as a need for parents to be physically nearby) is not as suitable for adolescents as it is for young children. Mothers of older children ultimately disregarded or re-interpreted the word "clingy," making the question applicable to their child's experience. One mother of an older youth, for example, conceptualized "clingy," not as parental dependence, but as succumbing to peer pressure:

"Clingy means you always need approval, before you move on you have to check in with someone like a friend.... If someone asks you to go to the movies, 'well I wonder if I should go, should I ask somebody? I want to go, but do I really want to go.' Those type of things... not being sure that I want to go. 'Do I want to go? Yes I do. Let me ask my parents if I can go.'"

Finally, one woman stated that she did not know the meaning of the word "clingy." Instead of responding to the entire question, she responded to the "nervous" part of the question:

"Yeah... somewhat true... When she was learning to ride her bike. When I was teaching her, she was having a hard time. She was nervous.... She was nervous, and she started crying. If she don't do something right, if she does something wrong and you say something to her, she'll start getting nervous. [Interviewer: When I said nervous or clingy in new situations, what did clingy mean to you?] Clinging? [Interviewer: clingy] [Participant pauses] [Interviewer: Have you ever heard of the word clingy?] No. I never heard of clingy. Is it spelled C-L-I-N-G-Y? [Interviewer: yes] No, I've never heard of it."

#### 17. Kind to younger children

<u>Problems/Issues</u>: Respondents did not know if they should include siblings and experienced difficulty answering because their children often behaved differently to younger siblings than to younger children outside the family.

<u>Recommendations</u>: Clarify whether responses should include siblings or only outside family members.

<u>Interpretations</u>: Participants interpretations were fairly consistent. Examples of "being kind to younger children" included: "being a mentor," "befriending," "seeking out," and "inviting to play." Illustrations of a negative question response included: "not wanting to play with," "not validating," and "taking advantage of or bullying."

A few participants stated that, while their child was kind to younger children, they were often unkind to their siblings: "As long as it's not her siblings it's ok," "Definitely true except for his little sister," "... although she can be rough on her own siblings." All of these participants, in forming their answers, discounted experiences with siblings, stating that sibling rivalry should not counted.

#### 18. Often lies or cheats

<u>Problems/Issues</u>: A few respondents struggled to give an answer because they saw a distinct difference between lying and cheating; the interviewer needed to emphasize the word "or."

Question is subject to the response relativity problem; responses were relative to the ways in which participants conceptualized lying.

Recommendations: Emphasize the word "or."

<u>Interpretations</u>: A few participants noted a major difference between the two parts of the question; "Lying" implied not telling the truth; "cheating" implied not following rules, for example while playing a game or taking a test. Because of these differences, several participants struggled to form an answer that they deemed accurate and representative of their child's behavior.

Participants' answers varied depending upon their particular definition of lying as well as their personal standard of acceptable behavior.

(Answer based on a stricter definition of lying)

"Oh this girl can lie! Look you straight in the face, look you dead in the eye and lie! She could break something, and then she'll clean it up. And you notice that it's broken. And you know she did it... there's three of us in the house. And my cousin is very ill with cancer, so he doesn't do much. I'm like, 'Did you break this?' 'Nope.' 'Well, how did it get in the trash can?' 'Don't know nothing about it.' Look you in the face for hours... days... months... and would deny, deny, deny, deny, "Definitely True

(Answer based on a more lenient definition of lying)

"He has been caught in a couple lies.... Like saying that he put out the recycling, then I go out to the garage and it's still sitting there. I can clearly see that it's not

out. But still...." Not True

Participants also reported that there were different types of lies, such as "fibbing," "exaggerating," "embellishing" and "out right lying." How participants understood these differences informed their frame of reference and influenced the way in which they answered the question.

"There is a difference between lying and embellishing. An outright lie would be saying that he didn't do something. He might need to be encouraged to tell the truth, but in the end he will." Not True

Another woman described a time when she told her daughter not to wear make-up to school. She found out, however, that her daughter did wear make up. Because she did not consider this to be a "bad lie," she answered:

"Somewhat True... That's a lie. It's not a bad lie. I mean, she's a kid, she's going to do a little bit of lying." Somewhat True

#### 19. Picked on or bullied by other *children* (ages 4-11)/youth (ages 12-17)

<u>Problem</u>: One respondent did not see the difference between this question and "Often fights with other *children* (ages 4-11)/*youth* (ages 12-17) or bullies them."

<u>Recommendations</u>: Emphasize the word "by" to make clear that this question refers to being the *recipient* of intimidation.

<u>Interpretations</u>: As with Question 12, participants' interpretations of "bullied" were relatively consistent. While one participant did not understand the difference between this question and the previous "bully" question, it appeared to be straight-forward for most participants.

#### 20. Often volunteers to help others (parents, teachers, other children)

<u>Problems/Issues</u>: Question is subject to response relativity problem; responses were relative to the ways in which participants definition of volunteer. Participants had different interpretations of what it means to "volunteer"— some thought of volunteering as *initiating* helpful behavior, while others defined volunteering as being helpful when asked.

Participants stated that their answers would differ depending on the particular setting. Because the parenthetical defines three different settings, it does not clarify the question, but rather adds complication.

Recommendations: Omit parenthetical and/or change question to specify one setting, such as:

"Often volunteers to help others at home."

<u>Interpretations</u>: Participants' conceptualizations of "volunteering" varied. Some participants held relatively strict understandings of the term, that volunteering meant specifically "making an offer to help." Others, on the other hand, suggested that making an offer was not necessary, and that volunteering could simply include agreeing to help when asked. Finally, other participants had even more lenient interpretations. One mother, for example, defined "volunteering" as doing chores, and included work for payment as part of her definition.

(Answer based on strict definition; volunteering = offers to help) "He kind of knows what's expected of him and gets that done, but doesn't really offer to do anything extra." Not True

(Answer based on more lenient definition; volunteering = helps when asked) "Yes, somewhat true.... If I ask her to help me, she will help me. But not all of the time." Somewhat True

(Answer based on extremely lenient definition; volunteering = doing chores) "He likes to volunteer. He even volunteers to fold laundry." [Interviewer asks, "He volunteers to fold laundry?"] "Well, he volunteers because he knows he's going to get a reward. We're trying to get out of the reward system, but...." Definitely True

Additionally, some participants experienced difficulty with the question because, they stated, their answers would vary depending on the particular setting. Because the parenthetical offers three different situations, the question is not clarified, but rather complicated.

"Ok, this is one of those questions that is really 3 questions. Does she offer to volunteer to help her friends? You bet. Parents? No..... Teachers? I have no idea." Could not give answer.

"So that's sort of a trick question. And I would say that it's not that he is unwilling, he is just not as anxious to help. It takes a little prodding in the family to help. When he's with teachers or other parents, he's always willing to help." Definitely True outside the family; Somewhat True within the family

Finally, this woman couldn't answer for all settings and only answered for herself as a parent:

"And when you said others, I automatically thought of myself. And he doesn't volunteer to help me very often; I have to ask. With regard to other adults in his life, I'm not sure." Not True

#### 21. Thinks things out before acting

<u>Problems/Issues</u>: Participants answers were based on a broad range of behaviors. Participants interpretations of "thinks things out before acting" vary and are contradictory.

Recommendations: Clarify analytic intent of question, and re-write accordingly.

<u>Interpretations</u>: This is perhaps the most problematic question. Interpretations of the question varied and were contradictory among participants. Many participants did not have a clear understanding of meaning or intent of the question. The various interpretations included "considers consequences," but also "scheming to get out of trouble," "planning social interactions with peers," "not ignoring," and "thinking about breaking the rules."

#### (Considers consequences)

"It means he can think about the consequences of an action before he does it.... He's somewhat cautious about... Like if he's riding a bike and there's a hill, he'll think 'Ok, I'm not going to ride my bike down this hill because I don't want to fall and crash. But there's other things that he'll... here's a stupid example: Somebody at camp must open their chips by popping the bag [she slaps her hands together]. So he saw it and I... well he did it and all of the chips fell out of the bottom. You know? To me it was like, 'Hey did you think about what you did?' But to him it was like trial and error thing." Somewhat True

#### (Planning a social interaction)

"Kind of like planning things? ...What I'm going to do?...What the response will be?... If there is somebody that she likes... a boy... she might try to figure out how she might want to approach him." Somewhat True

#### (Not ignoring)

"The other day she was [having trouble with another student] and she said she'd ignore it, but I figure while she was ignoring it, she was thinking 'I'm getting sick and tired of this girl, so I guess I'm going to turn around and smack her.' So she thinked it and turned around and smacked her. And I just guess she was thinking. [Interviewer: So she thought about smacking her and then actually did it?] Yeah, that's what I figure. Because she told me that she was ignoring the girl." Definitely True

Most troublesome, as these previous quotations also illustrate, interpretations are contradictory among the participants. Some participants understood "thinks things out before acting" as a positive trait (e.g. as "considers consequences"), while others understood the concept negatively. As a negative construct, "Thinks things out before acting" meant "thinking about breaking the rules," or "scheming to get away with breaking the rules." For example:

(Scheming to get away with breaking the rules)

"Like I said, she is kind of sneaky. She'll think about what she's gonna do and

what her response is going to be when you ask her. Cause I guess she just knows that she's gonna get caught in the act. So she's already got it thought up in her head what she's gonna say and how she's gonna prove that it wasn't her." Definitely True

Furthermore, a few mothers could not form an interpretation of the question; when asked, they were unable to articulate in their own words the meaning of the question. This mother, for example, did not understand "Thinks things out before acting," could not provide an example and, consequently, answered "Not True."

"I'm trying to think of a situation where she thought about something before... you know... she actually did it, but I can't. I'm just going to say not true. I just don't think so. She hasn't gotten to that age yet I guess." Not True

For those participants who *were* able to conceptualize an interpretation, the question elicited a broad spectrum of behaviors or incidents, including (as already illustrated) "crossing the street," "interacting with peers," "opening a bag of chips," "breaking rules," "applying for college," "counting calories."

"I don't know. That is very broad. In what situation?... [Participant is struggling to tie this to an aspect of his life]... when he's riding his bike in the street, in an argument with friends, at school.... I guess somewhat true.... I'm thinking of us being at home. For example, he might take the toilet paper off the roll... like unroll all of it to play a game or something and not think about the fact that he's not supposed to do that and he's going to get in trouble. Or he might get up in the middle of the night and get something to drink knowing that he's not supposed to do that. And the consequence would be wetting the bed and getting into trouble. He wouldn't think about things like that.... But he wouldn't go light a match, even if he really wanted to." Somewhat True

#### 22. Steals from home, school, or elsewhere

Problems/Issues: We observed no noteworthy problems with this question.

<u>Interpretations</u>: Participants interpretations were fairly consistent. Those mothers whose children did not steal relatively had brief answers; they simply stated that there were no incidents to report. Those who answered affirmatively, however, tended to report a particular experience:

"One time I was getting ready to go to visit a friend of mine. And I had put my wallet down, and I had looked all over that house for that wallet. I tore the house up and I kept saying, 'Do you have my wallet?' And she was crying and everything and saying, 'I don't know why you are blaming me. I don't have it.' And finally I said, "I think you have my wallet. I'm going to have to call the

police." And then, "WELL HERE IT IS!" See, she was ready to go to the limit that she did not have it." Definitely True

A couple participants noted that "stealing," if it were to connote "taking something that didn't belong to you," could imply a range of seriousness. To this extent, answers could be relative to respondents' definitions of stealing. We, however, saw little evidence of this in these sets of interviews and do not cite this question as being subject to the problem of response relativity.

"I guess I need a clarification on the definition of steals.... taking something that doesn't belong to you. It's weird because I do the grocery shopping. And he knows that when you pay for things they sort of belong to you, but he'll go into the refrigerator and take something and he doesn't look at that as stealing. And he'll do it, and I'll get angry about it. He'll go into my bedroom and if he needs money, he'll take some change out of the little dish on my dresser. And he'll take that and he knows that it's not his. I don't think that he sees anything wrong with that. If we go to a store, he won't take anything there. He'll take a piece of candy off of dresser." Somewhat True

#### 23. Gets on better with adults than with other *children* (ages 4-11)/youth (ages 12-17)

<u>Problem/Issues</u>: An answer of "not true" could mean "get along with children *better* than adults" or "gets along *equally well* with adults and children."

<u>Recommendations</u>: Evaluate whether the issue above is significant; change "gets on" to "gets along."

<u>Interpretations</u>: The phrase "gets on with" is not commonly used in the United States. In fact, our first few participants generally thought we said "gets along with." Others thought the term was strange. We believe that the word "along" can be substituted for "on" with no loss of comparability.

Interpretations of "gets along with" were relatively consistent. Participants based their answers on who (whether other children or adults) their child "relates to," "is usually around," "plays with," or "prefers to be with." In several situations, participants used more than one interpretation to base their answer. For example, one mother noted that her child "gets along very well with adults, but he relates to children more," and consequently answered Not True.

Potentially troublesome, an answer of "not true" could mean that a participant believes her child gets along with other children better than adults, but it could also mean that her child gets along equally well with adults. Indeed, a few participants answered "not true" because they perceived their child as being well-adapted and well-liked by everyone regardless of age. One participant, in fact, was offended by the premise of the question (as she viewed it), that children should get along with other children better than adults:

(Refused to answer)

"She gets along with both equally well." [Participant is asked the question again] "This question assumes something that is just not true—that you should get along better with one or the other... and that is just not true. I can't answer that because it assumes something that is just not there. She gets along equally well with everyone." [Participant refused to answer, saying that she would be one of those difficult people who would refuse to answer.]

#### 24. Many fears, easily scared

<u>Problems/Issues</u>: Very few participants considered their child's fear in social situations; many considered whether their child is able to watch horror movies.

<u>Interpretation</u>: Though this is a seemingly broad question, about half of the participants considered only whether or not their child was frightened by horror movies. A few other participants mentioned fear of thunderstorms; others included heights, spiders, fear of noise, and fear of the dark.

Finally, as in Question 22, a few participants noted that it was difficult to form a response because it was difficult to decide whether or not their child's fear was "abnormal enough to report." Because respondents may have differing ideas about what constitutes abnormal fear, answers could be relative to respondents' conceptualizations of age appropriate fear. Again, as in Question 22, we saw little evidence of this in these sets of interviews and therefore do not cite this question as being subject to the problem of response relativity.

"No more fears than average? But you couldn't produce that answer unless you were a child psychologist or you had the early childhood behavior education. Of course that's going to be subjective thing because all parents are going to look at that differently. In my case, without having that education but from watching my children and other children, I would say that he tends to have many less fears than other children, but then again I don't have the educational background. So that one is sort of tough. There may be parents who answer the survey that say 'Oh, children need to be strong and not afraid of anything." Not True

#### 25. Sees tasks through to the end, good attention span

Problems/Issues: Participants answers are based on a broad range of behaviors.

<u>Recommendations</u>: If broad interpretations are potentially troubling, add a clarification such as "... when doing chores or housework."

Interpretations: Participants based their responses on a fairly broad range of tasks. Various

tasks included: "taking a test," "playing the computer," "watching tv," "learning to ride a bicycle," "reading a book," "doing school work," and "doing household chores" (e.g. "cleaning room," "feeding the dog," and "putting clothes away").

#### Part II: SDQX

1. Overall, do you think that your child has difficulties in one or more of the following areas: emotions, concentration, behavior, or being able to get on with other people?

No Yes, minor difficulties Yes, definite difficulties Yes, severe difficulties

<u>Problems/Issues</u>: Both participants and interviewers found this question to be burdensome. The question length and complexity make it difficult for participants to readily form an answer. Participants often ask for clarification and for the question to be repeated. Additionally, participants had different answers for the question's various parts (e.g., no problems with concentration, but definite difficulties getting along with people). Providing an answer based on an average of the four components seemed inaccurate and inadequate for many participants. Many participants insisted on giving different answers for different parts.

Additionally, many participants considered "minor difficulties" as being average or normal, but found themselves routed through the subsequent questions about severity of the problems. Numerous participants protested that "there is not a problem," that there are "only normal difficulties." Participants' answers, in this first question, were not only based upon children's behavior, but also varied depending on participants' particular understandings of "minor difficulties."

Regarding the response categories, "definite" and "severe" difficulties were distinguishable, but seen as relatively close together in meaning. The gap between "minor" and "definite" along a continuum of possible problems was large.

<u>Recommendations</u>: Divide the question into four questions, one for emotions, one for concentration, one for behavior, and one for being able to get along with other people. At minimum, use a flash card to ease interview interaction.

Consider whether follow-up questions are appropriate for respondents reporting "minor difficulties." Consider making the first category "none or very minor problems" and substitute the word "moderate" for "definite."

<u>Interpretations</u>: Of the four categories, *difficulty in emotions* elicited the broadest frame of reference across participants. Participants' interpretations of *difficulty in emotions* included 1) needing to control a situation, 2) easily hurt or hypersensitive, 3) unable to cope with or manage daily activities, 4) excessive display of anger, 5) unhappy or depressed much of the time, and 6) holding back or unable to show emotions. Interpreted more narrowly, participants suggested that

difficulty in behavior included 1) being argumentative, 2) unable to listen to instruction, and, overlapping difficulty in emotion, 3) needing to control a situation. Conceptualizations of difficulty in concentration included 1) unable to focus, 2) easily distracted and 3) not wanting to study. Finally, interpretations of getting along with others overlapped the behavior and emotion categories and included 1) being argumentative and 2) needing to control a situation.

Question administration, particularly in this first question, is the greatest problem in the second portion of the SDQ. Although it is presented as one single question, it is structured as four separate components. Consequently, participants are required to attend to the question as though it is four separate questions. That is, participants must hear and conceptualize the four parts, consider each separately, and then (by their own calculative device) summarize the four responses into a single answer. Because of the questions' length and complexity, more than half of the participants asked to have the question repeated at least once; some participants asked to have the question repeated multiple times. Additionally, some participants were unclear as to how they were to calculate their answer and struggled to derive a single answer from the multiple components. A few examples of participants struggling to form an answer follow:

"Can you go back over those and I can think of them one at a time.... [Interviewer reads question again; participant says "yes" when "concentration" is read, and "no" when "emotions," "behavior," and "get along with other people" are read.] So I guess there are more no's than yes's. He doesn't have any difficulties. Right? [Interviewer states that she will read the question again and that she is interested in how the participant gets her answer] Well I was just trying to figure out how many no's as opposed to the yes's. [Interviewer asks the question again] Well then it would be one of the following areas... it would be the concentration.... so he has... [participant is thinking out loud] let's see... overall... that means overall the whole question do I think that he has difficulties in one or more... which he does have in one... and so yes, minor difficulties with concentration.... Minor because it is not that big of a problem compared to all of the other stuff.... Minor because it is only one. I would think if someone answered yes to more than one question then it would be definite difficulties or even severe difficulties." Minor Difficulties

"To which [difficulty] though?" [The question was re-read] "His attention span is really short and he has a tendency to get hyper-sensitive during a really bad thunder storm." [Participant ultimately answered minor difficulties because her child only experienced a "little difficulty in two of the four categories."] Minor Difficulties

Most participants considered *Minor Difficulties* to be normal or average behavior for children, referring to *Minor Difficulties* as "a phase thing," "average difficulties that kids do," "just needs a little support," "only happens occasionally," "normal problems," and "has room to improve." *Definite Difficulties* was the first category that signified true difficulty for many participants. Interpretations of *Definite Difficulties* included a "noticeable problem," "happens regularly,"

"ongoing problems," "not within normal range," and "more significant." Finally, participants noted that severe difficulties implied "emotionally disturbed or birth defects," "farther out," "can't handle anything," and "extreme feelings of worthlessness."

Because many participants interpreted *Minor Difficulties* as being normal, they answered Minor Difficulties to Question 1 while believing their child had no real problem. In fact, of the 10 parents that stated up front that they did not suspect a problem, 7 responded Minor Difficulties for this question. Consequently, these participants were screened into the remaining questions which made little sense to answer. This interpretive issue, then, became an administrative problem for the remaining questions. Some of these participants, for example, after being asked Question 2 and realizing that the survey's definition of "minor difficulties" was significantly different from their own, wanted to retract their answer to Question 1. (See below)

## 2. How long have these difficulties been present?

Less than a month 1-5 months 6-12 months Over 12 months

<u>Problems/Issues</u>: This question, and the ones that follow, were inappropriate for many participants who had reported "minor difficulties" in the previous question.

<u>Recommendations</u>: Change answer categories in Q1, and consider screening some respondents from this section.

<u>Interpretations</u>: As mentioned earlier, many participants found these questions to be inappropriate. Some of their reactions included:

"Are you defining it differently? Minor difficulties? If you think of minor difficulties within normal range, then he's always been an active child who went from... his activity level is high but I don't think it is overly. And I think that is related to his concentration problem.... But if you define it outside normal range, then I would say "no, he's ok; he's typical." [Participant wanted to go back and change her answer to the first question.]

"See I don't believe he is having emotional difficulties... I'm keeping an extra eye... That question....I can't answer. It makes me want to flip back and say, 'No, he's not having emotional difficulties.' Cause like I say I don't have the early childhood educational background. That may be average 6 year old behavior. I'm extra concerned because of my background." [Participant wanted to go back and change her answer to the first question.]

Most participants, however, who had conceptualized "minor difficulties" as normal, did not ask

to retract their first response, but rather answered the question referencing some type of behavioral or emotional issue. The referenced behavior or emotional issue was one that they deemed as "not a problem" or "normal for the child's age," but one in which they believed their child could improve.

[After being asked Question 1 and answering Minor Difficulties, Interviewer asks: When you say minor difficulties, what does she do that you say that?] "Everyday little stuff... I consider this normal stuff all kids do it. [Interviewer: What kinds of things?] Like not wanting to share all the time. All kids go through that. They start it at 2... mine, mine, all mine. And with mine... my daughter is spoiled. [She laughs] She's just spoiled. She is not as spoiled as she wants to be because she does have other siblings. She's had to learn that you can't have everything you want because there are other people. So she is in essence having to learn how to share. They aren't like me... see, I'm an only child." [Interviewer asks Question 2.] For my daughter.... from birth. [Interviewer asks Question 3] "Only a little... because she thinks that everything she asks for she should get. I guess that probably comes from watching me because I am one of those types that doesn't understand no. It's probably learned behavior. Because I'm an only child. And all of my life, if I asked for something, if I didn't get it, I just figure I can pressure you into it. That can be learned behavior."

For those participants whose child had clear-cut difficulty (e.g. those whose children had ADD, ADHD, or bouts of depression) the remaining questions were straightforward and easily administered.

#### 3. Using this card, do the difficulties upset or distress your child?

Not at all Only a little Quite a lot A great deal

Problems/Issues: Participants' interpretation of the question were inconsistent.

When asked, participants tended to report that the word "Quite" seemed odd.

Regarding the scaling of response categories for Question 3, rather consistently participants reported that they saw little difference between "Not At All" and "Only A Little" as well as "Quite A Lot" and "A Great Deal," but a big difference between "Only A Little" and "Quite A Lot"

Recommendations: Clarify the analytic intent; re-write according to intent.

Re-work the response categories for Question 3 to exclude "Quite."

<u>Interpretations</u>: There was some confusion over whether Question 3 intended to measure the degree of distress a child experienced simply because they had a problem (i.e. because they were different from other children) OR if the question intended to measure the degree of disruption a child's difficulty had on his/her life. For example:

(Degree of child's distress because he/she has a difficulty)

"Not at all. We call his medication his concentration medication. And other kids take it, so I don't think he's looked at any less at school."

(Degree that child's difficulty disrupts his/her life)

"I'd say somewhere between Only a Little and A Lot [referring to her child's difficulty in concentration], but not a whole lot because if she really, really needs to get something done, she can walk away from everything, take whatever it is she needs to do, like her homework, go in her room, turn on her boom box... on low, and get it done. If she had to. If she's got to do it, she's fine. But, if she didn't have to, she'd be like "oh, I don't feel like doing it right now." Then it basically is a problem.

[Interviewer clarifies: So does she get upset by the fact that she is distracted?] No, not really."

#### 4. Do the difficulties interfere with your child's everyday life in the following areas?

a. Home life
b. Friendships
c. Classroom learning
d. Leisure activities

Answer categories:

Not at all
Only a little
Quite a lot
A great deal

<u>Problems/Issues</u>: Although response categories are presented in an ordered scale format, participants did not necessarily interpret the categories as being equidistant. Rather consistently, participants reported that they saw little difference between "Not At All" and "Only A Little" as well as "Quite A Lot" and "A Great Deal," but a big difference between "Only A Little" and "Quite A Lot." Additionally, when asked, participants tended to report that the word "Quite" was unusual to them, noting that it "seemed odd" or "a little strange."

A few participants also noted difficulty responding to this question with a single answer because they were still considering the four dimensions from Question 1. Their answers would differ, they stated, depending on which dimension of difficulty was being evaluated. For example, one woman reported that her child's concentration difficulty only affected school, but the behavior difficulty affected home and, to a lesser degree, school and friendships.

<u>Recommendation</u>: Change response categories, replacing "Quite A Lot" with "A Medium Amount."

Interpretations: For the most part, when responding to the question in its four variations, participants considered their child's relationships and interactions with others in the specified setting. While the settings of *home life* (which primarily consisted of relationships and interactions with family members) and *classroom learning* (which consisted of relationships and interactions with teachers as well as doing homework and paying attention in class) appeared straight forward, the settings of *friendships* and *leisure activities* tended to overlap. Many participants, for example, considered *leisure activities* as being the same as *friendships* and involved going to movies, parties and other social events with friends. Consequently, a couple participants, when asked about leisure activities, stated that they "had already been asked that question." Only a couple participants clearly saw a distinct difference between the two categories, primarily because their child did not have many friends, and their leisure activities were largely solitary activities.

#### 5. Do the difficulties put a burden on you and your family as a whole?

Not at all Only a little Quite a lot A great deal

<u>Problems/Issues</u>: Question has a relatively broad frame of reference and is subject to the problem of response relativity.

<u>Recommendation</u>: Provide definition to specify the intended meaning "burden." <u>Interpretations</u>: Participants' interpretations of the word "burden" varied. Interpretations included financial hardships, emotional or stress-related hardships, and needing to make accommodations.

#### (Emotional/stress-related hardship)

"Burden to me means how upset I get..... It is very hard to try to help your child understand what they are doing is less productive than another approach. It is hard to balance what to say and what to keep your mouth shut about. It hurts me when she is hurt.... When she's come home throughout the years and certain things have happened to her... like when she was in elementary school and with her friends... it was probably in the 5<sup>th</sup> grade. It was the end of school and this one girl wanted to get this picture with all of these kids and the teacher and my child wanted to be in the picture. And she didn't want my child in the picture! This is kid who has been to her birthday parties... supposedly a friend. And there were four kids and the teacher in the picture and she didn't want her in her in the picture. That's the kind of thing that tears you as a parent up. That is a burden." A Lot

#### (Adjustment/accommodation)

"I hope my daughter doesn't feel like she is being slighted because of all the activities that have to go on to make sure that John can get his homework done." [Earlier in interview she reported that her son needed absolute silence in the household to be able to concentrate on his homework] Only A Little

#### (Adjustment/accommodation)

"If it causes a problem or if it takes time out of our normal activities at home. And the little episodes [participant is referring to the fact that her child sometimes gets afraid during thunderstorms], while they don't take a lot of time, they do have to be addressed when they come up." Only A Little

Additionally, participants' responses were relative to their level of tolerance and whether or not they considered the typical travails of parental obligation.

"Only a little, because I don't respond to it. They get to their grandma easily, but they don't get to me like that because I don't respond to it. You can be in there screaming your lungs out, and I might just come in there and look at you. Because I learned that if you respond to that behavior it will continue." Only A Little

"Really, I think a little bit that having a child is a burden. Because on a Saturday morning, if you don't feel like doing something, you still have to do it. But, so in a way, it's a burden. But in another way, it's not a burden because you have children because you want children so you do what you do because you're a family. That's why you have to make the adjustments...." Not at All.

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#### Appendix A: Approved Changes for the NHIS

September 30, 2000 2001 NHIS Mental Health Supplement (SDQ-EX)

#### >CSCL1< FR: SHOW FLASHCARD CS2

- CAU.345.010 I am going to read a list of items that describe Children. For each item, please tell me if it has been NOT TRUE, SOMEWHAT TRUE, CERTAINLY TRUE for {S.C. name} during the past 6 months:
  - (1) Not True
  - (2) Somewhat True
  - (3) Certainly True
  - (7) Refused
  - (9)Don't Know

Considerate of other people's feelings

Restless, overactive, cannot stay still for long

Often COMPLAINS of headaches, stomach-aches, or sickness

Shares readily with other children (ages 4-11) for example toys, treats, pencils

/youth (ages 12-17) for example CD's, games, food

Often loses temper

#### >CSCL2< FR: SHOW FLASHCARD CS2

- CAU.345.020 I am going to read a list of items that describe Children. For each item, please tell me if it has been NOT TRUE, SOMEWHAT TRUE, CERTAINLY TRUE for {S.C. name} during the past 6 months:
  - (1) Not True
  - (2) Somewhat True
  - (3) Certainly True
  - (7) Refused
  - (9)Don't Know

Rather solitary, prefers to play alone (for ages 4-11)

Would rather be alone than with other teenagers (for ages 12-17)

Generally well behaved, usually does what adults request

Many worries or often seems worried

Helpful if someone is hurt, upset or feeling ill

Constantly fidgeting or squirming

#### >CSCL3< FR: SHOW FLASHCARD CS2

- CAU.345.030 I am going to read a list of items that describe Children. For each item, please tell me if it has been NOT TRUE, SOMEWHAT TRUE, CERTAINLY TRUE for {S.C. name} during the past 6 months:
  - (1) Not True
  - (2) Somewhat True

- (3) Certainly True
- (7) Refused
- (9)Don't Know

Has at least one good friend

Often fights with other children (ages 4-11) / youth (ages 12-17) or bullies them Often unhappy, depressed or tearful

Generally liked by other children (ages 4-11) / youth (ages 12-17)

Easily distracted, concentration wonders

#### >CSCL4< FR: SHOW FLASHCARD CS2

CAU.345.040 I am going to read a list of items that describe Children. For each item, please tell me if it has been NOT TRUE, SOMEWHAT TRUE, CERTAINLY TRUE for {S.C. name} during the past 6 months:

- (1) Not True
- (2) Somewhat True
- (3) Certainly True
- (7) Refused
- (9)Don't Know

Nervous in new situations, easily loses confidence

Kind to younger children

Often lies OR cheats

Picked on or bullied by other children (ages 4-11) / youth (ages 12-17)

Often offers to help other (parents, teachers, other children)

#### >CSCL5< FR: SHOW FLASHCARD CS2

CAU.345.050 I am going to read a list of items that describe Children. For each item, please tell me if it has been NOT TRUE, SOMEWHAT TRUE, CERTAINLY TRUE for {S.C. name} during the past 6 months:

- (1) Not True
- (2) Somewhat True
- (3) Certainly True
- (7) Refused
- (9)Don't Know

Thinks things out before acting

Steals from home, school, or elsewhere

Gets on better with adults than with other children (ages 4-11) / youth (ages 12-17)

Many fears, easily scared

Good attention span, sees chores or homework through to the end

#### >CSCL6< FR: SHOW FLASHCARD CS3

CAU.345.060 Overall, do you think that --- has difficulties in any of the following areas: emotions, concentration, behavior, or being able to get on with other people?

- (1) Not at all
- (2) A little
- (3) A medium amount
- (4) A great deal
- (7) Refused
- (9)Don't Know

#### >CSCL7<

CAU.345.070 How long have these difficulties been present?

- (1) Less than a month ago
- (2) 1-5 months
- (3) 6-12 months
- (4) Over 12 months
- (7) Refused
- (9) Don't Know

#### >CSCL8< FR: SHOW FLASHCARD CS4

CAU.345.080 Do the difficulties upset or distress your child?

- (1) Not at all
- (2) A little
- (3) A medium amount
- (4) A great deal
- (7) Refused
- (9)Don't Know

#### >CSCL9< FR: SHOW FLASHCARD CS4

CAU.345.090 Do the difficulties interfere with your child's everyday life in the following areas? Answer all categories:

- (1) Not at all
- (2) A little
- (3) A medium amount
- (4) A great deal
- (7) Refused
- (9)Don't Know
- HL Home Life
- FR Friendship
- CL Classroom Learning
- LA Leisure activities

### >CSCL10< FR: SHOW FLASHCARD CS4

CAU.345.100 Do the difficulties put a burden on you and your family as a whole?

- (1) Not at all
- (2) A little
- (3) A medium amount
- (4) A great deal
- (7) Refused
- (9)Don't Know

# SDQ Flashcard 1

- Not True
   Somewhat True
   Certainly True

## SDQ Flashcard 2

- 1) Not at all
- 2) Only a little
- 3) Quite a lot 4) A great deal