ATTACHMENT Q-SORT

The Toddler Attachment Q-Sort was conducted during the Three-Year In-Home interview as part of the survey on Child Care and Parental Employment. The Q-Sort consisted of 39 attachment-related items from Everett Waters’ 90-item Attachment Q-Set. This 90-item set was revised for simplicity and limited time constraints in the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), resulting in a 39-item version, called the Toddler Attachment Sort-39 (TAS-39). Some variation in the wording of the 39 items exists between the ECLS-B and the Fragile Families sets. The items included in the Fragile Families TAS-39 are as follows:

1. Cooperates willingly with mother and passes things if asked
2. Is very clingy
3. Seeks and enjoys being hugged by mother
4. If asked, child lets friendly strangers hold and share playthings
5. Actively ignores visitors and finds own activities more interesting
6. Generally finds something else to do when finished with an activity and does not go to mother for help
7. When child sees something desirable to play with, child will fuss
8. When child cries, cries loud and long
9. Rarely goes to mother for any help
10. Gets upset if mother leaves or shifts to another place
11. Hugs or cuddles with mother without being asked to do so
12. If there is a choice, child prefers to play with toys rather than friendly adults
13. When others ask child to do something, child readily understands what is wanted but may not obey
14. Child easily becomes angry at mother
15. Cries as a way of getting mother to do what is wanted
16. When child is bored will go to mother looking for something to do
17. Enjoys copying what friendly strangers do
18. Turns away from friendly adult strangers if they come too close
19. Obeys when asked to bring or give something to mother
20. Explores freely in new unfamiliar places
21. Is content to be alone without mother’s involvement playing or watching TV
22. When mother does not do what child wants right away, child gets angry
23. Wants to be center of attention
24. When upset by mother’s leaving, is hard to comfort by friendly adult strangers
25. A social child who enjoys the company of others
26. Is easily comforted by contact or interaction with mother when crying or otherwise distressed
27. Protests or interrupts if mother shows affection to other people including family members
28. Relaxes when in contact with mother
29. Is fearless (approaches things and people without hesitation)
30. Enjoys being hugged or held by friendly adult strangers
31. Responds positively to helpful hints from mother

32. When mother talks with anybody else, child seeks mother’s attention
33. If wary, pulls back or freezes but does not go looking for mother for comfort or reassurance
34. When child is upset after mother leaves, will sit and cry without attempting to follow
35. Is very independent
36. Eager to join in with friendly adult strangers
37. When mother says follow child does so willingly
38. Cries or otherwise tries to prevent separation if mother is leaving or moving to another place
39. Often wants mother’s attention

Items 24, 33, and 34 replaced the following three items in the ECLS-B version of the TAS-39: “Cries often, regardless of how hard or how long,” “Child does not try new things and always wants mother to help,” and “Soon loses interest in friendly adult strangers/new visitors.” The final analysis file for the Fragile Families data, “ff_attachment_variables_pub,” contains data provided by 2,268 mothers\(^2\) (or another primary caregiver, if the biological mother was not the respondent for the In-Home survey). These data can be merged to other Fragile Families and Child Wellbeing Study files using the variable, “idnum.” The raw variables specifying the placement of each individual item are not included on this data file.

**Administration of Q-Sort**

In completing the Q-Sort, respondents sorted 39 cards into three piles, each containing a characteristic or behavior a child might exhibit (see Table 1 for examples). First, respondents sorted each card into three piles: frequently applicable to the focal child, conspicuously infrequent, and not at either extreme. Respondents were encouraged to choose between frequent or infrequent and discouraged from sorting cards into the middle pile, for neither extreme. Next, the frequently applicable pile was sorted into applies mostly (1) and applies often (2), while the infrequently applicable pile was sorted into applies rarely or hardly ever (5) and applies sometimes (4). Respondents were encouraged to sort items in the middle pile “neither extreme,” into applies sometimes (4) or applies often (2). Sorting resulted in items being rated on a five point Likert scale, described above, ranging from 1 to 5.

**Q-Sort Scoring: Main Attachment Variables**

Raw data were scored by Dr. John Kirkland at Massey University (New Zealand). The models used for scoring the Q-Sort were data driven, not theory driven. Models for analyses included multidimensional scaling, factor analysis and hierarchical clustering.

The resultant attachment classifications from the scoring are three categories (insecure-avoidant, secure, and insecure-resistant) of attachment. The final attachment category, disorganized, was

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\(^2\) This file contains 52 cases which belonged to separate group of 109 cases included in the Baseline Fragile Families survey. These cases were either selected for the TLC3 study or for other related research purposes. These cases are not included in other In-Home files, but are in the core survey data files.
not supported by these data. The variable, “codeabc” codes children into these three categories: 1=insecure-avoidant, 2 = secure, and 3=insecure-resistant. Table 2 describes the distribution of children in these three categories.

Table 2: Q-Sort Attachment Profiles

<table>
<thead>
<tr>
<th>Secure</th>
<th>Insecure-Avoidant</th>
<th>Insecure-Resistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,719</td>
<td>47</td>
<td>502</td>
</tr>
</tbody>
</table>

The binary variable, “secure2,” separates secure attachment (“codeabc”=2 secure) from the two other categories of insecure attachments.

Three additional variables (“ad”, “bd”, and “cd”) indicate distance between the child’s specific profile classification and the three attachment classifications.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad</td>
<td>Distance to A – Avoidant</td>
</tr>
<tr>
<td>bd</td>
<td>Distance to B – Secure</td>
</tr>
<tr>
<td>cd</td>
<td>Distance to C – Resistant</td>
</tr>
</tbody>
</table>

**Q-Sort Scoring: Additional Analysis Variables**

As mentioned above, one component of the classification of children into attachment categories was factor analysis. Data processing yielded eight significant factors that are included in the file (variables “s” through “z”). Ultimately, classification was done by comparing children’s scores on these eight factors or “latent constructs” to prototypical descriptions of the A, B and C styles of attachment.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>s</td>
<td>Comfortably cuddly, enjoys and is comforted by close physical contact with</td>
</tr>
<tr>
<td></td>
<td>parent</td>
</tr>
<tr>
<td>t</td>
<td>Cooperative, responsive to directions and suggestions; interaction with</td>
</tr>
<tr>
<td></td>
<td>parent is harmonious</td>
</tr>
<tr>
<td>u</td>
<td>Enjoys company, happy and friendly</td>
</tr>
<tr>
<td>v</td>
<td>Independent, little use or reliance on parents, self-sufficient and</td>
</tr>
<tr>
<td></td>
<td>self-regulating</td>
</tr>
<tr>
<td>w</td>
<td>Attention-seeking, reliant on parent’s attention or affection, competes</td>
</tr>
<tr>
<td></td>
<td>with other calls upon them</td>
</tr>
<tr>
<td>x</td>
<td>Upset by separation, early upset by parents actual or anticipated absence</td>
</tr>
<tr>
<td>y</td>
<td>Avoids others/Does not socialize, shows little interest in interaction with</td>
</tr>
<tr>
<td></td>
<td>parent or friendly adults</td>
</tr>
<tr>
<td>z</td>
<td>Demanding, fusses, cries, becomes angry if parent’s responses are not</td>
</tr>
<tr>
<td></td>
<td>immediate</td>
</tr>
</tbody>
</table>

Higher positive scores on these factors indicate greater congruence with behaviors encompassed by the factor whereas lower negative scores indicate less congruence. For example, children with high positive scores on factor “s” (Comfortably cuddly, enjoys and is comforted by close
physical contact with parent) were rated as more cuddly, whereas children with low negative scores on factor “s” were rated as less cuddly.

Three additional variables also included on this file were derived from multidimensional scaling. These variables (“b1,” “b2” and “b3”) describe children’s fit on each of the following dimensions, with sociability being the least important:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>b1</td>
<td>security</td>
</tr>
<tr>
<td>b2</td>
<td>dependency</td>
</tr>
<tr>
<td>b3</td>
<td>sociability</td>
</tr>
</tbody>
</table>

Higher values for these variables indicate more security, dependence or sociability whereas lower values indicate less security, dependence or sociability.

The following pages are excerpts from the Three-Year “In-Home Longitudinal Study of Pre-School Aged Children” and contain instructions to interviewers and parents for the administration of the Q-Sort.
Q-SORT
(In-Home with Mother)

NOTE: BE SURE TO HAVE ALL MATERIALS READY: Q-SORT CARDS, Q-SORT FLOW-CHART, Q-SORT ENVELOPES (5).

READ THROUGH THE FOLLOWING STEPS TO HELP MOM GET STARTED WITH THE Q-SORT:

1. For this next activity, I’d like you to think of the last time (CHILD) had a cold, a sore throat, or a runny nose. Approximately, was it …
   - Within the last week 01
   - More than a week, but less than a month ago 02
   - More than a month ago 03

2. Let’s take the deck of cards and shuffle the cards. I’m going to place the cards on the sheet in the box that says “Start here.” (PUT CARDS DOWN WITH WORDS FACING UP.)

3. Now, let’s take the first card and read it. HAVE MOM READ THE CARD. IF MOM SHOWS SIGNS OF NOT BEING ABLE TO READ THE CARD, READ THE CARD FOR HER. INDICATE BELOW WHETHER…
   - MOM READ CARD, OR 00
   - CARD WAS READ TO MOM 01

4. Thinking about that time (CHILD) had a cold, a sore throat, or a runny nose, does this (POINT TO CARD) apply more or apply less to (CHILD). If it applies more, put the card on Pile 1. If it applies less, put it on Pile 3. If you’re unsure or if it is in between, put the card on Pile 2. But really try to put the card in either Pile 1 or Pile 3. In fact, it’s o.k. not to have any cards in Pile 2. (HAVE MOM PLACE CARD IN PILE 1, 2, OR 3.)
   - IF MOM HESITATES, SAY: I know it is hard to decide sometimes. Just use your first impression. You can always change your mind later.
   - AFTER MOM PLACES CARD ON A PILE, REPEAT THIS STEP FOR SECOND CARD AND THEN AGAIN FOR THIRD CARD.

IF MOM CAN READ AND SORT CARDS ON HER OWN, READ THROUGH STEPS 5-8. THEN HAVE MOM SORT ALL CARDS INTO FIVE PILES.

IF MOM NEEDS HELP READING, SKIP TO 9.
5. One by one go through each of the cards in the shuffled deck and put them into one of the three piles. The piles don't have to have the same number of cards, but make sure that there are at least 10 cards in Pile 1 and 10 cards in Pile 3. (POINT TO INSTRUCTIONS ON THE BOTTOM OF THE FLOWCHART AS A REMINDER.) Do you have any questions?

ANSWER ANY QUESTIONS. THEN ALLOW MOM TO SORT CARDS ON HER OWN. DON'T WATCH HER EVERY STEP, BUT CHECK ON HER FROM TIME TO TIME. MAKE SURE SHE HAS AT LEAST 10 CARDS IN PILE 1 AND PILE 3.

IF MOM SEEMS TO HAVE TROUBLE DECIDING WHERE TO PLACE A CARD, READ INSTRUCTIONS IN #4.

IF MOM HAS TROUBLE READING CARDS, CHANGE RESPONSE IN #3 AND SKIP TO 9.

6. Now, take the cards you put in Pile 1 and read each card again. This time, decide if the description applies mostly or applies often to (CHILD). If it applies mostly, put the card in 1a. If it applies often, put it in 1b. Remember to think about that time when (CHILD) had a cold, a sore throat, or a runny nose. And, remember it's o.k. to have more cards in one pile and less in another.

ALLOW MOM TO SORT CARDS ON HER OWN. DON'T WATCH HER EVERY STEP, BUT CHECK ON HER FROM TIME TO TIME.

7. Now, take the cards you put in Pile 3 and read each card again. Decide if the description applies sometimes or applies rarely, or hardly ever to (CHILD) when he/she had a cold, a sore throat, or a runny nose. If it applies sometimes, put the card in 3a. If it applies rarely, put it in 3b. Again, remember it's o.k. to have more cards in one pile and less in another.

ALLOW MOM TO SORT CARDS ON HER OWN. DON'T WATCH HER EVERY STEP, BUT CHECK ON HER FROM TIME TO TIME.

8. (READ IF MOM HAS CARDS IN PILE 2) Finally, quickly check the cards in Pile 2. Read each card again to see if the card might be placed in 1b because it applies often or in 3a because it applies sometimes. Of course, you can move any card from one pile to another at any time.

ALLOW MOM TO SORT CARDS ON HER OWN. DON'T WATCH HER EVERY STEP, BUT CHECK ON HER FROM TIME TO TIME.

WHEN MOM IS DONE, CHECK TO SEE IF THERE ARE 5 PILES OF CARDS (OR FOUR PILES IF THERE ARE NO CARDS IN PILE 2). PLACE EACH PILE INTO THE APPROPRIATE LABELED ENVELOPE. SKIP TO NEXT SECTION.

IF MOM CANNOT READ, FOLLOW STEPS 9 TO END.
9. One by one, I’m going to read each card. For each one, tell me if it applies more or less and we’ll place it in the correct pile. We need to make sure that there are at least 10 cards in Pile 1 and 10 cards in Pile 3.

READ EACH CARD AND PLACE IN PILE 1, 2, OR 3. MAKE SURE THAT THERE ARE AT LEAST 10 CARDS IN PILE 1 OR 3. IT IS O.K. IF THERE ARE NO CARDS IN PILE 2.

IF MOM SEEMS TO HAVE TROUBLE DECIDING WHERE TO PLACE THE CARD, READ INSTRUCTIONS IN #4.

10. Now, let’s take the cards you put in Pile 1. I’m going to read each card again. This time, tell me if it applies mostly or applies often to (CHILD). If it applies mostly, we’ll put the card in 1a. If it applies often, we’ll put it in 1b. Remember to think about that time when (CHILD) had a cold, a sore throat, or a runny nose. And, remember it’s o.k. to have more cards in one pile and less in another.

READ EACH CARD FROM PILE 1 AND PLACE CARD IN 1a or 1b.

11. Now, let’s take the cards you put in Pile 3. I’m going to read each card again. This time, tell me if it applies sometimes or applies rarely, or hardly ever to (CHILD) when he/she had a cold, a sore throat, or a runny nose. If it applies sometimes, we’ll put the card in 3a. If it applies rarely, we’ll put it in 3b. And, remember it’s o.k. to have more cards in one pile and less in another.

READ EACH CARD FROM PILE 3 AND PLACE CARD IN 3a or 3b.

12. (READ IF MOM HAS CARDS IN PILE 2) Finally, I’m going to read each card again in Pile 2. Tell me if it might be placed in 1b because it applies often or in 3a because it applies sometimes.

READ EACH CARD FROM PILE 2 AND PLACE CARD IN 2, 1b, or 3a.

PLACE EACH PILE INTO THE APPROPRIATE LABELED ENVELOPE.