PERHELOMAKE

FAMILY’S QUESTIONNAIRE

In this questionnaire we will be asking about the birth of the twins, childhood growth and development as well as health-related matters.
Dear responder,

This questionnaire is part of a medical research project, in which we will explain the effects of the environment and heredity on health and factors influencing health. For the project, we have called upon families that have twins.

From a scientific perspective, it is important that this questionnaire is answered by as many of you who receive it as possible. The forms have been numbered for data processing purposes. Thus, we avoid sending a new form to those who have already answered.

Be thorough in answering the questions. When you are done, check to make sure you have not skipped any questions by accident.

Return the completed questionnaire in the enclosed return envelope. You can drop it at the post office without a stamp. We will pay for postage.

NOTICE: Your identity and the information you give will remain completely confidential. The results of the research will be studied in the form of tables compiled from all answers, and we won't reveal answers given by individual participants.
HOW TO ANSWER:

It is easy to fill out the questionnaire. You will always answer each question or sub-question by circling one of the alternatives. The alternatives have been numbered. Take a look at example 1.

Some of the questions have, after the answer alternatives, a supplementary question or an indication to move on to a certain other question. These have been marked with guiding arrows. Look at example 2.

In some of the questions you are asked to write or number something. Look at examples 2 and 3.

If you have to correct an answer, cross out the incorrect answer.

EXAMPLES:

EXAMPLE 1  In the past month, have you visited the following

<table>
<thead>
<tr>
<th></th>
<th>never</th>
<th>once</th>
<th>2 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Doctor</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

(in this example the person giving the answers had visited the pharmacy twice and a doctor once during the past month)

EXAMPLE 2  Do you know your blood type?

1 no ----> go to the next question
2 yes ----> what is your blood type? ____________

(here the person answering knew his/her blood type)

EXAMPLE 3  Have your children been diagnosed with a long-term illness? If so, then

what illness?

A-child: yes, asthma
B-child: no

(in this example, only A-child has been diagnosed with asthma)
At first, we will ask questions regarding the birth of the twins.

In the following, A-child means the first-born, B-child means the second-born of the twins.

1. During which week of your pregnancy did you find out that you had a twin pregnancy?
   1. week ______
   2. I found out about the twin pregnancy when I was in labor
   3. I can't remember

2. During which week of your pregnancy were the twins born?
   Week ______

3. How many minutes apart were A-child and B-child born?
   1. ______minutes apart
   2. I can't remember

4. Were the twins born through a Caesarean birth?
   1. no
   2. yes, both
   3. yes, only B-child

5. What kind of placenta did the twins have?
   1. combined
   2. separate
   3. I don't know

6. Children's first names:
   A-child ____________________________________________  B-child ____________________________________________

7. Birth weight:
   A-child ____grams
   B-child ____grams

8. Birth height:
   A-child ____centimeters
   B-child ____centimeters

9. Apgar-rating:
   A-child ____
   ______B-child ____

10. Did either of the children have to stay in the hospital after birth?
    A-child 1. no  2. yes
    B-child 1. no  2. yes
If so, for what reason: __________________________________________

11. Have your children ever ended up in the hospital due to an accident or illness?

A-child  1. no  2. yes
B-child  1. no  2. yes

If so, for what reason: __________________________________________

In the following, we will be asking about matters related to the health of the twins.

12. Do your twins have any proclaimed illnesses or defects related to birth (for example, an organic heart problem, hairlip, or a hernia)?

A-child: ____________________________
B-child: ____________________________

13. Has your twin ever had any of the following illnesses or symptoms:


B. Asthma  1. neither  2. A-child diagnosed at age: A ____ yrs
                              B ____ yrs
3. B-child  4. both

C. Convulsions/
   Muscular contractions  1. neither  2. A-child
                              3. B-child  4. both

D. Unconsciousness or
   other "spasms"  1. neither  2. A-child
                              3. B-child  4. both

14. Have they been diagnosed to have other long-term illnesses? If so, then what disease?

A-child: __________________________________________
B-child: __________________________________________

15. Do they have long-term medication? What medicine and for which illness?

A-child: __________________________________________
B-child: __________________________________________

Next, we will ask about the growth and development of the twins. First, we will ask about events that happened before entering school. In most questions, we will ask you to compare the twins.

The development of the children before school-age (0-6 years old)
Children do not always develop at the same rate, one can develop faster than another. We understand that it can be difficult to remember how the children developed and at what age they learned different skills. For that reason, we are asking about differences between the twins.

16. In your mind, were one of the children, who were under school age, ahead of the other in:

<table>
<thead>
<tr>
<th>Skill</th>
<th>A-child was ahead</th>
<th>B-child was ahead</th>
<th>No difference</th>
<th>I can't say</th>
</tr>
</thead>
<tbody>
<tr>
<td>learning how to walk without support</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>learning words and how to speak</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>manual dexterity (for example, making things with paper and glue)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>other physical exercise developments (e.g. agility)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>intellectual development (e.g., cleverness)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>&quot;maturing&quot; (development of emotions, adapting and so forth)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

17. How did your twins usually get along together, before school age?

1. very well
2. fairly well
3. fairly badly
4. hardly ever
5. I can't say

18. Were their behaviors similar before school age?

1. very similar
2. fairly similar
3. fairly different
4. very different
5. I can't say

19. Were they, back then, interested in the same things?

1. completely the same things
2. usually the same things
3. usually different things
4. hardly any common interests
5. I can't say

20. Which of your children learned the following skills first?

<table>
<thead>
<tr>
<th>Skill</th>
<th>A-child First</th>
<th>B-child First</th>
<th>At the same time within 2 mos.</th>
<th>I can't say</th>
</tr>
</thead>
</table>
21. Did strangers have difficulty distinguishing between the twins, because the twins were so similar in appearance?

1. never or rarely
2. sometimes
3. often

22. How were the twins cared for before being of school age?

1. mom/dad cared for them ________ years
2. they were in "family daycare" ________ years
3. they were in daycare ________ years
4. grandparents cared for them ________ years
5. a nanny at home ________ years
6. other, what? ________________________ years

Here end the questions regarding development before school age.
TWINS' IDENTITY

There are two types of twins, identical and fraternal twins. Identical twins come from the same single ovum that does not develop into one fetus but separates into two individuals. They have the same chromosomes and are of the same gender. They are also more identical than other siblings on average. Fraternal twins form when two ova separate at the same time from the ovaries and develop separately. Here, we speak about dizygotic twins. Although fraternal twins develop in the same area and are born at the same time, they are not on the average more identical in terms of chromosomes and physical appearance than other brothers and sisters. The question of identity can be studied later in other ways: sometimes the identity of the twins can be verified by examining the amnion in the maternity hospital. Later, the similarities of chromosomes can be examined by a special test.

23. In the maternity hospital, were you told about the identity of the twins as proven by amnion and other tests?

1. twins are different gender – move to the question 29
2. identity was not a mentioned
3. It was said that identity cannot be verified
4. the twins were said to be fraternal
5. the twins were said to be identical
6. I can't say

24. Do the twins have same color eyes?

1. definitely different color eyes
2. some difference
3. completely same color eyes

25. Do the twins have same hair color?

1. completely same hair color
2. some difference
3. definitely different hair color

26. Do the twins have the same type of hair (thickness, curly or straight . . .)?

1. completely same type of hair
2. some difference
3. definitely different type of hair

27. Do the twins have the similar kind of facial features?

1. definitely different kind of facial features
2. a few small differences in facial features
3. facial features are very similar

28. What is your understanding of the identity of the twins?

1. the twins are identical
2. the twins are fraternal
3. I am not sure
School-aged children's development

(Cohort -83: A-child  B-child

1. Does your twin go to a normal comprehensive school? 1 2
   Special school 1 2
   Which special school?_______________________________________)

29. Which child learned to read first?
   1. A-child
   2. B-child
   3. at the same time (within a month's time)
   4. I can't say

30. In your mind, was one of the twins more skilled or ahead in development while 7-10 years old:

<table>
<thead>
<tr>
<th></th>
<th>A-child</th>
<th>A-child</th>
<th>Both were</th>
<th>B-child</th>
<th>B-child</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>definitely ahead</td>
<td>slightly ahead</td>
<td>equal</td>
<td>slightly ahead</td>
<td>definitely ahead</td>
</tr>
<tr>
<td>-in agility</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>-in strength</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>-in verbal expression</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>-emotionally, in adjusting</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>-musically</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

31. Was their behavior similar during school age?
   1. very similar
   2. somewhat similar
   3. somewhat different
   4. Very different
   5. I can't say

32. Are the twins so identical that the teachers have a hard time telling them apart?
   1. no
   2. yes
   3. I can't say

33. Are they interested in the same things?
   1. completely the same things
   2. usually the same things
   3. usually different things
   4. Very few common interests
   5. I can't say

34. Do they have the same friends?
   1. Share almost all friends
   2. many common friends
   3. Mainly different friends
   4. no shared friends
   5. I can't say
35. Does one appear as the “leader” when it comes to opinions, games or assignments, etc.?

1. child A always leads
2. child A usually leads
3. they lead equally
4. child B usually leads
5. child B always leads
6. I can’t say

36. At home, do the twins share a bedroom?

1. yes
2. no – for how many years have they lived in different rooms?
   ______ years

37. Who lives with the twins in the household?

1. the twins’ biological mother
2. the twins’ biological father
3. siblings, how many ______?
4. other adults (a new husband/wife, grandparents, other relatives, other people)
   Who?________________________________________________
5. other children (half-siblings, adoptive children, other) How many?____________________________?

38. How much time, when awake, do the twins spend together? (you may circle as many choices as you need).

1. the twins are almost always together
2. the twins are usually together
3. A-child is usually with other friends or siblings
4. A-child is alone a lot
5. B-child is usually with other friends or siblings
6. B-child is alone a lot

39. Are the twins dependent on each other?
Circle the most accurate alternative for both A and B child.

A-child of his/her twin
1 very dependent
2 somewhat dependent
3 not at all dependent
4 cannot say

B-child of his/her twin
1 very dependent
2 somewhat dependent
3 not at all dependent
4 cannot say

40. Do your twins attend the same school?

1. they have attended the same school throughout elementary school
2. they were in the same school together for ____ years
3. they attended different elementary schools in different schools → move to question 42
11. Have they always been in the same class in elementary school (have they always had the same homeroom teacher)?
   1. they have always been in different classes.
   2. they have been in the same class together for ___ years

41. Have the twins always been in the same homeroom, i.e. have they always had the same homeroom teacher?
   1. they have always been in different homerooms
   2. they have been in the same homeroom for 1-2 years
   3. they have been in the same homeroom for 3-4 years
   4. they have always been in the same homeroom
   5. other, what?

42. Which twin had a better grade point average last spring?
   1. A-child
   2. B-child
   3. no difference
   4. I can't say

SCHOOL STUDY

On the last page of this questionnaire we ask about where your children go to school and the name of their homeroom teacher. We need this information so that we may ask the school principal and the homeroom teacher to agree to a study conducted in the school.

The reciprocal social difficulties of twins at school and at home will be explained by the homeroom teachers' and parents' estimations. For this reason, we will send the same questionnaires to the home and the school in the beginning of the spring semester.

In addition, some of the twins will participate in a reciprocal study that is conducted in the classrooms of the twins by a researcher. In this study the pupils are asked to evaluate each other by answering questions (for example, "Of your classmates, who would you choose to be the leader of a class trip?"). In the research situation, the twins are not singled out because the entire class participates in the evaluation of others. In other words, it is at no stage emphasized that the research concerns the twins. After the class study, the researcher will present a few questions to the twins, separately, regarding their interests and health experiences.

We ask you for your approval for the twins to participate in the school study.

1. I approve -> please fill in the following page
   2. I do not approve -> go to question 43
School related information of the twins:

A-child's name: __________________________
Name and address of the school: ______________________________________________________
Class/Grade (for example, 5A): __________________________
Homeroom teacher's name: __________________________
If A-child does not attend a normal class, please explain what type of classroom-form special teaching does he/she receive and as of when? _________________________________________

B-child's name: __________________________
Answer the section for the B-child separately, if your twins have different homeroom teachers, please.
Name and address of the school: ______________________________________________________
Class/Grade (for example, 5A): __________________________
Homeroom teacher's name: __________________________
If B-child does not attend a normal class, please explain what type of classroom-form special teaching does he/she receive and as of when? _________________________________________

Signature, and name of the parent, in block letters:

__________________________________________

43. Next, you may add any information that did not come out in our questions about the twins' or the family's health.

Later on in the research, additional questions may arise. We hope that, if needed, we may get in contact with you by telephone.

My phone number is

day-time ( )
Evenings ( )

We thank you for Your help in this research.