

Supplementary Material

Parental Decision-Making in Childhood Vaccination

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Complete battery for Study 1

1 Demographics

Country of residence Please select your gender:

- a) Woman
- b) Man
- c) Other

Age (in arabic numbers)

Please select the highest education level that you completed *(options adapted for each country)* Please, select your marital status:

- a) Single
- b) Married
- c) Divorced or separated

Please select the option that best fits your actual situation:

- a) Living with the other parent of the child/ children
- b) Living with another partner (not the parent)
- c) Single parent

To what extent do you find difficulties to make the ends meet in your household? *Likert scale (1=Not difficult at all to 7=completely difficult)*

How many children do you have or are currently taking care of?

How old are they?

- a) Age of the child 1:
- b) Age of the child 2:
- c) Age of the child 3:
- d) Age of the child 4:
- e) Age of the child 5:
- f) Age of the child 6:

g) Age of the child 7:

Are the children vaccinated according to the official vaccination schedule in your country

- a) Yes, all vaccines in the schedule have been administered at the recommended age.
- b) Some of the vaccines have not been administered following the official schedule
- c) No, the children are not being vaccinated at all
- d) Other possibilities (open-ended)

If you selected the second or third option, please briefly state the reason(s) why your children are not being vaccinated according to the official schedule of your county (open-ended)

Have you been vaccinated according to the official vaccination schedule (at the time) in your country?

- a) Yes, all vaccines in the schedule have been administered at the recommended age.
- b) Some of the vaccines have not been administered following the official schedule
- c) No, I have not been vaccinated at all
- d) Other possibilities (open-ended)

If you selected the second or third option, please briefly state the reason(s) why you have not been vaccinated according to the official schedule of your county (open-ended)

2 Dependant variable

Would you at this time vaccinate your child according to the official vaccination schedule? *Likert 7-point scale (Definitely not=1; Definitely yes=7)*

3 Psychological features

3.1 Vaccine hesitancy

Please, rate your agreement to each of this items in the following scale, where 1 means "I strongly disagree", and 7 means "I strongly agree":

- 1. The risk of side effects outweighs any protective benefits of vaccines.
- 2. Vaccinating healthy children helps protect others by stopping the spread of disease.
- 3. I plan to vaccinate my children.
- 4. Children do not need vaccines for diseases that are not common anymore.
- 5. Doctors would not recommend vaccines if they were unsafe
- 6. Vaccine safety data is often fabricated.
- 7. Immunizing children is harmful and this fact is covered up.
- 8. Pharmaceutical companies cover up the dangers of vaccines.
- 9. People are deceived about vaccine efficacy.
- 10. Vaccine efficacy data is often fabricated.
- 11. The government is trying to cover up the link between vaccines and autism.

Please, complete the following survey:

- 1. Have you ever delayed having your child get a shot for reasons other than illness or allergy?
 - a) Yes
 - b) No
 - c) I don't know

- 2. Have you ever decided not to have your child get a shot for reasons other than illness or allergy?
 - a) Yes
 - b) No
 - c) I don't know
- 3. If you had another infant today, would you want him/her to get all the recommended shots?
 - a) Yes
 - b) No
 - c) I don't know
- 4. How sure are you that following the recommended shot schedule is a good idea for your child? *Likert 7-point scale (1=Not sure at all; 7= Completely sure)*
- 5. Children get more shots than are good for them
 - *Likert 7-point scale (1=Completely disagree; 7=Completely agree)*
- 6. I believe that many of the illnesses shots prevent are severe
 - *Likert 7-point scale (1=Completely disagree; 7=Completely agree)*
- 7. It is better for my child to develop immunity by getting sick than to get a shot. *Likert 7-point scale (1=Completely disagree; 7=Completely agree)*
- 8. It is better for children to get fewer vaccines at the same time. Likert 7-point scale (1=Completely disagree; 7=Completely agree)
- How concerned are you that your child might have a serious side effect from a shot? Likert 7-point scale (1=Not concerned at all; 7=Completely concerned)
- 10. How concerned are you that any one of the childhood shots might not be safe? Likert 7-point scale (1=Not concerned at all; 7=Completely concerned)
- 11. How concerned are you that a shot might not prevent the disease?
- *Likert 7-point scale (1=Not concerned at all; 7=Completely concerned)* 12. Overall, how hesitant about childhood shots would you consider yourself to be?
- *Likert 7-point scale (1=Not concerned at all; 7=Completely concerned)*
- 13. I trust the information I receive about shots.
 - *Likert* 7-point scale (1=Completely disagree; 7=Completely agree)
- 14. I am able to openly discuss my concerns about shots with my child's doctor. *Likert 7-point scale (1=Completely disagree; 7=Completely agree)*

3.2 Perceived freedom

When I was making the decision of whether to vaccinate my child/children...

- 1. I felt very free in this decision
- 2. I was able to choose what I wanted
- 3. I was able to ponder and think freely and easily
- 4. I felt very constricted in this decision

Likert 7-point scale (Definitely not=1; Definitely yes=7)

3.3 Choice overload

When I was making the decision of whether to vaccinate my child/children...

- 1. I felt overwhelmed by the decision
- 2. The choice exhausted me
- 3. It was difficult to keep all the relevant information together

Likert 7-point scale (Definitely no=1; Definitely yes=7)

3.4 The Actively Open-Minded Thinking Scale

Please, rate to what extent do you agree with these statements.

- 1. Allowing oneself to be convinced by an opposing argument is a sign of good character.
- 2. People should take into consideration evidence that goes against their beliefs.
- 3. People should revise their beliefs in response to new information or evidence.
- 4. Changing your mind is a sign of weakness.
- 5. Intuition is the best guide in making decisions.
- 6. It is important to persevere in your beliefs even when evidence is brought to bear against them.
- 7. One should disregard evidence that conflicts with one's established beliefs.
- 8. People should search actively for reasons why their beliefs might be wrong.
- 9. When we are faced with a new question, the first answer that occurs to us is usually best.
- 10. When faced with a new question, we should consider more than one possible answer before reaching a conclusion.
- 11. When faced with a new question, we should look for reasons why our first answer might be wrong, before deciding on an answer.

Likert 7-point scale (Completely disagree=1; Completely agree=7)

3.5 Trust towards authorities

Please indicate the extent to which you trust the following sources to tell the truth about vaccinations:

- a) Corporations
- b) National government
- c) Healthcare system
- d) Science/scientist
- e) Mainstream media
- f) Alternative media
- g) Social networks
- h) Your child's doctor

Likert 7-*point scale* (*Completely mistrust*=1; *Completely trust*=7)

3.6 Sources of information

Please check all the sources you have used to make the decision about vaccination

- a) Social Networks
- b) Mainstream media
- c) Alternative media
- d) Government communication
- e) Friends and family
- f) Books
- g) Magazines
- h) Scientific journals
- i) My children's paediatrician
- j) Websites concerning vaccination
- k) Others: _____

3.7 Access to information

I have access to all the information I need to make good decisions about immunizing my children. *Likert 7-point scale (Definitely no=1; Definitely yes=7)*

3.8 Exposure to anecdotal cases

Have you ever heard of anyone who has had a bad reaction to a shot?

- a) Yes
- b) No

3.9 Involvement in the decision

Please, rate your level of involvement in the decision of vaccinating your children or not *Likert 7-point scale (Not involved at all =1; Completely involved=7)* Was anyone else also involved in the decision?

- a) Yes
 - i. How many people were also involved in the decision?
 - ii. Who did you consult?
 - 1. The other parent of the kid
 - 2. Another family member
 - 3. A friend
 - 4. Another person
 - iii. Gender(s)
 - 1. Male
 - 2. Female
 - 3. Other
 - iv. Please rate the person(s)'s level of involvement in the decision.
 - *Likert* 7-*point scale* (*Not involved at all* =1; *Completely involved*=7)
- b) No

3.10 Norms, perceived consensus, knowledge

Is there a consensus among scientists about the safety of vaccines? *Likert 7-point scale (No consensus at all=1; Total consensus=7)*Is there a consensus among scientists about the effectiveness of vaccines? *Likert 7-point scale (No consensus at all=1; Total consensus=7)*What do you think is the percentage of vaccinated children in your country? 0% to 100% scale
Is vaccination mandatory in your country? a) Yes

b) No

Is the "vaccination issue" a big thing in your country? *Likert 7-point scale (Definitely no=1; Definitely yes=7)*

3.11 Passive Risk Taking

To what extent are you likely to behave in the manner described in the following situations?

- 1. Buy an expensive product (computer, refrigerator) only after comparing prices in several stores.
- 2. Install an up to date anti -virus on my computer.
- 3. Check the credit card bill in detail every month.

- 4. Inquire all about a course before signing up (who is the lecturer, what are the topics, the assignments etc....
- 5. Read the fine print on any major document like a lease, an insurance policy or loan
- 6. Save receipts and warranty documents of major items in an organized fashion.
- 7. Check tolls and prices before calling long distance or overseas.
- 8. Back up all important files on the computer, including documents, pictures or videos.
- 9. Not save money regularly
- 10. Always lock the house door when going to sleep
- 11. Buy clothes without trying them on
- 12. Buy a used car only after taking it to a complete check up in a licensed auto shop
- 13. Immediately go to the doctor's when something in my body is aching or bothering me.
- 14. Have regular general medical check -ups every one or two years.
- 15. Get vaccinated for the flu in the winter.
- 16. Install an anti -collision device in the car.
- 17. Drive straight to the auto repair shop when the car makes a strange noise.
- 18. Ask the person I am dating about his/her sexual history.
- 19. Buy serious medical insurance when traveling to another country.
- 20. Always wear a seatbelt when sitting in the back seat.
- 21. Pay when parking in a blue -white zone as directed by the parking meter.
- 22. Change some part in the car (filter, strap, etc..) because the mechanic said it was old and due to fail.
- 23. Go through customs without declaring about goods I am bringing which are supposed to be taxed.
- 24. Report to social services about a child from the neighborhood that is being seriously neglected by his parents.
- 25. Not say anything when receiving too much change at the store.

Likert 7-point scale (Not likely at all=1; Very likely=7)

3.12 Elaboration of possible outcomes

Generation/evaluation dimension

- 1. Before I act I consider what I will gain or lose in the future as a result of my actions
- 2. I try to anticipate as many consequences of my actions as I can.
- 3. Before I make a decision I consider all possible outcomes.
- 4. I always try to assess how important the potential consequences of my decisions might be.
- 5. I try hard to predict how likely different consequences are.
- 6. Usually I carefully estimate the risk of various outcomes occurring.

Positive outcome focus dimension

- 1. I keep a positive attitude that things always turn out all right.
- 2. I prefer to think about the good things that can happen rather than the bad.
- 3. When thinking over my decisions I focus more on their positive end results.

Negative outcome focus dimension

- 1. I tend to think a lot about the negative outcomes that might occur as a result of my actions.
- 2. I am often afraid that things might turn out badly.
- 3. When thinking over my decisions I focus more on their negative end results.
- 4. I often worry about what could go wrong as a result of my decisions.

Likert 7-*point* scale (Completely disagree=1; Completely agree=7