Appendix

The influence of identifiability and singularity in moral decision making

Johanna Wiss,¹ David Andersson,² Paul Slovic,^{3,4} Daniel Västfjäll,^{3,5} and Gustav Tinghög^{1,2}

- 1. The National Center for Priority Setting in Health Care, Department of Medical and Health Sciences, Linköping University, SE-581 83 Linköping, Sweden.
- 2. Division of Economics, Department for Management and Engineering, Linköping University, SE-581 83 Linköping, Sweden.
- 3. Decision Research, 1201 Oak Street, Suite 200, Eugene, Oregon 97401, USA.
- 4. University of Oregon.
- 5. Department of Behavioral Sciences and Learning, Linköping University, SE-581 83 Linköping, Sweden.

Corresponding Author:

Johanna Wiss
Department of Medical and Health Sciences
Division of Health Care Analysis
Linköping University
SE-581 83 Linköping
Sweden

Email: johanna.wiss@liu.se Phone: +46 13 28 56 43

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1 Experimental instructions

1.1 Instructions exp. SWE I

[Translated from Swedish]

Before responding to the questions in this survey, please read carefully the instructions below.

An international organization "UNICEF" offers the possibility to vaccinate vulnerable children in areas where measles is widespread. **Each day, over 600 children die from measles.** Vaccination is the only way to entirely protect children against the disease, and UNICEF is the world's largest buyer of measles vaccines.

You will be presented with a specific scenario with certain specified conditions. Your task is to make a choice how to distribute measles vaccines between two alternatives. <u>Vaccines will be funded in accordance with your decision</u>. It is thus a REAL decision situation. Your choice will result in UNICEF providing vaccines to the featured children and other children in similar situations.

IMPORTANT:

- The study contains two parts.
- Do not proceed to Part II before you completed Part I.
- Do not go back and change your answer in Part I when you have moved on to Part II.

Before you read the question and make your choice, fill in the background information below:

Age:							
Program/Course (specify which program and / or the course):							
Sex:	O Female	O Male					

If you have questions concerning the survey, do not hesitate to contact me at: johanna.wiss@liu.se

Treatment 1 (1 id vs. 5 non-id)



Benge

Benge is five years old and lives in Kenya. He lives in a poor and inaccessible mountain village where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate enough money for one dose of measles vaccine that protects Benge from the disease and its side effects. A vaccination offers him an opportunity for a better and more secure future.

For the same amount of money we can vaccinate five children living in another more accessible, poor area in Kenya.

You can choose to deny Benge the vaccine in favor of the other children. Do you choose to give Benge the vaccine?

O YES

O NO

Treatment 2 (1 non-id vs. 5 non-id)

A child is living in a poor and inaccessible mountain village in Kenya, where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate enough money for one dose of measles vaccine that protects the child from the disease and its side effects. A vaccination offers the child an opportunity for a better and more secure future.

For the same amount of money we can vaccinate five children living in another more accessible, poor area in Kenya.

You can choose to deny the child in the mountain village the vaccine in favor of the other children. Do you choose to give the child in the mountain village the vaccine?

O YES

O_{NO}

Treatment 3 (1 id vs. 5 id)



Benge

Benge is five years old and lives in Kenya. He lives in a poor and inaccessible mountain village where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate enough money for one dose of measles vaccine that protects Benge from the disease and its side effects. A vaccination offers him an opportunity for a better and more secure future.







Mutaka



Jallo



Maluf



Nelson

For the same amount of money we can vaccinate the five-year-olds Sueva, Mutaka, Jallo, Maluf, and Nelson living in another more accessible, poor area in Kenya.

You can choose to deny Benge the vaccine in favor of Sueva, Mutaka, Jallo, Maluf, and Nelson. Do you choose to give Benge the vaccine?

O YES

O_{NO}

Treatment 4 (1 non-id vs. 5 id)

A child is living in a poor and inaccessible mountain village in Kenya, where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate enough money for one dose of measles vaccine that protects the child from the disease and its side effects. A vaccination offers the child an opportunity for a better and more secure future.



For the same amount of money we can vaccinate the five year olds Sueva, Mutaka, Jallo, Maluf, and Nelson living in another more accessible, poor area in Kenya.

You can choose to deny the child in the mountain village the vaccine in favor of Sueva, Mutaka, Jallo, Maluf, and Nelson. Do you choose to give the child in the mountain village the vaccine?

O YES

O_{NO}

Part II (all treatments)

How di	fficult did y	you find the	question wa	s to answei	r?	
	1 Not at all difficult	2	3	4	5	6 Very difficult
How m	uch sympa	thy did you f	eel for Beng	ge [the chile	d in the mo	untain village]?
	1 No sympathy	2	3	4	5	6 Much sympathy
How m		thy did you	feel for Suc	eva, Mutak	xa, Jallo, M	aluf and Nelson [the other
	1 No sympathy	2	3	4	5	6 Much sympathy

Comments on the task (optional):

1.2 Instructions exp. USA and SWE II

Before responding to the questions in this survey, please read carefully the instructions below.

The United Nations Children's Fund (UNICEF) offers the possibility to vaccinate vulnerable children in areas where measles is widespread. **Each day, over 430 children die from measles.** Vaccination is the only way to entirely protect children against the disease, and UNICEF is the world's largest buyer of measles vaccine.

You will be presented with a specific scenario with certain specified conditions. Your task is to make a choice on how to distribute measles vaccines between two alternatives. We will fund vaccines in accordance with your decision. Your choice will result in UNICEF providing vaccines to children in need.

1. Year of birt	h?				
2. Are you ma	le or female?				
	Male				
	Female				
Programme/Course (specify which program and / or the course):					

If you have any questions concerning the survey, please contact me at: johanna.wiss@liu.se

Treatment 1 (1 id vs. 5 non-id)



This is Benge

Benge is five years old and lives in Kenya. He lives in an area where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate one dose of measles vaccine that protects Benge from the disease and its side effects. A vaccination offers him an opportunity for a better and more secure future.

Instead of vaccinating Benge it is possible to vaccinate five other children, living in a similar situation as Benge.

Right now the vaccine is designated to Benge. However, you can choose to deny Benge the vaccine in favor of the other children.

Do you choose to give Benge the vaccine?

O Yes

Treatment 2 (1 non-id vs. 5 non-id)

A child is living in Kenya, in an area where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate one dose of measles vaccine that protects the child from the disease and its side effects. A vaccination offers the child an opportunity for a better and more secure future.

Instead of vaccinating the single child it is possible to vaccinate five other children, living in a similar situation as the single child.

Right now the vaccine is designated to the single child. However, you can choose to deny the single child the vaccine in favor of the other children.

Do you choose to give the single child the vaccine?

O Yes

Treatment 3 (1 id vs. 5 id)



This is Benge

Benge is five years old and lives in Kenya. He lives in an area where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate one dose of measles vaccine that protects Benge from the disease and its side effects. A vaccination offers him an opportunity for a better and more secure future.











This is: Sueva

Mutaka

Jallo

Maluf

Nelson

Instead of vaccinating Benge it is possible to vaccinate the children Sueva, Mutaka, Jallo, Maluf, and Nelson, living in a similar situation as Benge

Right now the vaccine is designated to Benge. However, you can choose to deny Benge the vaccine in favor of Sueva, Mutaka, Jallo, Maluf, and Nelson.

Do you choose to give Benge the vaccine?

O Yes

Treatment 4 (1 non-id vs. 5 id)

A child is living in Kenya, in an area where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate one dose of measles vaccine that protects the child from the disease and its side effects. A vaccination offers the child an opportunity for a better and more secure future.



Instead of vaccinating the single child it is possible to vaccinate the children Sueva, Mutaka, Jallo, Maluf, and Nelson, living in a similar situation as the single child.

Right now the vaccine is designated to the single child. However, you can choose to deny the single child the vaccine in favor of Sueva, Mutaka, Jallo, Maluf, and Nelson.

Do you choose to give the single child the vaccine?

O Yes

Part II

All treatments

Do you believe that your choice will result in a real donation? Not convinced at all-Very convinced (1-6)

How difficult did you find the question was to answer? Not at all difficult-Very difficult (1-6)

How much sympathy did you feel for Benge? No sympathy-Much sympathy (1-6)

How much sympathy did you feel for the five children? No sympathy-Much sympathy (1-6)

I felt sympathy for Benge and used these feelings to guide my choice. Disagree-agree (1-6)

I felt sympathy for the five children and used these feelings to guide my choice. Disagree-agree (1-6)

My feelings for Benge made me feel less intensely for the five children. Disagree-agree (1-6)

My feelings for Benge made me feel more intensely for the five children. Disagree-agree (1-6)

My feelings for the five children made me feel less intensely for Benge. Disagree-agree (1-6)

My feelings for the five children made me feel more intensely for Benge. Disagree-agree (1-6)

I felt that Benge should not get a "special treatment". Disagree-agree (1-6)

I felt that the five children should not get a "special treatment". Disagree-agree (1-6)

Only treatment 1 and 4

The fact that Benge was identified with name and picture made me feel less intensely for him than for the other five children.

Disagree-agree (1-6)

The fact that Benge was identified with name and picture made me feel more intensely for him than for the other five children.

Disagree-agree (1-6)

The fact that the five children were not identified with names and pictures made me feel less intensely for them than for Benge.

Disagree-agree (1-6)

The fact that the five children were not identified with names and pictures made me feel more intensely for them than for Benge.

Disagree-agree (1-6)

All treatments

Do you have any thoughts regarding the questions that you would like to share?

1.3 Instructions exp. USA - reversed order

TREATMENT 1 (reverse order)

Five children are living in Kenya, in an area where outbreaks of measles frequently occur. The disease can cause serious injury and even death. We will donate five doses of measles vaccine that protects the children from the disease and its side effects. A vaccination offers the children an opportunity for a better and more secure future.



This is Benge

Instead of vaccinating the five children it is possible to vaccinate the child Benge, living in a similar situation as the five children.

Right now the vaccine is designated to Benge. However, you can choose to deny Benge the vaccine in favor of the other children.

Do you choose to give Benge the vaccine?

O Yes

O No

[The same structure was used for treatment 2-4.]

2 Additional analysis

2.1 Interaction analysis

Table 1: Interaction analysis of the effect of identifying the single child and location of experiment

	USA and S\	USA and SWE I		
	Estimate	sig.		
Intercept	-0,2213	0,4856		
Single child identified	0,1871	0,2620		
Group identified	-0,4120	0,0136		
Age	-0,0081	0,3479		
Female	0,0998	0,5560		
Exp. SWE I (Exp. USA as ref)	-0,0511	0,7666		
Single child identified * exp. SWE I	-0,6120	0,0002		
Group identified * exp. SWE I	0,0496	0,7665		

	USA and S\	USA and SWE II			
	Estimate	sig.			
Intercept	-0,4937	0,1398			
Single child identified	0,3696	0,0565			
Group identified	-0,4228	0,0301			
Age	-0,0010	0,2566			
Female	0,0897	0,6401			
Exp. SWE II (exp. USA as ref)	-0,4110	0,0310			
Single child identified * exp. SWE II	-0,4335	0,0256			
Group identified * exp. SWE II	0,0406	0,8340			

USA and SWEDEN (SWE I + SWE II)

	Estimate	sig.
Intercept	-0,0462	0,9138
Single child identified	0,8116	0,0004
Group identified	-0,4818	0,0362
Age	-0,0123	0,1513
Female	0,2189	0,1445
SWE (USA as ref)	-0,4604	0,1487
Single child identified * SWE	-1,1116	0,0002
Group identified * SWE	0,0954	0,7491

2.2 Mean values for follow-up questions on perceived emotions in exp. SWE I-II and exp. USA

Table 2: Mean values for follow-up questions on perceived emotions in exp. SWE I-II and exp. USA

• • • • • • • • • • • • • • • • • • • •	SWE I			SWE II			USA					
Treatment 1 – 4 (T1-T4)	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
How difficult did you find the question was to answer?	4.3	4.21	4.46	3.99	3.97	3.84	3.87	4.05	3.94	3.79	3.81	3.47
How much sympathy did you feel for the single child [Benge]?	5.12	4.96	5.24	4.79	4.58	4.43	4.98	4.9	4.96	4.73	5.02	5
How much sympathy did you feel for the five children [Sueva, Mutaka, Jallo, Maluf, and Nelson]?	4.85	4.44	4.88	4.65	4.18	4.25	4.68	5.02	4.9	4.86	4.99	4.89
My feelings for the single child [Benge] made me feel more intensely for the five children [Sueva, Mutaka, Jallo, Maluf, and Nelson].					2.47	2.07	2.16	2.33	3.39	3.5	3.23	3.26
I felt that the single child [Benge] should not get a "special treatment".					4.15	3.1	3.6	3.92	3.4	3.33	3.13	3.56
Do you believe that your choice will result in a real donation?					3.22	3.3	2.81	3.45	3.41	3.51	3.43	3.46