Revised Supplementary Online Appendix

Feeling their Pain:
Affective Empathy and Public Preferences for Foreign Development Aid

1. The Interpersonal Reactivity Index (IRI)

PT = perspective-taking scale
FS = fantasy scale
EC = empathic concern scale
PD = personal distress scale
(-) denotes item to be scored in reverse fashion

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how strongly you agree or disagree that it describes you.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

1. I often have tender, concerned feelings for people less fortunate than me. (EC)
2. I sometimes find it difficult to see things from the "other guy's" point of view. (PT) (-)
3. Sometimes I don't feel very sorry for other people when they are having problems. (EC) (-)
4. In emergency situations, I feel apprehensive and ill-at-ease. (PD)
5. I try to look at everybody's side of a disagreement before I make a decision. (PT)
6. When I see someone being taken advantage of, I feel kind of protective towards them. (EC)
7. I sometimes feel helpless when I am in the middle of a very emotional situation. (PD)
8. I sometimes try to understand my friends better by imagining how things look from their perspective. (PT)
9. When I see someone get hurt, I tend to remain calm. (PD) (-)
10. Other people's misfortunes do not usually disturb me a great deal. (EC) (-)

11. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments. (PT) (-)

12. Being in a tense emotional situation scares me. (PD)

13. When I see someone being treated unfairly, I sometimes don't feel very much pity for them. (EC) (-)

14. I am usually pretty effective in dealing with emergencies. (PD) (-)

15. I am often quite touched by things that I see happen. (EC)

16. I believe that there are two sides to every question and try to look at them both. (PT)

17. I would describe myself as a pretty soft-hearted person. (EC)

18. I tend to lose control during emergencies. (PD)

19. When I'm upset at someone, I usually try to "put myself in his shoes" for a while. (PT)

20. When I see someone who badly needs help in an emergency, I go to pieces. (PD)

21. Before criticizing somebody, I try to imagine how I would feel if I were in their place. (PT)

As we note in the paper, we did not use the fantasy (FS) items because we did not see them as relevant to empathy in international politics. FS items measure the ability to put oneself in shoes of fictitious characters and image oneself as part of fictitious stories.

Factor analysis appendix indicates that the three dimensions of empathy captured by the IRI index constitute three distinct dimensions empirically.

		Factor Loadings		
		Empathic Concern	Personal Distress	Perspective Taking
tender, concerned feelings		0.574		
other guy's point of view (reversed)				0.643
don't feel so sorry (reversed)		0.621		
apprehensive at emergencies			0.542	

everybody's side of a disagreement				0.601
feel protective		0.562		
helpless in the middle of an emotional situation			0.702	
try to understand my friends				0.743
remain calm when someone is hurt (reversed)			0.603	
others' misfortunes don't disturb (reversed)		0.587		
don't waste much time listening				0.813
tense emotional situations scares me			0.646	
don't feel very much pity		0.523		
effective in dealing with emergencies (reversed)				0.661
touched by things that I see happen		0.710		
two sides to every question				0.774
soft-hearted person		0.302		
lose control during emergencies			0.701	
put myself in his shoes				0.711
help in an emergency, I go to pieces			0.781	
how I would feel if I were in their place				0.802

2. Experimental Scenarios

Control Condition: Zambia is one of the poorest countries in the world. It is heavily dependent on foreign development assistance from rich donor countries, including the United States. Donors have provided over $4 billion in foreign aid to Zambia between 2009 and 2012. Aid constitutes a large chunk of Zambia's yearly national income.

High Effectiveness-High Deservingness Condition: Zambia is one of the poorest countries in the world. It is heavily dependent on foreign development assistance from rich donor countries, including the United States. Donors have provided over $4 billion in foreign aid to Zambia between 2009 and 2012. Aid constitutes a large chunk of Zambia's yearly national income. Experts report that these foreign development funds have tremendously contributed to Zambia's economic growth. In the last decade, development aid has increased Zambia's economic growth by approximately 75%. For its part, the national government of Zambia used foreign aid as well. It established a successful national development strategy. Specifically, it succeeded in determining clear policy priorities, setting up effective monitoring programs in a variety of sectors ranging from education to healthcare and in carefully reporting the results of Zambia's economic progress to donors and citizens.

High Effectiveness-Low Deservingness Condition: Zambia is one of the poorest countries in the world. It is heavily dependent on foreign development assistance from rich donor countries, including the United States. Donors have provided over $4 billion in foreign aid to Zambia between 2009 and 2012. Aid constitutes a large chunk of Zambia's yearly national income. Experts report that these foreign development funds have tremendously contributed to Zambia's economic growth. In the last decade, development aid has increased Zambia's economic growth by approximately 75%. For its part, however, the national government of Zambia struggled with using foreign aid well. It failed to establish successful a national development strategy. Specifically, it failed to determine clear policy priorities, set up effective monitoring programs and carefully report the results of Zambia's economic progress to donors and citizens.

Low Effectiveness-High Deservingness Condition: Zambia is one of the poorest countries in the world. It is heavily dependent on foreign development assistance from rich donor countries,

including the United States. Donors have provided over $4 billion in foreign aid to Zambia between 2009 and 2012. Aid constitutes a large chunk of Zambia's yearly national income. Experts report that these foreign development funds have contributed to Zambia's economic growth very little. In the last decade, development aid has increased Zambia's economic growth by approximately 25%. For its part, however, the national government of Zambia used foreign aid well. It established a successful national development strategy. Specifically, it succeeded in determining clear policy priorities, setting up effective monitoring programs in a variety of sectors ranging from education to healthcare and in carefully reporting the results of Zambia's economic progress to donors and citizens.

Low Effectiveness-Low Deservingness Condition: Zambia is one of the poorest countries in the world. It is heavily dependent on foreign development assistance from rich donor countries, including the United States. Donors have provided over $4 billion in foreign aid to Zambia between 2009 and 2012. Aid constitutes a large chunk of Zambia's yearly national income. Experts report that these foreign development funds have contributed to Zambia's economic growth very little. In the last decade, development aid has increased Zambia's economic growth by approximately 25%. Furthermore, for its part, the national government of Zambia struggled with using foreign aid well. It failed to establish successful a national development strategy. Specifically, it failed to determine clear policy priorities, set up effective monitoring programs and carefully report the results of Zambia's economic progress to donors and citizens.

In the Macedonia experiment, the country name was changed, and the aid amount donors provided was $24 million.

Sociodemographic Characteristics of the Participants

	Mean (Std) or Percentage	N
Age	35.20 (11.15)	1,026
Female	%54.05	1,025
Republican	% 24.56	1,026
Democrat	% 43.96	1,026
Independent	% 28.54	1,026
African-American	%11.41	1,031
White	%78.69	1,031
Less than High School	%1	1,031
High School	%35	1,031
College/University	%55	1,031
Graduate/Prof School	%10	1,031

Balance Tables
Macedonia

	Control	HEHD	HELD	LEHD	LELD	Statistic	Significance
Age	35.24 (11.69)	34.04 (10.20)	34.77 (10.95)	34.57 (11.51)	36.49 (11.53)	F=1.39	Prob > F 0.2370
Female	93	107	120	95	94	$\chi 2$= 6.423	P= 0.1697
Generalized Trust (can trust)	89	100	100	87	86	$\chi 2$= 3.2473	P = 0.517
Ideology (liberal)	4.44 (1.67)	4.38 (1.83)	4.58 (1.74)	4.61 (1.74)	4.14 (1.82)	F= 2.32	Prob > F 0.0552
Support for Gov't Welfare	3.46 (1.92)	3.45 (1.96)	3.32 (1.96)	3.17 (2.05)	3.46 (1.97)	F=0.80	Prob > F 0.5225
Cosmopolitanism	105056.00	105628.00	114313.50	99353.50	100449.0	$\chi 2$= 7.873	P= 0.0964
Nationalism	3.27 (0.96)	3.24 (1.02)	3.37 (0.95)	3.12 (0.98)	3.33 (0.96)	F= 1.96	Prob > F 0.0978
Democrat	95	81	98	96	80	$\chi 2$= 8.1921	P = 0.085
Republican	50	50	45	41	63	$\chi 2$= 6.0327	P = 0.197
Income	2.44 (0.87)	2.413 (0.87)	2.39 (0.90)	2.27 (0.86)	2.36 (0.88)	F= 1.10	Prob > F 0.3574
Years of Education	4.05 (1.34)	4.15 (1.25)	4.30 (1.31)	3.97 (1.31)	4.12 (1.34)	F= 1.76	Prob > F 0.1352

Entries are group means for selected covariates, with standard deviations in parentheses, or frequencies or ranks. When the Bartlett's test for equal variances is not satisfied, the Kruskal-Wallis test is used.

Zambia

	Control	HEHD	HELD	LEHD	LELD	Statistic	Significance
Age	34.33 (10.80)	35 (10.14)	35.11 (12.05)	35.55 (11.62)	35.75 (11.14)	F= 0.49	Prob > F 0.7402
Female	103	106	121	111	112	$\chi 2$= 3.6888	P= 0.450
Generalized Trust (can trust)	91	98	89	97	89	$\chi 2$= 1.0399	P = 0.904
Ideology (liberal)	4.41 (1.74)	4.38 (1.75)	4.26 (1.71)	4.52 (1.81)	4.56 (1.81)	F= 0.90	Prob > F 0.4610
Support for Gov't Welfare	3.5 (2.00)	3.50 (2.00)	3.51 (2.07)	3.25 (1.96)	3.08 (2.00)	F= 1.94	Prob > F 0.1013
Cosmopolitanism	3.71 (0.92)	3.66 (0.86)	3.63 (1.01)	3.66 (1.00)	3.70 (0.92)	F= 0.23	Prob > F 0.9201
Nationalism	3.40 (0.89)	3.29 (0.93)	3.29 (1.02)	3.21 (1.01)	3.14 (1.02)	F= 1.99	Prob > F 0.0941
Democrat	92	94	93	85	87	$\chi 2$= 0.8879	P = 0.926
Republican	53	50	55	51	42	$\chi 2$= 2.4258	P = 0.658
Income	2.49 (0.88)	2.39 (0.85)	2.40 (0.92)	2.29 (0.85)	2.30 (0.88)	F= 1.85	Prob > F 0.1164
Years of Education	4.41 (1.34)	4.10 (1.26)	4.02 (1.33)	4.08 (1.38)	3.95 (1.24)	F= 3.72	Prob > F 0.0052

Entries are group means for selected covariates, with standard deviations in parentheses, or frequencies or ranks. When the Bartlett's test for equal variances is not satisfied, the Kruskal-Wallis test is used.

Measurement of the Control Variables and Sociodemographic

Bayram (2017) has argued that generalized trust underpins the moral aspect for support for foreign and showed that generalized trusters are considerably more willing to supply for foreign aid than non-trusters. Using the conventional measure of generalized trust, we asked respondents:

Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?

- Most people can be trusted
- Need to be very careful

Scholars have also argued that hat liberals are more supportive of foreign development aid than conservatives. The Ideology variable is measured by asking participants to place themselves on a 7-point ideology scale.

1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
❍ Extreme conservative	❍	❍	❍	❍	❍	❍ Extremely liberal

Relatedly, we consider for support government welfare following existing studies. Now we'd like you to tell me your views on various issues. How would you place your views on this scale? 7 means you agree completely with the statement on the left; 1 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.

1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
❍ Americans should take more responsibility to provide for themselves	❍	❍	❍	❍	❍	❍ The U.S. government should take more responsibility to ensure that everyone is provided for

Following previous research, we also consider the role of social identity and control for national and cosmopolitan identities. The first three items below capture national identity and the latter three cosmopolitan identity.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
When I see the American flag flying I feel great.	❍	❍	❍	❍	❍
I am proud to be an American.	❍	❍	❍	❍	❍
I believe in the motto: "My country, right or wrong.	❍	❍	❍	❍	❍
I believe it is important to have both an American identity and a global identity, which is inclusive of all human beings in the world.	❍	❍	❍	❍	❍
In addition to being a citizen of my country, I also see myself as a citizen of the world.					
I am proud to think of myself as a global citizen of the world.	❍	❍	❍	❍	❍

What is your race?

- White
- Black
- Asian
- Native American
- Pacific Islander
- Other

What is your gender identity?

- Male
- Female
- Transgender
- Other

With which political party, if any, do you identify?

- Republican
- Democrat
- Independent
- Other

What is the highest level of education you have completed?

- Less than high school
- High school
- College/University
- Graduate/Professional school

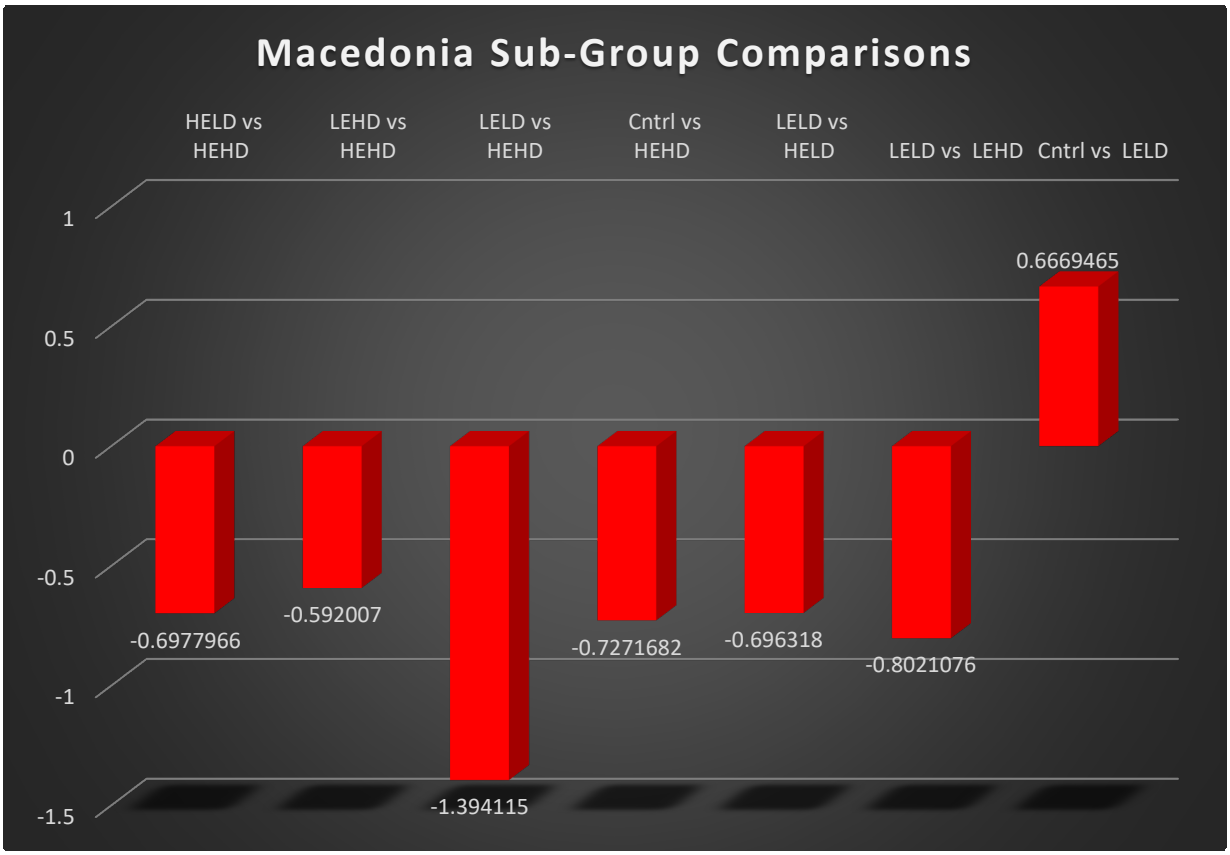
What is your average household income?

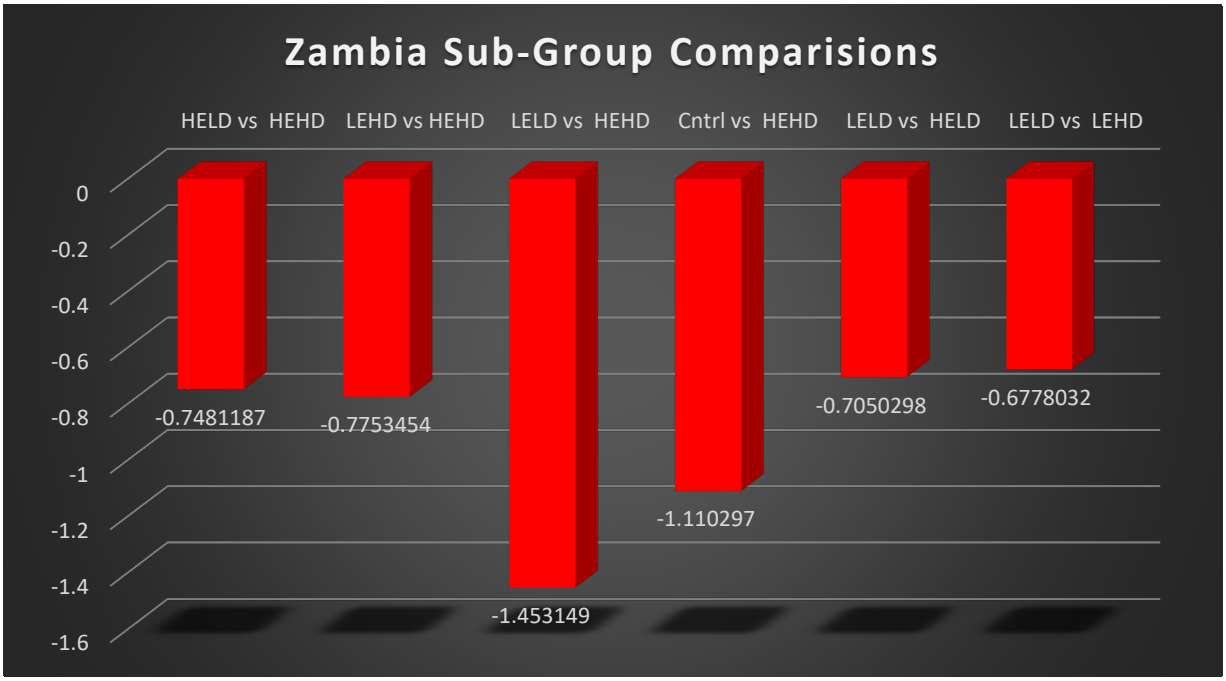
- Less than $25,000.
- $25,000 to $34,999.
- $35,000 to $49,999.
- $50,000 to $74,999.
- $75,000 to $99,999.
- $100,000 to $149,999.
- $150,000 to $199,999.
- $200,000 or more.

How old are you (in years)?

Subgroup Comparisons

Captured below, sub-group comparisons with a Bonferroni correction indicate statistically significant and substantively relevant differences across some of the conditions. In both experiments, the largest difference in support for foreign aid is between the HEHD and LELD conditions. When aid is effective, and the recipient government is deserving, respondents are highly willing to provide foreign aid. When effectiveness of aid and the merit of the recipient government are in doubt, participants' willingness to provide aid declines considerably. Similarly, comparing the change in aid support in the HEHD and HELD conditions in both of the experiments shows that when the recipient government lacks merit, participants' willingness to provide aid declines. In sum, we find evidence that the effectiveness of foreign aid and the deservingness of the recipient government predict support for providing foreign aid, whether the recipient of aid is an African or a European country. These findings support our situational hypotheses of *Aid Effectiveness* and *Recipient Deservingness*.





Sub-group comparisons with a Bonferroni correction, only statistically significant differences are reported.

Additional Discussion on the Results of the Zambia Experiment

As Model 1 in Table 3 in the main text shows, aid effectiveness and recipient deservingness increase support for foreign aid. In the Macedonia experiment, the substantive effects of the effectiveness and deservingness treatments were comparable. In the Zambia experiment, the deservingness of the recipient government matters more than the effectiveness of aid. When we add the PD, EC, and PT dimensions of empathy, we find that PD and EC exert statistically significant and positive effects on respondents' support for foreign aid while PT again has no effect (Model 2). This result cements our claim that simply taking the perspective of others does not facilitate helping behavior. But being concerned and anxious about unfortunate others contributes to aid willingness, providing evidence for the *Affective Empathy* hypothesis (H3).

Model 3 focuses on the interaction between aid effectiveness and empathy, and Model 4 on the interaction between recipient deservingness and empathy. We observe an important difference between the Macedonia and Zambia experiments. The interaction term between PD and aid effectiveness was negative and statistically significant in the Macedonia experiment. In the Zambia study, it is still negative but not significant, showing that PD does not moderate the effect of the effectiveness treatment (Model 3). When asked about providing foreign aid to Zambia, those who score high on PD are no more willing to advocate for foreign aid when aid has contributed to Zambia's economic growth greatly than when it has contributed slightly.

As captured in Figure 5, similar to what we found in the Macedonia experiment, PD again amplified the impact of the deservingness treatment (Model 4) to some extent. Individuals who score high on PD reward the Zambian government with more foreign aid when it is deserving but they penalize the Zambian government if it is undeserving. This result lends credence to the Affective Amplification hypothesis (H5). As Model 5 shows, we also find that generalized trust,

cosmopolitanism, and support for social welfare also associate with increased support for aiding Zambia, but the result for the impact of affective empathy remains stable.

Additional Model Estimations as Robustness Checks

Because we have a full factorial design, one might wonder what happens when we estimate models with the experimental conditions rather than dummy variables for aid effectiveness and recipient deservingness and interact the experimental conditions with the empathy variables. Here we provide these models. We would like to note, however, that estimating the interactions between the experimental conditions and empathy is not what is of theoretical interest to us and neither do they help us squarely test our hypotheses. In addition, such models are at risk for collinearity, reduce our statistical power, and are hard to interpret substantively. The models reported in the text, in contrast, enable us to directly test our argument, isolating the impact of effectiveness, deservingness, empathy and the interactions among these.

Robustness checks for Macedonia

	Model AM1	Model AM2	Model AM3	Model AM4
High Effectiveness-High Deservingness (HEHD)		0.727*** (0.140)	0.706*** (0.137)	1.343 (1.050)
High Effectiveness-Low Deservingness (HELD)	-0.707*** (0.138)	0.103 (0.136)	0.101 (0.135)	1.123 (1.00)
Low Effectiveness-High Deservingness (LEHD)	-0.602*** (0.137)	0.135 (0.137)	0.201* (0.131)	0.256 (1.00)
Low Effectiveness-Low Deservingness (LELD)	-1.404*** (0.140)	-0.666*** (0.138)	-0.606 (0.136)	-0.210 (1.00)
Control	-0.727*** (0.140)			
Personal Distress			0.250*** (0.051)	0.126 (0.122)
Empathic Concern			0.218*** (0.061)	0.242 (0.150)
Perspective Taking			0.040 (0.071)	0.208 (0.180)
HEHD X Personal Distress				0.165 (0.165)
HEHD X Empathic Concern				-0.096 (0.210)
HEHD X Perspective Taking				-.0182 (0.251)
HELD X Personal Distress				**-0.157*** **(0.172)**
HELD X Empathic Concern				-0.0856 (0.203)
HELD X Perspective Taking				-.0081 (0.237)
LEHD X Personal Distress				**0.378**** **(0.160)**
LEHD X Empathic Concern				-0.001 (0.210)
LEHD X Perspective Taking				-0.279

				(0.235)
LELD X Personal Distress				0.162 (0.110)
LELD X Empathic Concern				-0.018 (0.200)
LELD X Perspective Taking				-0.202 (0.222)
Constant	3.975 (0.100)	3.248** (0.100)	1.602*** (0.305)	1.226* (0.715)
R2	0.0956	0.0956	0.1362	0.1518
N	1007	1007	1004	1004

*** p≤0.001 **p≤ 0.05 *p≤0.10

Reported values are regression coefficients with robust standard errors in parenthesis. In Model AM1, the high effectiveness-high deservingness condition is the comparison category. In all other models, the control group is the comparison category. The dependent variable measures participants' willingness to provide foreign aid to Macedonia and ranges from 1 to 6, with higher values indicating greater willingness.

Robustness checks for Zambia

	Model AZ1	Model AZ2	Model AZ3	Model AZ4
High Effectiveness-High Deservingness (HEHD)		1.110*** (0.145)	1.104*** (0.143)	0.420 (1.100)
High Effectiveness-Low Deservingness (HELD)	-0.748*** (0.143)	0.362** (0.141)	0.366** (0.130)	0.0421 (1.06)
Low Effectiveness-High Deservingness (LEHD)	-0.775*** (0.144)	0.335** (.142)	0.340** (0.140)	-0.651 (1.04)
Low Effectiveness-Low Deservingness (LELD)	-1.453*** (0.143)	-0.342** (0.141)	-0.324** (0.140)	1.076 (1.37)
Control	-1.110*** (0.145)			
Personal Distress			0.203*** (0.052)	0.075 (0.137)
Empathic Concern			0.204*** (0.060)	0.277 (0.171)
Perspective Taking			0.132 (0.101)	0.300 (0.202)
HEHD X Personal Distress				0.103 (0.175)
HEHD X Empathic Concern				-0.105 (0.244)
HEHD X Perspective Taking				-0.068 (0.266)
HELD X Personal Distress				0.201 (0.200)
HELD X Empathic Concern				-0.318 (0.226)
HELD X Perspective Taking				0.102 (0.256)
LEHD X Personal Distress				**0.472** (0.200)**
LEHD X Empathic Concern				0.202

				(0.229)
LEHD X Perspective Taking				-0.363 (0.270)
LELD X Personal Distress				0.162 (0.110)
LELD X Empathic Concern				0.063 (0.228)
LELD X Perspective Taking				-0.431 (0.275)
Constant	4.140*** (0.103)	3.031*** (0.101)	1.308*** (0.320)	1.042 (0.83)
R2	0.1010	0.1010	0.1340	0.1430
N	1031	1031	1027	1027

*** p≤0.001 **p≤ 0.05 *p≤0.10

Reported values are regression coefficients with robust standard errors in parenthesis. In Model AZ1, the high effectiveness-high deservingness condition is the comparison category. In all other models, the control group is the comparison category. The dependent variable measures participants' willingness to provide foreign aid to Zambia and ranges from 1 to 6, with higher values indicating greater willingness.

Recent Scholarly Debates on the Desirability of Empathy

Recently, scholars have begun to debate just how desirable empathy actually is. Part of the backlash stems from claims about the utility of empathy that strike many as overly optimistic. Jeremy Rifkin has recently argued that it is likely that nothing short of the development of "global empathy," or "biosphere consciousness," will allow us "to avert planetary collapse" (Rifkin 2009: 616). Similarly, Roman Krznaric (2014: 195) has suggested that an "empathy revolution" may allow us to transcend the dominance of "pursu[ing] our personal desires and self-interest," which has been in place since the end of World War II. It is not difficult to see how some might think empathy has been over promised as a panacea and, perhaps, skeptical that it will ever deliver on its promises. Additionally, a lack of empathy, or "empathy deficit," is often used to explain normatively negative outcomes, such as continued global poverty, lack of humanitarian intervention in crisis situations, or even the rise of political movements. As one newspaper recently asked, "Did a lack of empathy cause both Brexit and Trump?"[1]

Others, however, point out something a bit deeper, nuanced, and problematic about empathy itself: it is not the unalloyed good we often view it as, and the President Obama quote above implies. Jesse Prinz (2011: 1), for example, argues that "empathy is not a component, a necessary cause, a reliable epistemic guide, a foundation for justification, or the motivating force behind our moral judgments. In fact, empathy is prone to biases that render it potentially harmful." Some recent research suggests that empathy and social identity interact: we have an easier time empathizing with, and consequently helping, those that we view as like us or in a group with which we identify. As a result, in some cases, invoking empathy might lead to sub-optimal outcomes, particularly when it comes to public policy choices. Paul Bloom (2016: 34) argues in *Against*

[1] http://www.newstatesman.com/culture/books/2017/02/did-lack-empathy-cause-both-brexit-and-trump.

Empathy that we tend to overestimate the extent to which we are capable of empathizing with others, and the social identity interaction can have devastating effects. “This perverse moral mathematics is part of the reason why governments and individuals care more about a little girl stuck in a well than about events that will affect millions.”

The implications are clear. If we use empathy to make decisions related to policy, whether it is to invade a foreign land for humanitarian intervention, or distributive decisions regarding foreign aid or international development, we are likely to privilege those that are perceived to be like us, at the expense of those who are not. Even if we are able to overcome these biases, Bloom argues that empathy necessarily shines a spotlight on some individuals and groups, while leaving others in the dark. The ones we empathize with benefit, while the others continue to languish. Instead, Bloom (2016: 111) favors a more rational response, what he terms “rational compassion,” one that privileges a more detached cost-benefit analysis over empathic perspective taking. Caring and concern for others does not go away, but the way we achieve it does. Similarly, Prinz (2011: 225) argues that “a general conception of human dignity” should be our decision-making guide rather than “any vicarious experience of human emotions” related to empathy.

Appendix Bibliography

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