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Empathy Tempering Economic Choice: The Empirical Evidence

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CORNHUSKER ECONOMICS

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Market Report	Yr Ago	4 Wks Ago	1/7/11
Livestock and Products, Weekly Average			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight	$84.27	$100.79	$105.29
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb.	110.10	147.75	147.34
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb.	96.07	117.00	126.83
Choice Boxed Beef, 600-750 lb. Carcass	140.23	164.40	165.81
Western Corn Belt Base Hog Price Carcass, Negotiated	65.15	65.68	70.45
Feeder Pigs, National Direct 50 lbs, FOB	*	*	*
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean	70.56	78.36	78.35
Slaughter Lambs, Ch. & Pr., Heavy, Wooled, South Dakota, Direct	*	157.00	161.00
National Carcass Lamb Cutout, FOB	242.93	350.77	352.13
Crops, Daily Spot Prices			
Wheat, No. 1, H.W. Imperial, bu.	4.19	6.74	6.87
Corn, No. 2, Yellow Omaha, bu.	3.59	5.71	5.68
Soybeans, No. 1, Yellow Omaha, bu.	9.63	12.71	13.21
Grain Sorghum, No. 2, Yellow Dorchester, cwt.	5.95	9.27	9.46
Oats, No. 2, Heavy Minneapolis, MN , bu.	2.47	3.99	3.89
Feed			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton.	135.00	140.00	140.00
Alfalfa, Large Rounds, Good Platte Valley, ton.	87.50	72.50	72.50
Grass Hay, Large Rounds, Premium Nebraska, ton.	*	*	*
Dried Distillers Grains, 10% Moisture, Nebraska Average.	107.50	181.50	186.00
Wet Distillers Grains, 65-70% Moisture, Nebraska Average.	43.75	58.50	65.00

*No Market

The notion that something beyond money could also be an important part of economic choice goes back hundreds of years. Adam Smith, who is credited with providing the framework for modern market-based economies, wrote extensively in the late 1700s about the role of the "moral sentiments." In fact, his book *The Theory of Moral Sentiments* was actually drafted first, and he worked on it many years after the publication of his better known book *On the Nature and the Causes of the Wealth of Nations*, the latter focused "on the money." Intriguingly, the sentiments/empathy book is all about how market trade (international and otherwise), in order to be efficient needed to be conditioned by first "walking-in-the-shoes" of your potential trading partner (empathy), and asking yourself "how would I wish to be treated?" Ironically, in that Adam Smith saw a role for empathy over 200 years ago, it has not had much attention in economics, although studied widely and deeply in many other disciplines, such as philosophy, theology, psychology, ethology and more recently, neuroscience.

Recent neuroscientific findings show that a number of regions of the brain are involved in empathy (Rueckert and Naybar, 2008). Deficits in empathy have been found in children with autism, in adults with multiple sclerosis and in psychopaths (who have little/no concern for others' well being; even though they empathize, fully understanding the other person, they do not choose to enter into shared sympathy). This research suggests that the brain actually has "empathy regions," with empathy and the shared sympathy it can lead to being a part of normal choices. Therefore, it is not unreasonable to expect that these regions may play a role in many, if not all economic choices.

We have been exploring the role of empathy in environmental choices related to conservation. A recent survey-based study shows that empathy (and sympathy) conditions affect conservation tillage choices pertaining to the

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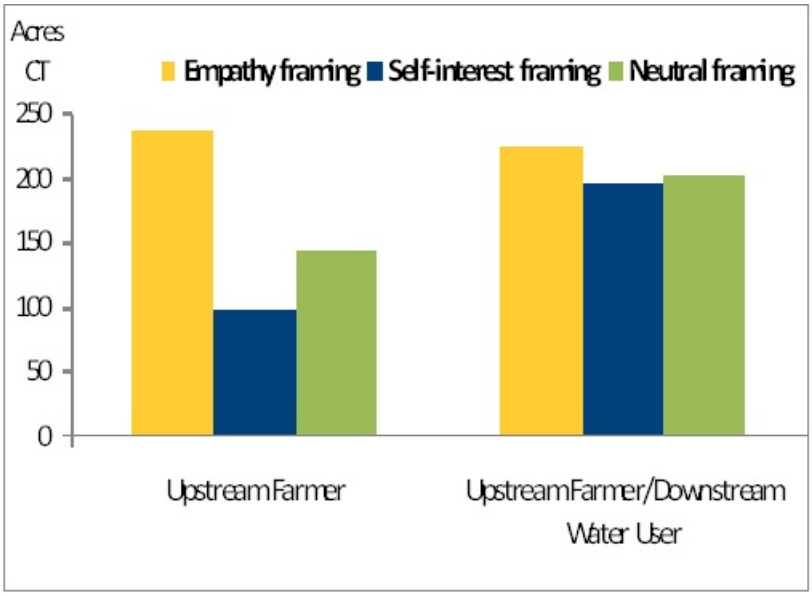
quality of water in Tuttle Creek Lake, which is fed by the Blue and Little Blue Rivers in Nebraska and Kansas (see Sheeder and Lynne, 2009). This study served as the inspiration for the design of an experiment to further test for the role of empathy. The laboratory experiment was designed to represent farmers performing agricultural operations upstream (Upstream Farmers), who decide on the usage of generally more costly conservation technology. The type of technology used by the Upstream Farmers affects the quality of drinking water for individuals living downstream, who are drawing their drinking water from downstream (Downstream Water User). Finally, the Upstream Farmer/Downstream Water User both farm upstream and live on a farm tied to a rural water supply system that draws water from this source, the actual case in Northeastern Kansas.

One intriguing question is this: Can empathy be induced? During the experiment we had three treatments: empathy framing, self-interest framing and neutral (no framing, neutral language). In the empathy framing treatment, the participants were shown the priming phrase: "The choice of tillage by farmers will greatly affect the water quality of the lake and the payoff for the Downstream Water User. A cleaner lake and higher payoff for the Downstream Water User will be assured if the farmers choose to place **more** land under Conservation Tillage." During the self-interest framing treatment, the participants were shown the following: "The choice of tillage by farmers will greatly affect their own profit. The farmers get higher profits if they choose to place **more** land under Intensive Tillage." During the neutral framing treatment, no priming was used.

The figure below depicts overall results. In *empathy framing* we find that individuals are more conscious, as compared to both *self-interest* and *neutral framing*, regarding their choice of conservation technology that affects the quality of water downstream. The average number of acres placed under conservation tillage (CT) is just a little below 250 acres, which assures an equal distribution of earnings among the three players. Even when the Upstream Farmers were encouraged to look only to their own profit and self-interest, they still placed about 1/5 of their land under conservation tillage.



In the *self-interest* and *neutral framing* we observe that Upstream Farmer/Downstream Water Users place significantly more acres under conservation tillage than the Upstream Farmers. In the *empathy framing* on the other hand, the differences are minimal. This result is not surprising, as the task of this individual by design involves more integrating and balancing of the self-interest considerations and empathy based other (shared)-interest concerns. Another important insight is the priming for empathy encouraged the farmers to place more land under conservation tillage, while priming for self-interest did not significantly affect players' behavior, supporting the metaeconomics conjecture that empathy serves to temper and condition the self-interest (see http://agecon.unl.edu/metaeconomics). Intriguingly, empathy within self for oneself is also likely a force in going beyond just the concern for money. Both parts of the figure (and other results we will share in later articles) provide evidence for the Adam Smit contention that empathy at least has the potential to condition and temper economic choice, leading to good and better outcomes.

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