SUPPLEMENTAL MATERIAL

ADMC Sample Items and Scoring:

Resistance to Sunk Costs: is the mean of 10 items, using a rating scale from 1 (most likely to choose the sunk cost option) to 6 (most likely to choose the normatively correct option). For example:

You are in a hotel room for one night and you have paid $6.95 to watch a movie on pay TV. Then you discover that there is a movie you would much rather like to see on one of the free cable TV channels. You only have time to watch one of the two movies. Would you be more likely to watch the movie on pay TV or on the free cable channel?

1	2	3	4	5	6
Most likely to watch pay TV					Most likely to watch free cable

Resistance to Framing Effects: presents fourteen item pairs, constituted of two positive and negative frames, or situations, that are logically equivalent. Performance is measured by the mean absolute difference between ratings for the positive or negative versions of each item. The positive frames and negative frames appear in separate sets with different item orders and are separated by other A-DMC tasks. For example, purchasing ground beef that is 80% lean or contains 20% fat:

Imagine the following situation. You are entertaining a special friend by inviting them for dinner. You are making your favorite lasagna dish with ground beef. Your roommate goes to the grocery store and purchases a package of ground beef for you. The label says 80% lean ground beef.

What's your evaluation of the quality of this ground beef?

1	2	3	4	5	6
Very low					Very high

Over/Underconfidence: assesses how well participants recognize the extent of their knowledge. Participants indicate whether statements are true or false, then assess their confidence in that answer on a scale from 50% (just guessing) to 100% (absolutely sure). For example, a decision maker who answers 70% of items correctly should express 70% confidence. Over/underconfidence equals one minus the absolute difference between mean confidence and percentage correct across items, so that higher scores reflect better performance.

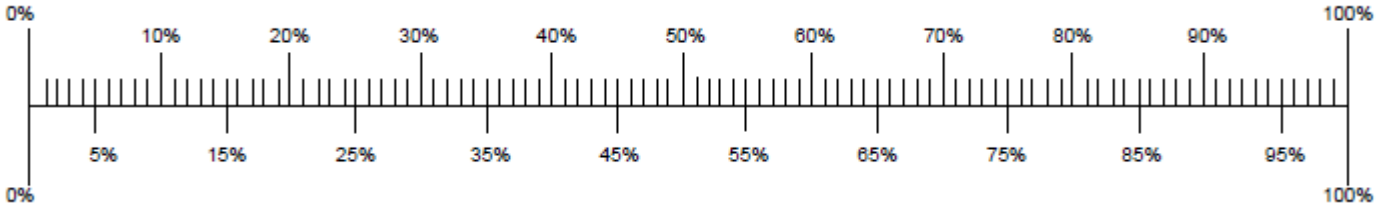
Problems with in-laws contribute to more than 30% of divorces.

This statement is [True / False].

50%	60%	70%	80%	90%	100%
Just guessing					Absolutely sure

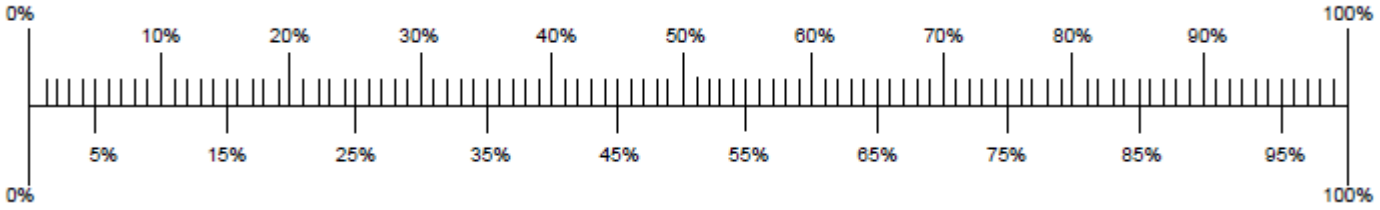
Consistency in Risk Perception: Twenty items ask participants to judge the chance of an event happening to them on a linear scale ranging from 0% (no chance) to 100% (certainty). Scoring is the percentage of consistent risk judgments across related events.

What is the probability that you will move your permanent address to another state some time during the next year?



No chance Certainty

What is the probability that you will keep your permanent address in the same state during the next year?



No chance Certainty

Supplementary eTable 1a. Correlation between *Resistance to Sunk Cost* and *Resistance to Framing* and other measures in the Depressed Participants

		ADMC		Demo-graphic	Cognition	IQ	Interpersonal			
ADMC		Sunk Cost	Resistance to Framing	Age	Mattis Dementia Rating Scale	WTAR	IIPSensitivity	IIPAmbivalence	IIPAggression	SPSI Impulsivity Carelessness Style
Resistance to Framing	Pearson R	.01								
Demographic										
Age	Pearson R	-.13	-.13							
Cognition										
Mattis Dementia Rating Scale	Pearson R	**.23****	.16	-.34**						
IQ										
WTAR	Pearson R	**.23****	**.36****	-.031	.39**					
IIPSensitivity	Pearson R	-.01	-.05	-.34**	.06	.04				
IIPAmbivalence	Pearson R	-.134	**-.17***	-.14	-.15	-.28**	.38**			
IIPAggression	Pearson R	.05	-.02	-.20*	.03	-.01	.71**	.49**		
Impulsivity/Social Problem Solving										
SPSI Impulsivity Carelessness Style	Pearson R	-.10	**-.17***	-.17	-0.08	-.17	.30**	.54**	.37**	
Depression										
Hamilton 16***	Pearson R	-.02	-.01	-.29**	-.02	-.06	.24**	.22*	.15**	.30**

Sample size for assessments (mean) = 142, range 140 -148
* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
*** No suicide Items used

Susceptibility to sunk cost bias was moderately correlated with poor global cognition (DRS scores) and modestly correlated with struggle in interpersonal relationships (IIP Ambivalence Subscale). Inability to resist framing effects was modestly correlated with age, global cognition, IQ (WTAR score), struggle in interpersonal relationships, and impulsive/careless social problem (SPSI Impulsivity/Carelessness Style).

Supplementary eTable 1b. Correlation between *Over/Underconfidence* and *Consistency in Risk Perception* and other measures in the Depressed Participants

		ADMC		Demo-graphic	Cognition	Interpersonal			
ADMC		Over/Under Confidence	Consistency in Risk Perception	Age	Mattis Dementia Rating Scale	IIPSensitivity	IIPArrbivalence	IIPAggression	SPSI Impulsivity Carelessness Style
Consistency in Risk Perception	Pearson R	-.14							
Demographic									
Age	Pearson R	.03	-.06						
Cognition									
Mattis Dementia Rating Scale	Pearson R	**.22****	.01	-.34**					
Interpersonal									
IIPSensitivity	Pearson R	-.10	-.02	-.34**	.06				
IIPAmbivalence	Pearson R	**-.22****	-.12	-.14	-.15	.38**			
IIPAggression	Pearson R	-.10	-.14	-.20*	.03	.71**	.49**		
Impulsivity/Social Problem Solving									
SPSI Impulsivity Carelessness Style	Pearson R	**-.17***	-.10	-.17	-0.75	.30**	.54**	.37**	
Depression									
Hamilton 16***	Pearson R	.02	.09	-.29**	-.02	.24**	.22*	.15**	.30**

Sample size for assessments (mean) = 142, range 140 -148

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Over/under Confidence was moderately correlated with poor global cognition (DRS scores) and with struggle in interpersonal relationships (IIP Ambivalence Subscale) and modestly correlated with impulsivity (SPSI Impulsivity/Carelessness Style). Consistency in Risk Perception modestly correlated with interpersonal aggression (IIP Aggression Subscale).

Sensitivity analyses

To ensure that group differences were not distorted by partial effects of age [1], we equated all 5 groups on age by excluding the oldest participants from the non-psychiatric control (8 dropped) and the depressed non-suicidal groups (11 dropped). In this sample of 152 participants, group differences in resistance to sunk cost ($F[4,142]=3.61$, $p=0.008$, $\eta_p^2=0.09$) and resistance to framing ($F[4,142]=4.27$, $p=0.003$, $\eta_p^2=0.11$) remained after controlling for gender, race, age, and Dementia Rating Scale score.

References

1. Miller GA, Chapman JP. Misunderstanding analysis of covariance. Journal of abnormal psychology 2001 Feb;110(1):40-48.