

APPENDIX 2: Details of the statistical model for measuring the effect of social relations on knowledge utilization

We used multiple hierarchical regression to test the degree to which two different types of social relations affected knowledge utilization. This means we treated the two different measures of social interaction as independent variables and correlated them with the total knowledge utilization score for each policy maker (the dependent variable). This was done in two steps. The first regression model (Model 1 in Table B-1) included the total number of direct contacts each policy maker had with DCDC researchers. Next (Model 2), we included the total number of other policy makers with whom each discusses DCDC coproduced research. We also tested the effects of occupying the shortest distance in the overall network (i.e. betweenness centrality) for knowledge utilization but no significant relationship was found.

Table 2.1

N= 32	Model 1 $r^2=0.133$, Adj. $r^2=0.104$, $F=4.588$			Model 2 $r^2=0.307$, Adj. $r^2=0.260$, $F\ change=7.317$		
	Beta	Std. Error	Std. Beta	Beta	Std. Error	Std. Beta
Direct interactions	7.803	3.643	0.364**	7.350	3.315	0.343**
Indirect interactions				4.062	1.502	0.419**

* $p < .1$; ** $p < .05$ (two-tailed tests)