**Appendix 1. Assessing the interactions.**

In a logistic regression model containing a product interaction we need to consider both that product interaction (which in this case is positive) as well as the effect of compression (Berry, DeMeritt and Esarey, 2016; Rainey, 2016). Closer examination of the evidence shown in Table A1 including the difference in marginal effects and the change in model fit suggest that there is an interactive relationship in the case of spouses and other family, but not so for other relationship types. We include a number of model fit measures (log likelihood; AIC etc.) to gauge improvement following the inclusion of the product interaction (see Table 3). Lower AIC values in the spouse model with a product interaction compared with the model without provides support for an improvement in model fit (Burnham and Anderson, 1998) but there is little evidence of any improvement across other relationship types.

In the spouse and other family models, the minimum-maximum second difference in marginal effects is significantly greater than zero whether or not an interaction term is included (Berry, DeMeritt and Esarey, 2016). The minimum-maximum second difference in marginal effects is calculated as follows:

Min-max 2nd diff = [pr(Y|X =1, Z=1)- |pr(Y|X =0, Z=1)]- [pr(Y|X =1, Z=0)- |pr(Y|X =0, Z=0)] where Y=turnout, X=Normative Expectations and Z=Empirical Expectations (Berry, DeMeritt and Esarey, 2016; Rainey, 2016)

In both cases the ceiling effect reduces the impact of normative expectations when empirical expectations are present. However, in the case of spouses this is compensated by a positive and significant product interaction term. In other words, the effect of social approval of voting is greater when a spouse votes, after allowing for the impact of compression. This compensating product-term effect is demonstrated by the more negative minimum-maximum second difference in the model without a product term compared to the model with a product term. Similarly, there is a significant negative compression interaction effect for friends when no product term is included but this is negated by adding the product term. This reflects the point made by Rainey (2016) that models without a product term can inflate the apparent interaction due to compression.

**Table A1. Diagnosing Interaction Terms**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Spouse | Other family | Friends | Neighbours etc |
|  | Product term | Product term | Product term | Product term |
|  | No | Yes | No | Yes | No | Yes | No | Yes |
| Pr(Y) EE=0, NE=0 | .48 (.01) | .48 (.01) | .67 (.01) | .67 (.01) | .72 (.01) | .72 (.01) | .72 (.01) | .72 (.01) |
| Pr(Y) EE=0, NE=1 | .65 (.01) | .63 (.02) | .83 (.01) | .83 (.01) | .83 (.01) | .82 (.01) | .79 (.01) | .80 (.02) |
| Pr(Y) EE=1, NE=0 | .91 (.01) | .90 (.01) | .81 (.01) | .81 (.01) | .85 (.01) | .84 (.01) | .84 (.01) | .85 (.01) |
| Pr(Y) EE=1, NE=1 | .96 (.00) | .96 (.00) | .92 (.00) | .91 (.00) | .91 (.01) | .92 (.01) | .88 (.01) | .88 (.01) |
| Dy/dx (NE) | EE=0 | .17 (.01) | .14 (.02) | .16 (.01) | .17 (.01) | .11 (.01) | .10 (.01) | .06 (.01) | .08 (.02) |
| Dy/dx (NE) | EE=1 | .05 (.00) | .06 (.01) | .10 (.01) | .10 (.01) | .07 (.01) | .08 (.01) | .04 (.01) | .03 (.01) |
| Log Likelihood | -3535.54 | -3531.44 | -3840.84 | -3840.70 | -3746.49 | -3745.24 | -2518.33 | -2517.52 |
| AIC | 7105.08 | 7098.89 | 7715.67 | 7717.41 | 7526.98 | 7526.48 | 5070.67 | 5071.05 |
| Min-Max 2nd Diff | -0.13\*  | -0.08\*  | -0.06\* | -0.07\* | -0.06\* | -0.02 | -0.02 | -0.05 |

Note. The models with the product term are exactly as shown in Table 2 and the predictive margins as plotted in Figure 4. The model without the product term is simply the model in table 2 but without the product term. The \* for the Min-Max 2nd Diff denotes a significant difference in the marginal effects of NE when EE=0 and 1 (where the confidence intervals do not overlap at 95% level).