

**The evil of banality:**

**When choosing between the mundane feels like choosing between the worst**

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**Supplemental Material**

## Supplemental Results

We ran a follow-up experiment to address a potential factor that could have contributed to our finding of a quadratic relationship between anxiety and set value: product identifiability. Across our studies, products were always accompanied by labels (and the products themselves were generally familiar consumer items available through common retailers). However, it remains possible that participants were unfamiliar with a subset of products and that these products were both rated low value and as anxiety-provoking as a result of their unfamiliarity. To examine whether this might have been the case, we had a new set of participants ( $N=13$ ; 61.5% female,  $M_{\text{age}} = 20.2$ ,  $SD_{\text{age}} = 3.0$ )<sup>1</sup> complete an experiment whose procedure was identical to Study 1, with a single exception. For Phase 4, rather than rating each product's value, participants instead rated the degree to which they felt like they were given sufficient information in order to evaluate and make choices involving that product (0-10 analog scale, anchored at "need much more information" and "information was sufficient"). For each choice set, we calculated the average identifiability of the set based on the Phase 4 identifiability ratings that were given for each of the items in that set.

We found that participants overall recognized the vast majority of products (median rating: 9.6 out of 10) and that less identifiable products were valued less than more identifiable ones ( $\beta = 0.52$ ,  $t(10.2) = 4.2$ ,  $p = 0.002$ ). However, we did not find a relationship between identifiability and anxiety ( $\beta = -0.06$ ,  $t(9.89) = -0.61$ ,  $p > 0.250$ ). We were, however, able to again replicate the correlation between anxiety and set salience ( $\beta = 0.17$ ,  $t(12.4) = 3.9$ ,  $p = 0.002$ ), while controlling for identifiability.

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<sup>1</sup>Based on a power analysis across Studies 1, 2, and 4, we determined that an approximate sample size of  $N=8$  was sufficient to observe a within-subject linear effect of set salience on anxiety with 90% power ( $\alpha = 0.05$ ).

## Supplemental Tables

	Shenhav & Buckner (2014)		Study 1	
<b>Set Value</b> (linear)	$\beta = 0.53$ $t = 11.72$ $p < 0.001$	$\beta = 0.54$ $t = 10.62$ $p < 0.001$	$\beta = 0.03$ $t = 0.34$ $p > 0.250$	$\beta = 0.07$ $t = 0.81$ $p > 0.250$
<b>Set Value</b> (quadratic)		$\beta = -0.05$ $t = -2.74$ $p = 0.007$		$\beta = 0.16$ $t = 3.60$ $p = 0.002$
<b>Value Spread</b> (max-min)	$\beta = -0.17$ $t = -7.55$ $p < 0.001$	$\beta = -0.19$ $t = -7.52$ $p < 0.001$	$\beta = -0.18$ $t = -6.07$ $p < 0.001$	$\beta = -0.09$ $t = -3.46$ $p = 0.003$
<b>R<sup>2</sup></b>	0.4016	0.4123	0.4185	0.4488
<b>N</b>	5157	5157	2637	2637

**Table S1.** Linear mixed-effects regression estimates predicting anxiety ratings in Studies 1-2 of Shenhav & Buckner (2014) and the current Study 1, based on a linear or quadratic model.

Unlike these previous studies, Study 1 did not observe a significant linear effect of set value.

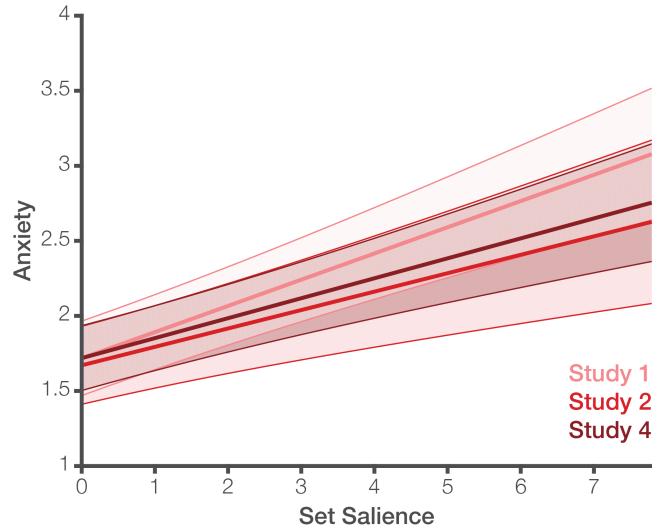
	Study 1	Study 2	Study 3	Study 4
<b>Set Salience</b>	$\beta = 0.13$ $t = 4.41$ $p < 0.001$	$\beta = 0.12$ $t = 4.37$ $p < 0.001$	$\beta = 0.23$ $t = 9.39$ $p < 0.001$	$\beta = 0.10$ $t = 3.50$ $p = 0.002$
<b>Set Value</b>	$\beta = 0.70$ $t = 11.21$ $p < 0.001$	$\beta = 0.68$ $t = 13.32$ $p < 0.001$	$\beta = 0.59$ $t = 12.98$ $p < 0.001$	$\beta = 0.73$ $t = 10.84$ $p < 0.001$
<b>Value Spread</b> (max-min)	$\beta = 0.09$ $t = 3.78$ $p = 0.001$	$\beta = 0.09$ $t = 3.95$ $p < 0.001$	$\beta = 0.13$ $t = 6.98$ $p < 0.001$	$\beta = 0.09$ $t = 3.99$ $p < 0.001$
<b>R<sup>2</sup></b>	0.5727	0.4363	0.5672	0.5053
<b>N</b>	2638	2279	3120	3228

**Table S2.** Linear mixed-effects regression estimates predicting appraisal ratings (i.e., how much participants liked each choice set overall) across Studies 1-4. Unlike anxiety ratings, these appraisals demonstrate a monotonic relationship with set value (Figure S1). See Table 1 legend for additional details about each of the variables.

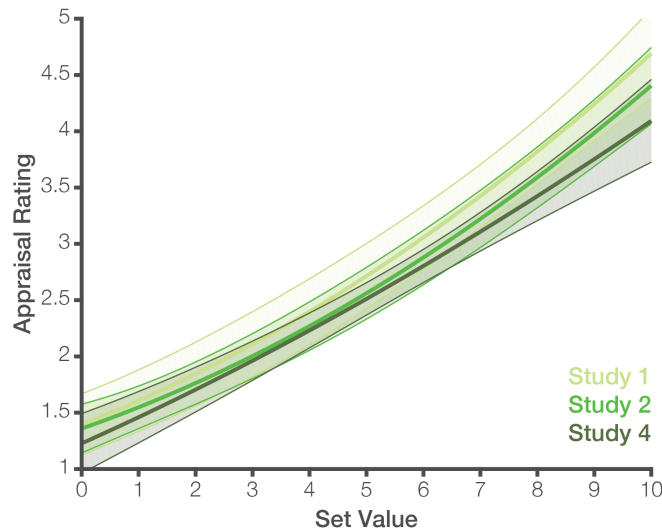
	<b>dACC</b>	<b>B-AI</b>	<b>R-DMS</b>	<b>Network</b>
<b>Anxiety (choice trials)</b>	$\beta = 0.14$ $t = 5.37$ $p < 0.001$	$\beta = 0.11$ $t = 4.15$ $p < 0.001$	$\beta = 0.041$ $t = 1.52$ $p = 0.141$	$\beta = 0.14$ $t = 5.09$ $p < 0.001$
<b>Cluster size</b>	468	201	48	717
<b>N</b>	1789	1789	1789	1789

**Table S3.** Results of separate mixed-effects regressions using anxiety rating on choice trials to predict BOLD activity within individual sub-regions of the anxiety network or the entire network.

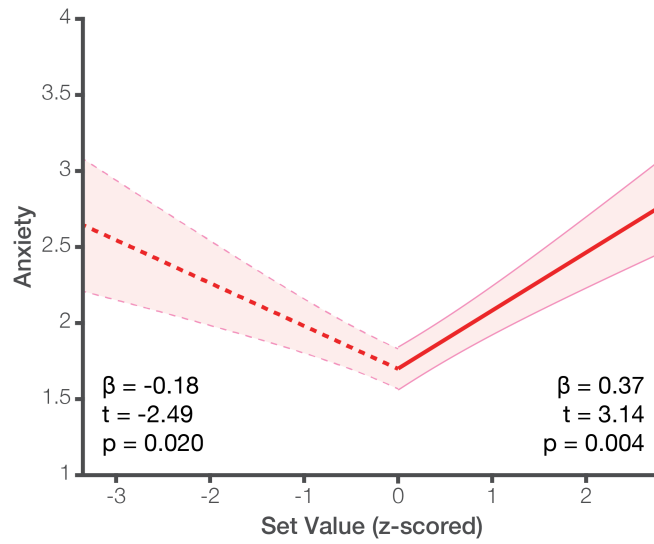
## Supplemental Figures



**Figure S1.** Relationship between anxiety and set salience, shown here collapsed across Studies 1, 2, and 4 (the three behavioral studies that used the same estimates of set value). See Table 1 for individual study statistics, and see Figure 4 for a plot of Study 3’s findings. Shaded error bars reflect s.e.m.



**Figure S2.** Relationship between set appraisal and set value, shown here collapsing across Studies 1, 2, and 4. Across all studies, set appraisal is a monotonic function of set value, with a nonlinearity (plateauing) observed for the lowest set values (potentially reflecting a floor effect). Shaded error bars reflect s.e.m.



**Figure S3.** As in the case of the remaining studies (Figure 6), Study 3 shows a negative association between set value and anxiety for lower-value choice sets and a positive association for higher-value choice sets.