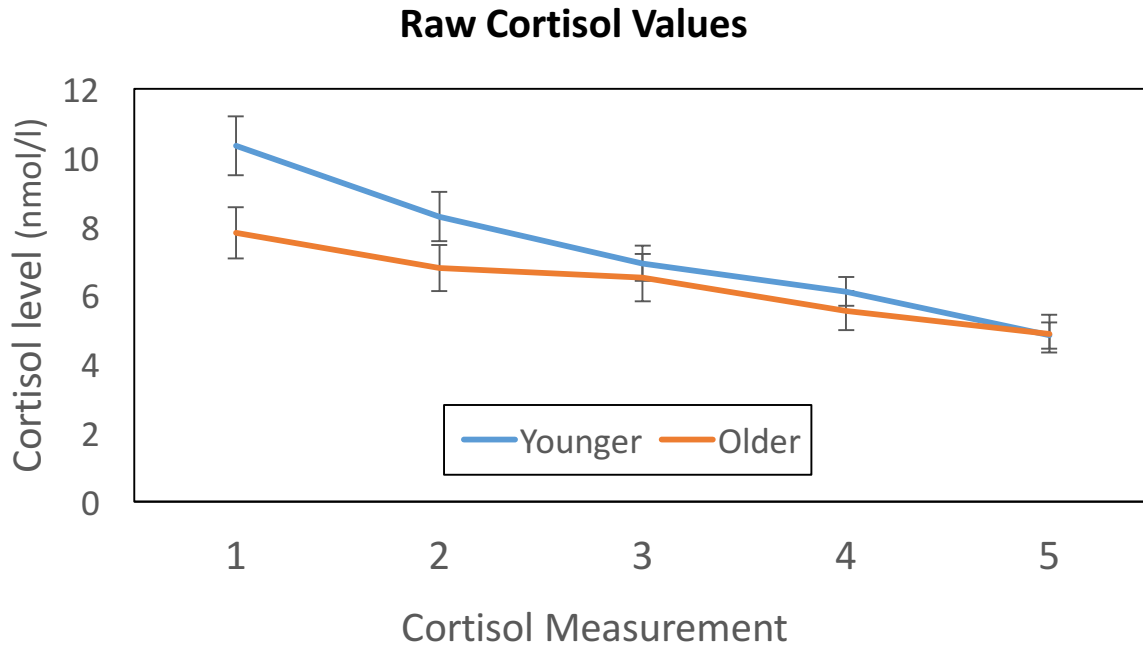


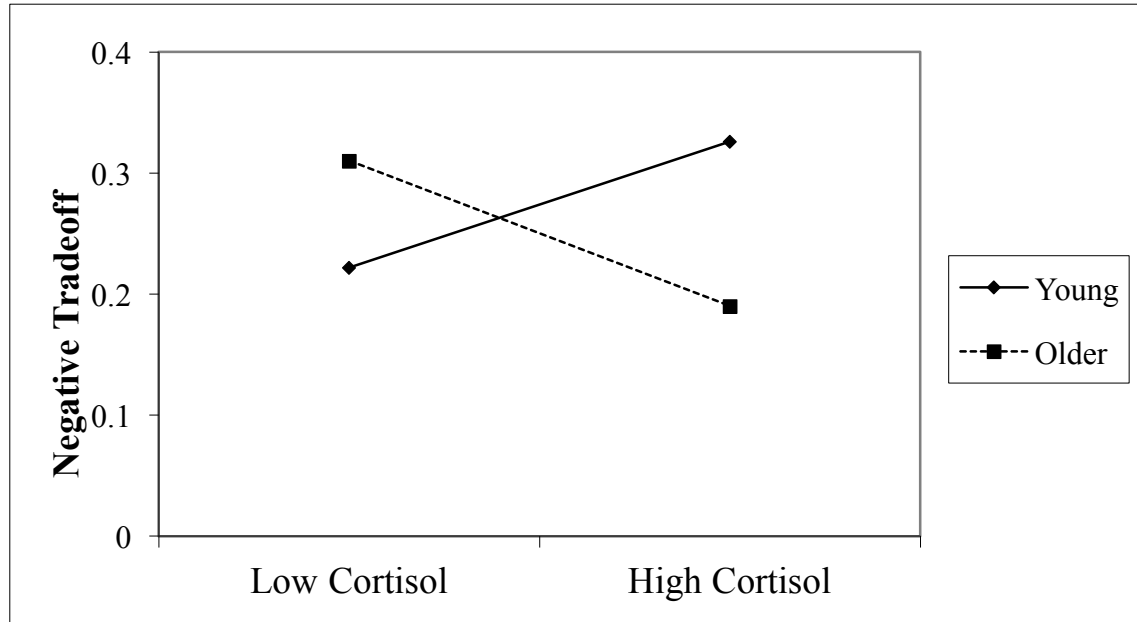
Supplementary Figure 1



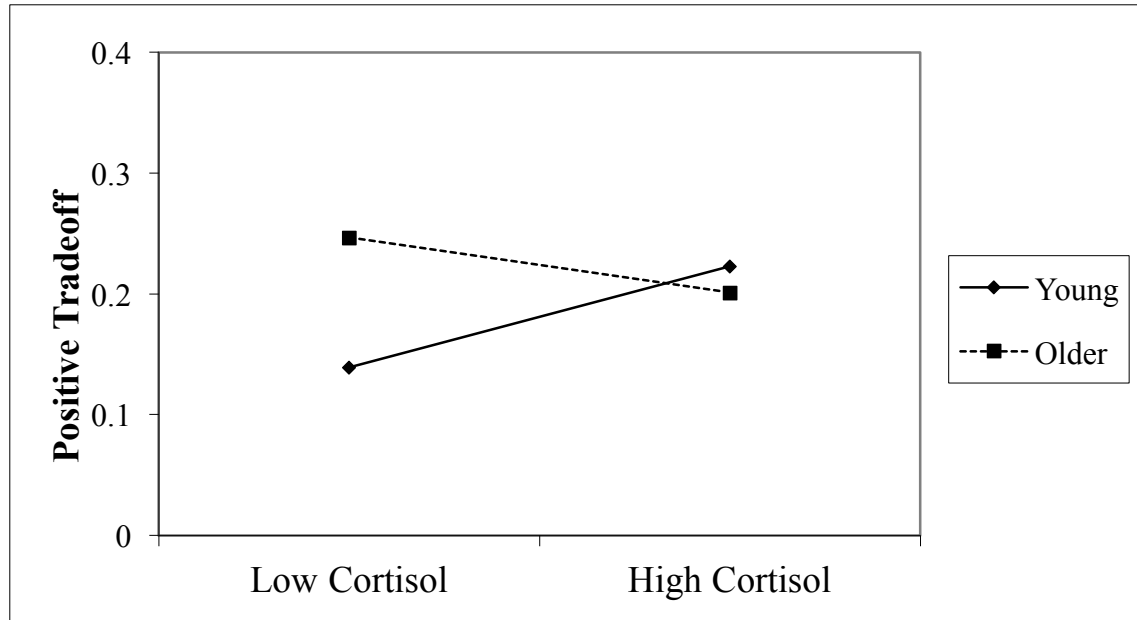
Although overall cortisol levels did not differ across younger and older adults, there was a significant age x time interaction such that younger adults exhibited a greater decrease in cortisol levels than did older adults. The order of tasks was fixed for all participants, though there was some variability across individuals in the time to complete tasks. This variability was most pronounced in the time to complete the self-paced recognition task. Average lengths of time (in minutes:seconds) between data collection time points were: from arrival for the study to cortisol 1 (pre-learning),  $M=7:49$ ,  $SD=3:40$ , from time 1 to time 2 (post-encoding) was  $M=18:17$ ,  $SD=3:37$ , from time 2 to time 3 (pre-retrieval) was  $M=9:33$ ,  $SD=2:32$ , from time 3 to time 4 (post-retrieval) was  $M=27:32$ ,  $SD=20:25$ , and from time 4 to time 5 (recovery) was  $M=47:43$ ,  $SD=8:42$ .

Supplementary Figure 2.

A.



B.



Graph A (top) depicts the association between negative trade-off and cortisol, measured at the 3rd time point (pre-retrieval), for young and older adults. There was a significant interaction of age and cortisol. Graph B (bottom) depicts the association between positive trade-off and cortisol in young and older adults. There was no significant interaction of age and cortisol.

**Supplementary Table 1**

<b>Negative Trade-off</b>				<b>Positive Trade-off</b>			
<b>A.</b>	<i>beta</i>	<i>t</i>	<i>p</i>	<b>B.</b>	<i>beta</i>	<i>t</i>	<i>p</i>
Time of day cortisol 1	-.12	-1.04	.30	Time of day cortisol 1	-.03	-.29	.77
Age	-.06	-.59	.55	Age	.08	.82	.41
Standardized cortisol 1	.25	1.60	.11	Standardized cortisol 1	.16	1.03	.31
Age-by-cortisol	-.38	-2.71	.008*	Age-by-cortisol	-.18	-1.23	.22

This table depicts the results (standardized coefficient *beta*, *t* and *p* values) of the regression analyses for the 3<sup>rd</sup> time point (pre-retrieval cortisol assay), examining the effects of the time of day of cortisol collection (as a control variable), age (young/old), standardized cortisol value at time 3, and the age-by-cortisol interaction on negative (A;  $R^2 = .096$ ) and positive (B;  $R^2 = .027$ ) trade-off scores (\*=significant at  $p < .05$ ).