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ANTICIPATION AND THE CORTISOL AWAKENING RESPONSE WITHIN A DYNAMIC PSYCHOSOCIAL WORK ENVIRONMENT

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The cortisol awakening response (CAR) is a distinct element of the diurnal pattern of cortisol release, believed to be partly driven by the anticipation of the demands of the upcoming day. Although evidence suggests that the response may be associated with various ergonomic factors, the influence of temporal variation in anticipated workplace characteristics upon the CAR remains unclear. The current study examined the CAR on two work days of differing levels of anticipatory demand (high/low) and a single weekend day through repeated assessment of healthy higher education employees (N=15). Participants provided saliva samples immediately upon awakening and thirty minutes thereafter on all three assessment days. A paired t-test confirmed that the two work days differed significantly in terms of perceived acute demand and a repeated measures ANOVA revealed a significant main time effect, confirming the presence of a distinct rise in salivary cortisol over the thirty minutes post awakening. This response was found to differ according to the type of day being greater on the “high” compared to the “low” demand day, or the weekend. These findings suggest that the CAR is influenced by the relative perceived level of acute anticipatory work-related demand of the assessment day, highlighting the importance of attending to the dynamics of the environment when employing real-world psychoneuroendocrine assessments.