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‘When the Chips are Down’: The Relation between Stress, Social Support, and Food Product Attitudes

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To exercise sensible judgment it is conducive to be cool and collected (e.g., Raghunathan and Pham 1999). Despite this widely shared knowledge, this emotional state is not always within reach. Several studies have demonstrated influences of various affective states on decision processes (e.g., Shiv and Fedorikhin 1999; Isen 2001) and attitudes (e.g., Clore et al. 2005). One affective state that has important consequences for decision-making processes is stress (e.g., Keinan 1987). We argue, in the present studies, that stress is not only related to different decision-making strategies but also to consumers’ product evaluations.

Under conditions of stress, self-regulatory mechanisms break down more frequently. According to the self-regulation model (for a review, see Baumeister, Heatheron, and Tice 1994), we only have a limited amount of regulatory strength. When this reserve is worn out, depletion is the result and self-regulatory performance is often weakened (Schmeichel, Vohs, and Baumeister 2003). This limited self-regulatory resource can be exhausted by self-regulatory demands (Vohs and Heatherton 2000). Once depleted, people buy (Vohs and Faber 2007) and eat (Baumeister and Heatheron 1996; Vohs and Heatherton 2000) more, and more impulsive. Obviously, the consequences for consumer behavior are far-reaching.

However, thus far, little is known about product preferences once depleted through stress. Therefore, in the present studies, we explore the influence of stress on explicit food product attitudes. Building on the theory of self-regulation, we propose in study 1 that stressed consumers not only eat more, but also prefer unhealthy food products over healthy food products, because they lose self-control. In addition, a growing body of literature has pointed out the importance of social support in the reduction of stress and stress related behavior (see Antonucci, Fuhrer, and Jackson 1990; Siebert, Mutran, and Reitzes 1999; Yacono Freeman and Gil 2004). Therefore, it is expected, in study 2, that social support has a stress declining effect, which reduces the impact of stress on food product attitudes.

Study 1

To test the hypothesis that stress is related to food attitudes, participants’ stress level was measured using the State version of the State Trait Anxiety Inventory (STAI; Spielberger 1983). A median split was applied to classify participants as experiencing high versus low levels of stress. Subsequently, consumers rated, on a five-point scale, their attitudes towards different food products (three healthy and three unhealthy food products). A measure of product preference was created by calculating the difference score between the mean score

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on the healthy products and the mean score on the unhealthy food products. Hence, higher scores indicate a more favourable attitude towards healthy food product whereas lower scores indicate a more favourable attitude towards unhealthy food products.

As expected, the results demonstrated that participants with a high level of perceived stress scored lower on the product preference measure than participants with a low level of perceived stress, indicating that stressed participants have a more positive attitude towards unhealthy food products in comparison with unstressed participants.

Study 2

In study 2 we aim to extend the results found in study 1 by manipulating levels of stress instead of measuring levels of stress. Furthermore, we examine the moderating role of perceived social support. We hypothesize that high levels of stress result in more positive evaluations of unhealthy food products than low levels of stress. Moreover, we expect this effect to be stronger for participants who are not satisfied by the social support they receive from friends and family.

We tested our hypotheses in a 2 (stress level: stressed vs relaxed) x 2 (social support: unsatisfied vs satisfied) between subjects design. Participants' satisfaction with the overall social support they receive was measured by the Social Support Questionnaire (Sarason, Levine, Basham, and Sarason 1983). Based on a median split, participants were classified as satisfied or unsatisfied with the social support they receive from friends and family. Stress was induced by adopting the procedure used by Coffey and Lombardo (1998), in which participants completed a number task, while hearing an audio novel in the background. Participants in the control condition were instructed to relax and to do so they could choose to listen to some music or to just wait. To test whether participants in the stress condition experienced more stress and felt more depleted than participants in the relax condition, they responded to the state version of the State Trait Anxiety Inventory (STAI; Spielberger 1983) and to a shortened version of the depletion scale (Ciarocco, Twenge, Muraven, and Tice, unpublished manuscript; Janssen, Fennis, Pruyn, and Vohs 2008). These measures were followed by the product preferences measure used in study 1.

The results demonstrated that participants in the stress condition experienced more stress and felt more depleted than participants in the relax condition, indicating that the stress manipulation was successful in inducing stress, and furthermore, it revealed that the stress manipulation resulted in depletion. Moreover, the results yielded a significant main effect of stress on product preferences showing that the stressed participants, compared to the relaxed participants, evaluated the unhealthy food products more positively than the healthy food products. In addition, this effect was qualified by a significant interaction between stress levels and social support satisfaction; the effect of stress on product preference appeared more pronounced for participants who are unsatisfied with the social support they receive.

When stress drains a consumer's strength, failing self-regulation becomes a possibility (Baumeister and Heatheron 1996), and can end up in compulsive (eating) behavior. The findings of the present studies show that being stressed may result in different food product attitudes as well. Moreover, participants who are satisfied with the social support they receive seem better in coping with stress and related feelings of depletion. Consequently, the impact of stress on food attitudes diminishes for those who experience satisfying social support.

Taken into account the enormous growth of stress (Schabracq, Winnubst, and Cooper 2003; Schaufeli and Enzmann 1998), the findings reported have important implications for consumers and producers on a large societal scale. The current studies contribute to the literature on the relation between stress, social support and product attitudes. It seems that social support can function as a resource to inhibit stress-related behaviors.

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