Emotion regulation in action: emotional reactivity in experiential avoidance

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Abstract

The present study examined the relationship between emotional reactivity (self-report and physiological reactivity) to pleasant, unpleasant, and neutral emotion-eliciting stimuli and experiential avoidance (EA). Sixty-two participants were separated into high and low experiential avoiders. Results indicated that high EA participants reported greater emotional experience to both unpleasant and pleasant stimuli compared to low EA participants. In contrast to their heightened reports of emotion, high EA participants displayed attenuated heart rate reactivity to the unpleasant stimuli relative to the low EA participants. These findings are interpreted as reflecting an emotion regulation attempt by high EA participants when confronted with unpleasant emotionally-evocative stimuli.

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1. Introduction

Experiential avoidance is a construct that has been gaining attention in recent years. This construct has been operationalized as an individual’s unwillingness to experience feelings, physiological sensations, and thoughts, especially those that are negatively evaluated (e.g. fear), as well as attempts to alter the form or frequency of these events and the contexts that occasion them (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Given this definition of the construct, experiential avoidance is thought to be critical to the development and maintenance of psychopathology (Hayes, Strosahl, & Wilson, 1999). More specifically, it has been hypothesized that

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psychological problems are not the result of the thoughts or feelings themselves, but rather these problems are the result of the attempts to suppress, avoid, and control such unwanted private events (Hayes, 1987).

Indeed, research has suggested that efforts to avoid unwanted thoughts and feelings may paradoxically produce increases in the severity and frequency of these private events, as well as increases in psychological symptoms (e.g. Marx & Sloan, 2002; Wenzlaff & Wegner, 2000). Despite the ultimate maladaptive outcome, individuals continue to engage in experiential avoidance because the immediate effects are seemingly positive in that the avoidance strategy initially results in apparent decreases of emotional intensity/experiences (Wenzlaff & Wegner, 2000). The pattern of a short-term reduction leading to a long-term increases results in a self-amplifying loop that appears to be fairly resistant to change (Hayes, Strosahl, & Wilson, 1999).

The construct of experiential avoidance seems promising and appears to have substantial clinical importance (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Yet, empirical work examining the construct has been sparse. As experiential avoidance is a relatively new construct there has been only one measure developed to index the construct. This measure is called the Acceptance and Action Questionnaire (AAQ; Hayes et al., 2003) and the items included in the AAQ relate to key aspects of the construct and link experiential avoidance to inaction, the literalness of thoughts, and escape or avoidance of negatively evaluated content. Most studies that have examined this construct have been correlational, such that responses on the AAQ are typically examined in relation to responses or behaviors assumed to be critical to experiential avoidance. For instance, Hayes and colleagues (2003) found that higher scores on the AAQ were related to higher levels of general psychopathology, depression, anxiety, trauma, and a lower quality of life. Marx and Sloan (2002) found that AAQ scores mediated the relationship between childhood sexual abuse and psychological distress over and above emotional expressiveness. Additionally, Bond and Bunce (in press) found that AAQ scores predicted mental health and job performance one year later, over and above negative affectivity and locus of control. Taken together, these studies support the construct of experiential avoidance and the use of the AAQ to index the construct. However, most studies of experiential avoidance have examined participants’ self-reports of their experiences and behaviors. Obtaining information on an individual’s subjective experience is important, though it is problematic to rely solely on subjective reports as these data may be biased and may not provide a full picture of attempts to regulate private experiences (i.e. thoughts, feelings, memories, sensations). A more informative approach would be to examine additional response channels (i.e. expressive physiology), as well as the relationship between verbal channels and physiological channels of responding (Lang, 1979; Sloan, Strauss, & Wisner, 2001; Sloan, Bradley, Dimoulas, & Lang, 2002).

A multiple channel emotional responding approach was taken by Feldner and colleagues (2003) to examine experiential avoidance. To investigate whether individual differences in experiential avoidance would differentially relate to fearful responding, participants were instructed to observe their emotional response to an aversive biological challenge (i.e. inhalation of 20% carbon dioxide-enriched air). Interestingly, participants scoring high in experiential avoidance responded with greater self-reported levels of anxiety and distress, but displayed comparable levels of physiological (heart rate reactivity) arousal as the low EA participants. These findings were interpreted to indicate that experiential avoidance related to how bodily arousal is experienced rather then reflecting actual (physiological) arousal patterns. The Feldner et al.
study has provided some direct support for the theoretical predictions of the experiential avoidance construct. However, the investigators examined emotional responding to aversive stimuli only. Thus, it is unclear whether the heightened subjective experience of emotion is observed to unpleasant stimuli only or if this pattern of responding is observed to emotionally evocative (arousing) stimuli more generally.

The goal of the present study was to examine the differences between experiential and non-experiential avoiders in their emotional responses using a range of emotion-eliciting stimuli. The purported definition of experiential avoidance would indicate that this emotion regulation strategy would only be used when confronted with stimuli that elicit unwanted thoughts and feelings and that this approach would result in the amplification or proliferation of these very thoughts and feelings. Given these predictions and the findings of Feldner and colleagues (2003), it was anticipated that experiential avoiders would report increased emotional responding to unpleasant stimuli compared to non-experiential avoiders, but the groups would not differ in physiological reactivity to the unpleasant stimuli. Additionally, consistent with the theory of experiential avoidance, no group differences in emotional responding to pleasant stimuli were expected.

2. Method

2.1. Participants

Sixty-two participants (36 females; M age, 19.0 years, SD, 1.5 years) were recruited from a larger screening sample (n = 952). The ethnic distribution of participants included in the study was 53.2% Caucasian, 33.9% African-American, 6.5% Asian, 3.2% Hispanic, and 3.2% “other” (e.g. mixed racial background). Participants were selected on the basis of the Action and Acceptance Questionnaire (AAQ) total score, such that half of the participants scored at least one standard deviation above and the other half of the participants scored at or below the mean score on the AAQ for females (M = 34.17, SD = 6.8) and males (M = 33.53, SD = 6.2). The procedure used to classify experiential avoidance groups followed that used by Feldner and colleagues. The average AAQ scores obtained in this study are consistent with those obtained by others (Feldner, Zvolensky, Eifert & Spira, 2003; Hayes et al., 2003). For individuals who participated in the study, the mean AAQ scores for the high and low experiential avoidance groups were 45.93 (SD, 4.3) and 31.03 (SD, 3.9), respectively. The groups did not significantly differ in terms of age, gender, or racial background. Exclusionary criteria included cardiac dysfunction and/or current psychotropic medication use.

2.2. Measures

2.2.1. Experiential avoidance

The Acceptance and Action Questionnaire (AAQ; Hayes et al., 2003) is a nine-item self-report measure of experiential avoidance. Respondents rate the degree to which each statement applies to them using a seven-point Likert-type scale (1, never true; 7, always true), with half of the items requiring reverse scoring. Taken together, the nine items offer key aspects of the
experiential avoidance construct and link experiential avoidance to inaction, the literalness of thoughts, controlling private events in the same manner as real-world events, and escape or avoidance of negatively evaluated content (Hayes et al., 2003). Respondents evaluate statements such as, “I’m not afraid of my feelings”, “Anxiety is bad”, and “When I evaluate something negatively, I usually recognize that this is just a reaction not an objective fact” (reversed scored).

The internal consistency (Cronbach alpha) of the AAQ was found to be 0.70 (Hayes et al., 2003), which is considered adequate for a scale with a small number of items (Nunally, 1978). The AAQ correlates moderately to highly with measures of general psychopathology, as well as specific measures of depression and anxiety, social phobia, anxiety sensitivity, and post-traumatic stress symptomatology (Hayes et al., 2003). These findings are consistent with the notion that experiential avoidance is pathogenic. The AAQ has also demonstrated convergent validity (0.44–0.50) with the White Bear Suppression Inventory (Wegner, 1994), another measure of avoidant coping. The possible range of scores on the AAQ is 0–63, with higher scores indicating greater experiential avoidance (Hayes et al., 2003). As stated previously, the AAQ measure was used to classify high and low experiential avoidance groups by Feldner and colleagues (2003) in the same manner used in this study.

2.2.2. Emotion-eliciting stimuli

Film clips were chosen for this study as the emotional stimuli for several reasons. Film viewing is a relatively common occurrence for all people, and this stimuli does not rely on participants’ ability to recall past experiences. Also, pictures (e.g. slides) present momentary emotional scenes, whereas film clips present a more typical context in which emotional experiences generally develop over time. Lastly, using film clips as opposed to reliving past emotional experiences or imagining emotional scenes allows for consistency across participants. Film clips have also been successfully used by several emotion researchers to elicit emotion in the laboratory (e.g. Gross & Levenson, 1995; Kring & Gorden, 1998; Rottenberg, Gross, Wilhem, Najmi, & Gotlib, 2002).

Participants viewed six brief film clips (ranging in length from 120 to 180 s) that represented pleasant emotion domain (happiness and contentment), unpleasant emotion domain (fear, sadness, and disgust), and a neutral emotion domain. The film clips used in this study have been successful in eliciting both experienced and expressed emotion in previous research (e.g. Fredrickson & Levenson, 1996; Gross & Levenson, 1995), and they have been shown to elicit higher ratings of their intended emotion than other similar clips (Gross & Levenson, 1995). The film clips included scenes of slapstick comedy (happiness), nature scene (contentment), a plane crash (fear), people grieving over a dying man (sadness), surgical amputation of an arm (disgust), and changing color bars (neutral). The neutral film clip was always presented first in order to obtain an accurate “baseline” measure, while the order of presentation for the emotionally evocative film clips was randomized to avoid order effects.1

Film clip order was included in initial analyses of all dependent variables associated with film viewing. No main effects or interactions were found, thus, order was not included in the reported analyses.
2.2.3. Self-reported emotion ratings

To assess experienced emotion during the films participants completed the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) after watching each film. The PANAS has been previously used to index self-reported emotional reactivity to film clips (e.g. Kring & Neale, 1996). The PANAS is a 20-item mood adjective checklist designed to measure Positive Affect (PA) and Negative Affect (NA) factors. These two factors have been reliably produced in several studies of affect (e.g. Russell, 1980; Watson & Tellegen, 1985). To complete the PANAS, participants were instructed to use a five-point Likert scale (1, very slightly or not at all; 5, extremely) to indicate “to what extent you feel this way right now, that is, at the present moment” for each adjective.

2.2.4. Physiological measures

Heart rate was included because of its sensitivity to the arousal component of emotional reactivity and facial electromyographic activity was included because of its sensitivity to valence (pleasantness) component of emotional reactivity (e.g. Bradley, 2000; Bradley & Lang, 2000). A PC-compatible computer running VPM data acquisition software (Cook, Atkinson, & Lang, 1987) was used for timing, stimulus presentation, and acquisition of physiological recordings. Heart rate recordings were obtained using Beckman standard Ag-AgCl electrodes placed on each inner forearm. The signal was filtered and amplified by Coulbourn Hi-Gain Bioamplifier and fed to a digital input on the computer, which detected R-waves and recorded the interval between R-waves in milliseconds. Facial electromyographic (EMG) activity of the zygomatic major (“smile”) and corrugator superciliii (“frown”) muscle regions was recorded from the left side of the face using Beckman miniature Ag-AgCl electrode with placements recommended by Fridlund and Cacioppo (1986). The skin was cleaned with alcohol and rubbed with electrode paste. This procedure reduced the electrode site impedance to less than 15 Ω. Raw EMG activity was measured with Coulbourn Hi-Gain Amplifiers bandpass filtered from 90 to 1000 Hz. The raw EMG was integrated by Coulbourn Following Integrators with a time constant set to 500 ms. The integrated signals were sampled at 100 Hz, and the data were expressed as microvolts.

2.3. Procedure

The AAQ screening questionnaire was completed as part of a research requirement for introductory psychology course. Students meeting AAQ criteria were contacted by phone and invited to participate in the study. All participants were scheduled within 3 weeks of the screening period. Participants were tested individually in what was described to them as a study of how people respond to movie scenes. After providing informed consent participants were positioned in a comfortable chair facing a television screen in a quiet, dimly lit room adjacent to the equipment room. The procedures for connecting sensors were explained and the sensors were subsequently attached. Participants were informed that the sensors were being attached to “record various bodily movements”. Participants were then informed that they would view a series of film clips and following each film they would make ratings according to how they felt while watching the film. Participants were instructed that following their ratings they should relax and clear their mind of all thoughts before the beginning of the next film scene (180 s). After reading
the instructions to the participants, a practice film clip (ocean waves) was viewed and self-report ratings of experienced emotion were completed with the experimenter in the room (these data were not recorded). After ensuring that the participant understood all procedures they were left alone in the room to watch the six film clips. The film clips were shown using a videocassette player and a 20-in (50.8-cm) color television positioned approximately 1.75 m from the participant. At the end of the session, the sensors were removed and the participant was fully debriefed. All participants received course credit in exchange for their participation.

2.4. Data reduction and analyses

Heart rate interbeat intervals were converted offline to beats per minute and facial EMG (corrugator and zygomatic) was converted to microvolts and averaged over half second periods. Average scores were computed for each film clip period for both heart rate and facial EMG data. Because EA has been previously associated with greater physiological reactivity during baseline periods (Feldner, Zvolensky, Eifert, & Spira, 2003) physiological reactivity to the neutral film was examined first. Next, analyses examining emotional reactivity (self-report and physiology) to the affect-evoking film clips were conducting using change from baseline as the dependent variable for all physiological measures (see Piferi, Kline, Younger, & Lawler, 2000, for a discussion of the advantages of neutral film baseline procedures).

3. Results

3.1. Emotional responses to the neutral film

To examine whether high EA participants differed from low EA participants in reactivity patterns to the neutral film clip, a multivariate analysis of variance (MANOVA) was conducted using EA status as the between-subjects' variable and self-reported emotion (PA and NA) and physiological activity (heart rate, corrugator facial EMG, zygomatic facial EMG) as the dependent variables. A significant group effect was revealed, $F(5, 56) = 3.52$, $p < 0.01$, which was further explored using univariate tests. Further examination of self-reported emotion revealed no significant group differences in either PA or NA to the neutral film clip. In contrast, several significant group differences emerged for physiological activity to the neutral film clip. Specifically, high EA participants showed significantly greater heart rate activity ($p < 0.01$) and corrugator facial EMG activity ($p < 0.05$) in response to the neutral film clip (M, 77.73; SD, 10.6; M, 16.69; SD, 10.7, respectively) compared to low EA participants (M, 71.61; SD, 7.6; M, 10.8; SD, 8.2, respectively). No significant group difference was observed for zygomatic facial EMG activity.

3.2. Self-reported emotion to emotion-eliciting films

In order to reduce Type I error, only the targeted subjective emotion was examined for each film clip (e.g. PA ratings for happiness and contentment films and NA ratings for fear, sadness, and disgust films). Group differences in self-reported emotion were examined using a 2 (EA: high, low) × 5 (film category: happiness, contentment, fear, sadness, disgust) repeated measures
3.2. Self-reported emotion to emotion-eliciting films

Analysis of variance (ANOVA). A significant main effect was revealed for film category, \( F(5, 56) = 35.66, p < 0.001 \), which was qualified by a significant film category by group interaction effect, \( F(5, 56) = 2.71, p < 0.05 \). Post-hoc planned comparison tests (Rosenthal & Rosow, 1991) revealed that the high EA group reported experiencing greater negative emotion to the fear \( (p < 0.05) \) and disgust \( (p < 0.01) \) film clips and greater positive emotion to the happiness film clip \( (p < 0.01) \) relative to the low EA group. No group differences in self-reported emotion were found for contentment or sadness film clips (see Fig. 1).

3.3. Physiological responding to emotion-eliciting films

Group differences in physiological reactivity were examined using a series of 2 (EA: high, low) \( \times \) 5 (film: happiness, contentment, fear, sadness, disgust) repeated measures ANOVAs, with heart rate reactivity, corrugator facial EMG, and zygomatic facial EMG used as the dependent variables in each of the separate analyses. For heart rate, a significant main effect for film category was found, \( F(5, 56) = 10.68, p < 0.001 \), which was qualified by a significant film category by group interaction effect, \( F(5, 56) = 11.05, p < 0.001 \). In contrast to the findings for self-reported emotion, planned comparison post-hoc tests revealed that the high EA group showed decreased heart rate reactivity to the fear and disgust film clips relative to the low EA group \( (p's < 0.001) \). No group differences in heart rate reactivity were observed for happiness, contentment, or sadness film clips (see Fig. 2).

Fig. 1. Change score for self-reported emotion to the affect-evoking film clips as a function of group.
Examination of facial EMG activity revealed significant main effects for film category for both corrugator facial EMG activity, \( F(5, 56) = 16.52, p < 0.001 \), and zygomatic facial EMG activity, \( F(5, 56) = 10.56, p < 0.01 \). Post-hoc tests revealed that, consistent with previous studies (e.g. Sloan et al., 2000), all participants showed significantly greater corrugator facial EMG (frown response) to the fear, sadness, and disgust films compared to the happiness and contentment films \((p’s < 0.05)\). Also consistent with previous studies, participants showed significantly greater zygomatic facial EMG (smile response) in response to the happiness film compared to the other emotion-eliciting films \((p’s < 0.05)\). However, in contrast to findings for self-reported emotion and heart rate reactivity, high EA participants did not significantly differ from low EA participants in facial EMG activity to any of the emotion-eliciting films (nonsignificant interaction effects; see Fig. 3).

4. Discussion

The results of this study seem to raise more questions than answers. Similar to the findings of Feldner and colleagues (2003), the high EA group reported greater negative emotion to two of the three unpleasant films (fear and disgust) compared to the low EA group. Somewhat surprisingly, the high EA group also reported greater pleasant emotion to one of the two pleasant films (happiness), relative to the low EA group. Although these stimuli differ in valence (pleasantness) dimension, all three stimuli are of high arousal value and this may account for
why high EA participants reported greater emotional experience to these stimuli. That is, experiential avoiders may be particularly sensitive to highly arousing material.

There is substantial evidence that high emotionality tends to run in families (Eysenck, 1967; Gray & McNaughton, 1996; Kendler, Walters, Neale, Kessler, Heath, & Eaves, 1995; Plomin, DeFries, McClearn, & Rutter, 1997). It is possible that this high emotionality may be related to attempts to diminish or regulate intense emotional experiences. Such biological predispositions

Fig. 3. Change score for corrugator facial EMG activity (top panel) and zygomatic facial EMG activity (bottom panel) in response to the affect-evoking film clips as a function of group.
towards neuroticism and self-regulation may also be augmented by environmental influences (i.e. parents, teachers, siblings, and schoolmates) that instruct that it is important to control affective (particularly negatively evaluated) states (Hayes, Strosahl, & Wilson, 1999). Such a pattern of responding would be consistent with the way the construct of experiential avoidance is currently formulated. It would be useful for future research to investigate the extent to which experiential avoidance is related to trait neuroticism, expressed early in life, and represents a risk factor for subsequent expressions of psychopathology.

The picture of emotional reactivity in experiential avoidance becomes even more complicated when considering the pattern of physiological reactivity to the film clips. In contrast to their heightened reports of emotion experience, the high EA group exhibited attenuated heart rate reactivity to the fear and disgust film clips compared to the low EA participants. However, no other group differences in heart rate activity were observed for the other emotion-eliciting films and no group differences in facial EMG activity were observed for any of the films. This contradictory pattern of responding by high EA participants is perplexing. One possible explanation for the discrepant pattern of responding may relate to emotion regulation attempts. More specifically, the attenuated pattern of heart rate activity in response to the highly arousing unpleasant film clips may reflect attempts by high EA participants to regulate their heightened internal experiences. If the high EA group was attempting to alter their emotional experience, then we might also expect greater subsequent physiological activity at a later time point (i.e. rebound effect; Gross & Muñoz, 1995). Such a pattern of suppression followed by intensification of affect among those high in EA would be consistent with other research on the effects of suppression or elimination of private experience (Cioffi & Holloway, 1993; Clark, Ball, & Pape, 1991; Kelly & Kahn, 1994; Muris, Merckelbach, van den Hout, & de Jong, 1992; Salkovskis & Campbell, 1994; Wegner, 1994). Because physiological activity was not monitored during the inter-trial interval (due to movement related to completing the self-report emotion measure) examination of a possible rebound effect after viewing the film clips was not possible. However, it is unclear when the rebound effect might occur. For instance, it is possible that the rebound effect may not have occurred until after the participant left the experiment.

It should be noted that Gross (2002) has found that instructing individuals to suppress emotional responses results in increased heart rate activity, while the opposite pattern of activity (attenuated heart rate activity) was observed here for the aversive stimuli. However, for individuals who frequently suppress their emotional responses, a pattern of increased heart rate may not be observed because the strategy has become an effortless, automatic process. In contrast, increased physiological reactivity during an emotional suppression task may be observed among participants who are not prone to such regulatory strategies and who thus require greater effort to suppress their responses. This effortful process of suppression would, consequently, likely result in increased autonomic activity, such as increased heart rate. Indeed, individuals can train themselves to regulate or control their physiological responses and this is the premise of biofeedback (e.g. Goodie & Larkin, 2001). The work of Gross and colleagues also indicates that increases in skin conductance activity are observed during directed emotional suppression, though these increases have been interpreted as the result of body movement (Gross, 2002). Nonetheless, it may be useful to include additional measures of physiological activity (e.g. respiration, skin conductance, EEG) in future experimental studies of experiential avoidance.
This explanation for the conflicting pattern of self-reported emotion and physiological reactivity in the high EA group to the unpleasant stimuli is speculative and could not be examined in this study because of the type of stimuli employed. As noted previously, film clips allow for a natural unfolding of emotional response. To examine the hypothesis that experiential avoiders actively regulate their emotional responses, and these regulation attempts result in a rebound effect, one would need to employ a stimulus with a consistent level of arousal throughout the presentation. Ideally the stimulus presentation would be followed by an inter-trial interval in which physiological activity would continue to be monitored. Examining the dynamic process of experiential avoidance would be an important next step in testing the theoretical predictions of the construct.

Although most findings of this study are consistent with that of Feldner and colleagues (2003) the findings for heart rate activity during presentation of the aversive stimuli are inconsistent. Specifically, Feldner et al. found no EA group differences in heart rate activity during the presentation of aversive stimuli, while this study found high EA individuals responded to fear and disgust film clips with decreased heart rate compared to low EA participants. There are a few possible explanations for the inconsistency in these findings. First, in the Feldner et al. investigation, the duration of the stimulus presentation was only 25 s, while the shortest duration of stimulus presentation in this study was 120 s. It is feasible that attempts to regulate or suppress internal experiences would not be observed to stimulus presentations of a short duration, such as 25 s. A second possible explanation for the discrepant findings relates to the resting heart rate values reported in the respective studies. Feldner and colleagues reported average resting heart rate values for high and low EA groups of 113 and 104 beats per minute (BPM), respectively. These average resting heart rate values are unusually high. In fact, such high heart rates values are rarely observed in studies of emotion-elicitation (using film clips, pictures, public speaking, strop task, etc.) and resting heart rates for anxiety patients (who generally display significantly higher resting heart rate values than other groups) are typically around 80 BPM (e.g. Brandt, Harvey, & Guthrie, 2000; Coupland, Wilson, Potokar, Bell, & Nutt, 2003). It is possible that the unusually high resting heart rates displayed by participants in the Feldner et al. investigation reflected the anxious apprehension that all participants likely experienced prior to the aversive biological challenge, a procedure with potential health risks that participants were informed of at the beginning of the study. If this were the case, then the resting period used in that study would not have been a true resting, baseline period. Nevertheless, as Feldner and colleagues examined heart rate activity to the aversive stimulus by subtracting the resting heart rate values, a ceiling effect may have occurred that would have made detection of group differences more difficult. In contrast, the average heart rate values to the neutral film clip observed in this study (e.g. 72 BPM) are in line with resting heart rate values reported in the literature (Hugdahl, 1995).

In contrast to the unpleasant films, the high EA participants in this study did not differ in heart rate activity in response to the happiness film compared to the low EA participants, despite their reports of greater experienced emotion. As noted previously, high EA participants may perceive a heightened experience to high arousal emotional material, in the absence of physiological activity, similar to what has been observed for anxiety sensitivity (Taylor, 1999; Zvolensky & Forsyth, 2002). However, attempts to regulate their reactivity to the happiness film may not have occurred because this stimulus was not perceived as threatening.
The elevated physiological activity (heart rate and corrugator facial EMG activity) for the high EA group relative to the low EA group in response to the neutral film clip is consistent with Feldner and colleagues (2003) who observed greater heart rate activity in the high EA group during a resting baseline period compared to the low EA group. Elevated physiological activity during resting or neutral periods may be a consequence of continuous attempts to regulate emotion, which leads to greater levels of general arousal even during resting or neutral periods. Again, this explanation is speculative and needs to be further examined.

Overall, the findings obtained here underscore the need to conduct more work in a laboratory context to understand what experiential avoidance is, when individuals use this strategy, and the consequences of employing such a regulation strategy. The current understanding of experiential avoidance is that it is a private experience. If we are to better understand this construct we need to incorporate measures that would allow for examination of “private” experiences, such as psychophysiology, and not solely rely on self-report data. Although the present study is an important step in understanding the construct of experiential avoidance, there are also limitations to the study. One limitation is that the stimuli employed were not personally relevant to the participants. Given our current understanding of experiential avoidance it would seem important to examine responses to personally relevant material in addition to standardized material. Indeed, an entirely different picture of emotional responding may be observed when examining stimuli that are personally relevant. As stated previously, it was the purpose of this study to examine initial emotional reactions to affect-evoking stimuli. However, in view of the findings of this study it would seem important for future research to investigate the dynamic process of emotional responding by experiential avoiders. The construct of experiential avoidance has received so much attention in recent years because it stems from a strong basic behavioral approach to understanding the development and maintenance of psychological problems (Hayes & Wilson, 2003). What is needed now is examination of this construct in the laboratory, so we can inform our understanding of the definition of experiential avoidance and more fully address how we might undo the detrimental effects of this apparently maladaptive style of coping.

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