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Chronic Worry as Avoidance of Arousal

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Abstract
Previous research suggests that worry is primarily a verbal-linguistic activity that may serve as a method of cognitive avoidance of fearful imagery. The purpose of the present study was to examine cognitive avoidance in high worriers (N = 22) and low worriers (N = 24) using psychophysiological measures and a modified dichotic listening task. The task involved presenting neutral words into an unattending ear while worry or neutral scenarios were presented into the attending ear. Participants were given a surprise word recognition test of the words presented to provide evidence of cognitive avoidance beyond self-report. Contrary to the hypotheses, high worriers did not have less physiological reactivity than did low worriers. Low worriers recognized more words than did high worriers overall. High worriers remembered more words from the worry scenario than the neutral condition, as would be expected if they attempted to avoid the worry scenario. Implications for treatment of worry and the use of the dichotic listening task in researching worry are discussed.

Keywords: worry, cognitive avoidance, anxiety, arousal

Introduction

Worry is a familiar concept among most individuals. Borkovec, Ray, and Stober (1998, p. 562) describe worry as a "predominance of negatively valenced verbal thought activity," in which one thinks about negative events that may occur in the future. There has been a

substantial increase in research investigating the concept of worry over the past two decades (see Borkovec et al., 1998). This increase was encouraged by the addition of generalized anxiety disorder (GAD) into DSM taxonomy, with chronic and pathological worry defined as its cardinal feature (American Psychiatric Association, 1987, 1994). Although worry is a common human experience in psychologically healthy individuals (Borkovec, 1994), worry can lead to discomfort, disruption, and loss of enjoyment in life that becomes clinically significant. "Chronic" or "pathological" worry generally refers to a relatively uncontrollable stream of negative thoughts and images related to events with uncertain and/or impossible outcomes. It seems that pathological worry is associated with considerable psychological dysfunction (Boehnke, Schwartz, Stromberg, & Sagiv, 1998; Borkovec, 1994) as well as greater frequency, intensity, uncontrollability, and impairment in functioning than normal worry (Borkovec, Shadick, & Hopkins, 1991; Brown, 1997).

A variety of evidence has indicated that worry is primarily a verbal-linguistic activity, with a predominance of thoughts over images (Borkovec, 1994; Borkovec et al., 1998; Borkovec & Inz, 1990; Rapee, 1993; Tallis, Davey, & Capuzzo, 1994). Further, Borkovec (1994) asserts that this verbal activity serves to prevent the full experience of anxiety or fear in the case of chronic worry. Thus, worry may function as a method of cognitive avoidance of perceived danger by avoiding emotional imagery. Research indicates that verbal thoughts about emotional stimuli elicit little cardiovascular arousal while images of this emotional material elicit a significantly greater response (Vrana, Cuthbert, & Lang, 1986). Many psychophysiological studies have found that, unlike other anxious states, worry is not associated with increased sympathetic activation (Hoehn-Saric & MacLeod, 1988; Hoehn-Saric, MacLeod, & Zimmerli, 1989). Chronic and state worry are instead associated with autonomic rigidity and reduced vagal tone (Lyonsfields, Borkovec, & Thayer, 1995; Thayer, Friedman, & Borkovec, 1996), which may initially provide some initial relief (Borkovec, 1994). For example, individuals fearful of formal speaking demonstrated less heart rate response when engaging in worrisome thinking than in relaxation (Borkovec, Lyonsfields, Wiser, & Deihl, 1993). Further, time spent thinking during a period of worry predicts the extent to which physiological responses are muted (Borkovec et al., 1993) and stronger endorsements of thoughts (vs. images) during a worry episode positively correlated with reduced autonomic hyperactivity (Freeston, Dugas, & Ladouceur, 1996). There may be important differences in brain activity for worriers that indicate an avoidance of imagery in the worrying process. Preliminary evidence examining brain activity supports the assertion that worriers engage less in imagery processes and have less executive control over mental activities while worrying (Borkovec et al., 1998). For instance, normal controls displayed a pattern of movement from more frontal areas of the brain to posterior areas, whereas individuals with GAD displayed an opposite directionality in the pattern of EEG activity movement. This suggests that individuals with GAD have a delay in accessing the limbic system (i.e., access to emotional processing) and its influence on frontal lobe processes, which would be consistent with the experience of the "uncontrollability" of worry and less control of mental activities in individuals with GAD while worrying.

In addition, self-report data have revealed that individuals meeting GAD diagnostic criteria tended to report worrying to distract themselves "from more emotional topics"

(Borkovec & Roemer, 1995; Freeston, Rheaume, Letarte, Dugas, & Ladouceur, 1994). Further, measures of cognitive avoidance were able to discriminate individuals diagnosed with GAD from normal controls (Dugas, Gagnon, Ladouceur, & Freeston, 1998). Wells and Papageorgiou (1995) found that participants who engaged in worrying after exposure to a gruesome film reported less anxiety following the postprocessing period compared to those who engaged in imaginal rehearsal. Thus, it seems that individuals with chronic worry use worry as a tactic to avoid emotional arousal.

According to Lang (1985), reduction in autonomic activation indicates a failure to fully access the fear associative network. This failure is likely to interfere with successful emotional processing and continued threat associations (Foa & Kozak, 1986), and therefore worrying may actively inhibit emotional processing and create maintaining conditions for pathological worrying (Borkovec et al., 1998). A similar explanation has originated from recent findings revealing that worrying is characterized by reduced concreteness (Borkovec et al., 1998; Stober, 1998). This theory does not necessarily propose that worrisome thought eliminates imagery, but that the imagery associated with worry is less vivid, slower, and more difficult to access (Stober, 1998). Thus, worry may function as cognitive avoidance of mental imagery that elicits a fear reaction (Borkovec et al., 1998), thereby avoiding the emotional core of anxiety (Craske, 1999). The worry process appears to provide immediate positive effects that are counteracted by long-term negative effects in the form of continued threat associations and lack of new learning.

Much of the previous research with chronic worry and cognitive avoidance has been based on self-report. Because direct measurement of processes such as cognitive avoidance is not currently feasible, studies must focus on developing multimodal methods of indirectly assessing these cognitive states. The present study extended previous findings suggesting that worry suppresses imagery by including an attentional task to assess cognitive avoidance. If a worrier tries to avoid anxiety-provoking imagery (and the associated arousal), then the worrier should be easily distracted from the imagery even when instructed not to avoid it. An assessment of this distractibility would provide evidence beyond self-report that this worry process is occurring. A modification of the dichotic listening procedure used by experimental cognitive psychologists was used to measure that tendency to be distracted. Although the dichotic listening task has typically been employed for the purpose of assessing internal cognitive bias processes, this modified dichotic listening task was used as a convenient tool to assess avoidance (i.e., a behavioral shift away from worry imagery material).

In the typical dichotic listening task used to assess automatic attentional processes in individuals with anxiety disorders, participants attend to a script in one ear while threat and neutral words are presented to the other ear. The participant is also asked to repeat the attended script out loud ("shadowing") while listening to it. Previous research using this type of task with participants diagnosed with GAD demonstrated slower reaction times in shadowing than control participants when threat words were presented in the message they were told to disregard (Mathews & MacLeod, 1986). Moreover, participants reported that they heard no words from the disregarded message and were unable to identify the threat words on a recognition task, suggesting an automatic process. Research investigating individuals diagnosed with obsessive-compulsive disorder (Foa & McNally,

1986) suggested that this type of dichotic listening task is useful in examining attentional biases to threat words during fear reactions. In response to methodological limitations of the dichotic listening task, Bonanno, Davis, Singer, and Schwartz (1991) developed an adaptation of the dichotic listening task to examine avoidance of negative affective material in four groups of individuals varying in high or low anxiety and defensiveness. Results indicated that "repressors" (low anxiety, high defensiveness) did in fact recognize significantly more negative words presented in the unattended ear than any of the other groups, suggesting an attentional focus away from the material. However, the current study investigated cognitive avoidance of worry imagery rather than attentional bias of threat material, in individuals who are chronic worriers rather than repressors. Thus, the current study employed a modified dichotic listening task in which participants were asked to attend to either a worry or neutral script in one ear while disregarding neutral words presented in the unattended ear. This method allows for the examination of cognitive avoidance of worry imagery by assessing recognition of neutral words presented to the unattended ear. Although high worriers would likely attend to the threatening material and initially begin producing imagery, it is believed that the imagery would quickly shift to avoidance of the fear response. However, low worriers would instead respond to the threatening material with imagery and fully access the fear associative network. The worry script was based on pilot work with college students, and therefore the script included topics that were relevant to them and likely to produce anxiety.

In summary, previous research suggests that worry is primarily a verbal-linguistic activity that may serve as a method of cognitive avoidance. The majority of studies have found that worrying is associated with reduced physiological arousal, brain activity indicating less imagery, and self-reported cognitive avoidance of imagery. However, much of the research on worrying and avoidance of imagery has relied on self-report. Therefore, the current study examined worry and cognitive avoidance by assessing a natural byproduct of cognitive avoidance—recognition of to-be-ignored stimuli presented in competition with anxious imagery. Physiological assessment was also included.

Hypotheses

As previous work indicates that worrying is associated with a reduction in physiological arousal (Hoehn-Saric et al., 1989) and high worriers would be more likely to respond to threatening material with a shift to avoidance of imagery than low worriers, it was hypothesized that high worriers would demonstrate less physiological reactivity during exposure to a worry imagery script, while low worriers would demonstrate an increase in physiological reactivity. Furthermore, it was hypothesized that there would be no differences in physiological reactivity between high worriers and low worriers in the neutral imagery script.

It was expected that high worriers would avoid listening to the worrisome scenario due to discomfort associated with these images, and would instead focus on the unattended channel despite instructions not to do so. Therefore, it was hypothesized that high worriers, but not low worriers, would demonstrate an elevated recognition of words from the unattended channel on a modified dichotic listening task during a worry imagery script.

No difference between high worriers and low worriers in word recognition from the unattended channel on a modified dichotic listening task was expected for neutral imagery.

Method

Participants

Two hundred fifty-eight students at the University of Nebraska–Lincoln agreed to participate in the current study to fulfill a portion of the research requirements for an introductory psychology course. Of these 258 who completed prescreening questionnaires, 72 participants were invited to participate in the second phase of the study. Participants in this study were chosen based on their scores on two standard measures of worry, as recommended by Molina and Borkovec (1994) as well as Tallis, Davey, and Bond (1994). The questionnaires were administered during a screening session. Those with scores on the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990) of greater than 60 and scores on the Worry Domains Questionnaire (WDQ; Tallis, Eysenck, & Matthews, 1992) greater than 40 were placed into the high worry group (see Tallis, Davey, & Capuzzo, 1994). Those with scores less than 44 on the PSWQ and less than 27 on the WDQ were placed in the low worry group (see Tallis, Davey, & Capuzzo, 1994). Of these 72 participants invited to participate, 47 completed the entire study. One participant was omitted from the analysis as a statistical outlier. Of the final 46 participants, there were 22 individuals (20 women and 2 men) who qualified as high worriers and 24 individuals (17 women and 7 men) who qualified as low worriers. The groups did not differ in age (high worriers: $M = 18.8$ years; $SD = 0.95$; range = 18–23; low worriers: $M = 18.7$ years; $SD = 0.89$; range = 18–20), $t < 1$. The high worry group had greater scores on the PSWQ ($M = 63.6$, $SD = 6.7$), $t(44) = 5.52$, $p < .001$, and WDQ ($M = 52.5$, $SD = 13.0$), $t(44) = 7.04$, $p < .001$, than the low worry group.

Measures

Dichotic Listening Task

The dichotic listening task was administered via cassette recorders with sound channeled into a set of headphones worn by each participant. All participants were screened for hearing difficulties. Participants were asked whether right or left handed, and right or left dominance was determined based on handedness. One headphone presented the experimental scenarios to the dominant ear and the other presented a list of nonthreatening nouns to the nondominant ear. During the task, participants were asked to attend to information played through the attended channel and ignore any information from the unattended channel. Information played through the attended channel consisted of a 3-min neutral imagery script and a 3-min worry imagery script in counterbalanced order. In the neutral imagery script, the listener was asked to imagine as vividly as possible a vignette of walking through a meadow. In the worry scenario, the listener was asked to imagine a vignette in which the person is contemplating multiple stressors including multiple tests and financial problems as well as experiencing physiological symptoms of anxiety. The worry script was based on the top three worries that all participants in the initial screening were asked to record.

During the entire 6-min task, 180 of the 270 nonthreatening one and two syllable nouns were presented, in the same voice and tone as the vignettes, to the unattended ear at a rate one word every 2 s. These 270 nouns were chosen because of their nonthreatening nature and tendency to be ambivalent with regard to emotional saliency. Ninety of the words were randomly chosen as distracter words that were not presented at all during the task. Ninety were presented during the 3-min neutral imagery script and 90 were presented during the 3-min worry imagery script.

At the end of the task, participants were given a surprise word recognition test. This test simply required participants to circle YES or NO following each of the 270 nouns listed in random order. The total recognition score for the worry and neutral conditions was computed by dividing the number of correctly identified words presented during that scenario by the total number of words (correct and errors) that received a "yes" response across both conditions. The ratio was then divided by 100 to provide the percentage of words recognized in each condition taking into account words that may have been incorrectly endorsed.

Physiological Assessment

Assessment of physiological arousal consisted of measures of both skin conductance and constant skin temperature. Skin conductance was assessed with the AT-64 SCR system developed by Autogenic System's Advanced Technology. Skin conductance readings were detected via two skin conductance electrodes that were attached with Velcro to the palmar surface of the participant's second and third finger. The AT-64 utilizes a built in microprocessor that automatically computes and displays the percentage of increase from baseline to peak response and the half-recovery period (length of time in seconds to return to baseline after a peak response). Skin conductance was computed for each condition (baseline, neutral, and worry) by averaging 18 measures of skin conductance taken during each condition. Several research studies support the use of skin conductance for detecting psychophysiological reactivity during imaginal fear (Cook, Melamed, Cuthbert, McNeil, & Lang, 1988; Nikula, Klinger, & Larson-Gutman, 1993; Smith, Waldorf & McNamara, 1993; Trandel & McNally, 1987). Skin temperature was monitored using a portable digital thermometer that is sensitive to tenths of a degree. One sensor that measures continuous skin temperature was connected with Velcro to each participant's index finger throughout the experiment. The skin temperature was computed for each condition (baseline, neutral, and worry) by averaging 18 measures of skin temperature taken during each condition. Hand surface skin temperature is a reliable measure of arousal (Arena, Blanchard, Andrasik, Cotch, & Myers, 1983).

Imagery Measure

The Betts Questionnaire Upon Mental Imagery—Short Version (QMI; Sheehan, 1967) is a 35-item self-report questionnaire designed to assess imagery vividness across sensory modalities (i.e., visual, auditory, kinesthetic, gustatory, and olfactory). The QMI is a reliable self-report questionnaire for discriminating between good and poor imagers and has been used for many years as a measure of imagery vividness in research (Cook et al., 1988;

Sheehan, 1969). This measure was included to ensure that high and low worry groups did not differ in their ability to engage in the imagery task.

Procedure

Participants completed the PSWQ, WDQ, and short version QMI in a session prior to the dichotic listening task. Participants were taken individually to a sound-attenuated room, seated in a comfortable recliner, and given a brief explanation of each of the instruments. Participants were asked to spend 5 min relaxing while listening to the music while baseline physiological data were collected. The music was directed to each ear individually to ensure the participant's ability to hear clearly from each ear and adjusted for volume. The same volume was then used for the dichotic listening task. A set of headphones was worn by the research assistant to allow constant monitoring of the task for potential problems. Following the recording of baseline data, participants were given a brief 3-min practice session using a benign script describing a California vacation. Participants were given the following instructions:

> You will be listening to a 6-minute tape recording through these headphones. Some of the information will probably sound familiar and some may not. I would like you to ignore anything you hear in your left/right ear (depending on dominance). Instead, focus on the passages you hear in your left/right ear (depending on nondominance). As you listen to each of the stories, please try to imagine that you are actually part of the story. That is, imagine that the story is actually occurring at the time you are listening to it. Some people find it easier to close their eyes and imagine being part of the story. Others find it easier to imagine sitting in front of a television and watching the story unfold. Either method is fine. The most important thing is that while listening to the story, you imagine as vividly as possible that it is actually occurring. Do you have any questions? Okay, let's begin . . .

At the end of the practice session, any questions regarding the logistics of the experiment were answered by the research assistant. The 6-min experimental session then began. At the conclusion of the modified dichotic listening task, participants were given the surprise recognition task.

Results

An integrity check was conducted to ensure that there were no differences in the two groups' abilities to generate vivid images as assessed by the QMI, $t(45) = 0.15$, $p = ns$.

Physiological Data

It was hypothesized that there would be no difference between groups in physiological reactivity in the neutral imagery script conditions (conditions that contain no worry information). However, high worriers were expected to be less physiologically reactive during exposure to a worry imagery script than low worriers.

The first ANOVA was a 2 × 2 [Group (high worry vs. low worry) × Script condition (worry vs. neutral)] repeated measures design with skin conductance reactivity (change from baseline) as the dependent variable. Contrary to the hypotheses, there were no main effects for group, $F(1, 40) = 3.46$, $p = ns$, $\eta = 0.28$, or condition, $F(1, 40) = 2.84$, $p = ns$, $\eta = 0.26$, nor was there an interaction of group and condition, $F(1, 40) = 0.78$, $p = ns$, $\eta = 0.14$. In the high worry group, the mean skin conductance reactivity was 1.95 ($SD = 1.02$) in the worry script condition and 1.64 ($SD = 1.01$) in the neutral script condition. Within the low worry group, the mean skin conductance reactivity was 2.98 ($SD = 2.80$) for the worry script condition and 2.88 ($SD = 2.64$) in the neutral script condition (see Fig. 1). The second ANOVA was a 2 × 2 [Group (high worry vs. low worry) × Script condition (worry vs. neutral)] repeated measures design with skin temperature reactivity as the dependent variable. There was a main effect for group, $F(1, 40) = 4.04$, $p = 0.05$, $\eta = 0.30$. However, contrary to the hypotheses, individuals in the high worry group (worry script: $M = 1.24$, $SD = 0.08$; neutral script: $M = 1.24$, $SD = 0.08$) had greater skin temperature reactivity than those in the low worry group (worry script: $M = 1.18$, $SD = 0.10$; neutral script: $M = 1.18$, $SD = 0.11$). Further, there was no main effect for condition, $F(1, 40) = 0.53$, $p = ns$, $\eta = 0.11$, or interaction of group and condition, $F(1, 40) = 2.63$, $p = ns$, $\eta = 0.25$ (see Fig. 2).

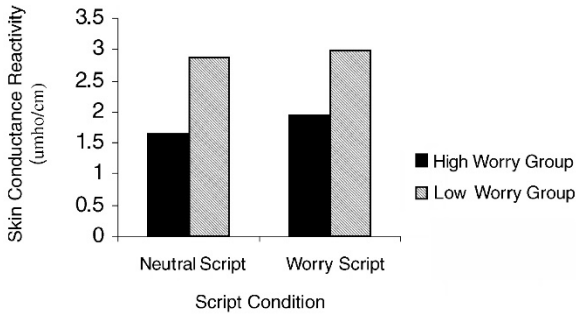

Figure 1. Skin conductance reactivity for high and low worry groups across script conditions.

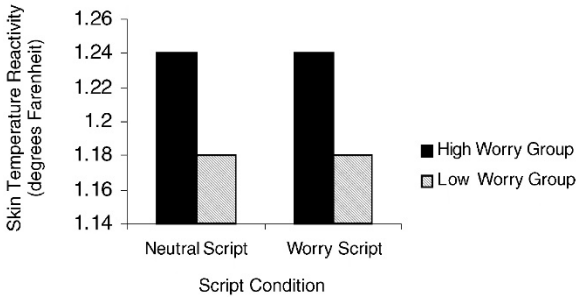

Figure 2. Skin temperature reactivity for high and low worry groups across script conditions.

Word Recognition Task

It was expected that high worriers would demonstrate a higher recognition of words on a modified dichotic listening task during the worry imagery script condition but not the neutral imagery, compared to low worriers. A 2 × 2 (Group × Condition) ANOVA was used, with percent of words recognized as the dependent variable. There was a main effect for group, with the low worry group recalling more words correctly across script conditions, $F(1, 41) = 16.90$, $p < 0.001$, $\eta = 0.54$. There was also a main effect for script condition, with more words recognized overall in the worry imagery script condition across groups $F(1, 41) = 6.19$, $p = 0.017$, $\eta = 0.36$. However, contrary to hypotheses, there was no interaction of group and script condition $F(1, 41) = 1.14$, $p = ns$, $\eta = 0.16$. Although no interaction was found, planned comparisons between worry and neutral scripts for each group were conducted. As shown in Figure 3, high worriers recognized a greater percentage of words for the worry script condition ($M = 43.56$, $SD = 17.97$) than the neutral script condition ($M = 28.47$, $SD = 12.88$), $t(21) = 2.55$, $p = 0.02$, $\eta = 0.49$. There was no difference between percentage of words recognized for the worry ($M = 46.10$, $SD = 13.47$) and neutral script ($M = 40.10$, $SD = 14.87$) conditions for the low worry group, $t(19) = 1.14$, $p = ns$, $\eta = 0.25$, partially supporting the hypothesis.

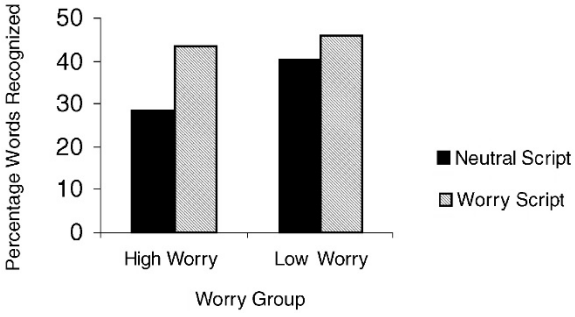

Figure 3. Percentage of words recognized in worry and neutral script conditions across worry groups.

Discussion

The present study examined the theory that chronic worry is perpetuated because it suppresses physiological arousal and emotional processing of worry information. This study involved multiple methods of assessment including self-report, psychophysiological measures, and a modified dichotic listening task. This research endeavor is an extension of previous research indicating that worry is primarily a verbal-linguistic process (e.g., Borkovec, 1994), it involves a decrease in sympathetic activation (Hoehn-Saric & MacLeod, 1988; Lyonfields et al., 1995), and that worriers avoid processing anxiety-provoking images (Borkovec & Roemer, 1995).

It was hypothesized that high worriers would demonstrate less physiological reactivity during exposure to a worry imagery script, while low worriers would demonstrate an increase in physiological reactivity. Although the means were in the expected direction for

skin conductance in the worry script, this hypothesis was not supported as high and low worriers did not significantly differ in skin conductance reactivity. Further, although the means were not significantly different in the neutral script as expected, an examination of the means in Figure 1 indicate that high worriers appeared to have higher skin conductance reactivity than low worriers. The lack of statistical significance may be attributable to the large variability in the data. Perhaps individualized scripts or a longer assessment period (e.g., Surwit, Shipiro, & Feld, 1976) would generate larger effect sizes. Given the moderate effect sizes for the main effects and relatively small sample size, the lack of significance may be indicative of a Type II error.

Surprisingly, high worriers had greater, not less, overall skin temperature reactivity than low worriers, but this difference was true across both the neutral and worry script conditions. The lack of specificity indicates high worriers were responding with anxiety to the task in general, not specifically the anxiety-provoking imagery. However, later experience using skin temperature reactivity in worry research suggests that the time frame used in the current study was not long enough to produce sufficient changes in temperature reactivity. Further, the researchers had no control over the ambient temperature, which presents as a possible confound due to the variability in temperature across experimental sessions.

It was expected that high worriers would avoid listening to the worrisome scenario because of discomfort associated with these images, and would instead focus on the unattended channel despite instructions not to do so. In the surprise recognition task, it was hypothesized that high worriers would recognize more words presented in the worry condition than low worriers. This was not the case, as low worriers recognized more words than high worriers in both the neutral and worry script conditions. It is possible that high worriers were attending to internal processes and avoiding both channels, resulting in fewer words recognized overall. However, within the high worry group, worriers remembered more words from the worry script condition than the neutral script condition as expected. Much of the previous work on the avoidance of anxiety-provoking imagery by worriers relied on self-report of the content of mentation ("Were you having thoughts or images?") (Borkovec, 1994; Borkovec et al., 1998; Borkovec & Inz, 1990; Rapee, 1993; Tallis, Davey, & Capuzzo, 1994). This study offers more direct evidence that worriers avoid anxiety-provoking images despite instructions to do otherwise. An alternative explanation for these results related to the word recognition task could be that the high worriers attended particularly well to the neutral script rather than avoiding the worry imagery script. Although there are other such explanations for these findings, the current findings are consistent with the theory that high worriers avoid imagery that elicits a fear reaction.

This study had several limitations. The groups were defined by self-report questionnaires so these findings may not extend to clinical worriers or individuals with GAD. However, the PSWQ and WDQ are commonly used and have excellent psychometric characteristics. The use of both for screening increases confidence in the group definitions. As noted above, individualized scripts may yield more robust results. However, this worry script was based on pilot work with college students and likely had substantial relevance for the majority of individuals in the study. Moreover, the use of standard worry script reduces threats to internal validity relative to individualized scripts.

Because of limited availability of equipment, the physiological assessment was fairly primitive. Finer grain assessment across multiple channels may yield the expected suppression of arousal. Another limitation of the study is that there were not self-report measures of anxiety, worry, and imagery level before and after the dichotic listening task. The physiological assessment was intended to tap into these constructs in a more objective manner but did not produce expected results. Thus, future research using the modified dichotic listening task should include these self-report measures in addition to multiple physiological measures. Given these limitations in the assessment of anxiety, worry, and imagery, as well as the constraints in measuring cognitive avoidance, there are limitations in interpreting the results relative to the research hypotheses. Although it is not certain whether the worry imagery script actually induced worry or imagery in participants per se, the results are consistent with a shift away from worry-related material as Borkovec et al. (1998) predict in the model of cognitive avoidance and worry.

In conclusion, the finding that worriers remembered more words from the unattended channel in the worry script condition than the neutral script condition provides support, albeit indirect, for Borkovec et al.'s (1998) theory that the function of worry may be to avoid mental imagery that elicits a fear reaction. It seems that individuals with high levels of worry may have avoided listening to the worry script because of the discomfort associated with the worry images. This study also supports the use of the modified dichotic listening task to assess cognitive avoidance of anxiety-provoking imagery.

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