Published in final edited form as:

Cogn Emot. 2011 June ; 25(4): 747–755. doi:10.1080/02699931.2010.500566.

Individual Differences at High Perceptual Load: The Relation between Trait Anxiety and Selective Attention

Naomi Sadeh and Keith Bredemeier

Department of Psychology, University of Illinois Urbana-Champaign.

Abstract

Attentional control theory (Eysenck et al., 2007) posits that taxing attentional resources impairs performance efficiency in anxious individuals. This theory, however, does not explicitly address if or how the relation between anxiety and attentional control depends upon the perceptual demands of the task at hand. Consequently, the present study examined the relation between trait anxiety and task performance using a perceptual load task (Maylor & Lavie, 1998). Sixty-eight male college students completed a visual search task that indexed processing of irrelevant distractors systematically across four levels of perceptual load. Results indicated that anxiety was related to difficulty suppressing the behavioral effects of irrelevant distractors (i.e., decreased reaction time efficiency) under high, but not low, perceptual loads. In contrast, anxiety was not associated with error rates on the task. These findings are consistent with the prediction that anxiety is associated with impairments in performance efficiency under conditions that tax attentional resources.

Keywords

Perceptual load; attentional control; trait anxiety; selective attention

Individual Differences at High Perceptual Load: The Relation between Trait Anxiety and Selective Attention

Anxiety is experienced when a current goal is threatened and is often associated with worry about potential future negative events and increased physiological arousal (e.g., Spielberger, 1979). Though everyone feels anxious from time to time, persistent and/or intense anxiety can develop into a debilitating anxiety disorder with substantial costs to both the individual and society. Trait anxiety is a particular dimension of anxiety that is conceptualized as a general disposition to experience frequent and/or intense state anxiety (e.g., Spielberger, 1979), as well as a lower-order facet of neuroticism or negative emotionality (Costa & McCrae, 1992). One mechanism by which anxiety is thought to impair functioning is through its association with attentional control deficits in cognitively demanding and distracting situations (Eysenck, Derakshan, Santos, & Calvo, 2007; Derakshan & Eysenck, 2009). The goal of the present study is to extend this research by examining whether the attentional control deficits associated with anxiety are affected by perceptual demands. This is an important issue to explore as it has implications for further elucidating the contextual factors that moderate anxiety-related performance deficits.

Theories of selective attention

The processing stage at which selective attention is implemented and serves to attenuate irrelevant stimuli has been contested in the attention literature. Early-selection models (Broadbent, 1958) posit that attention attenuates the processing of unattended stimuli early-on in the processing stream (perception), whereas late-selection models argue that attention influences post-stimulus identification processes, such as response selection (Duncan, 1980). The load theory of attention attempts to reconcile these theories by asserting that the perceptual demands of a task (i.e., the number of task-relevant items in the display) determine the extent to which irrelevant information is processed and influences behavior (Lavie, 1995; Lavie et al., 2004).

Specifically, the load theory posits that early selection occurs under conditions of high perceptual load (i.e., when there are many task-relevant stimuli in a display), because perceptual resources are taxed and insufficient capacity remains to process unattended information (Lavie, 1995). Conversely, late selection is postulated to occur under conditions of low perceptual load, because the perceptual demands of the task do not consume attentional resources, which spill-over to automatically process unattended stimuli. When irrelevant information is perceived under conditions of low perceptual load, executive functions such as working memory operate to suppress the effects of distractors on behavior by maintaining task priorities in situations of response conflict (Lavie et al., 2004). Thus, perceptual load is theorized to determine the contexts conducive to distractor processing, with the processing of irrelevant stimuli continuing until capacity is taxed at high loads. Working memory load, in contrast, is theorized to influence the extent to which distractors impact behavioral responses after they have been processed. In support of the load theory, a series of behavioral (e.g., Lavie, 1995) and fMRI (e.g., Schwartz et al., 2005) studies indicate that distractor processing decreases at high perceptual loads in young adults.

Anxiety and Attentional control

For over a decade, processing efficiency theory has served as the dominant framework for understanding the effects of anxiety on task performance (Eysenck & Calvo, 1992). According to processing efficiency theory, anxiety can impair task performance, because a portion of the cognitive resources that would typically be allocated to task completion are consumed by anxious worry. However, anxious individuals should be able to compensate for the detrimental effects of worry by exerting more effort. Thus, only in situations where cognitive resources are taxed and/or rapid responses are required does anxiety impair performance, because the compensation process typically engaged by anxious individuals is ineffective as a result of task demands. In other words, anxiety has a greater effect on processing "efficiency" than overall performance "effectiveness".

Despite the popularity of the processing efficiency theory, it has been deemed problematic because it does not clearly specify the cognitive processes that are impaired in anxious individuals. To address this problem, Eysenck and colleagues (2007) recently introduced a major revision of the processing efficiency theory, which they refer to as the attentional control theory (ACT). According to ACT, it is the inability to ignore distractors (both internal, like worrisome thoughts, and external, like irrelevant stimuli) that impairs task performance in anxious individuals. More specifically, the goal-directed and stimulus-driven attentional systems that jointly govern attentional control (Corbetta & Shulman, 2002) are purportedly imbalanced in anxious individuals, such that the former system exerts less influence over allocation of attentional resources than the latter, making anxious individuals vulnerable to irrelevant distractors. As a result of this imbalance, anxious individuals are predicted to show performance deficits in contexts that place demands on goal-directed attentional resources, namely tasks that tax working memory resources or increase task

difficulty in such a way that attentional resources are strained. Empirical testing of ACT supports the hypothesis that placing demands on central executive resources impairs processing efficiency in anxious individuals (e.g., Ansari, Derakshan, & Richards, 2008; Derakshan, Ansari, Shoker, Hansard, & Eysenck, 2009).

One issue that is not explicitly addressed by ACT is whether manipulating perceptual load increases task difficulty in such a way that attentional control deficits are exacerbated in anxious individuals. Rather, most of the existing research has manipulated the cognitive demands of the task at hand either by increasing the amount of information that must be stored in working memory, or by introducing a secondary task (see Eysenck et al., 2007). According to the load theory of attention, attentional resources are increasingly taxed as the perceptual demands of a task increase. Thus, integrating these two theoretical views, one might predict that distractor processing would increase among anxious individuals as enhancing perceptual load places increasing demands on attentional resources.

A recent fMRI investigation provided preliminary data on whether trait anxiety moderates distractor processing as a function of perceptual load (Bishop, 2009). In this investigation, an inverse relationship between trait anxiety and activity in the dorsolateral prefrontal cortex emerged under low perceptual load, suggesting high-anxious individuals recruit less prefrontal resources than low-anxious individuals to resolve response conflict when presented with few task-relevant stimuli. Although perceptual load was manipulated in this study, some aspects of the experimental paradigm utilized in this investigation may have limited the moderating effects of anxiety. For instance, the high load condition was modified from that employed in previous studies on load theory (e.g., Maylor & Lavie, 1998) to decrease error rates by restricting target letters from appearing in the most peripheral positions. Furthermore, trials were blocked by perceptual load potentially allowing participants to prepare for the perceptual demands on each trial. These modifications may have reduced the perceptual processing demands of the task, particularly at high levels of perceptual load. Finally, only two levels of perceptual load were examined. Assessing performance at intermediate levels of perceptual load may be necessary to detect the effects of perceptual load on distractor processing in anxious individuals.

Present Study

The present study sought to extend this literature by more closely examining the extent to which perceptual load enhances attentional control deficits in anxiety. Specifically, the relation between trait anxiety and behavioral response disruptions (i.e., RT slowing, errors) to incompatible relative to compatible peripheral distractors were assessed across four levels of perceptual load (Figure 1, top panel). According to the load theory of attention, increasing the perceptual demands of the task by manipulating the number of task-relevant items in a display will eventually exhaust attentional resources at high perceptual load, and thus preclude the processing of distractors (Lavie, 1995). Based on research showing that anxiety is associated with attentional control deficits when cognitive resources are taxed (see Eysenck et al., 2007), we hypothesized that anxiety would moderate distractor processing as the perceptual demands of the task increasingly strain attentional resources. That is, we predicted that trait anxiety would be associated with greater response interference caused by distractors at higher levels of perceptual load. At low perceptual loads, ACT theory predicts that high-anxious individuals should be able to compensate for attentional control deficits by expending additional attentional resources. Thus, high-anxious individuals were predicted to show comparable levels of distractor interference to low-anxious individuals at low perceptual loads. Anxiety was not expected to be associated with error rates on the task, based on the claim that anxiety is not generally associated with deficits in performance effectiveness (Eysenck & Calvo, 1992).

Methods

Participants

Sixty-eight male college students age 18 to 22 ($M = 19.0$, $SD = 1.0$) participated for course credit through the Psychology Department Subject Pool as part of a larger study examining cognitive risk for psychopathology in men¹. Three participants were removed from analyses, because their error rates were more than 4 SD s above the sample mean. Participants identified as Caucasian ($n = 46$; 68.7 %), Asian ($n = 12$; 17.9 %), Hispanic ($n = 5$; 7.5 %), African-American ($n = 1$; 1.5 %), and other ($n = 4$; 5.8 %).

Anxiety and Estimated IQ Measures

Welsh Anxiety Scale (WAS; Welsh, 1956). The WAS is a 39-item true/false scale that measures trait anxiety and negative affect (Cronbach's $\alpha = .91$). Research indicates that scores on the WAS correlates .75 with trait anxiety on the Spielberger State-Trait Anxiety Inventory (Watson & Clark, 1984), which is one of the most widely used self-report measures in research on anxiety and cognitive performance.

Shipley Institute of Living Scale-Vocabulary Test (SILS; Zachary, 1986). The SILS Vocabulary Test is a 40-item measure that assesses reading ability, verbal comprehension, and acquired verbal knowledge. We used the age-corrected T-score as a covariate in all analyses to ensure that individual differences in verbal competency could not account for performance.

Experimental Task

We administered the Perceptual Load Task employed by Maylor and Lavie (1998), illustrated in Figure 1, with the following changes: stimuli appeared for 200 ms and feedback was presented visually. In each trial, a circle of letters appeared that consisted of one target letter (X or N) and 0, 1, 3 or 5 non-target letters to represent four levels of perceptual load (Loads 1, 2, 4, and 6). Participants were instructed to press the left arrow key if they saw X in the circle and the right arrow key if they saw N in the circle. Larger distractor letters (X and N) that were either compatible or incompatible with the target also appeared in the periphery to either the right or left of the circle. These distractor letters were irrelevant to completing the task, and participants were instructed to ignore them and focus on the central circle. *WRONG* appeared in the middle of the screen following incorrect responses. All possible combinations of target, non-target and distractor letters and locations were counterbalanced within each perceptual load, resulting in a total of 96 unique letter displays. Participants completed two blocks of practice trials consisting of 12 trials each, followed by five blocks of 96 randomized experimental trials. Research indicates young adults are able to ignore distractors only at load 6 (Maylor & Lavie, 1998), when perceptual resources are theorized to be fully taxed.

Dependent Measures and Data Analysis

Mean reaction time (RT) and error frequency were analyzed using repeated measures MANOVAs with Perceptual Load (1, 2, 4, 6) and Distractor Compatibility (incompatible, compatible) as the within-subject variables. Continuous WAS scores were then entered as the between-subjects variable, with SILS-Vocabulary included as a covariate. Interference scores were also calculated by subtracting the dependent measure (mean RT or error frequency) on compatible trials from the analogous dependent measure on incompatible trials to aid in the interpretation of interactions. Interference scores that differ from zero

¹The data for these participants were drawn from a larger sample reported in Sadeh & Verona (2008).

provide evidence that the critical distractor item was being processed by participants. To test whether significant interference scores emerged for low-anxious individuals, high-anxious individuals, or both within each load condition, we used a median split on the WAS and conducted one-sample t-tests using interference scores for each group.

Results

Participants responded more slowly and inaccurately as the number of items in the display (i.e., perceptual load) increased [RT, $F(3, 62) = 145.2, p < .001, \eta^2 = .88$, and error frequency, $F(3, 62) = 86.1, p < .001, \eta^2 = .81$]. They also reacted more slowly and inaccurately to incompatible than compatible distractors [RT, $F(1, 64) = 13.5, p < .001, \eta^2 = .17$, and error frequency, $F(1, 64) = 14.4, p < .001, \eta^2 = .18$]. Consistent with the load theory, analyses revealed a Perceptual Load $\times$ Distractor Compatibility interaction for RT, $F(3, 62) = 6.21, p < .001, \eta^2 = .23$, with RT interference effects emerging at perceptual loads 1, 2, and 4, $F_s(1, 64) > 4.00, p_s < .05$, but not 6, $F(1, 64) = 2.8, p > .10$. This interaction did not emerge for error frequency, $F(3, 62) = 1.5$, ns. Total errors did not correlate with mean RT at any load ($p_s > .10$), suggesting that the results were not driven by a speed-accuracy tradeoff.

As predicted, analyses also yielded a WAS $\times$ Perceptual Load $\times$ Distractor Compatibility interaction for RT, $F(3, 60) = 3.96, p < .012, \eta^2 = .17$, but not error frequency, $F(3, 60) = 1.14$, ns. Examination of the distractor compatibility effect within each load revealed a WAS $\times$ Distractor Compatibility interaction for load 4, $F(1, 62) = 7.47, p < .008, \eta^2 = .11$, and load 6, $F(1, 62) = 4.93, p < .03, \eta^2 = .07$, but not loads 1 or 2, $F_s(1, 62) < 1$, ns. Specifically, anxiety and RT interference were not significantly correlated at loads 1 ($r = -.09$) or 2 ($r = -.10$), were positively correlated at load 4 ($r = .33$), and were negatively correlated at load 6 ($r = -.27$). The positive association between interference scores and WAS at load 4 implicates increased difficulty ignoring distractors for individuals with high- relative to low- anxiety. Though unexpected, the negative relationship between interference scores and WAS at load 6 is consistent with negative compatibility effects found in previous research at high levels of perceptual load (e.g., Bavelier, Deruelle, & Prokisch, 2000).

As shown in Figure 1 (bottom panel), high-anxious individuals continued to process the irrelevant distractors even at load 6, while low-anxious individuals stopped at load 4. One-sample t-tests conducted within low- and high-WAS groups were consistent with these findings in that low-anxious individuals only demonstrated RT interference at perceptual loads 1, $t(32) = 4.52, p < .001$, and 2, $t(32) = 2.83, p < .008$, but not loads 4, $t(32) = 1.68, p > .10$, and 6, $t(32) < 1$, ns. In contrast, high-anxious individuals continued to show significant interference across all four loads [load 1: $t(31) = 3.70, p < .001$; load 2: $t(31) = 2.25, p < .031$; load 4: $t(31) = 4.55, p < .001$; load 6: $t(31) = -2.45, p < .02$]. These findings suggest that high-anxious individuals had more difficulty ignoring the irrelevant distractors at higher perceptual loads that increased demands on attentional resources.

Discussion

Examining anxiety as a moderator of selective attention revealed that the association between trait anxiety and task performance does indeed vary as a function of perceptual load. Specifically, trait anxiety predicted task performance at elevated levels of perceptual load, such that low-anxious individuals stopped showing significant RT interference from distractors at the second-highest perceptual load (load 4), whereas high-anxious individuals continued to show significant distractor interference even at the highest perceptual load (load 6). The continued distractor processing observed in high-anxious individuals at higher levels of perceptual loads is consistent with our hypothesis, based on attentional control

theory, that anxiety would moderate distractor processing as the perceptual demands of the task increasingly strained attentional resources.

The reversal of the interference effect for high-anxious individuals in the most perceptually demanding load condition was unexpected in the context of the load theory of attention, though it can be interpreted in the context of basic research on distractor compatibility. Specifically, research on negative compatibility effects indicates that compatible distractors elicit greater interference relative to incompatible distractors when the demands of a task severely tax attentional resources, including high levels of perceptual load (e.g., Bavelier et al., 2000; Van Leeuwen & Bakker, 1995). Positive compatibility effects, such as those observed in loads 1 through 4 for high-anxious individuals, are thought to be driven primarily by the response related conflict that arises between incompatible and compatible distractors after they are perceived (Eriksen & Hoffman, 1973). In contrast, research suggests negative compatibility effects result from an early perceptual effect whereby compatible distractors are initially grouped with the target display as a result of their perceptual similarity, causing a delay in the identification of the target from the distractors (Bavelier et al., 2000). This grouping does not occur for the perceptually-dissimilar incompatible distractors and targets, resulting in faster responses on incompatible than compatible trials. Given that non-significant negative compatibility effects have appeared at high perceptual loads in other investigations (e.g., Maylor & Lavie, 1998), the present results may represent an exacerbation of this effect in anxious individuals rather than a novel process. Thus, although unexpected, the inverse relationship between anxiety and distractor interference at the highest perceptual load coincides with other research on selective attention and likely reflects an outcome of poor attentional control in anxious individuals under attentionally-taxing conditions.

These findings support the ACT hypothesis that anxiety is associated with regulatory deficits in top-down attentional control, theorized to impair the ability of anxious individuals to selectively focus on important stimuli and ignore distractors in situations that tax attentional resources. In addition to providing supporting evidence for ACT, the present study extends previous research on the model by specifying perceptual load demands as a contextual factor that engenders attentional control deficits in anxious individuals. More specifically, the present results indicate that having to simultaneously attend to many task-relevant stimuli is sufficient to induce attentional control deficits in anxious individuals, a task dimension not systematically investigated across low, intermediate, and high levels of perceptual load in terms of this theoretical model.

As with any investigation, the present study has limitations. First, only male participants were included in the study, as the data were collected as part of a larger project on cognitive risk factors for psychopathology in men. Thus, it is unclear whether these findings will generalize to women. There is some recent research on attentional biases for threat-related stimuli in anxious individuals that suggests gender may be an important moderating variable. For example, Waters and colleagues (2007) found that high-anxious females, but not high-anxious males, exhibit attentional biases for threatening stimuli, whereas Koster and colleagues (2006) found the opposite pattern (attentional biases in high-anxious males but not high-anxious females). Thus, future research should systematically examine whether gender differences exist in the relation between trait anxiety and selective attention at various levels of perceptual load. Further, we focused exclusively on trait levels of anxiety and did not include a measure of state anxiety. It is possible that the relations between trait anxiety and task performance reported here result from the fact that high-anxious participants were experiencing more anxiety at the time that they were completing the tasks (i.e., state anxiety), rather than trait anxiety per se. It is also possible that the relation between trait anxiety and selective attention at different levels of perceptual load varies as a

function of participants' current state, as several studies have found that certain cognitive performance deficits associated with trait anxiety only emerge under stressful conditions (e.g., Sorg & Whitney, 1992). Thus, whether the relation between trait anxiety and selective attention under different levels of perceptual load is mediated or moderated by state anxiety remains unanswered.

Despite these limitations, our findings have important implications for the study of distractor processing and anxiety, namely that perceptual load is an important contextual variable that increases the attentional demands of the task at hand, and thus engenders attentional control deficits in anxious individuals. These results are also interesting in light of prior work that suggests high levels of perceptual load eliminate individual differences in distractor processing (Forster & Lavie, 2007). Indeed, the present findings, in concordance with other emerging evidence (Remington et al., 2009), suggest that individual differences in distractor processing are present at high perceptual loads and vary as a function of traits associated with psychopathology. More generally, these findings underscore the need to measure individual difference variables in basic research on cognitive processes and examine them as potential moderating variables of performance.

Acknowledgments

Naomi Sadeh was supported by NIMH grant F31 MH086178.

References

- Ansari TL, Derakshan N, Richards A. Effects of anxiety on task-switching: Evidence from the mixed antisaccade task. *Cognitive, Affective, and Behavioural Neuroscience*. 2008; 8:229–238.
- Bavelier D, Deruelle C, Prokisch J. Positive and negative compatibility effects. *Perception & Psychophysics*. 2000; 62:100–112. [PubMed: 10703259]
- Bishop SJ. Trait anxiety and impoverished prefrontal control of attention. *Nature Neuroscience*. 2009; 12:92–98.
- Broadbent, DE. *Perception and communication*. New York: Oxford University Press; 1958.
- Costa PT, McCrae RR. Normal personality assessment in clinical practice: the NEO Personality Inventory. *Psychological Assessment*. 1992; 4:5–11.
- Derakshan N, Ansari TL, Shoker L, Hansard ME, Eysenck MW. Anxiety, inhibition, efficiency, and effectiveness: An investigation using the antisaccade task. *Experimental Psychology*. 2009; 56:48–55. [PubMed: 19261578]
- Derakshan N, Eysenck MW. Anxiety, processing efficiency and cognitive performance: New developments from attentional control theory. *European Psychologist*. 2009; 14(2):168–176.
- Duncan J. The locus of interference in the perception of simultaneous stimuli. *Psychological Review*. 1980; 87:272–300. [PubMed: 7384344]
- Eriksen CW, Hoffman JE. The extent of processing of noise elements during selective encoding from visual displays. *Perception & Psychophysics*. 1973; 14:155–160.
- Eysenck MW, Derakshan N, Santos R, Calvo MG. Anxiety and cognitive performance: Attentional control theory. *Emotion*. 2007; 7:336–353. [PubMed: 17516812]
- Forster S, Lavie N. High perceptual load makes everybody equal: eliminating individual differences in distractibility with load. *Psychological Science*. 2007; 18:377–381. [PubMed: 17576274]
- Koster EHW, Crombez G, Verschuere B, Van Damme S, Wiersema J-R. Components of attentional bias to threat in high trait anxiety: Facilitated engagement, impaired disengagement, and attentional avoidance. *Behaviour Research and Therapy*. 2006; 44:1757–1771. [PubMed: 16480943]
- Lavie N. Perceptual load as a necessary condition for selective attention. *Journal of Experimental Psychology: Human Perception and Performance*. 1995; 21:451–468. [PubMed: 7790827]

- Maylor E, Lavie N. The influence of perceptual load on age differences in selective attention. *Psychology of Aging*. 1998; 13:563–573.
- Remington A, Swettenham J, Campbell R, Coleman M. Selective attention and perceptual load in Autism Spectrum Disorder. *Psychological Science*. 2009; 20:1388–1393. [PubMed: 19843262]
- Schwartz S, Vuilleumier P, Hutton C, Maravita A, Dolan R, Driver J. Attentional load and sensory competition in human vision: Modulation of fMRI responses by load at fixation during task-irrelevant stimulation in the peripheral visual field. *Cerebral Cortex*. 2005; 15:770–786. [PubMed: 15459076]
- Sorg BA, Whitney P. The effect of trait anxiety and situational stress on working memory capacity. *Journal of Research in Personality*. 1992; 26:235–241.
- Spielberger, CD. *Understanding stress and anxiety*. London: Harper & Row; 1979.
- Van Leeuwen C, Bakker L. Stroop can occur without Garner interference: Strategic and mandatory influences in multidimensional stimuli. *Perception & Psychophysics*. 1995; 57:379–392. [PubMed: 7770328]
- Waters AM, Nitz AB, Craske MG, Johnson C. The effects of anxiety upon attention allocation to affective stimuli. *Behaviour Research and Therapy*. 2007; 45:763–774. [PubMed: 16956578]
- Watson D, Clark LA. Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*. 1984; 96:465–490. [PubMed: 6393179]
- Welsh, G. Factor dimensions A and R. In: Welsh, GS.; Dahlstrom, WG., editors. *Basic readings on the MMPI in psychology and medicine*. Minneapolis: University of Minnesota Press; 1956. p. 264-281.
- Zachary, RA. *Shipley Institute of living scale, revised manual*. Los Angeles: Western Psychological Services; 1986.

Figure 1. Top panel: Load Examples from the Perceptual Load Task. Bottom panel: Distractor Interference as a Function of Perceptual Load and a Median-Split on the Welsh Anxiety Scale.

Table 1

Means and standard deviations for Reaction Time (ms) and Error Rate (%) by Perceptual Load, Distractor Compatibility, and Welsh Anxiety Scale Median-Split.

Condition	<u>Low WAS</u>		<u>High WAS</u>	
	<i>Reaction Time M (SD)</i>	<i>Error Rate M (SD)</i>	<i>Reaction Time M (SD)</i>	<i>Error Rate M (SD)</i>
Load 1				
Incompatible	623 (61.6)	3.6 (2.8)	619 (77.5)	4.1 (3.1)
Compatible	599 (60.9)	2.4 (2.2)	600 (81.2)	2.9 (1.9)
Load 2				
Incompatible	693 (72.6)	3.7 (3.2)	672 (98.7)	3.3 (2.6)
Compatible	676 (68.8)	3.0 (2.2)	663 (97.1)	3.4 (2.5)
Load 4				
Incompatible	835 (95.1)	6.2 (3.5)	822 (164)	5.8 (3.2)
Compatible	846 (102)	5.3 (2.8)	786 (145)	5.3 (4.1)
Load 6				
Incompatible	937 (130)	11.0 (4.9)	881 (187)	11.0 (5.3)
Compatible	938 (126)	10.3 (4.1)	904 (203)	11.0 (4.9)

Note. $N = 65$. Low WAS: $n = 33$. High WAS: $n = 32$. WAS = Welsh Anxiety Scale (Welsh, 1956).