

Is Waiting the Hardest Part? Comparing the Emotional Experiences of Awaiting and Receiving Bad News

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Abstract

Awaiting uncertain news is stressful, but is it more stressful than receiving bad news? We compared these emotional experiences in two studies. Participants in Study 1 reflected on a personal experience awaiting news that ultimately turned out badly, and participants in Study 2 were law graduates awaiting their results on the bar exam who ultimately failed the exam. In Study 1, participants were ambivalent as to whether awaiting or receiving bad news was more difficult, and emotion ratings in both studies confirmed this ambivalence. Anxiety was higher in anticipation of bad news (at least at the moment of truth) than in the face of it, whereas other negative emotions were more intense following the news than during the waiting period. Thus, whether waiting is “the hardest part” depends on whether one prefers to be racked with anxiety or afflicted with other negative emotions such as anger, disappointment, depression, and regret.

Keywords

waiting, uncertainty, emotion, anxiety, bad news

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In July 2014, a federal judge in California ruled the death penalty unconstitutional, declaring that it violated the ban on cruel and unusual punishment. However, the judge’s decision came with a surprising twist: Rather than declaring execution itself cruel and unusual, he instead focused on the inevitable and often prolonged waiting period that precedes execution. He observed that the inmate at the center of the case faced “complete uncertainty as to when, or even whether” he would be put to death (Dolan & Kim, 2014), and it was the suffering apparently caused by this uncertainty that prompted the judge’s unprecedented decision. Is waiting truly a fate worse than death? More broadly, is waiting for uncertain news harder than facing the bad news that may come at the end of the waiting period? We present two studies comparing the emotional experiences of awaiting and receiving bad news. Specifically, we pit three competing hypotheses against each other, each of which has a foundation of empirical support: (a) facing bad news is harder than waiting, (b) waiting is harder than facing bad news, and (c) waiting and facing bad news are hard in different ways.

Competing Hypothesis 1: Facing bad news is harder than waiting.

Facing bad news may be unequivocally more distressing (i.e., across different types of negative emotions) than awaiting uncertain news. This hypothesis has clear intuitive appeal.

However stressful it may be to wait, the notion that receiving a dire diagnosis or failing an important exam could be a stress-reducing experience is counterintuitive. After all, what makes waiting stressful if not the possibility of impending bad news? In fact, uncertainty can be quite pleasurable if a pleasant outcome is virtually guaranteed (e.g., awaiting the identity of a secret admirer, awaiting the opening of birthday presents; Kurtz, Wilson, & Gilbert, 2007; Lee & Qiu, 2009; Wilson, Centerbar, Kermer, & Gilbert, 2005). Thus, the prospect of bad news transforms waiting from a pleasurable experience into a distressing one, suggesting that it is the news rather than the waiting itself that provides an emotional blow. Perhaps unsurprisingly, patients sometimes report that dreaded medical events (miscarriage, cancer diagnosis) are more distressing than the waiting and uncertainty that preceded them (e.g., Maxwell et al., 2000; Ockhuisen, Boivin, van den Hoogen, & Macklon, 2013; Schnur et al., 2008).

Competing Hypothesis 2: Waiting is harder than facing bad news.

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Although less intuitive, waiting may be unequivocally more distressing than facing bad news. Research on the intensity and duration of emotions in uncertain situations finds that uncertainty tends to exaggerate emotional experiences, both positive and negative, thus supporting this second competing hypothesis. In two sets of studies, participants reported a particularly intense emotional experience when they were prompted to feel uncertain (e.g., by focusing on uncertain aspects of a film; Bar-Anan, Wilson, & Gilbert, 2009) and a prolonged emotional experience when an aspect of the situation remained unclear (e.g., when the reason for a kind act was unknown; Wilson et al., 2005). In yet another set of studies, people reported more intense emotional responses in anticipation of unpleasant events (menstruation, annoying sounds) than when reflecting on the unpleasant event after it occurred (Van Boven & Ashworth, 2007). These findings suggest that all emotions might be heightened during waiting periods, compared with the period following bad news.

Further supporting these broad findings are studies of women with breast cancer. Some women and their partners report that the uncertainty and fear inherent to the diagnostic process are more distressing than the diagnosis itself (Lebel et al., 2003; Nosarti, Roberts, Crayford, McKenzie, & David, 2002; Poole, 1997), and studies have documented clinical levels of both anxiety and depression during the wait for biopsy results (Lampic, Thurfjell, Bergh, & Sjöden, 2001; Pineault, 2007; Poole et al., 1999).

Competing Hypothesis 3: Waiting and facing bad news are hard in different ways.

Thus far, we have presented a mixed bag of evidence, with some studies supporting the predominance of distress over bad news and other studies supporting the predominance of distress during waiting periods. One possible explanation for these mixed (albeit limited) findings is that the answer to the question, "Is waiting the hardest part?" may depend on what one means by "hardest." Perhaps waiting for uncertain news and receiving bad news are equally difficult but difficult in different ways. Specifically, feelings of anxiety may be at the forefront during a waiting period but take a backseat to other negative emotions in the face of bad news.

Research on the appraisal patterns associated with various emotions confirms the link between low certainty and anxiety (Frijda, Kuipers, & ter Schure, 1989). In contrast, other negative emotions such as anger and disappointment are associated with situations of high certainty (Frijda et al., 1989) and thus are more likely to arise when the waiting is over and uncertainty (disagreeably) resolved. In fact, the only study to date to directly compare the emotional experience of awaiting and receiving bad news, a study of women undergoing in vitro fertilization (IVF; without success, in the case of these participants), provided initial evidence that the waiting period was characterized by relatively high anxiety

compared with the period following bad news, whereas the period following bad news was characterized by relatively intense negative affect compared with the waiting period (Boivin & Lancaster, 2010).

Overview

Although the appraisal processes associated with anxiety and other negative emotions suggest that awaiting and receiving bad news might differ in predictable ways, direct empirical evidence on this point is lacking. It is one thing to say that people rate anxiety experiences as relatively high in uncertainty, and experiences with other negative emotions as relatively high in certainty (Frijda et al., 1989), but it is quite a stretch to conclude from those findings that waiting may actually be more anxiety provoking than learning that a worst-case scenario has come to pass. The aforementioned study with women undergoing IVF is a step in the right direction. However, that study was limited by its narrow context and small sample size (61 women), and thus its findings require replication and extension.

We compared the emotional experiences of awaiting uncertain news and receiving bad news in two studies, thus pitting our three competing hypotheses against each other. Study 1 compared participants' recalled experiences of waiting for and receiving bad news across a broad spectrum of domains. This study was strong in generalizability and power but was limited by the possibility of memory biases. Study 2 compared the experience of law graduates awaiting feedback on the California bar exam to the experience of learning that one failed the bar exam. This study was strong in internal and external validity but limited in statistical power. Together, we propose that the pair of studies balance each other's strengths and weaknesses, thus providing a strong test of our competing hypotheses.

Competing Hypothesis 1 would predict that participants will recall (Study 1) and experience (Study 2) less anxiety and other negative emotions while waiting than in response to bad news (i.e., a main effect of timing). Competing Hypothesis 2 would predict that participants will recall and experience *greater* anxiety and other negative emotions while waiting than in response to bad news (i.e., an opposite main effect of timing). Finally, the third of the competing hypotheses would predict that participants will recall and experience greater anxiety while waiting than in response to bad news and higher levels of other negative emotions in response to bad news than while waiting (i.e., an interaction between timing and type of emotion).

We also examined the role of outcome importance (Study 1), proximity of the news (Study 2), and key individual differences (intolerance of uncertainty and dispositional optimism) in these emotional experiences. Temporal proximity (i.e., the amount of time remaining before learning one's fate) has emerged as a key predictor of waiting experiences, particularly outcome predictions (see Sweeny & Krizan, 2013, for a

meta-analysis) but also anxiety, rumination, and use of coping strategies to manage feelings of uncertainty (Shepperd, Ouellette, & Fernandez, 1996; Sweeny & Andrews, 2014). Similarly, a recent study found that dispositional optimism and intolerance of uncertainty strongly predicted anxiety during a consequential waiting period, such that people who were more dispositionally optimistic and more tolerant of uncertainty were less anxious, ruminated less, and used fewer defensive coping strategies (Sweeny & Andrews, 2014). The current studies extend these findings by examining the role of these individual differences in emotional variability between waiting periods and experiences with bad news.

Study 1

Method

Participants. Amazon mTurk users in the United States ($N = 464$, 51% women, $M_{age} = 36.8$ years) were compensated US\$1 for their participation. Although no formal stopping rule was used, we sought a sample that would provide sufficient power for testing our competing hypotheses. For our primary analyses (paired-samples t tests), a sample of 175 participants achieved a statistical power level of .80 with an alpha level of .05 for an effect size r of .15 (Cohen's $d = .30$). Our analyses focused on a subsample of participants (i.e., those who received bad news; see below), and thus we oversampled to ensure sufficient power for analyses with that group. We began analyses only after the full sample was obtained. The sample consisted primarily of participants identifying as White/Caucasian (75%), with others identifying as Asian (5%), Hispanic/Latino (7%), Black/African American (9%), Native American (<1%), and multiple/Other (2%).

Procedure. Following consent procedures, participants completed an online questionnaire. First, participants completed a set of individual difference measures including measures of intolerance of uncertainty and dispositional optimism. We assessed intolerance of uncertainty with the full Intolerance of Uncertainty Scale (Buhr & Dugas, 2002), which consists of 27 items rated on 5-point scales (e.g., "Uncertainty keeps me from living a full life," "I can't stand being taken by surprise"; 1 = *not at all characteristic*, 5 = *entirely characteristic*; $M = 2.58$, $SD = 0.82$, Cronbach's $\alpha = .96$). We assessed dispositional optimism with the Life Orientation Task-Revised (LOT-R; Scheier, Carver, & Bridges, 1994), which consisted of six substantive items and four filler items rated on 5-point scales (e.g., "In uncertain times, I usually expect the best," "I hardly ever expect things to go my way," reverse scored; 1 = *strongly disagree*, 5 = *strongly agree*; $M = 3.39$, $SD = 0.90$, $\alpha = .87$).

The remainder of the questionnaire consisted of two parts: describing a time when participants waited for important news, then reflecting on the news they received at the end of the waiting period. We provided participants with examples of uncertain waiting periods, including waiting for an academic

outcome (e.g., results on an exam or college admission), results of a doctor's visit or medical test, or the decision following a job interview, but we also encouraged participants to report any important waiting period they could recall. Participants described waiting periods in the contexts of their profession (e.g., waiting to hear about a job interview; 38%), academics (e.g., waiting for college admissions decisions; 13%), health (e.g., waiting for medical test results; 12%), finances (e.g., waiting for a loan approval; 5%), romance (e.g., waiting to learn whether a partner would initiate a breakup; 4%), family (e.g., waiting to hear about a family member's health outcome; 22%), and friends (3%), among others (3% could not be categorized).

Participants then completed measures of their emotions during the waiting period, responding "according to how [they] felt while waiting for the important news [they had] brought to mind." We assessed anxiety with five items adapted from previous research on waiting experiences (e.g., Sweeny & Andrews, 2014; Sweeny, Reynolds, Falkenstein, Andrews, & Dooley, in press; "I would feel anxious / worried / nervous / scared / afraid"; $M = 3.92$, $SD = 0.96$, $\alpha = .85$). We assessed general negative emotions with nine items targeting negative emotions that are particularly relevant to experiences of uncertainty and/or responses to bad news ("I would feel distressed / hostile / upset / ashamed / disappointed / regretful / depressed / discouraged / angry"; $M = 2.44$, $SD = 1.06$, $\alpha = .91$). We also assessed positive emotions with five items ("I would feel inspired / grateful / happy / content / at peace"), but because positive emotions are not the focus of this article, we do not consider them further.

After reflecting on their waiting experience, participants were asked to think about the news they received at the end of the waiting period. Participants first indicated whether they considered the news to be good ($n = 246$), bad ($n = 175$), or neutral ($n = 43$). For the purpose of this article, we focus our analyses on participants who reported an instance of bad news; analyses that include the full sample are available upon request. Participants again responded to the set of emotion items, this time responding "according to how [they] felt in the days after [they] received the important news [they had] brought to mind" (anxiety: $M = 3.46$, $SD = 1.30$, $\alpha = .91$; negative emotions: $M = 3.71$, $SD = 0.86$, $\alpha = .82$). Finally, participants rated the importance of the news they received ("How important was the outcome of this news to you?" 1 = *not important at all*, 5 = *very important*; $M = 4.67$, $SD = 0.64$) and indicated whether it was more difficult waiting or receiving the news, or whether these experiences were equally difficult. Additional measures not pertinent to our hypotheses are available in Supplemental Material online, and data are available upon request.

Results

We first sought to confirm that participants recalled experiences that were relatively important in their lives rather than

Table 1. Perceptions of Waiting or Bad News as More Difficult (Study 1).

	Observed frequency	Expected frequency	Standardized residual	Intolerance of uncertainty	Dispositional optimism
				M (SD)	M (SD)
Bad news is more difficult	72	58.33	1.79	2.82 (0.90)	3.18 (0.95)
Waiting is more difficult	43	58.33	-2.01	2.64 (0.77)	3.23 (0.83)
Equally difficult	60	58.33	0.22	2.52 (0.90)	3.36 (1.00)
χ^2 test	$\chi^2(2, N = 175) = 7.28, p = .026, \phi = .204$				

Note. Only reporting for subsample who received bad news.

Table 2. Means by Condition for Anxiety and Negative Emotion Composites.

	Anxiety	Negative emotions
	M (SD)	M (SD)
Study 1		
During wait		
Bad news ($n = 175$)	4.15 (0.91)	2.85 (1.08)
Good news ($n = 246$)	3.78 (0.95)	2.14 (0.98)
Neutral news ($n = 43$)	3.75 (1.00)	2.46 (0.86)
Following news		
Bad news ($n = 175$)	3.47 (1.30)	3.71 (0.86)
Good news ($n = 246$)	1.76 (1.02)	1.37 (0.69)
Neutral news ($n = 43$)	2.99 (0.92)	2.42 (0.93)
Study 2		
1 month prior to learning results		
Bad news ($n = 31$)	2.77 (1.13)	2.21 (1.08)
Good news ($n = 179$)	2.52 (0.95)	1.85 (0.77)
1 day prior to learning results		
Bad news ($n = 33$)	3.71 (.95)	2.38 (1.04)
Good news ($n = 180$)	3.51 (1.05)	2.05 (0.93)
Following news		
Bad news ($n = 33$)	3.03 (0.99)	3.19 (1.00)
Good news ($n = 184$)	1.37 (0.51)	1.40 (0.72)

trivial incidents. In fact, 75% of participants gave the news the highest possible importance rating (5 out of 5; 18% provided a rating of 4), and no one provided the lowest rating (1 out of 5).

Preference for waiting or bad news. Reflecting on their waiting and bad news experiences, 25% of participants indicated that waiting was most difficult, 41% indicated that receiving the bad news was most difficult, and 34% felt that the two experiences were equivalently difficult. A chi-square test comparing this pattern of responses with a pattern in which equal numbers of participants fell into each response category was significant (see Table 1).

Emotional responses to waiting and bad news. Table 2 presents the means within participants for anxiety and general negative emotions. We first conducted a 2 (Time: *wait vs. post-news*) \times 2 (Emotion: *anxiety vs. negative emotions*) repeated

measures ANOVA and found an interaction effect consistent with Competing Hypothesis 3, $F(1, 174) = 182.81, p < .0001, \eta_{\text{partial}}^2 = .51$. To follow up, we then performed paired-samples t tests comparing participants' recollections of the emotions they experienced while awaiting and then receiving bad news. Also consistent with the third competing hypothesis, participants recalled feeling more anxiety while waiting for uncertain news than after receiving bad news, $t(174) = 7.60, p < .001, r_{\text{diff}} = .50$ ($M_{\text{diff}} = 0.68, 95\% \text{ CI: } [0.50, 0.86]$). We inspected individual emotion items to ensure the robustness of our findings and found that participants rated all anxiety items higher when reflecting on waiting than on receiving bad news, $t_s > 3.66, p_s < .001, r_{\text{diff}} > .27$.

In contrast, participants recalled more general negative emotions following bad news than during the waiting period, $t(174) = 10.47, p < .001, r_{\text{diff}} = .62$ ($M_{\text{diff}} = 0.86, 95\% \text{ CI: } [0.70, 1.02]$). Looking at individual items, participants rated all negative emotion items higher when reflecting on bad news than

on waiting, although one item (distressed) did not reach statistical significance, $t(173) = 1.72, p = .087, r_{es} = .13$ (all other t s $> 5.88, p$ s $< .001, r_{es}$ $> .41$).

Of course, the participants of primary interest to our inquiry knew that their waiting period ended in bad news. Although our findings regarding anxiety confirm that waiting is a particularly anxiety-provoking experience, two other explanations bear mention. First, although some waiting periods are truly and entirely uncertain, often people have reason to expect either a good or bad outcome in advance. Perhaps participants were more anxious during the waiting period because they anticipated bad news. Alternatively, participants' memories of the waiting period may be tainted by the news they ultimately received. These alternative explanations (i.e., that waiting is not as distressing, or not always as distressing, as participants indicated) are consistent with Competing Hypothesis 1 in that they would support the predominance of distress over bad news.

To test these alternative explanations, we utilized the recollections of anxiety during the waiting period of participants who ultimately received good and neutral news. In fact, participants who ultimately received bad news recalled more anxiety during the waiting period compared with participants who ultimately received neutral, $F(1, 461) = 6.18, p = .013, \eta_{\text{partial}}^2 = .01$, or good news, $F(1, 461) = 15.44, p < .001, \eta_{\text{partial}}^2 = .03$ (see Table 2 for means). However, it remains unclear whether this difference reflects a retrospective bias or a true difference in the extent to which people feel anxious during waiting periods that ultimately end in good, neutral, or bad news (the latter supporting Competing Hypothesis 1). Study 2 provides a clearer test of this competing hypothesis.

Individual differences in emotional experiences. Finally, we examined the role of outcome importance and individual differences in participants' recalled emotional experiences. Starting with outcome importance, perhaps bad news is only less anxiety provoking than waiting when the bad news is relatively mild. To examine the moderating role of importance, we conducted mixed ANOVAs and inspected the interaction between importance ratings (continuous) and the within-subjects factor of waiting versus post-news emotions. Outcome importance did not moderate the difference between waiting and post-news anxiety, $F(1, 172) = 0.07, p = .796, \eta_{\text{partial}}^2 < .01$, nor did it moderate the difference between waiting and post-news negative emotions, $F(1, 172) = 1.40, p = .238, \eta_{\text{partial}}^2 = .01$.

Turning to individual differences, perhaps people differ in their emotional patterns depending on their general tolerance for uncertainty or their outlook on the future. We conducted mixed ANOVAs and inspected the interaction between intolerance of uncertainty or dispositional optimism (continuous) and the within-subjects factor of waiting versus post-news emotions. Intolerance of uncertainty did not moderate the difference between waiting and post-news anxiety, $F(1, 171) = 2.17, p = .143, \eta_{\text{partial}}^2 = .01$, nor did it moderate the difference

between waiting and post-news negative emotions, $F(1, 171) = 0.29, p = .594, \eta_{\text{partial}}^2 < .01$. Similarly, dispositional optimism did not moderate the difference between waiting and post-news anxiety, $F(1, 173) = 1.33, p = .250, \eta_{\text{partial}}^2 < .01$, nor did it moderate the difference between waiting and post-news negative emotions, $F(1, 173) = 0.38, p = .537, \eta_{\text{partial}}^2 < .01$.

We also compared the levels of intolerance of uncertainty and dispositional optimism between people who indicated that waiting was more difficult, that receiving bad news was more difficult, or that they were equally difficult. A one-way ANOVA revealed no association between intolerance of uncertainty, $F(2, 170) = 2.03, p = .13, \eta_{\text{partial}}^2 = .02$, or dispositional optimism, $F(2, 172) = 0.64, p = .53, \eta_{\text{partial}}^2 < .01$, and responses on the preference item (see Table 1 for means).

Study 2

Consistent with Competing Hypothesis 3, participants in Study 1 recalled experiencing greater anxiety during an uncertain waiting period than after receiving bad news following that waiting period. In contrast, and also consistent with that hypothesis, participants recalled experiencing more negative emotions (aside from anxiety) in the face of bad news than during a waiting period prior to receiving news.

A strength of Study 1 was the breadth of waiting experiences reported by participants, thus maximizing the generalizability of our findings. However, the retrospective nature of the study may have introduced memory biases. People generally tend to overestimate the intensity of negative emotional experiences in their past (Levine & Safer, 2002; Wilson, Meyers, & Gilbert, 2003; Wirtz, Kruger, Napa Scollon, & Diener, 2003), and in fact we found that participants recalled more anxiety as they awaited what they ultimately learned to be bad news than when they awaited news that turned out to be good or neutral. It may be that people truly experience less anxiety during waiting periods that turn out well, perhaps because they can predict their outcomes with some degree of accuracy, but the retrospective nature of Study 1 leaves open the possibility that these findings simply reflect memory biases. Thus, we sought to extend and replicate our findings in a longitudinal study that captured "real time" emotions as they unfolded across the course of a waiting period and following consequential bad news.

Method

Participants. Law graduates taking the July 2013 California bar exam ($N = 230$; 61% female; $M_{\text{age}} = 27.6$ years; 67% White, 25% Asian or Pacific Islander, 7% Hispanic, and 1% Black) were recruited for a larger study examining the experience of awaiting bar exam results. For the purpose of our analyses, we will utilize data from participants who completed measures 1 month prior to receiving their exam results ($n = 216$) and 1 day prior to receiving their results ($n = 211$), as well as participants who failed the exam and completed

measures after learning their results ($n = 33$). Although we achieved sufficient power for our analyses that utilize the full sample, we recognize the power limitations of analyses that focus on the subset of participants who received bad news. Due to the challenges of studying serious incidents of bad news in the “wild,” we could neither control nor predict the size of the relevant subsample. We provide effect sizes throughout, and confidence intervals for the key mean differences, in an effort to aid interpretation of our findings.

Procedure. A full description of the larger study’s procedures and measures are available in Supplemental Materials online. As in Study 1, participants completed a set of individual difference measures including measures of intolerance of uncertainty and dispositional optimism. Study 2 used a short form of the Intolerance of Uncertainty Scale (Carleton, Norton, & Asmundson, 2007), which consists of 12 items ($M = 2.77$, $SD = 0.70$, $\alpha = .88$). We again assessed dispositional optimism with the LOT-R (Scheier et al., 1994) but without the filler items included ($M = 3.59$, $SD = 0.60$, $\alpha = .77$).

To test our competing hypotheses, we focus on measures of anxiety and negative emotions collected 1 month and 1 day before participants learned their results on the bar exam and immediately after learning their results (for those who failed). At each of these points, participants completed the same measures of anxiety (1 month prior: $\alpha = .92$; 1 day prior: $\alpha = .92$; immediately after, failing only: $\alpha = .82$) and negative emotions (1 month prior: $\alpha = .91$; 1 day prior: $\alpha = .92$; immediately after, failing only: $\alpha = .88$) described in Study 1.

Results

Emotional responses to waiting and bad news. Table 2 presents the means within participants for anxiety and negative emotions. We again conducted 2 (Time: *wait vs. post-news*) \times 2 (Emotion: *anxiety vs. negative affect*) repeated measures ANOVAs, both in the moments prior to learning results and 1 month prior. Looking first at emotions at the moment of truth (within the day prior to learning results), we found an interaction effect as in Study 1, $F(1, 30) = 46.39$, $p < .0001$, $\eta^2_{\text{partial}} = .61$. We performed paired-samples t tests to follow up and found that once again participants reported feeling more anxious at the moment of truth than they did after receiving bad news, $t(31) = 2.79$, $p = .009$, $r_{\text{es}} = .45$ ($M_{\text{diff}} = 0.68$, 95% CI: [0.19, 1.17]). In contrast, but consistent with Study 1, participants reported greater negative emotion following bad news than at the moment of truth, $t(31) = 3.55$, $p = .001$, $r_{\text{es}} = .54$ ($M_{\text{diff}} = 0.81$, 95% CI: [0.30, 1.32]). Note that participants (including those who ultimately received good and bad news) reported more anxiety, $t(204) = 12.77$, $p < .001$, $d = 1.78$, ($M_{\text{diff}} = -0.99$, CI: [-1.15, -0.84]), and negative emotions $t(204) = 3.57$, $p < .001$, $d = .50$ ($M_{\text{diff}} = -0.22$, CI: [-0.35, -0.10]), at the moment of truth than 1 month prior to the news.

To provide a further test of Competing Hypothesis 1, we compared the emotional experiences at the moment of truth

of participants who ultimately received good and bad news. Competing Hypothesis 1 would predict that in at least some cases (e.g., when anticipating good news), waiting would be relatively low in anxiety compared to the experience of bad news. However, in contrast to Study 1, participants who ultimately failed the bar exam reported no more anxiety at the moment of truth compared with participants who ultimately passed the bar exam, $t(209) = 0.97$, $p = .335$, $d = .13$ ($M_{\text{diff}} = 0.19$, CI: [-0.20, 0.59]).

Turning to emotions 1 month prior to learning results, we once again found a significant interaction effect, $F(1, 30) = 13.34$, $p = .001$, $\eta^2_{\text{partial}} = .31$. However, participants reported feeling equivalently anxious 1 month prior to learning their results and after bad news, $t(31) = 1.16$, $p = .254$, $r_{\text{es}} = .20$ ($M_{\text{diff}} = 0.26$, 95% CI: [-0.27, 0.79]), although they again reported greater negative emotion following bad news than while waiting, $t(31) = 4.50$, $p < .001$, $r_{\text{es}} = .63$ ($M_{\text{diff}} = 0.98$, 95% CI: [0.46, 1.50]). Once again, participants who ultimately failed the bar exam reported no more anxiety at 1 month prior to learning results compared with participants who ultimately passed the bar exam, $t(208) = 1.32$, $p = .189$, $d = .18$ ($M_{\text{diff}} = 0.25$, CI: [-0.12, 0.62]).

Individual differences in emotional experiences. We once again examined the moderating role of individual differences in the emotional experiences of waiting and facing bad news with mixed ANOVAs. Intolerance of uncertainty (continuous measure) did not moderate the difference between anxiety at the moment of truth and post-news anxiety, $F(1, 27) = 2.17$, $p = .987$, $\eta^2_{\text{partial}} < .01$, nor did it moderate the difference between anxiety 1 month prior to feedback and post-news anxiety, $F(1, 28) = 0.22$, $p = .641$, $\eta^2_{\text{partial}} = .01$. Intolerance of uncertainty also did not moderate the difference between negative emotions at the moment of truth and post-news negative emotions, $F(1, 27) = 0.14$, $p = .707$, $\eta^2_{\text{partial}} = .01$, nor did it moderate the difference between negative emotions 1 month prior to feedback and post-news negative emotions, $F(1, 28) = 0.59$, $p = .448$, $\eta^2_{\text{partial}} = .02$.

Finally, we examined the moderating role of dispositional optimism (continuous measure in the mixed ANOVA procedures). Consistent with Study 1, dispositional optimism did not moderate the difference between anxiety at the moment of truth and post-news anxiety, $F(1, 27) < 0.01$, $p = .968$, $\eta^2_{\text{partial}} < .01$; the difference between anxiety 1 month prior to feedback and post-news anxiety, $F(1, 28) = 1.88$, $p = .181$, $\eta^2_{\text{partial}} = .06$; the difference between negative emotions at the moment of truth and post-news negative emotions, $F(1, 27) = 0.49$, $p = .491$, $\eta^2_{\text{partial}} = .02$; nor the difference between negative emotions 1 month prior to feedback and post-news negative emotions, $F(1, 28) = 0.10$, $p = .754$, $\eta^2_{\text{partial}} < .01$.

Discussion

The goal of this inquiry was to determine whether waiting is truly “the hardest part,” a familiar but largely untested idiom.

Due to the relative novelty of the endeavor, we posed three competing hypotheses and pitted them against each other. Competing Hypothesis 1 posited that facing bad news would be more distressing than awaiting uncertain news, regardless of the nature of the distress. Competing Hypothesis 2 posited that waiting would be more distressing than facing bad news, regardless of the nature of the distress. Competing Hypothesis 3 posited that waiting would provoke more anxiety than facing bad news, but bad news would provoke other negative emotions more so than waiting.

In an explicit test of our question, people in Study 1 were somewhat ambivalent: Less than half indicated that getting bad news was most difficult, a quarter indicated that waiting for uncertain news was most difficult, and a third indicated that the experiences were equally difficult. In fact, the emotional experiences reported by participants in both studies confirm the complexity of our seemingly simple question. Consistent with Competing Hypothesis 3, people reported more intense anxiety when waiting than they did following bad news, both when reflecting on a personal experience of awaiting uncertain news and at the moment of truth in a consequential waiting period. Although Study 1 suggested that this anxiety might be mitigated in anticipation of news that ultimately turns out well, Study 2 revealed that people who remained ignorant of their fate (i.e., who were reporting anxiety in real time) were equally anxious regardless of their ultimate outcome, suggesting that the variability in Study 1 was due to memory biases. In contrast, our studies confirmed that negative emotions (aside from anxiety) are more intense in the face of bad news than during an uncertain waiting period.

Furthermore, our findings were not moderated by the importance of the news or by individual differences relevant to experiences of uncertainty, but they were moderated by proximity to the news during the waiting period. One month prior to learning whether they passed the bar exam, law graduates in Study 2 were no more anxious than they were after learning they failed the exam. This temporal shift is generally consistent with research on bracing for bad news, which has established a robust tendency for people to increasingly fret about their future outcomes as the moment of truth draws near (Shepperd et al., 1996; Sweeny & Krizan, 2013). The present findings extend this work by demonstrating that people are not only more anxious when news is relatively proximal versus relatively distant, they are even more anxious at the moment of truth (but not 1 month earlier) than they are when the feared bad news comes to pass.

An Evolutionary Perspective

One question raised by our findings is why waiting periods are more characterized by anxiety and bad news by other negative emotions. This distinction makes sense from an evolutionary perspective. According to current emotion theory, feeling is for doing; that is, emotions motivate action toward a goal (Frijda, 1988; Zeelenberg, Nelissen, Breugelmans, & Pieter,

2008). Research suggests that anxiety is particularly likely to arise in conditions of uncertainty, thus motivating action to resolve the uncertainty (Frijda et al., 1989; Loewenstein, 1994). In the types of uncertain waiting periods addressed in this article, people typically do not have ready access to the information that would resolve their uncertainty. Perhaps it is this conflict that makes waiting periods so distressing: Anxiety arises to motivate resolution of the uncertainty, but circumstances prevent satisfaction of that goal.

Similarly, anxiety during periods of uncertainty may motivate people to take action to respond effectively to good and bad news. In fact, one way people cope with this type of uncertainty is to put in place contingency plans that will mitigate the blow of bad news and aid in capitalizing on opportunities arising from good news (Sweeny & Cavanaugh, 2012; Sweeny et al., in press). However, while the waiting period persists, people must put these plans on hold until they know for certain what their fate will be. This action paralysis, paired with the inability to resolve the uncertainty itself, makes waiting a particularly challenging endeavor.

In contrast, other negative emotions may serve little purpose during an uncertain waiting period. Sadness motivates recovery from loss (Roseman, 1984; Roseman, Wiest, & Swartz, 1994), but during a waiting period no loss has yet occurred. Regret motivates a change in behavior to correct or avoid repeating the mistake (Roseman et al., 1994), but during a waiting period it remains unclear whether one has made a mistake. Anger motivates action to repair an injustice (Frijda et al., 1989; Roseman et al., 1994; Shaver, Schwartz, Kirson, & O'Connor, 1987), but during a waiting period no injustice has yet been suffered. However, once the waiting period ends in bad news, the motivating force of anger, regret, and sadness, as well as disappointment, shame, and other negative emotions, may serve a useful purpose depending on the nature of the news.

Unanswered Questions

Although the studies presented here balance each other in numerous ways (i.e., a retrospective study using a relatively large sample paired with a prospective study with relatively few people receiving bad news), two notable limitations prompt questions that can be addressed in future research. First, both studies relied on self-reported emotions to test our competing hypotheses. The nuanced pattern of results suggests that participants successfully differentiated between subtly varying emotion items (e.g., nervous and worried vs. upset and depressed), but self-reports can fall victim to response biases, memory inaccuracies, limitation of insight, and social desirability pressures (Paulhus & Vazire, 2009). A clear next direction for research investigating the distress associated with awaiting uncertain news is to introduce physiological and behavioral measures of distress, including sleep quality (Mezick et al., 2009), inflammation (Segerstrom & Miller, 2004), heart rate variability (Thayer, Friedman, &

Borkovec, 1996), and speech patterns (Robbins et al., 2011), among others. Even within the realm of self-reported emotions, experience sampling methods that capture relatively brief fluctuations in psychological states (Mehl & Conner, 2012) can further reduce the influence of memory biases that emerged in Study 1.

A second limitation that provides an opportunity for future research is the small sample of participants who received bad news in Study 2. The consistency across studies lends support to the reliability of our results, despite the small sample size, but subsequent studies should seek to replicate and extend our findings in prospective studies that address other types of waiting periods and outcomes, and with larger samples of unfortunate souls whose waiting culminates in bad news.

Conclusion

Our findings suggest that whether waiting is the hardest part depends on whether one prefers to be racked with anxiety or afflicted with other negative emotions such as anger, disappointment, depression, and regret. Although we did not find evidence for individual differences in the pattern of emotions between waiting periods and the period following bad news, people who are dispositionally more comfortable with uncertainty and who have a dispositionally more optimistic outlook do report lower levels of anxiety during consequential waiting periods (Sweeny & Andrews, 2014). In contrast, perhaps people who suffer from depression or low self-esteem would do better in conditions of uncertainty than in the face of definitive evidence of failure or loss.

Of course, our findings also suggest that the answer depends to some extent on the nature of the waiting period. The wait law graduates endure after taking the bar exam in California is quite lengthy (approximately 4 months) relative to many consequential waiting periods, such as the wait for medical test results, the outcome of a job interview, or a grade on a midterm exam. However, the bar exam waiting period is not unique; people typically wait several months for college and graduate admission decisions, the outcome of manuscript and grant submissions, and some hiring and promotion decisions. When a waiting period is long, these and other findings (e.g., Sweeny & Andrews, 2014) suggest that people are relatively successful at putting aside thoughts of uncertainty and thus mitigating their anxiety through much of the lengthy waiting period. However, as the moment of truth approaches, anxiety ramps up to a point that exceeds the anxiety of facing bad news. The torment of uncertain waiting periods and the blow of bad news are often unavoidable ordeals, but our findings provide a roadmap to guide people through these unique emotional journeys.

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Supplemental Material

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