

BEING THE BEST BEARER OF BAD TIDINGS:  
THE BAD NEWS RESPONSE MODEL

By

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BEING THE BEST BEARER OF BAD TIDINGS:  
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Giving bad news is an unpleasant task, and the medical literature provides numerous guidelines for giving bad news well. However, what people mean by “giving bad news well” is less clear. What should be the goal when communicating bad news? I suggest that the goal of news-givers should be to guide recipients toward a desired response. I propose a theoretical framework, the Bad News Response Model, for delivering bad news that draws from research in health and social psychology. The model is applicable to all forms of bad news and specifies that three characteristics of the news (controllability, likelihood, and severity) influence which response (watchful waiting, active change, or acceptance) will most often lead to the best quality of life for the recipient. Our studies examined three questions related to the Bad News Response Model:

- How does the type of bad news affect response choices? (Studies 1 and 2)
- How do people feel about responses to bad news? (Study 3)
- How do people view the effectiveness of responses to bad news? (Study 4)

Results suggest that response choices are predictable based on the controllability, likelihood, and severity of news outcomes, as suggested by the model (Studies 1 and 2). In addition, results revealed that people may also make response choices based on the beliefs they have about response options (Study 3) and on the perceived effectiveness of each response (Study 4).

## CHAPTER 1 INTRODUCTION

Giving bad news is an unpleasant task (Rosen & Tesser, 1970). Unfortunately, most people must transmit bad news at some point in life, and for many people (e.g., health care professionals, police officers, business managers) giving bad news is part of their job descriptions. Although giving bad news is uncomfortable for the giver, in many cases it is important that people give bad news “well.” A number of researchers in the medical field have provided guidelines to help those who must give bad news, but what people mean by “giving bad news well” is less clear. Some articles focus on the goal of providing hope to the recipient of the news, others focus on making the transmission easier for the news-giver, and others focus on increasing recipients’ satisfaction with the bad news transmission.

I propose that news-givers should focus on guiding recipients towards a desired response. For example, a physician giving news of cancer should give the news in such a way that the patient understands the best course of action and is likely to engage in the desired response. Furthermore, I propose the Bad News Response Model as a framework to aid the givers of bad news in determining the best response. The model is applicable to all forms of bad news and specifies that three characteristics of the outcomes of bad news (controllability, likelihood, and severity) predict that one of three responses (Watchful waiting, active change, or acceptance) will most often lead to the best quality of life for the recipient of the news (Figure 1-1).

This paper presents four studies that address the following questions related to the Bad News Response Model:

- **How does the type of bad news affect response choices?** Although other researchers have made broad suggestions as to how people should respond to bad news, no studies systematically examine how various situational factors influence how people give and respond to bad news. Studies 1 and 2 examined the relationship between aspects of bad news and response choices.

- **How do people feel about responses to bad news?** Study 3 examines why people might prefer certain responses over others, particularly addressing how people perceive various response options. We propose that although different responses may be best suited to different types of news, people are more likely to choose some responses than others, regardless of the circumstances. Study 3 examined the possibility that people may associate particular emotions with each response and anticipate making particular impressions by responding to bad news in each way.
- **How do people view the effectiveness of responses to bad news?** Study 4 examined yet another reason people may prefer some responses over others: some responses may be more effective than others for producing positive outcomes. Study 4 examined people's perceptions of how their responses to bad news affected their outcomes.

### **The Bad News Response Model**

As mentioned earlier, we propose that giving bad news well is defined as guiding news-recipients toward desired responses – responses that news-givers believe will result in the best long-term outcomes for recipients. The goal of guiding recipients toward the most effective responses prompts two questions. First, what are the different ways people can respond to bad news? Second, which responses should bad news-givers suggest? I developed the Bad News Response Model to answer these two questions. I propose that all responses to bad news fall into one of four categories: Watchful waiting, active change, acceptance, and non-responding. I further suggest that three factors of the outcomes of bad news (controllability, likelihood, and severity) indicate which response is likely to be effective (Figure 1-1).

The Bad News Response Model suggests that giving bad news well involves guiding news-recipients towards a desired response. Thus, the model is aimed both at the person who must give bad news and at the recipient of the news. Ultimately, the goal of the Bad News Response Model is to elicit a desired response from the recipient of bad news, but bad news-givers must evaluate the characteristics of the possible bad outcome that determine what the desired response should be. Bad news-givers can then tailor their communication of bad news to

encourage the desired response from the recipient. In addition, recipients of bad news can individually evaluate their situation and determine the most effective response to the news.

It is important to note that the Bad News Response Model does not attempt to precisely predict the response that will lead to the best quality of life. The model provides guidance for bad news-givers as to which responses may be best under different circumstances, but the model addresses a wide spectrum of bad news and must make generalizations based on situational factors. Bad news-givers and recipients should choose the response that is most likely to result in the best outcomes, given their assessment of the situational factors. In addition, the Bad News Response Model focuses on what lies in the future as a result of the bad news and not on the event that has passed. The model addresses responses to bad news and the outcomes of those responses on the future. Thus, the situational factors in the model do not pertain to the event that is being disclosed, but rather to the possible results of that event.

### **How Can People Respond to Bad News?**

The Bad News Response Model suggests that people can respond to bad news in one of four ways: watchful waiting, active change, acceptance, and non-responding. These response categories broadly apply to many kinds of bad news, although the specific nature of each response may differ across domains. For example, a patient who responds to a diagnosis of cancer with active change will engage in different specific behaviors than will a student who responds to a failed exam with active change. However, I suggest that these two responses will be similar in fundamental ways.

#### **Watchful waiting**

The first category represents a relatively passive form of responding. The medical literature has used the term “watchful waiting” as a specific contrast to aggressive treatment options (de Haes & Koedoot, 2003). Here, Watchful waiting indicates a more general “wait and

see” mentality regarding the bad news. The term “watchful” emphasizes that people engaged in this response are aware that they are facing a possible threat and are vigilant to changes in their situation. However, they maintain the status quo rather than take action. To illustrate, consider a man diagnosed with prostate cancer. The man is in his late 80s, a widower, and has few financial responsibilities. Although this man registers and accepts his diagnosis of cancer, he may choose not to get a second opinion or undergo treatment but instead go on with his life largely as if nothing had changed. He may make annual appointments to reassess his response, but otherwise his life remains as it was prior to his diagnosis.

Watchful waiting bears similarity to the general conceptualization of emotion-focused coping (Folkman & Lazarus, 1980), although the specific characterization of emotion-focused coping differs widely between studies (Carver, Scheier, & Weintraub, 1989). The similarity resides in the fact that both watchful waiting and emotion-focused coping focus on distraction and emotional regulation. Emotion-focused coping entails directing energy toward managing anxiety and other negative emotions arising from a stressful situation rather than engaging in active intervention. People in the watchful waiting category may engage in activities that distract them from the bad news. Behaviors that are designed to take one’s mind off of a threat may be beneficial if no actions will make a difference, or if action would be too costly or if dwelling on the threat is counterproductive (Lazarus, 1985).

However, watchful waiting differs from emotion-focused coping in a fundamental way. Emotion-focused coping is not mutually exclusive with other more active forms of responding, and in fact people may engage in emotion-focused coping in all four response categories of the Bad News Response Model. Emotion-focused coping complements all forms of responding by reducing the intensity of stressful emotions and allowing people to gain perspective on their

situation (Folkman & Lazarus, 1980). In contrast, watchful waiting involves a specific set of behaviors and emotions that represent one way of responding to bad news.

### **Active change**

Active change represents the most vigorous, engaged form of responding. Unlike the distraction or irrelevant activity characterizing watchful waiting, active change involves specific responses directed toward addressing the bad news. Active change aligns most clearly with traditional views of productive coping strategies, such as problem-focused coping, that directly address the negative situation. Problem-focused coping in part involves taking action to solve a problem or change a negative situation (Carver et al., 1989; Folkman & Lazarus, 1980; Folkman & Lazarus, 1985).

Active change includes three types of behavior: information-seeking, prevention, and treatment. Information-seeking serves two purposes. First, information-seeking provides recipients of bad news with the information they need to make decisions about how to respond. Second, information-seeking serves to connect recipients with others who have dealt with similar experiences and provides a network of support. Of note, other researchers have discussed these roles of information-seeking as part of problem-focused or active coping (Aldwin & Revenson, 1987; Lazarus, 1981; Lazarus & Launier, 1978).

The terms “prevention” and “treatment” have medical connotations, but in this context they broadly refer to behaviors directed toward preventing the situation from deteriorating (maintenance) and treating an undesirable situation that has emerged (improvement). To illustrate, consider a different man diagnosed with prostate cancer. This man is in his late 40s, has a wife and several children, and is the primary breadwinner for the family. Unlike the man in his 80s who chooses watchful waiting, the second man may be very willing to undergo chemotherapy and radiation in hopes that it will eradicate the cancer and allow him to live a full

and long life with his family. He should actively investigate his condition, perhaps seeking a second opinion or researching prostate cancer online or at the library, and undergo preventative and/or aggressive measures to prolong his life.

### **Acceptance**

Acceptance is the third and most complex form of responding. I view acceptance as action towards acceptance rather than passive resignation. People who respond to bad news with acceptance do not necessarily collapse in a heap, although this response may be unavoidable at first. Instead, they eventually direct their energy towards moving forward and addressing any consequences of the bad news. Acceptance involves looking beyond the negative outcomes to the possibility for hope that lies in the future. Even in the case of imminent death, people can find hope in living life to the fullest during their remaining time and dying with dignity (Dean, 2002). Acceptance is not a final, static state of resignation; instead, it involves an ongoing positive process of making the best of a bad situation.

Acceptance involves two types of behavior: information-sharing and accommodation. Information-sharing involves telling others about the negative event, although the extent of sharing with others may vary depending on the news. For example, certain types of bad news, such as testing HIV-positive, may stigmatize the individual, and people may want to limit their information-sharing to close friends and family. Furthermore, the effectiveness of information-sharing depends in part on the receptiveness of the listener (Harber & Pennebaker, 1992; Kelly & McKillop, 1996).

Information-sharing serves three purposes. First, information-sharing helps people accept the negative event by making the event part of their social reality. Second, information-sharing elicits social support from friends and family. Researchers have distinguished between seeking social support for emotional reasons vs. seeking social support for practical reasons (advice,

assistance, etc.; Carver et al., 1989). Acceptance focuses more on the emotional side of social support, rather than the more active, change-focused practical side. Third, information-sharing seems to serve an important function in an end unto itself (Pennebaker, 1988; Pennebaker, Colder, & Sharp, 1990; Pennebaker & O'Heeron, 1984; Pennebaker, Zech, & Rimé, 2001; Spera, Buhrfeind, & Pennebaker, 1994).

Accommodation involves making changes, not to affect the news-specific outcome, but rather to incorporate the negative event into one's life. When a negative outcome is uncontrollable, accommodation focuses people's energy on productive activity rather than futile efforts to change the outcome. For example, in most cases a woman who receives a rejection letter from her first choice graduate school should consider alternative schools or career plans rather than continuing to pursue admission at the school that rejected her. Accommodation often involves behavioral changes such as cutting back on strenuous activities in the case of a debilitating disease or putting away a lost loved one's personal items in the case of a death in the family. It often also involves cognitive changes that entail looking for reasons why the tragedy occurred (sense-making) and focusing on positive changes resulting from the tragedy (benefit-finding) (Davis, Nolen-Hoeksema, & Larson, 1998; Rabow & McPhee, 1999).

### **Non-responding**

The fourth category of responding captures a number of responses. Lubinsky (1994) distinguishes between four forms of non-responding: denial, disbelief, deferral, and dismissal. Although the four may appear similar, their sources differ. Denial is form of repression brought on as a defense mechanism. It involves vehement disagreement with any disliked information, even when evidence makes it clear that the information is correct, and is a relatively rare response to bad news. Disbelief is marked by confusion rather than rejection of bad news and may result from a desire to maintain hope for longer than is warranted. Deferral is marked by

avoidance of information about bad news as a result of inadequate resources to cope with the situation. People responding with deferral may accept the basis for bad news (e.g., results of a medical test) but reject or ignore the implications of those findings (i.e., the necessity of lifestyle changes or treatment). Finally, dismissal is marked by anger at the bad news-giver and denial of the news-giver's competence or legitimacy. These four reactions, though different in significant ways, all fall into the response category of non-responding.

Non-responding is distinct from watchful waiting. Non-responding is not an attempt to reduce anxiety about bad news while acknowledging it, but rather an attempt to pretend nothing has happened or "wish away" the bad news. Furthermore, non-responding may be most likely to occur in situations when acceptance is called for. Both watchful waiting and active change are somewhat attractive responses: one allows people to monitor the news and defer action until it is appropriate, and the other involves taking action to change things for the better (de Haes & Koedoot, 2003). Acceptance, in contrast, requires people to face the news head-on and does not offer the hope that things will turn out well. Although acceptance is necessary when a very bad outcome is unavoidable, people may prefer to embrace non-responding instead. Non-responding can feel good for a short time because it allows people to pretend that nothing has changed for the worse, but people eventually must face negative outcomes, such as the death of a loved one or a terminal illness, and cope with the consequences.

On the other hand, non-responding may be an acceptable response in the short-term. A number of researchers and physicians note that denial is a necessary response for some people under certain circumstances, and a number of theorists have argued that news-givers should not force recipients to face bad news before they are ready (Bor et al., 1993; Faulkner, 1998; Greer et al., 1979; Radziewicz & Baile, 2001). As indicated in Figure 1-1, the Bad News Response Model

indicates that non-responding is a legitimate but generally undesired response. News-givers may recognize that recipients are likely to engage in non-responding at first, but the Bad News Response Model suggests that the goal of the news-giver is to guide people towards the response that will lead to the best long-term outcomes. Although non-responding may be functional at first, people must eventually face bad news and choose a different response.

### **Which Responses Should News-Givers Suggest?**

The Bad News Model suggests that bad news-givers should guide recipients towards desired responses; the model does not attempt to predict with certainty the best responses to bad news. The model ultimately relies on news-givers to determine the response that will lead to the best outcomes for recipients and then guide the recipients towards that response. However, bad news varies on a number of predictable dimensions, and research suggests that certain dimensions may lead one response to be more effective than others, depending on the situation. Specifically, examination of the vast literature on risk perception, health behavior, and coping reveals three factors that repeatedly emerge as playing a particularly important role in people's responses to the possibility of bad news and other stressful situations: the controllability of negative outcomes, the likelihood of negative outcomes, and the severity of negative outcomes.

Table 1-1 presents a summary of the responses that may be most effective for each combination of high and low controllability, likelihood, and severity. These suggestions represent the responses that seem most likely to be effective under different circumstances, in light of existing research on both responses to bad news and situational factors of the news. In general, we suggest that people should engage in active change when two or three of the situational factors are high (high control, high likelihood, and/or high severity) and watchful waiting when two or three of the situational factors are low (low control, low likelihood, and/or low severity). The only exception occurs when likelihood and severity are high but control is

low. Under these circumstances, when severe negative outcomes are highly likely and little or nothing can be done to change the outcomes, we suggest that acceptance is the best response.

### **Controllability**

The first factor that may influence effective responding to bad news is the controllability of the negative outcomes that may result from bad news. The ability to control the outcomes of bad news varies greatly across different situations. For example, a student who discovers s/he is failing a course several weeks before the semester's end may be able to improve his or her grade by completing extra credit assignments, getting help from the professor, or studying long and hard for the final exam. However, as the semester draws to a close, control over the course grade diminishes, and once final course grades are turned in, there may be no remaining avenues to affect the outcome of the course.

Controllability plays a significant role in predicting people's responses to threat (Aspinwall & Taylor, 1997; Becker, 1974; Floyd, Prentice-Dunn, & Rogers, 2000; Janz & Becker, 1984; Kirscht, 1988; Maddux & Rogers, 1983; Rogers, 1983). Research on coping shows that the controllability of a stressful situation affects the strategies people choose to adopt when coping with stressful situations (Folkman & Lazarus, 1980). When people perceive event controllability to be high, they tend to adopt active coping strategies; when people perceive event controllability to be low, they tend to adopt strategies directed towards managing their emotions (Aldwin, 1991; Carver, Scheier, & Weintraub, 1989). Other studies find that the effectiveness of various coping strategies depends in large part on the controllability of the stressful situation, with active strategies proving most beneficial when the situation is controllable (Aldwin & Park, 2004; Park, 2001; Park, Armeli, & Tennen, 2004).

## **Likelihood**

The second factor in determining the appropriate response to bad news is the likelihood of possible negative outcomes. Bad news does not always indicate a guaranteed negative outcome. For example, a boss may have to inform employees that the company must downsize without knowing who will lose their jobs. Physicians frequently give bad news that indicates the possibility of illness or injury based on initial evidence without the ability to diagnose a problem with complete certainty.

For the purposes of the model, “likelihood” refers to how likely negative outcomes are to occur *if* the news recipient does not act to prevent them. For example, the likelihood that a suspicious lump indicates cancer should be evaluated irrespective of treatment options or the patient’s intentions to seek treatment. As such, likelihood is distinct from controllability. People may reduce the likelihood of negative outcomes by their response to bad news, but the initial evaluation of likelihood is separate from controllability.

Likelihood influences responding in two ways. First, and most intuitive, people consider the likelihood of a negative outcome in weighing the costs and benefits of an effortful and costly response. (Ajzen & Fishbein, 1980; Becker, 1974; Edwards, 1954; Rogers, 1983). Second, and less intuitive, the initial perception of likelihood of a negative outcome influences later affective reactions should the worst actually occur. Negative outcomes are unpleasant in their own right, but they are particularly unpleasant when they are unexpected (van Dijk & van der Pligt, 1997; Shepperd & McNulty, 2002). People who respond as if a negative outcome is unlikely to occur may have a particularly unpleasant experience if the outcome does occur, more so than if they had expected the worst. This finding suggests that people may benefit not only in terms of literal preparation, but also in terms of affective preparation by engaging in more active responses if the negative outcome is likely to occur.

## **Severity**

The third factor in determining the appropriate response to bad news is the severity of the possible negative event. Bad news varies in terms of how important or consequential the possible negative outcome is. Clearly, a woman who learns that she is at risk for heart burn is hearing very different news than a woman who learns that she is at risk for a heart attack, and both the news-giver and the recipient of the news should proceed differently in these two situations. Of course, even news that has relatively non-severe consequences can be bad. The woman who learns she has a high risk for heart burn may have to make significant dietary and other lifestyle changes. However, her response will differ in many ways from the woman learning of her risk for heart attack.

People naturally account for the severity of potential negative outcomes when they anticipate and respond to bad news. The severity of potential health outcomes predict whether people will engage in preventative health behavior (Becker, 1974; Rogers, 1983), and research on coping finds that people choose active coping strategies when they judge the event to be highly stressful or important (Anderson, 1977; Parkes, 1986; Terry, 1991). In addition, research on bracing for bad news finds that people only embrace a negative outlook for outcomes or consequences that are important (Shepperd, Findley-Klein, Kwavnick, Walker, & Perez, 2000). If possible negative outcomes are inconsequential or non-severe, news-recipients gain more from choosing relatively passive responses (watchful waiting) than from engaging in physically or emotionally active responses (active change or acceptance).

## **Communicating Desired Responses**

Although the goal of the Bad News Response Model is not to elucidate specific details of the communication of bad news, the model suggests that the bad news-giver direct the recipient towards desired responses and offers insights into which responses may be most effective in

different situations. The direction on behalf of the bad news-giver can encourage people to respond in the most effective way even in the face of problems with comprehension, arousal, education, etc.

When preparing to give bad news, the communicator can evaluate the news situation in terms of the likelihood, severity, and controllability of negative outcomes and direct the communication towards encouraging the recipient to engage in the response that is most likely to be effective. The details of such direction will differ greatly depending on the specific topic and nature of the bad news, but these broad generalizations should be effective across a variety of domains and situations. The Bad News Response Model does not recommend that bad news-givers manipulate the recipient into responding in a particular way using whatever means necessary. Rather, news-givers should present all possible responses and the costs and benefits of each, and then give their opinion regarding the best possible response (Epstein, Alper, & Quill, 2004). Furthermore, recipients of bad news can use the model to evaluate their news and choose the best response when the news-giver is unable to guide them appropriately.

### **Summary and Implications**

The medical literature suggests a number of goals to help people give bad news well, but we propose that giving bad news well should be defined as guiding news-recipients towards desired responses. The Bad News Response Model suggests that news-givers can look to situational factors (controllability, likelihood, and severity) to determine which of three responses (watchful waiting, active change, and acceptance) is most likely to be effective.

The Bad News Response Model can serve several important purposes. First, the model can assist bad news-givers who otherwise must rely on their own limited experience or personal motivations when giving bad news. The Bad News Response Model provides a goal for bad

news transmission that can reduce the impact of news-givers' concerns on their news-giving strategies by guiding them towards recipient-focused strategies.

Second, bad news-givers can use the model to evaluate their transmission of news after the fact. If news-givers observe recipients making an undesired response, they can examine their transmission strategy in light of the model. The news-giver may have incorrectly assessed one or more of the situational factors, or the suggestion of the best response may have been ineffective. For example, physicians may be unaware of their patients' financial circumstances, and this lack of information could result in misjudgment of the severity and/or controllability of patients' medical conditions. Physicians might assume that expensive treatments are feasible when in fact the patient does not have insurance or the means to pay for the treatments, making the prognosis relatively uncontrollable.

Third, bad news recipients can use the model to evaluate their responses to bad news, apart from the giver. After receiving bad news, recipients can use the model to determine the most appropriate response by evaluating the likelihood, severity, and controllability of the possible outcomes. For example, a woman who learns of upcoming layoffs at work can consider the likelihood that she will lose her job, how bad the consequences of a job loss would be, and if she has control over whether she is laid off. Having evaluated the situation, she may have a better sense of the most effective response. This process may help people to override responses based solely on anxiety or fear. In addition, recipients who find that their response to some news is ineffective can reexamine the situational factors involved and possibly adjust their responses accordingly. If the woman facing a possible job loss responds with active change and then finds that she is making no progress towards keeping her job, she may decide to shift towards acceptance by checking the want ads and telling her family about the layoffs.

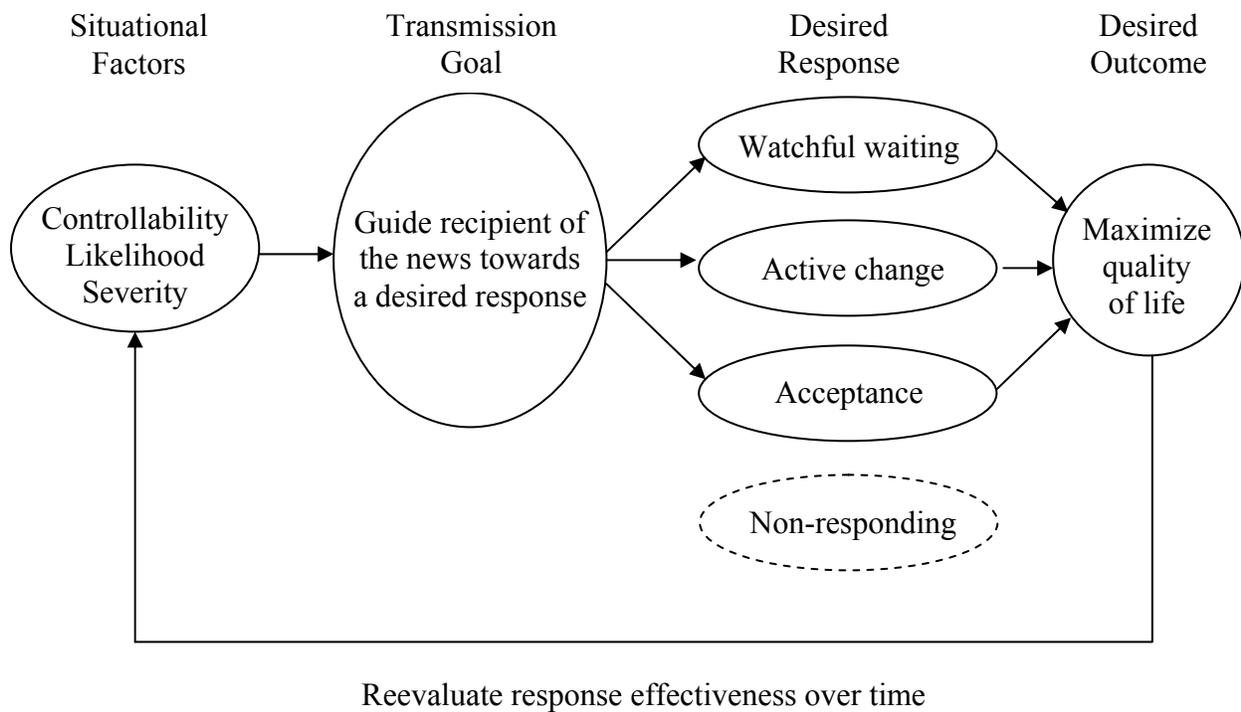


Figure 1-1. Bad news response model

Table 1-1. Impact of situational factors on appropriate responding

	Low likelihood	High likelihood
Low severity		
Low control	Watchful waiting	Watchful waiting
High control	Watchful waiting	Active change
High severity		
Low control	Watchful waiting	Acceptance
High control	Active change	Active change

## CHAPTER 2 REVIEW OF THE LITERATURE

God grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom to know the difference (Serenity Prayer, source uncertain).

In the book *The Anatomy of Hope* (Groopman, 2004), an oncologist recounts the stories of two patients whose prognoses permitted little hope. The first patient's physician repeatedly misled her into thinking that a cure was likely rather than providing more accurate information about her inevitable fate. When the cancer was about to take her life, the patient expressed dismay at the false hope promoted by her trusted physician. In contrast, the second patient's physician conveyed the gravity of her situation at each step of the cancer's progression. This patient lived her last moments to the fullest and died with little regret or dismay. Although the two diagnoses were equally dire, the patients' experiences were decidedly different. Such stories emphasize the role of those charged with giving bad news in providing the recipients with wisdom to know when their situation can be changed and when the situation simply calls for serene acceptance. These anecdotes suggest the need for a systematic model of giving and responding to bad news.

Giving bad news is an unpleasant task (Rosen & Tesser, 1970). Unfortunately, most people must transmit bad news at some point in their lives. They may have to break up with a lover or tell a student about a failing grade. Moreover, many professions entail bad news transmission as part of the job description. Health care employees must convey diagnoses, military personnel must deliver news of wartime casualties, and managers must occasionally hand out pink slips. Although giving bad news is uncomfortable for the giver, the opening medical examples point to the importance of giving bad news "well." A number of researchers in the medical field have provided guidelines to help those who must give bad news, but what people mean by "giving bad news well" is less clear. Evaluating the success of a bad news

transmission requires that news-givers have a goal in mind when giving bad news and compare the outcomes of their transmission to that goal. Some researchers focus on the goal of providing hope to the recipient of the news, others focus on making the transmission easier and less painful for the news-giver, and others focus on increasing recipients' satisfaction with the bad news transmission. What should be the primary goal when communicating bad news?

The purpose of this review is to investigate how to give bad news well. Central to the notion of “giving bad news well” is having a clear understanding of the goal of bad news transmission. We critically evaluate six goals suggested by prior research and propose a broader, more comprehensive goal for giving bad news. We then offer a theoretical framework, the Bad News Response Model, which draws from research in health and social psychology and is designed to maximize positive long-term outcomes for news-recipients. The model specifies four possible responses to bad news and three situational factors that influence the response choice. Finally, we discuss future directions for research.

The goals of this review are, by necessity, limited in scope. We do not address specific aspects of bad news transmission, such as tone of voice, setting, eye contact and amount of information. Although many studies have addressed these issues (e.g., Ptacek & Eberhardt, 1996; Loge, Kaasa, & Hytten, 1997; Holland, 1989; Ptacek & Ptacek, 2001), and these aspects of the communication can affect how people respond to bad news, they fall outside of the scope of this article. Furthermore, we do not address the process by which people respond to bad news. The literature on coping focuses on how people appraise and respond to bad news (Snyder, 1999 for a review). We focus on the goals people have when giving bad news. Finally, we do not attempt to predict with certainty the best responses to bad news. The Bad News Response Model predicts

how situational factors might affect responding, but the model does not stipulate how people “should” respond.

### **Giving Bad News Well**

A review of the medical literature reveals a rich yet disorganized picture of how to give bad news well. Some consensus exists as to the stages of the bad news transmission process and the important aspects of the situation and the message itself (Fallowfield & Jenkins, 2004; Faulkner, 1998; Ptacek & Eberhardt, 1996), but little consensus exists about the goals these suggestions are designed to achieve, and often no goal is mentioned at all. The medical literature suggests six possible goals of a bad news communication: 1) decreasing news-givers’ discomfort, 2) providing sufficient information to recipients, 3) promoting recipients’ satisfaction with the transmission, 4) improving news-recipients’ memory for and understanding of the news, 5) reducing recipients’ distress in response to the news, and 6) promoting hope. We briefly review the evidence supporting each of these goals and then offer a new, alternative goal that incorporates the positive aspects of the other six goals. Although we treat these goals as distinct for the purpose of this review, it is noteworthy that a news-giver may simultaneously pursue multiple goals during a bad news communication.

#### **Decreasing the News-giver’s Discomfort**

One goal of bad news-givers is to decrease the discomfort they feel about giving bad news. Giving bad news is often extremely unpleasant for the news-giver. Physicians and nurses report discomfort with giving bad news due to lack of training, fear of patients’ emotional reactions, fear of their own emotional reactions, fear of being blamed for the bad news, fear of the patients’ suffering and dying, personal fear of illness and death, and uncertainty associated with not knowing all the answers (Ambuel & Mazzone, 2001; Buckman, 1984). Reducing news-givers’ discomfort is an important goal because discomfort with giving bad news can produce

negative consequences for both news-givers and recipients. One study found that burnout and poor mental health are common among physicians who must frequently give bad news, and that physicians who felt insufficiently trained in giving bad news experienced the greatest distress (Ramirez et al., 1995). Furthermore, research shows that physicians who are more comfortable and confident with giving bad news are perceived as more trustworthy by patients, and patients who trust their physicians are more likely to comply with treatment recommendations (Holland, 1989).

With the importance of this goal in mind, several training programs for health care professionals aim to decrease discomfort and increase confidence and skills with giving bad news (Baile et al., 1999; Parathian & Taylor, 1993; Unger, Alperin, Amiel, Beharier, & Reis, 2001). In addition to formal training programs, a number of professionals suggest strategies to make the job of giving bad news easier (e.g., Clark & LaBeff, 1982; Eggly et al., 1997; McClenahan & Lofland, 1976; Radziewicz & Baile, 2001). For example, one paper describes five strategies to smooth the process of giving news of death and suggests that the best method of communication depends on several situational factors (the type of death, the age at death, the place of death, and the occupation and experience of the news-giver) (Clark & LaBeff, 1982).

Helping people to feel comfortable giving bad news is clearly important. However, the goal of decreasing news-givers' discomfort is problematic for several reasons. First, making news-givers as comfortable as possible may mean that they portray the news in a more positive light than is warranted, omitting negative information in an attempt to avoid eliciting negative responses from the receiver. Second, this goal relegates to secondary importance the needs of the news-recipient. An appropriate goal for bad news transmission should account for the needs of both the news-giver and news recipient.

## **Providing Sufficient Information**

A second goal for giving bad news described in the medical literature is to provide news-recipients with sufficient information about the news. Researchers who address the ethics of giving medical bad news primarily focus on how much information people should receive about diagnoses and prognoses. In medical settings, ethical treatment requires that patients receive clear, honest information because it allows the patients to accept the situation and make plans for the future (Fallowfield, Jenkins, & Beveridge, 2002; Girgis, Sanson-Fisher, & Schofield, 1999; Goldie, 1982; Ward, 1992). The information provided should also be consistent among patients and their family members to avoid distrust and suspicion (Doyle & O'Connell, 1996). Furthermore, cultural, family, and personal preferences affect the amount of information patients wish to receive, and it is the physician's responsibility to consider these preferences (Sabbioni, 1997).

However, personal comfort with disclosing bad news often determines what and how much information many physicians disclose. Giving and receiving bad news are both unpleasant experiences, and physicians and patients may be eager to avoid the experience at all costs. In one study, 40% of physicians admitted to giving patients inaccurate life expectancy estimates, mostly in an optimistic direction (Lamont & Chisakis, 2001). Although some people may not be prepared to hear the full truth about an undesirable diagnosis (Bor et al., 1993; Geer, Morris, & Perringale, 1979; Goldie, 1982; Lubinsky, 1994; Michaels, 1983; Radziewicz & Baile, 2001), evidence suggests that patients with serious conditions often suspect that they will hear bad news (Fallowfield, Jenkins, & Beveridge, 2002). Knowing how much information to disclose is difficult, leading some to recommend that physicians repeatedly ask patients how much they want to know, thus allowing the patients to determine the level of information conveyed (Freedman, 1993).

Providing sufficient information is clearly a necessary goal in medical interactions, including bad news communication. Patients who do not receive sufficient or accurate information are unable to make informed decisions as to how they want to respond to their diagnosis. However, this goal is insufficient for guiding bad news-givers. The ethical guideline of providing clear, complete information to patients is a means to an end, not an end in itself; it is only a starting point for guiding bad news transmission.

### **Promoting Recipient Satisfaction**

A third goal for bad news-givers is to give the news in a way that satisfies recipients. A predominant belief in the medical literature is that patients should be satisfied with the way they receive bad news and that they should have their needs met in the communication experience. One review of the literature concluded that, when giving bad news, the patients' desires and needs are far more important than the physicians' (Ptacek & Eberhardt, 1996). Many studies reinforce this idea by asking patients how they want to hear bad news and then using their responses to design bad news communication strategies (e.g., Ambuel & Mazzone, 2001; Back & Curtis, 2002; Butow et al., 1996; Girgis et al., 1999; Hagerty et al., 2005; Randall & Wearn, 2005; Salander, 2002). Other studies measure patients' satisfaction with their experience receiving bad news to assess the competence of bad news-givers (e.g., Damian & Tattersall, 1991; Derdarian, 1989; Dunn et al., 1993; Ellis & Tattersall, 1999; Gillotti, Thompson, & McNeilis, 2002; Hurwitz, Duncan, & Wolfe, 2004; Mast, Kindlimann, & Langewitz, 2005; Ptacek & Ptacek, 2001; Reynolds, Sanson-Fisher, Poole, Harker, & Byrne, 1981). Such studies typically find that the needs patients express are in line with established guidelines for giving bad news (Girgis et al., 1999; Ptacek & Ptacek, 2001; Randall & Wearn, 2005).

However, some differences arise when comparing patients' needs and the ways physicians typically give bad news. For example, patients rate information about treatment and

future outcomes as more important to them than diagnostic information (Back & Curtis, 2002; Butow et al., 1996; Salander, 2002). Patients also view the experience of receiving bad news as an ongoing process throughout their treatment, not as a one-time conversation with their physician (Randall & Wearn, 2005). Finally, a number of studies find that small talk and general expressions of support, not in-depth conversation about diagnoses or prognoses, are most helpful to patients receiving bad news (Dean, 2002; Gillotti et al., 2002).

Increasing patient satisfaction with bad news communication is a worthy goal for bad news-givers. However, asking patients how they want to hear bad news assumes that patients can objectively and accurately evaluate their own emotions and the reasons for them. People are generally poor at accurate introspection and thus poor at understanding the reasons behind their emotional and cognitive responses (Nisbett & Wilson, 1977). For example, patients reporting that their physicians are unskilled at presenting bad news may be unaware of the effects that their location, mood, and relationship with the physician have on their feelings about the news transmission. In this light, it seems that patients' opinions, although important and valid, may be a somewhat inaccurate source of suggestions for how to give bad news. Finally, satisfaction with a bad news communication is undoubtedly influenced to some extent by the content of the communication. Other things being equal, the worse the news, the less satisfied people will be with the communication. Although the medical literature does not speak to this point, it seems likely that a focus on promoting recipient satisfaction with the communication creates the possibility that news-givers will alter or water down the bad news.

### **Improving Memory and Understanding**

A fourth goal for giving bad news is to ensure that recipients understand and remember information about the bad news and its implications. People receiving bad news often find it difficult to understand and remember the information they receive. For example, a patient may

hear the word “cancer” during a diagnostic conversation and fail to process any information thereafter. Presenting information in a way that patients can understand is crucial in bad news communication because it can improve patients’ outcomes, avoid confusion and distress, and increase patients’ satisfaction with the communication (Baile et al., 2000; Ellis & Tattersall, 1999; Fallowfield & Jenkins, 2004; Loge et al., 1997; Quill, 1991).

A number of researchers suggest that when bad news is complicated or difficult to understand, bad news-givers should be careful to clarify, check for understanding, and summarize the information presented (Dias, Chabner, Lynch, & Penson, 2003). Furthermore, a number of communication skills of the news-giver, such as self-confidence, warmth, and honesty, can help the patient to process bad news (Myers, 1983). Finally, providing recall aids (e.g., informational handouts, audiotapes of the bad news communication) often improves patients’ memory and understanding, and may reduce patient anxiety (Back & Curtis, 2002; Hogbin, Jenkins, & Parkin, 1992; McHugh et al., 1995; Reynolds et al., 1981).

Improving news-recipients’ memory and understanding of the information they receive is clearly an important goal for bad news-givers. People who fail to comprehend the bad news they receive may be unable to cope with the news and may make unwise decisions in response. On the other hand, news-recipients need more than memory and understanding of the facts to cope and respond effectively. For example, even if a breast cancer patient hears, understands, and remembers the details of her diagnosis, she is unlikely to know much about the implications of the diagnosis or what course of action she should take. As such, improving memory and understanding represents an important intermediate goal for bad news communication, but is insufficient as an overarching principle for guiding news-givers.

## **Reducing Recipients' Distress**

A fifth goal for bad news-givers is to minimize recipients' distress in response to the news. People receiving unexpected or traumatic news may be emotionally paralyzed by the experience, and poor communication by news-givers can exacerbate recipients' distress (Lerman et al., 1993). Many physicians and researchers recognize the importance of reducing emotional trauma following a bad news communication (Baile & Aaron, 2005; Boyd, 2001; Brewin, 1991; Fallowfield & Jenkins, 2004; Ptacek & Eberhardt, 1996; Quill, 1991; Rabow & McPhee, 1999; Shields, 1998). Emotional distress may particularly involve fear of death when bad news is health related (Penson et al., 2005), but all types of bad news are capable of producing distress.

Researchers have noted that news-recipients' distress is most severe during and just after a bad news communication, whereas the news-giver's distress is most severe just before and during (Ptacek & Eberhardt, 1996). A consequence of this incongruity is that news-givers may be insensitive to recipients' distress following the communication of bad news. In response to this problem, the medical literature provides a number of suggestions for increasing sensitivity to patients' distress. For example, physicians should prepare in advance for the communication (Holland, 1989; Michaels, 1983; Shields, 1998), demonstrate empathy, sensitivity, and compassion (Boyd, 2001; Brewin, 1991; Fogarty et al., 1999; Mast et al., 2005; Penson et al., 2005; Rabow & McPhee, 1999), allow patients to express their emotions (Boyd, 2001; Penson et al., 2005; Rabow & McPhee, 1999), take sufficient time in the bad news communication (Boyd, 2001; Penson et al., 2005), and help patients put the situation in perspective (Lalos, 1999). In addition, physicians shouldn't simply reassure the patient and move on; instead, they should acknowledge patients' distress, determine the sources of distress, and check the patients' needs before moving on to reassurance (Maguire, 1998).

Although news-givers are in part responsible for managing recipients' distress, this goal is not an end in itself and thus is an insufficient goal for bad news communication. Much like the goal of improving memory and understanding, the goal of reducing recipients' distress is an intermediate goal that makes it possible for recipients to move on to the greater goal of coping and responding to the bad news. Even if the breast cancer patient described earlier understands and remembers her diagnosis and also maintains a manageable level of distress after hearing the news, she may nevertheless lack the resources to move forward and respond. Finally, as with promoting recipient satisfaction, focusing on reducing distress may inadvertently influence the content of the communication. The worse the news, the more likely the recipients will be distressed by the communication. Thus, similar to the goal of promoting recipient satisfaction, attending to recipient distress may lead news-givers to alter or water down the bad news.

### **Promoting Hope**

A sixth goal for giving bad news is to promote hope or optimism in recipients, an idea that has received considerable attention in the medical literature (Bor et al., 1993; Bruhn, 1984; Charlton, 1992; Clayton, Butow, Arnold, & Tattersall, 2005; Groopman, 2004; Yates, 1993). Hope can be defined as a combination of desires for the future, values and goals about future outcomes, and action to bring about hoped for outcomes (Simpson, 2004). The goal of promoting hope is supported by the finding that hope may be a powerful force in predicting positive health outcomes, such as better adjustment to breast cancer (Taylor, Lichtman, & Wood, 1984), lower incidence of hypertension (Richman et al., 2005), better immune functioning (Segerstrom, Taylor, Kemeny, & Fahey, 1998), and faster recovery from a number of illnesses (Groopman, 2004).

A number of factors increase the likelihood of promoting hope in a bad news communication. For example, fostering a good relationship between patient and physician

(Bruhn, 1984; Salander, 2002), focusing on the potential for successful treatment (Bruhn, 1984; Clayton et al., 2005; Peteet, Abrams, Ross, & Stearns, 1991; Sardell & Trierweiler, 1993), and discussing the effects of the news on day-to-day living (Clayton et al., 2005) promote hope in patients receiving bad news.

Promoting hope as a goal for news-givers is somewhat problematic. Although hope may lead to positive outcomes in many cases, it must be balanced with honesty and realistic goals (Clayton et al., 2005; Groopman, 2004; Links & Kramer, 1994). This balance is particularly important when there is a possibility that hope may be shattered at some point down the road, as is often the case during the course of an illness. Shattered hopes can lead to disappointment and distrust of those who initially communicated hopefulness (Peteet et al., 1991; Van Dijk, Zeelenberg, & van der Pligt, 1999). On the other hand, hope can always be directed toward the possibility of improving outcomes down the road or having a productive life in spite of the bad news (Links & Kramer, 1994; Peteet et al., 1991; Yates, 1993), making hope a worthwhile goal for bad news-givers.

However, providing hope is not the same as providing news-recipients with the information they need to cope and respond to negative life events. The breast cancer patient gains strength and other positive outcomes as a result of her physician promoting hopefulness, but she needs more than hope to know which course of treatment to undergo. Hope may be a necessary component of coping with bad news, but news-givers must also help recipients engage in responses that will lead to the best long-term outcomes. Thus, promoting hope, along with improving memory and understanding and reducing distress, is an intermediate step in the greater goal of promoting effective responses to bad news.

## **Guiding Recipients Toward Desired Responses**

The six goals for bad news-givers just described (reducing news-givers discomfort, providing sufficient information, promoting recipients' satisfaction, improving memory and understanding, reducing distress, and promoting hope) suggest different interpretations of what it means to give bad news well. However, these goals are means to an end, not ends in themselves. The six goals described are intermediate goals that may ultimately lead to positive outcomes for the recipient of the news but do not specify how these positive outcomes can be achieved. Furthermore, these goals were developed for use in medical settings and may be difficult to apply to other types of bad news.

We suggest an alternative, broader goal for news-givers that incorporates aspects of each of the other goals. We propose that giving bad news well is defined as guiding news-recipients towards desired responses – responses that news-givers believe will result in the best long-term outcomes for recipients. Although we later provide suggestions as to which responses may be most effective, a desired response refers to the response deemed best by the news-giver.

To illustrate, imagine a physician giving news of cancer. The physician must convey the diagnosis honestly and clearly, but ultimately the physician must encourage the patient to seek the most effective course of treatment or perhaps choose no treatment, depending on the situation. With this goal in mind, news-givers can provide sufficient information and feel confident in their ability to give bad news well. Furthermore, numerous studies suggest that a focus on options for the future increases satisfaction with the communication, reduces distress, and promotes hope (Back & Curtis, 2002; Clayton et al., 2005; Peteet et al., 1991; Salander, 2002; Schofield et al., 2003). Finally, guiding news-recipients towards the most effective course of action (or inaction) maximizes their chances of experiencing positive long-term outcomes and quality of life, although the definition of the best outcomes varies greatly across situations. In

general, successful bad news transmission should prompt the recipient to respond in a way that maximizes quality of life and minimizes negative life outcomes. These outcomes include financial stability, physical, mental, and emotional health, and general well-being.

A handful of studies have examined positive long-term outcomes associated with communicating bad news and reveal that a variety of factors can directly influence outcomes such as psychological adjustment to an illness and psychological and emotional health. Findings suggest that strategies such as expressing empathy, allowing sufficient time for the bad news communication, and engaging the patient in treatment decisions, among others, predict better adjustment to breast cancer (Butow et al., 1996; Roberts, Cox, Reintgen, Baile, & Gibertini, 1994). Another study of breast cancer patients found that perceptions of caring and emotional supportiveness during the bad news communication predicted fewer cancer-related PTSD symptoms, less depression, and less general distress (Mager & Andrykowski, 2002). In addition, physicians' personal manner, communication skills, technical skills, and overall care predicted emotional health in breast cancer patients (Silliman et al., 1998).

Yet the studies just described do not indicate how various aspects of the bad news communication lead to positive or negative health outcomes. For example, how does emotional supportiveness by physicians lead to better emotional outcomes in patients? It may be the case that supportiveness leads to better treatment decisions, or any number of positive behaviors, which then lead to better long-term outcomes. The researchers typically offer no explanation of how factors such as perceptions of caring, emotional supportiveness, the physician's personal manner, communication skills or technical skills produce beneficial outcomes. Moreover, because these studies are largely correlational and rely almost entirely on patients' retrospective reports about how they received their diagnoses, the specific mechanisms are difficult to pin

down. Thus, we propose that guiding recipients towards desired responses represents the mechanism by which news-givers can promote positive long-term outcomes.

The medical literature supports the goal of guiding patients toward the best course of action during bad news communications. A number of physicians note that patients want to focus on the future, towards treatment and long-term outcomes, rather than just on the diagnosis (Back & Curtis, 2002; Baile and Aaron, 2005; Baile et al., 2000; Bor et al., 1993). Other physicians describe methods for giving bad news with the stated purpose of improving coping and decision-making (Boyd, 2001; Clayton et al., 2005; Epstein, Alper, & Quill, 2004; Fogarty et al., 1999; Lalos, 1999). Finally, several physicians discuss various possible responses to bad news and the outcomes of engaging in different responses (De Haes & Koedoot, 2003; Greer et al., 1979).

The goal of guiding recipients toward the most effective responses prompts two questions. First, what are the different ways people can respond to bad news? Second, which responses should bad news-givers suggest? We developed the Bad News Response Model to answer these two questions. We propose that all responses to bad news fall into one of four categories: watchful waiting, active change, acceptance, and non-responding. We further suggest that three factors of the outcomes of bad news (controllability, likelihood, and severity) indicate which response is likely to be effective (Figure 1-1).

### **The Bad News Response Model**

The Bad News Response Model suggests that giving bad news well involves guiding news-recipients towards a desired response. Thus, the model is aimed both at the person who must give bad news and at the recipient of the news. Ultimately, the goal of the Bad News Response Model is to elicit a desired response from the recipient of bad news, but bad news-givers must evaluate the characteristics of the possible bad outcome that determine what the desired response should be. Bad news-givers can then tailor their communication of bad news to

encourage the desired response from the recipient. In addition, recipients of bad news can individually evaluate their situation and determine the most effective response to the news. It is important to note that the Bad News Response Model does not attempt to precisely predict the response that will lead to the best quality of life. The model provides guidance for bad news-givers as to which responses may be best under different circumstances, but the model addresses a wide spectrum of bad news and must make generalizations based on situational factors. Bad news-givers and recipients should choose the response that is most likely to result in the best outcomes, given their assessment of the situational factors.

In addition, the Bad News Response Model focuses on what lies in the future as a result of the bad news and not on the event that has passed. The model addresses responses to bad news and the outcomes of those responses on the future. Thus, the situational factors in the model do not pertain to the event that is being disclosed, but rather to the possible results of that event. These results include both direct outcomes of the bad news and indirect effects of the news on other parts of life. For example, a professor who must tell a student about a failing exam grade (the past event) should consider the impact of that exam on the student's final grade in the course (a direct future outcome) and on the student's overall academic status (an indirect future outcome) when determining the best strategy for bad news transmission.

### **How Can People Respond to Bad News?**

The Bad News Response Model suggests that people can respond to bad news in one of four ways: a) watchful waiting, b) active change, c) acceptance, and d) non-responding. These response categories broadly apply to many kinds of bad news, although the specific nature of each response may differ across domains. For example, a patient who responds to a diagnosis of cancer with active change will engage in different specific behaviors than will a student who

responds to a failed exam with active change. However, we suggest that these two responses will be similar in fundamental ways.

As evident in Table 2-1, we anticipate that the four response categories will each elicit a unique pattern of characteristics in terms of anxiety, affect and activity level. Anxiety level refers to feelings of worry, concern, or fear. Affect refers to general positive or negative moods and emotions, such as happiness or sadness. Activity level refers to the extent to which energy is directed towards changing the outcomes of the bad news. Of note, the characteristics described may be present with all four responses to varying degrees, but we suggest that they are more likely to occur with their respective response.

The characteristics in Table 2-1 may be causes, consequences, or concomitants of each response choice. For example, people who experience high levels of anxiety in response to bad news may be more likely to see the need to take action, in which case anxiety serves as a cause. However, people may also deliberately choose to respond to bad news in a certain way, which can then lead to a variety of consequential thoughts and feelings. Finally, certain kinds of bad news may prompt both a particular response and particular thoughts and feelings independently. Within the present model, we simply discuss the dimensions in Table 2-1 as characterizing a given response category.

### **Watchful waiting**

The first category represents a relatively passive form of responding. The medical literature has employed the term “watchful waiting” as a specific contrast to aggressive treatment options (e.g., de Haes & Koedoot, 2003). Here, watchful waiting indicates a more general “wait and see” mentality regarding the bad news. The term “watchful” emphasizes that people engaged in this response are aware that they are facing a possible threat and are vigilant to changes in their situation. However, they maintain the status quo rather than take action. To illustrate,

consider a man diagnosed with prostate cancer. The man is in his late 80s, a widower, and has few financial responsibilities. Although this man registers and accepts his diagnosis of cancer, he may choose not to get a second opinion or undergo treatment but instead go on with his life largely as if nothing had changed. He may make annual appointments to reassess his response, but otherwise his life remains as it was prior to his diagnosis.

Watchful waiting bears similarity to the general conceptualization of emotion-focused coping (Folkman & Lazarus, 1980), although the specific characterization of emotion-focused coping differs widely between studies (Carver, Scheier, & Weintraub, 1989). The similarity resides in the fact that both watchful waiting and emotion-focused coping focus on distraction and emotional regulation. Emotion-focused coping entails directing energy toward managing anxiety and other negative emotions arising from a stressful situation rather than engaging in active intervention. People in the watchful waiting category may engage in activities that distract them from the bad news. Behaviors that are designed to take one's mind off of a threat may be beneficial if no actions will make a difference, or if action would be too costly or if dwelling on the threat is counterproductive (Lazarus, 1985).

However, watchful waiting differs from emotion-focused coping in a fundamental way. Emotion-focused coping is not mutually exclusive with other more active forms of responding, and in fact people may engage in emotion-focused coping in all four response categories of the Bad News Response Model. Emotion-focused coping complements all forms of responding by reducing the intensity of stressful emotions and allowing people to gain perspective on their situation (Folkman & Lazarus, 1980). In contrast, watchful waiting involves a specific set of behaviors and emotions that represent one way of responding to bad news.

It seems likely that watchful waiting involves low anxiety, high general positive affect, and low activity level. Each of these characteristics results from distraction from the bad news and attention towards other, presumably positive aspects of life. Excessive focus on the bad news would increase anxious thoughts and feelings, induce sadness and distress, and lead to high activity levels in an effort to mobilize action towards change. People engaged in watchful waiting avoid this process by distracting themselves from the bad news.

### **Active change**

Active change represents the most vigorous, engaged form of responding. Unlike the distraction or irrelevant activity characterizing watchful waiting, active change involves specific responses directed toward addressing the bad news. Active change aligns most clearly with traditional views of productive coping strategies, such as problem-focused coping, that directly address the negative situation. Problem-focused coping in part involves taking action to solve a problem or change a negative situation (Carver et al., 1989; Folkman & Lazarus, 1980; Folkman & Lazarus, 1985).

Active change includes three types of behavior: information-seeking, prevention, and treatment. Information-seeking serves two purposes. First, information-seeking provides recipients of bad news with the information they need to make decisions about how to respond. Second, information-seeking serves to connect recipients with others who have dealt with similar experiences and provides a network of support. Of note, other researchers have discussed these roles of information-seeking as part of problem-focused or active coping (Aldwin & Revenson, 1987; Lazarus, 1981; Lazarus & Launier, 1978).

The terms “prevention” and “treatment” have medical connotations, but in this context they broadly refer to behaviors directed toward preventing the situation from deteriorating (maintenance) and treating an undesirable situation that has emerged (improvement). To

illustrate, consider a different man diagnosed with prostate cancer. This man is in his late 40s, has a wife and several children, and is the primary breadwinner for the family. Unlike the man in his 80s who chooses watchful waiting, the second man may be very willing to undergo chemotherapy and radiation in hopes that it will eradicate the cancer and allow him to live a full and long life with his family. He should actively investigate his condition, perhaps seeking a second opinion or researching prostate cancer online or at the library, and undergo preventative and/or aggressive measures to prolong his life. Active change also involves high anxiety and high activity levels. The high levels of anxiety result from acknowledgement that a negative event is likely to occur and/or that the consequences are severe. The high activity levels results from mobilization of energy towards active responses.

### **Acceptance**

Acceptance is the third and most complex form of responding. This response is similar to previous conceptualizations of acceptance in the literatures on aging, disability, and death. Previous theories discuss acceptance as a last stage in coping with loss or impending death that comes after a process of denial (Gamliel, 2000; Kübler-Ross, 1969). Many theorists assert that acceptance is a positive coping strategy in uncontrollable circumstances. People who come to accept their circumstances are able to seek meaning in their loss, reduce their dread over what lies ahead, and seek social support to cope (Gamliel, 2000). On the other hand, other researchers have found little support for the assertion that acceptance is an adaptive coping strategy, and some studies even suggest that realistic acceptance might be predictive of negative outcomes (Greer et al., 1979; Reed, Kemeny, Taylor, Wang, & Visscher, 1994; Wortman & Silver, 1989).

We view acceptance as action towards acceptance rather than passive resignation. People who respond to bad news with acceptance do not necessarily collapse in a heap, although this response may be unavoidable at first. Instead, they eventually direct their energy towards moving

forward and addressing any consequences of the bad news. Acceptance involves looking beyond the negative outcomes to the possibility for hope that lies in the future. Even in the case of imminent death, people can find hope in living life to the fullest during their remaining time and dying with dignity (Dean, 2002). Although this response is similar in many ways to previous conceptualizations of acceptance, it avoids the sense of passivity and hopelessness that may lead to negative outcomes. In addition, acceptance is not a final, static state of resignation; instead, it involves an ongoing positive process of making the best of a bad situation.

Acceptance combines aspects of watchful waiting and active change to most effectively address situations in which a lack of engagement is inappropriate yet the person cannot change the outcome. People can direct their energy towards changing their lives rather than changing the negative event. This response bears similarity to the concept of secondary control, in which people change themselves to fit a situation rather than changing the situation to fit the self (i.e., primary control) (Rothbaum, Weisz, & Snyder, 1982). Secondary control represents an important form of control over one's emotional responses, but it does not involve engaging effort towards changing the situation.

Acceptance involves two types of behavior: information-sharing and accommodation. Information-sharing involves telling others about the negative event, although the extent of sharing with others may vary depending on the news. For example, certain types of bad news, such as testing HIV-positive, may stigmatize the individual, and people may want to limit their information-sharing to close friends and family. Furthermore, the effectiveness of information-sharing depends in part on the receptiveness of the listener (Harber & Pennebaker, 1992; Kelly & McKillop, 1996).

Information-sharing serves three purposes. First, information-sharing helps people accept the negative event by making the event part of their social reality. People who keep negative events, such as a disease or a job loss, a secret from friends and family may be in denial that the event has occurred. Information-sharing is both a step towards acceptance and a sign that such acceptance has begun. Second, information-sharing elicits social support from friends and family. Researchers have distinguished between seeking social support for emotional reasons vs. seeking social support for practical reasons (advice, assistance, etc.) (Carver et al., 1989). acceptance focuses more on the emotional side of social support, rather than the more active, change-focused practical side. Third, information-sharing seems to serve an important function in an end unto itself (Pennebaker, 1988; Pennebaker, Zech, & Rimé, 2001). Research finds that people who talk (or write) more about a traumatic event ruminate less (Pennebaker & O’Heeron, 1984), experience less anxiety (Pennebaker, Colder, & Sharp, 1990), have fewer negative health outcomes (Pennebaker & O’Heeron, 1984), and have better quality of life (Spera, Buhrfeind, & Pennebaker, 1994), even when the expressions are private.

Accommodation involves making changes, not to affect the news-specific outcome, but rather to incorporate the negative event into one’s life. When a negative outcome is uncontrollable, accommodation focuses people’s energy on productive activity rather than futile efforts to change the outcome. For example, in most cases a woman who receives a rejection letter from her first choice graduate school should consider alternative schools or career plans rather than continuing to pursue admission at the school that rejected her. Accommodation often involves behavioral changes such as cutting back on strenuous activities in the case of a debilitating disease or putting away a lost loved one’s personal items in the case of a death in the family. It often also involves cognitive changes that entail looking for reasons why the tragedy

occurred (sense-making) and focusing on positive changes resulting from the tragedy (benefit-finding) (Davis, Nolen-Hoeksema, & Larson, 1998; Rabow & McPhee, 1999). Of note, other researchers have used the term accommodation differently, referring to a passive means of coping with old age that involves weakened aspirations and lowered standards of living (Brandtstadter, Dirk, & Werner, 1993). Here, we use accommodation to refer to an active process of reordering priorities and adjusting to the new situation.

In addition, the response of acceptance involves general negative affect (including sadness, regret, guilt, etc.) and moderate activity level. People are likely to experience particularly negative feelings when a severe negative event occurs and they are helpless to change the outcomes. The specific types of negative affect people experience depend on the details of the bad news. For example, people may feel guilt and regret when they feel that they could have changed the outcome, as in the case of failing a class, but people are more likely to experience sadness and grief when they believe they could not have changed the outcome, as in the case of an unavoidable death. Regarding activity level, acceptance does not involve the same level of energy mobilization as active change, but some effort is required to adapt to the negative event. People must direct their energy towards understanding and accepting the situation created by the bad news and dealing with the consequences, rather than taking active steps towards making significant life changes in an effort to change the outcomes of the bad news.

### **Non-responding**

The fourth category of responding captures a number of responses. Lubinsky (1994) distinguishes between four forms of non-responding: denial, disbelief, deferral, and dismissal. Although the four may appear similar, their sources differ. Denial is form of repression brought on as a defense mechanism. It involves vehement disagreement with any disliked information, even when evidence makes it clear that the information is correct, and is a relatively rare

response to bad news. Disbelief is marked by confusion rather than rejection of bad news and may result from a desire to maintain hope for longer than is warranted. Deferral is marked by avoidance of information about bad news as a result of inadequate resources to cope with the situation. People responding with deferral may accept the basis for bad news (e.g., results of a medical test) but reject or ignore the implications of those findings (i.e., the necessity of lifestyle changes or treatment). Finally, dismissal is marked by anger at the bad news-giver and denial of the news-giver's competence or legitimacy. These four reactions, though different in significant ways, all fall into the response category of non-responding.

Non-responding is distinct from watchful waiting. non-responding is not an attempt to reduce anxiety about bad news while acknowledging it, but rather an attempt to pretend nothing has happened or "wish away" the bad news. Furthermore, non-responding may be most likely to occur in situations when acceptance is called for. Both watchful waiting and active change are somewhat attractive responses: one allows people to monitor the news and defer action until it is appropriate, and the other involves taking action to change things for the better (de Haes & Koedoot, 2003). Acceptance, in contrast, requires people to face the news head-on and does not offer the hope that things will turn out well. Although acceptance is necessary when a very bad outcome is unavoidable, people may prefer to embrace non-responding instead. Non-responding can feel good for a short time because it allows people to pretend that nothing has changed for the worse, but people eventually must face negative outcomes, such as the death of a loved one or a terminal illness, and cope with the consequences.

On the other hand, non-responding may be an acceptable response in the short-term. A number of researchers and physicians note that denial is a necessary response for some people under certain circumstances, and a number of theorists have argued that news-givers should not

force recipients to face bad news before they are ready (Bor et al., 1993; Faulkner, 1998; Greer et al., 1979; Radziewicz & Baile, 2001). As indicated in Figure 1-1, the Bad News Response Model indicates that non-responding is a legitimate but generally undesired response. News-givers may recognize that recipients are likely to engage in non-responding at first, but the Bad News Response Model suggests that the goal of the news-giver is to guide people towards the response that will lead to the best long-term outcomes. Although non-responding may be functional at first, people must eventually face bad news and choose a different response.

### **How Can People Respond? Summary and Conclusions**

The Bad News Response Model suggests that people can respond to bad news in one of four ways: 1) watchful waiting, 2) active change, 3) acceptance, and 4) non-responding.

Watchful waiting represents a relatively inactive response characterized by distraction activities and managing anxiety. Active change is a highly active response primarily characterized by direct attempts to change the situation. Acceptance involves activity directed toward changing one's life to incorporate bad news rather than attempting to change the outcomes of the news. Non-responding involves unproductive (at least in the long-term) avoidance or denial of bad news.

Although thus far we have discussed the four response categories as though they were mutually exclusive and as though selecting one response means rejecting other responses, people may display (or appear to display) multiple responses. Multiple responding can manifest in several ways. First, people may engage in multiple responses simultaneously. By so doing, people hedge their bets by putting some effort towards one response (e.g., trusting that things will go well, as in watchful waiting) while also recognizing and preparing for alternative possibilities (e.g., by taking measures to encourage a positive outcome, as in active change). For example, someone who learns of upcoming layoffs can engage in watchful waiting by delaying

the search for a new job while also engaging in active change by delaying large purchases. This form of multiple responding recognizes that the future is uncertain and that what a person expects to occur may not occur. As Mohammed, the Muslim spiritual leader said, "trust in God, but tie your camel first" (Cleary, 2001).

People who seem to be engaging in multiple, simultaneous responses may also be responding to multiple levels of abstraction of the bad news. A single news event may include more than one form of bad news. A young man who learns that he failed a major project in a class relevant to a desired career has essentially received two pieces of news. First, he must deal with the possibility that he will fail the course. Second, he must deal with the implications of his failure on his qualifications to enter his desired career. He may respond with active change in regards to his course grade while simultaneously responding with acceptance in regards to his career path. Alternatively, he may respond with acceptance in regards to his course grade but take active measures to ensure that he performs well on other career-relevant criteria.

Finally, people may respond in different ways to one situation across time. For example, imagine that a physician finds a lump in a patient's breast. The physician may initially encourage watchful waiting, suggesting that the patient proceed with life as usual until the biopsy results come in. If the biopsy reveals malignancy, the physician might then recommend active change. Finally, if subsequent tests reveal that the cancer is resistant to treatment, the physician may suggest acceptance. Thus, one broad situation may involve multiple news events, therefore allowing for the possibility of multiple responses. The Bad News Response Model can account for longitudinal events if news-givers and recipients reevaluate the situation at each point when new information is available (Figure 1-1).

## **Which Responses Should News-Givers Suggest?**

The Bad News Model suggests that bad news-givers should guide recipients towards desired responses; the model does not attempt to predict with certainty the best responses to bad news. The model ultimately relies on news-givers to determine the response that will lead to the best outcomes for recipients and then guide the recipients towards that response. However, bad news varies on a number of predictable dimensions, and research suggests that certain dimensions may lead one response to be more effective than others, depending on the situation. Specifically, examination of the vast literature on risk perception, health behavior, and coping reveals three factors that repeatedly emerge as playing a particularly important role in people's responses to the possibility of bad news and other stressful situations: the controllability of negative outcomes, the likelihood of negative outcomes, and the severity of negative outcomes.

Table 1-1 presents a summary of the responses that may be most effective for each combination of high and low controllability, likelihood, and severity. These suggestions represent the responses that seem most likely to be effective under different circumstances, in light of existing research on both responses to bad news and situational factors of the news. In general, we suggest that people should engage in active change when two or three of the situational factors are high (high control, high likelihood, and/or high severity) and watchful waiting when two or three of the situational factors are low (low control, low likelihood, and/or low severity). The only exception occurs when likelihood and severity are high but control is low. Under these circumstances, when severe negative outcomes are highly likely and little or nothing can be done to change the outcomes, we suggest that acceptance is the best response.

It is noteworthy that perceptions of controllability, likelihood, and severity are somewhat subjective. Numerous studies demonstrate that people often function under an illusion of control when, in fact, chance determines their fate (Crocker, 1982; Langer, 1975; Langer & Roth, 1975).

In addition, people misperceive the likelihood of events due to misunderstandings of objective probabilities (Kahneman & Tversky, 1982; Tversky & Kahneman, 1974), undue focus on salient examples (MacLeod & Campbell, 1992; Slovic, Fischhoff, & Lichtenstein, 1982), and a desire to avoid disappointment or regret (Carroll, Sweeny, & Shepperd, 2006; Sweeny & Shepperd, 2006). Finally, people often base their perceptions of severity on misleading information, such as prevalence, personal relevance, or illness stereotypes (Jemmott, Ditto, & Croyle, 1986; Croyle & Williams, 1991). One prominent model of coping suggests that people engage in an appraisal process to determine whether a stressful situation demands coping resources (Folkman & Lazarus, 1980; Lazarus, 1966; Lazarus & Folkman, 1984), and this appraisal process is subject to the many biases that color judgments. Thus, news-recipients undoubtedly choose responses that reflect misperceptions of bad news.

Although people's natural responses may be biased, the most effective response to bad news depends more on the actual controllability, likelihood, and severity of potential negative outcomes than on subjective perceptions of these factors. For example, a patient who misperceives the severity of his or her condition due to lack of knowledge or inaccurate understanding will not benefit from, and may even be hurt by, pursuing treatment based on this misperception. The purpose of this section is to discuss situational factors that may predict the effectiveness of responses to bad news. As such, objective levels of controllability, likelihood, and severity are more important for our purposes than subjective appraisals of these factors by news-recipients.

### **Controllability**

The first factor that may influence effective responding to bad news is the controllability of the negative outcomes that may result from bad news. The ability to control the outcomes of bad news varies greatly across different situations. For example, a student who discovers s/he is

failing a course several weeks before the semester's end may be able to improve his or her grade by completing extra credit assignments, getting help from the professor, or studying long and hard for the final exam. However, as the semester draws to a close, control over the course grade diminishes, and once final course grades are turned in, there may be no remaining avenues to affect the outcome of the course.

Controllability plays a significant role in predicting people's responses to threat. The Health Belief Model (Becker, 1974; Janz & Becker, 1984; Kirscht, 1988) and Protection Motivation Theory (Floyd, Prentice-Dunn, & Rogers, 2000; Maddux & Rogers, 1983; Rogers, 1983) include measures of controllability (response efficacy and/or self-efficacy) as factors that predict whether people engage in preventative health behaviors, and the proactive coping model (Aspinwall & Taylor, 1997) indicates that perceived control plays a role in people's attempts to prevent negative events. Research on coping shows that the controllability of a stressful situation affects the strategies people choose to adopt when coping with stressful situations (Folkman & Lazarus, 1980). When people perceive event controllability to be high, they tend to adopt active coping strategies; when people perceive event controllability to be low, they tend to adopt strategies directed towards managing their emotions (Aldwin, 1991; Carver, Scheier, & Weintraub, 1989). Other studies find that the effectiveness of various coping strategies depends in large part on the controllability of the stressful situation, with active strategies proving most beneficial when the situation is controllable (Aldwin & Park, 2004; Park, 2001; Park, Armeli, & Tennen, 2004).

### **Likelihood**

The second factor in determining the appropriate response to bad news is the likelihood of possible negative outcomes. Bad news does not always indicate a guaranteed negative outcome. For example, a boss may have to inform employees that the company must downsize

without knowing who will lose their jobs. Physicians frequently give bad news that indicates the possibility of illness or injury based on initial evidence without the ability to diagnose a problem with complete certainty.

For the purposes of the model, “likelihood” refers to how likely negative outcomes are to occur *if* the news recipient does not act to prevent them. For example, the likelihood that a suspicious lump indicates cancer should be evaluated irrespective of treatment options or the patient’s intentions to seek treatment. As such, likelihood is distinct from controllability. People may reduce the likelihood of negative outcomes by their response to bad news, but the initial evaluation of likelihood is separate from controllability.

Likelihood influences responding in two ways. First, and most intuitive, people consider the likelihood of a negative outcome in weighing the costs and benefits of an effortful and costly response. Several models include likelihood (or perceived vulnerability) as a predictor of health behavior (Becker, 1974; Rogers, 1983) and preventative behavior in general (Theory of Reasoned Action, Ajzen & Fishbein, 1980; and Subjective Expected Utility Theory, Edwards, 1954).

Second, and less intuitive, the initial perception of likelihood of a negative outcome influences later affective reactions should the worst actually occur. Expectations about future outcomes play a role in how bad a bad outcome feels. Negative outcomes are unpleasant in their own right, but they are particularly unpleasant when they are unexpected (van Dijk & van der Pligt, 1997; Shepperd & McNulty, 2002). People who respond as if a negative outcome is unlikely to occur may have a particularly unpleasant experience if the outcome does occur, more so than if they had expected the worst. This finding suggests that people may benefit not only in

terms of literal preparation, but also in terms of affective preparation by engaging in more active responses if the negative outcome is likely to occur.

### **Severity**

The third factor in determining the appropriate response to bad news is the severity of the possible negative event. Bad news varies in terms of how important or consequential the possible negative outcome is. Clearly, a woman who learns that she is at risk for heart burn is hearing very different news than a woman who learns that she is at risk for a heart attack, and both the news-giver and the recipient of the news should proceed differently in these two situations. Of course, even news that has relatively non-severe consequences can be bad. The woman who learns she has a high risk for heart burn may have to make significant dietary and other lifestyle changes. However, her response will differ in many ways from the woman learning of her risk for heart attack, and the people giving the news to these women should also proceed differently.

The consequences or severity of bad news may differ based on a characteristic of the outcome (e.g., financial impact, life expectancy, effect on emotional well-being) or characteristics of the individual. The earlier examples of the two men diagnosed with prostate cancer illustrate how characteristics of the individual such as age, family circumstances, financial stability and responsibilities can influence the consequences of bad news.

People naturally account for the severity of potential negative outcomes when they anticipate and respond to bad news. The severity of potential health outcomes predict whether people will engage in preventative health behavior (Becker, 1974; Rogers, 1983), and research on coping finds that people choose active coping strategies when they judge the event to be highly stressful or important (Anderson, 1977; Parkes, 1986; Terry, 1991). In addition, research on bracing for bad news finds that people only embrace a negative outlook for outcomes or consequences that are important (Shepperd, Findley-Klein, Kwavnick, Walker, & Perez, 2000).

People brace less for outcomes that are unimportant because such outcomes are less consequential for them. For example, participants in one study who anticipated soon learning their test results for a medical condition shifted from optimism in their risk estimates only when the consequences of testing positive were severe. If the consequences were not severe, their predictions remained unchanged (Taylor & Shepperd, 1998). If possible negative outcomes are inconsequential or non-severe, news-recipients gain more from choosing relatively passive responses (watchful waiting) than from engaging in physically or emotionally active responses (active change or acceptance).

### **Communicating Desired Responses**

Although the goal of the Bad News Response Model is not to elucidate specific details of the communication of bad news, the model suggests that the bad news-giver direct the recipient towards desired responses and offers insights into which responses may be most effective in different situations. The direction on behalf of the bad news-giver can encourage people to respond in the most effective way even in the face of problems with comprehension, arousal, education, etc.

When preparing to give bad news, the communicator can evaluate the news situation in terms of the likelihood, severity, and controllability of negative outcomes and direct the communication towards encouraging the recipient to engage in the response that is most likely to be effective. The details of such direction will differ greatly depending on the specific topic and nature of the bad news, but these broad generalizations should be effective across a variety of domains and situations. It is important to note that the Bad News Response Model does not recommend that bad news-givers manipulate the recipient into responding in a particular way using whatever means necessary. Rather, news-givers should present all possible responses and

the costs and benefits of each, and then give their opinion regarding the best possible response (Epstein, Alper, & Quill, 2004).

At first glance, the suggestion that news-givers should evaluate multiple aspects of the recipient's situation to give the bad news in the best way may seem impractical. In many cases, news-givers may know little about the recipient or the circumstances surrounding the bad news they must disclose. However, the model's suggestions represent an improvement over leaving bad news-givers to their own devices. News-givers who attempt to evaluate the bad news and guide recipients towards responses that are most likely to be effective, as suggested by the Bad News Response Model, will likely do a greater service for the recipients than would a news-giver with little or no guidance. Without guidance, news-givers often fall victim to personal concerns, such as not wanting to upset the recipient or be blamed for the news, that often trump concern for the best interest of the recipient (Buckman, 1984). Furthermore, recipients of bad news can use the model to evaluate their news and choose the best response when the news-giver is unable to guide them appropriately.

### **Summary, Critique, and Future Directions**

The medical literature suggests a number of goals to help people give bad news well: news-givers should reduce their own discomfort, provide sufficient information, promote recipient satisfaction, improve memory and understanding, reduce recipients' distress, and promote hope. However, none of these goals provides sufficient information or a broad enough objective to adequately guide people in giving bad news. We propose that giving bad news well should instead be defined as guiding news-recipients towards desired responses – responses that news-givers believe will result in the best long-term outcomes for recipients. The Bad News Response Model suggests that news-givers can look to situational factors (controllability,

likelihood, and severity) to determine which of three responses (watchful waiting, active change, and acceptance) is most likely to be effective.

### **Strengths of the model**

The Bad News Response Model has a number of strengths that improve previous attempts in the medical literature to study the processes of giving bad news. First, the model is applicable to a broad set of situations and domains, including academic performance, professional news, interpersonal news, medical diagnoses, and news of death, among others. Second, the model addresses the roles of both the bad news-giver and the recipient of the news by making suggestions for transmission based on the desired response. Third, the model systematically addresses different types of bad news in terms of the likelihood, severity, and controllability of possible negative outcomes of the news. Although the model draws on the strengths of previous research, it represents the first comprehensive model of giving and responding to bad news.

The Bad News Response Model can serve several important purposes. First, the model can assist bad news-givers who otherwise must rely on their own limited experience or personal motivations when giving bad news. The Bad News Response Model provides a goal for bad news transmission that can reduce the impact of the news-giver's concerns on their news-giving strategies by guiding them towards recipient-focused strategies.

Second, bad news-givers can use the model to evaluate their transmission of news after the fact. If news-givers observe recipients making an undesired response, they can examine their transmission strategy in light of the model. The news-giver may have incorrectly assessed one or more of the situational factors, or the suggestion of the best response may have been ineffective. For example, physicians may be unaware of their patients' financial circumstances, and this lack of information could result in misjudgment of the severity and/or controllability of patients'

medical conditions. Physicians might assume that expensive treatments are feasible when in fact the patient does not have insurance or the means to pay for the treatments, making the prognosis relatively uncontrollable. Even when physicians perfectly assess the situational factors, patients often mishear or forget information conveyed in a diagnostic communication (Croyle, Loftus, Klinger, & Smith, 1993). The best efforts of news-givers to prompt desired responding can be lost if the recipient tunes out the transmission. Bad news-givers who notice seemingly ineffective responding by recipients can seek additional information to better judge the situational factors or reevaluate the bad news transmission for signs of lack of attention or misunderstanding on the part of the recipient.

Third, bad news recipients can use the model to evaluate their responses to bad news, apart from the giver. After receiving bad news, recipients can use the model to determine the most appropriate response by evaluating the likelihood, severity, and controllability of the possible outcomes. For example, a woman who learns of upcoming layoffs at work can consider the likelihood that she will lose her job, how bad the consequences of a job loss would be, and if she has control over whether she is laid off. Having evaluated the situation, she may have a better sense of the most effective response. This process may help people to override responses based solely on anxiety or fear. In addition, recipients who find that their response to some news is ineffective can reexamine the situational factors involved and possibly adjust their responses accordingly. If the woman facing a possible job loss responds with active change and then finds that she is making no progress towards keeping her job, she may decide to shift towards acceptance by checking the want ads and telling her family about the layoffs.

### **Limitations of the model**

Although the Bad News Response Model is based on research from psychology, medicine and health, the model is largely speculative and remains untested. In addition, the

model makes broad suggestions to allow the greatest breadth of application. This focus on the functionality of the model leads to an emphasis on generality over detail. As a result, the Bad News Response model may be imperfect in certain specific situations, while making suggestions that lead to the best outcomes overall. People often make miracle recoveries from medical conditions that were, by all accounts, beyond hope. Although the model would recommend acceptance in these cases, people can choose to take risks and pursue unlikely cures in hopes of such a miracle. However, the model plays the odds by suggesting the response that will *most often* result in the best outcomes.

The model does not provide specific suggestions regarding how news-givers should communicate their suggestion of the best response in a way that insures recipients will respond as desired. Other researchers have addressed techniques of news transmission in both the medical literature and in the literatures on persuasion and communication, but future research may be required to determine the specific application of that research to the goal of guiding news-recipients towards desired responses. One strategy that may prove successful is for news-givers to help recipients reach accurate conclusions about the controllability, likelihood, and severity of potential negative outcomes of bad news. The research reviewed earlier suggests that people naturally respond to bad news in light of these situational factors, but their assessment of these factors may be inaccurate or biased. News-givers can provide recipients with more objective information about the bad news, thus making desired responding more likely.

Finally, the model does not specify precisely how people should evaluate the three situational factors, or how to determine whether the factors are “high” or “low”. The situational factors fall on a continuum, and the distinction between high vs. low is relative. For example, bad news that is low in severity may be significantly more severe than neutral news, but it is low

in severity compared to other types of bad news. Research examining people's perceptions of various events, as well as the most effective responses to these events, will address the question of how to evaluate the situational factors of bad news.

### **Future directions**

The first step for future research is to test the effectiveness of the Bad News Response Model as a model for giving bad news well. Four questions deserve attention. First, are the four responses in the model exhaustive, or are there other possible responses? Second, do the responses suggested in the model, which derive from the three situational factors, produce the best quality of life? Third, how do people naturally respond to bad news under various circumstances, and can bad news-givers improve the likelihood that people will make the desired responses? Fourth, how can news-givers best guide recipients towards a desired response once the desired response is determined? The model makes predictions for each of these questions, and studies are currently underway to test these predictions.

A second direction for future research is to examine the specific characteristics of the four responses to bad news. Table 2-1 makes predictions regarding the cognitive, emotional, and behavioral characteristics of each response. For example, we suggest that watchful waiting is characterized by low anxiety, high general positive affect, and low arousal. Studies examining people's emotional states and activity level while engaging in watchful waiting, and likewise active change and acceptance, can examine these characteristics.

A third area for future research is the influence of individual differences on people's responses to bad news. The model attempts to make predictions that generalize across people and circumstances. However, individual differences may affect responding in two ways. First, individual differences likely affect people's natural responses to bad news. For example, self-efficacy could increase the likelihood of choosing active change over the other response

categories. Second, individual differences likely influence both the actual and perceived experiences of the likelihood, severity, and controllability of negative outcomes. The 80- and 40-year old men with prostate cancer described earlier provide one example of how differences such as age, priorities, and resources affect the best response to bad news. For example, the same disease with the same prognosis has more severe consequences for the man with responsibilities to his family than for the man with few responsibilities. Although the disease may be equally severe for the two men, the consequences of the disease on other areas of their lives are likely to differ in severity.

Finally, future studies can examine the application of the Bad News Response Model to different cultures and developmental stages. Several studies find that people give medical bad news differently in different cultures (Searight & Gafford, 2005). For example, patients in China often receive less information about their diagnoses than patients in the United States (Tse, Chong, & Fok, 2003), and cancer patients in England report that their doctors used the word “cancer” much less frequently than patients in the United States (Newall et al., 1987). These findings suggest that the Bad News Response Model may apply across cultures, but it is possible that cultural values and traditions may affect the way in which some aspects of the model are applied. As such, culture may act as an individual difference variable that affects natural responses to bad news. For example, differences in personal agency between Eastern and Western cultures may lead people to respond with active change more in the West than in the East, and this difference would affect the ease with which news-givers are able to guide people towards the three responses in different cultures.

Furthermore, although people of all ages receive bad news, the cognitive and emotional responses of children are likely not comparable to those of late-adolescents or adults. Young

children and adolescents may have a difficult time expressing complex emotional reactions and making complex decisions (Inhelder & Piaget, 1958). The Bad News Response Model may be applicable to all ages, but the nature of its applicability likely differs across developmental stages. For example, the model may apply better to the primary caregiver than to the child diagnosed with a severe illness, or better to the adult child than to the senile parent given news of failing health. The Bad News Response Model assumes that recipients of bad news are in a position to choose between different possible responses. In the cases just described, the family member, not the primary recipient of the news, will make decisions about treatment options.

### **Coda**

The medical literature provides many useful suggestions for giving bad news but falls short of providing an overarching goal for bad news-givers. The Bad News Response Model represents an improvement over the existing work on giving bad news by providing a framework that includes all types of bad news, incorporates a number of valuable goals for bad news transmission, and addresses the role of both the news-giver and the recipient. A comprehensive and systematic model of bad news transmission benefits not only people who must give bad news, but also those receiving the news. People receiving bad news must not only address the subject of the news itself, but also their emotional reactions to the news. Poor coping can lead to depression, anxiety, and other mental health concerns. The Bad News Response Model strives to provide bad news-givers the tools they need to improve the recipient's ability to respond effectively to the situation at hand.

Table 2-1. Characteristics of the three response categories

	Watchful waiting	Active change	Acceptance	Non-responding
Anxiety	Low	High	Moderate	Low
Positive affect	Moderate	Low	Low	High
Negative affect	Low	High	High	Low
Activity level	Low	High	Moderate	Low

## CHAPTER 3

### STUDY 1

All bad news is not created equal. Some news presents myriad options for taking action; other news provides only the option of acceptance. Some news foreshadows additional bad outcomes in the future; other news is short-lived in its effects. Some news is serious; other news is relatively benign. The Bad News Response Model takes into account various facets of bad news and suggests that responses to bad news may be sensitive to the type of news people receive. In Study 1, we test several predictions of the Bad News Response Model in an academic domain.

The purpose of Study 1 was to examine how the controllability, likelihood, and severity of the outcomes of bad news predict the responses people choose. The Bad News Response Model makes three predictions regarding the relationship between the type of bad news and responses:

- **Hypothesis 1:** People are more likely to engage in watchful waiting when perceived controllability, likelihood, and/or severity of outcomes are low than when they are high.
- **Hypothesis 2:** People are most likely to engage in active change when perceived controllability, likelihood, and/or severity of outcomes are high than when they are low.
- **Hypothesis 3:** People are most likely to engage in acceptance when they perceive the controllability of outcomes as low than when they perceive controllability as high.

### Methods

#### Participants

Participants were 230 undergraduates recruited through the web-based participant pool participating in sessions of one to five.

#### Procedure

All participants read eight scenarios describing a situation involving a poor grade on an exam (Appendix A). The scenarios varied based on a) the likelihood of a bad outcome (high vs.

low likelihood of failing the course), b) the severity of the outcome (high vs. low importance of the course), and c) controllability of the outcome (high vs. low ability to improve the course grade). The order of all scenarios was counterbalanced.

Participants then read descriptions of the three response types (watchful waiting, active change, and acceptance) and indicated the extent to which they would engage in each response ( $1 = \text{very unlikely}$ ,  $9 = \text{very likely}$ ) and which response they would choose. Participants also indicated how likely they were to receive a poor grade based on the scenario ( $1 = \text{very unlikely}$ ,  $9 = \text{very likely}$ ), how severe that outcome would be if it occurred ( $1 = \text{not at all bad}$ ,  $9 = \text{very bad}$ ), and how much control they had over improving their grade ( $1 = \text{little or no control}$ ,  $9 = \text{full control}$ ).

## Results

### Manipulation Checks

To test the effectiveness of our manipulations, we conducted dependent t-tests on the three manipulation check items. The manipulations of controllability, likelihood, and severity were quite successful. Analysis of the controllability manipulation check item revealed that participants rated the outcomes as less controllable in the low control conditions ( $M = 2.94$ ,  $SD = 1.24$ ) than in the high control conditions ( $M = 4.78$ ,  $SD = 1.49$ ),  $t(229) = 20.10$ ,  $p < .0001$ ,  $d = 2.66$ . Analysis of the likelihood manipulation check item revealed that participants rated the negative outcome as less likely in the low likelihood condition ( $M = 6.66$ ,  $SD = 1.77$ ) than in the high likelihood condition ( $M = 7.18$ ,  $SD = 1.41$ ),  $t(229) = 5.86$ ,  $p < .0001$ ,  $d = .77$ . Analysis of the severity manipulation check item revealed that participants rated the outcomes as less severe in the low severity condition ( $M = 6.50$ ,  $SD = 1.34$ ) than in the *high severity* condition ( $M = 7.34$ ,  $SD = 1.02$ ),  $t(229) = 12.72$ ,  $p < .0001$ ,  $d = 1.68$ .

## Likert-Type Ratings

We tested the first set of hypotheses using 2 (Controllability: *high vs. low*) by 2 (Likelihood: *high vs. low*) by 2 (Severity: *high vs. low*) repeated measures ANOVAs on participants' ratings of the likelihood that they would choose watchful waiting, active change, and acceptance. We had no predictions regarding whether or how the three factors might interact to influence participants. Nevertheless, we conducted analyses to explore possible interactive effects.

### Watchful waiting

We hypothesized that people would prefer watchful waiting when the controllability, likelihood, and severity of the negative outcome were low than when they were high (*Hypothesis 1*). Our hypotheses were partly confirmed. First, participants were more likely to choose watchful waiting when likelihood was low ( $M = 5.40, SD = 2.25$ ) than when likelihood was high ( $M = 3.18, SD = 1.62$ ),  $F(1, 227) = 317.38, p < .0001, d = 2.36$ . Second, participants were more likely to choose watchful waiting when severity was low ( $M = 4.58, SD = 1.95$ ) than when severity was high ( $M = 3.87, SD = 1.70$ ),  $F(1, 227) = 79.07, p < .0001, d = 1.17$ . Contrary to predictions, participants were more likely to choose watchful waiting when controllability was *high* ( $M = 4.43, SD = 1.92$ ) than when controllability was *low* ( $M = 4.02, SD = 1.76$ ),  $F(1, 227) = 21.10, p < .0001, d = .61$ . We suspect that this unexpected result may be due to participants interpreting the high controllability manipulation (i.e., the class has opportunities for extra credit that could improve the grade) as an indication that they could wait until later in the semester to act.

Analyses also yielded two unexpected interactions for watchful waiting. The first was a Controllability by Likelihood interaction,  $F(1, 227) = 8.09, p < .01, d = .38$  (Figure 3-1). Post hoc tests using the Bonferroni adjustment revealed that in high likelihood conditions participants

were more likely to respond with watchful waiting when controllability was high ( $M = 3.46$ ,  $SD = 1.89$ ) than when controllability was low ( $M = 2.89$ ,  $SD = 1.71$ ),  $t(229) = 5.42$ ,  $p < .0001$ ,  $d = .72$ . In low likelihood conditions, participants in high ( $M = 5.40$ ,  $SD = 2.40$ ) and low ( $M = 5.15$ ,  $SD = 2.31$ ) controllability conditions did not differ in their preference for watchful waiting,  $t(227) = 2.33$ ,  $p = .02$ ,  $d = .31$ . Analyses also revealed an unexpected three-way interaction for preferences for watchful waiting,  $F(1, 227) = 14.09$ ,  $p < .001$ ,  $d = .50$ . The marginal means for this interaction are shown in Table 3-1. Because this interaction is not readily interpretable and was not predicted, we will not discuss it further. There were no other significant interactions for watchful waiting, all  $F$ s  $< 2.87$ , all  $p$ s  $> .09$ , all  $d$ s  $< .22$ .

### **Active change**

We hypothesized that people would prefer active change when the controllability, likelihood, and severity of the negative outcome were high than when they were low (*Hypothesis 2*). Once again, the analyses partly supported our hypotheses. First, participants were more likely to choose active change when likelihood was high ( $M = 7.58$ ,  $SD = 1.13$ ) than when likelihood was low ( $M = 5.94$ ,  $SD = 1.88$ ),  $F(1, 227) = 210.47$ ,  $p < .0001$ ,  $d = 1.92$ . Second, participants were more likely to choose active change when severity was high ( $M = 7.18$ ,  $SD = 1.23$ ) than when severity was low ( $M = 6.53$ ,  $SD = 1.49$ ),  $F(1, 227) = 90.61$ ,  $p < .0001$ ,  $d = 1.26$ .

Unexpectedly, participants were equally likely to choose active change when controllability was high ( $M = 6.79$ ,  $SD = 1.36$ ) and when controllability was low ( $M = 6.91$ ,  $SD = 1.36$ ),  $F(1, 227) = 2.55$ ,  $p = .11$ ,  $d = .21$ .

Analysis also yielded two unexpected interactions for active change. The first was a Severity by Controllability interaction,  $F(1, 227) = 19.16$ ,  $p < .0001$ ,  $d = .58$  (Figure 3-2). Post hoc tests using the Bonferroni adjustment revealed that in high severity conditions participants were more likely to respond with active change when controllability was low ( $M = 6.70$ ,  $SD =$

1.59) than when controllability was high ( $M = 6.36$ ,  $SD = 1.69$ ),  $t(229) = 3.79$ ,  $p < .001$ ,  $d = .50$ . In low severity conditions, participants in high ( $M = 7.23$ ,  $SD = 1.34$ ) and low ( $M = 7.12$ ,  $SD = 1.40$ ) controllability conditions did not differ in their preference for active change,  $t(229) = -1.36$ ,  $p = .18$ ,  $d = .18$ .

Analyses also revealed an unexpected three-way interaction for preferences for active change,  $F(1, 227) = 8.44$ ,  $p < .01$ ,  $d = .38$ . The marginal means for this interaction are presented in Table 3-1. Because this interaction is not readily interpretable and was not predicted, we will not discuss it further. There were no other significant interactions for active change, all  $F_s < 3.54$ , all  $p_s > .06$ , all  $d_s < .25$ .

### **Acceptance**

We hypothesized that people would prefer acceptance more when the controllability of the negative outcome was low than when it was high (*Hypothesis 3*). Analyses confirmed our hypothesis. Participants were more likely to choose acceptance when controllability was low ( $M = 4.74$ ,  $SD = 1.66$ ) than when controllability was high ( $M = 4.58$ ,  $SD = 1.66$ ),  $F(1, 227) = 5.88$ ,  $p = .02$ ,  $d = .32$ . However, participants were also more likely to choose acceptance when likelihood was high ( $M = 4.89$ ,  $SD = 1.72$ ) than when likelihood was low ( $M = 4.51$ ,  $SD = 1.81$ ),  $F(1, 227) = 15.95$ ,  $p < .0001$ ,  $d = .53$ . The effect of severity was non-significant,  $F(1, 227) = .01$ .

Analysis also yielded two unexpected interactions for acceptance. The first was a Severity by Controllability interaction,  $F(1, 227) = 4.60$ ,  $p = .03$ ,  $d = .28$  (Figure 3-3). Post hoc tests using the Bonferroni adjustment revealed that in the high severity conditions participants were more likely to respond with acceptance when controllability was low ( $M = 4.81$ ,  $SD = 1.80$ ) than when controllability was high ( $M = 4.52$ ,  $SD = 1.77$ ),  $t(229) = 3.31$ ,  $p < .01$ ,  $d = .44$ . In the low severity condition, participants in the low ( $M = 4.67$ ,  $SD = 1.75$ ) and high ( $M = 4.63$ ,  $SD = 1.82$ ) controllability conditions did not differ in their preference for acceptance,  $t(229) = .41$ ,  $p =$

.68,  $d = .05$ . The second was a Likelihood by Severity interaction,  $F(1, 227) = 6.16, p = .01, d = .33$  (Figure 3-4). Post hoc tests revealed that in high severity conditions participants were more likely to respond with acceptance when likelihood was high ( $M = 4.94, SD = 1.91$ ) than when likelihood was low ( $M = 4.38, SD = 1.94$ ),  $t(227) = 4.30, p < .0001, d = .57$ . In contrast, in low severity conditions participants did not differ in their preference for acceptance when likelihood was high ( $M = 4.78, SD = 1.82$ ) and when likelihood was low ( $M = 4.53, SD = 1.87$ ),  $t(229) = 2.33, p = .02, d = .31$ . There were no other significant interactions for acceptance, all  $F$ s  $< .35$ , all  $p$ s  $> .56$ , all  $d$ s  $< .08$ .

### **Forced-Choice Responses**

In addition to the Likert-type ratings for each response choice, participants also indicated which response they would choose if forced to pick one response to the scenario. We conducted Chi-square analyses examining the effects of controllability, likelihood, and severity with which participants chose each response. Our predictions for participants' forced-choice responses were the same as our predictions for their Likert-type ratings.

To examine our hypotheses, we conducted Chi-square analyses to compare the proportion of participants who chose each response (watchful waiting, active change, or acceptance) in the high vs. low conditions of controllability, likelihood, and severity. The Chi-square analyses examined whether 50% of the response choices fell into the high and low conditions. In other words, we compared expected frequencies (50% of response choices falling into low conditions and 50% into high conditions, or chance responding) with actual estimate frequencies. If the situational factors had no effect on participants' response choices, then, for example, 50% of participants who chose acceptance (or active change or watchful waiting) should have done so in the low controllability (or likelihood or severity) condition and 50% in the high controllability condition. In contrast, if our hypothesis is correct, greater than 50% of participants who chose

acceptance will have done so in the low controllability condition, and less than 50% of participants who chose acceptance will have done so in the high controllability condition.

Table 3-2 shows the number and percentage of participants who chose each response based on the manipulations of controllability, likelihood, severity, and role. The results were partly consistent with the hypotheses. Supporting Hypothesis 1, participants opted for watchful waiting more often when likelihood was low than when likelihood was high,  $\chi^2(1, N = 484) = 203.72, p < .0001$ . Participants also opted for watchful waiting more often when severity was low than when severity was high,  $\chi^2(1, N = 484) = 19.04, p < .0001$ . Contrary to predictions (yet consistent with the Likert-type responses), there was a marginally significant tendency for more participants to opt for watchful waiting when controllability was *high* than when controllability was *low*,  $\chi^2(1, N = 484) = 3.60, p = .06$ . As discussed earlier, we suspect that this unexpected result may be due to participants' misinterpretation of our controllability manipulation.

Supporting Hypothesis 2, participants opted for active change more often when likelihood was high than when likelihood was low,  $\chi^2(1, N = 1204) = 79.82, p < .0001$ . Participants also opted for active change more when severity was high than when severity was low,  $\chi^2(1, N = 1204) = 6.73, p < .01$ . However, controllability had no effect on participants' response choice,  $\chi^2(1, N = 1204) = .65, p = .42$ . Supporting Hypothesis 3, there was a marginally significant tendency for participants to opt for acceptance more when controllability was low than when controllability was high,  $\chi^2(1, N = 150) = 3.23, p = .07$ . However, likelihood and severity had no effect on participants' response choice,  $\chi^2(1, N = 1204) = .65, ps = .42$ .

## Discussion

Study 1 provided an initial test of the Bad News Response Model – a model for understanding and predicting responses to bad news. We tested three hypotheses in this study. First, as expected participants were more likely to choose watchful waiting when negative

outcomes of the news were unlikely to occur and/or non-severe (Hypothesis 1). Unexpectedly, however, participants were *less* likely to choose watchful waiting when negative outcomes were uncontrollable. Second, participants were more likely to choose active change when negative outcomes were controllable and likely to occur (Hypothesis 2). However, we did not find that severity influenced choices of active change. Third, participants were more likely to choose acceptance when negative outcomes were uncontrollable (Hypothesis 3) and relatively likely to occur.

These findings are important in that they provide support for the Bad News Response Model and offer preliminary evidence that the model is useful in predicting responses to bad news. However, the numerous interaction effects are difficult to interpret and inconsistent with our predictions. We failed to find complete support for our three hypotheses, and we found a number of unexpected interactions that make our supported hypotheses difficult to interpret. Several limitations to this study may have contributed to these problems. First, using exam scenarios may have caused participants to add their own interpretations to the scenarios beyond our intended manipulations. That is, students at the college level regularly receive exam grades, and as such they may have predetermined beliefs about what is realistic in their personal experience. For example, some participants may have felt that even our controllable event would be uncontrollable in real life, or they may have believed that they could control even our supposedly uncontrollable event. Participants in this study may have reinterpreted our scenarios in light of their personal experience, making our manipulations of secondary concern.

Second, participants may have interpreted the event as having drastically variable consequences, depending on their academic history. We used a “D” on a course exam as the negative event in this study. A “D” might be a devastating grade for some students, whereas

other students may regularly receive “D” grades. Although we hoped that the within-subjects nature of our design would render these differences irrelevant, individual differences in academic history may have been a strong enough influence on responses to weaken our manipulations.

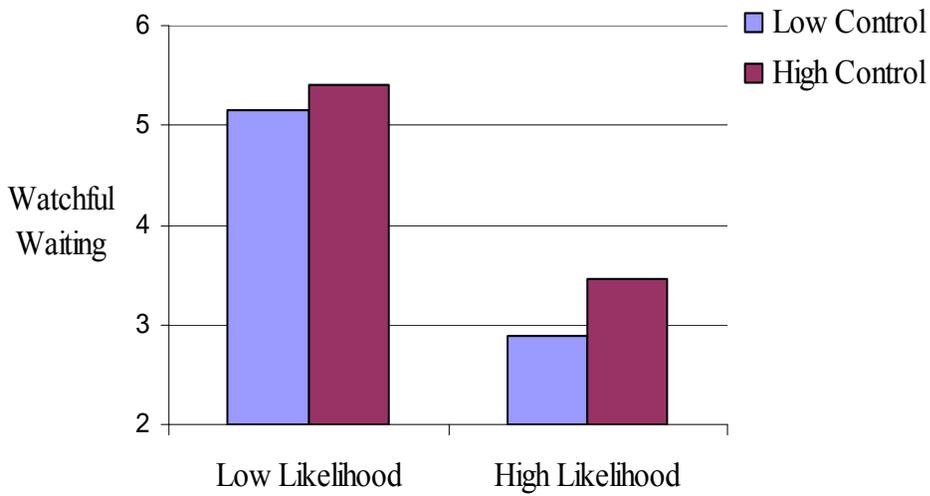


Figure 3-1. Responses of watchful waiting as a function of the interaction between controllability and likelihood (Study 1).

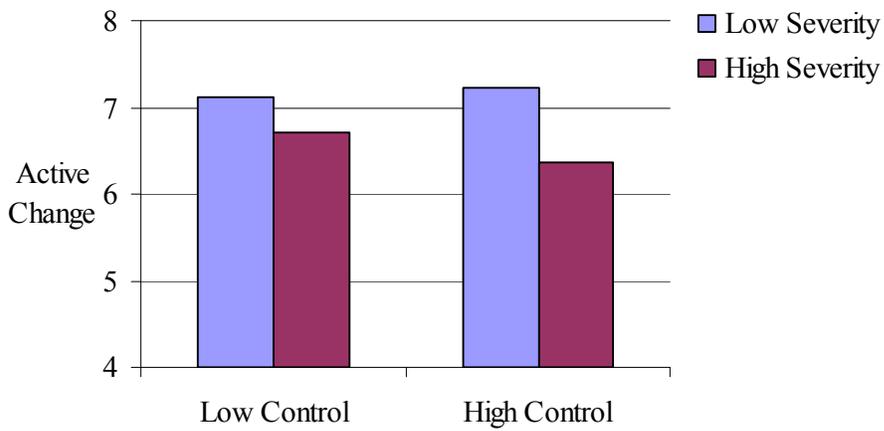


Figure 3-2. Responses of active change as a function of the interaction between controllability and severity (Study 1).

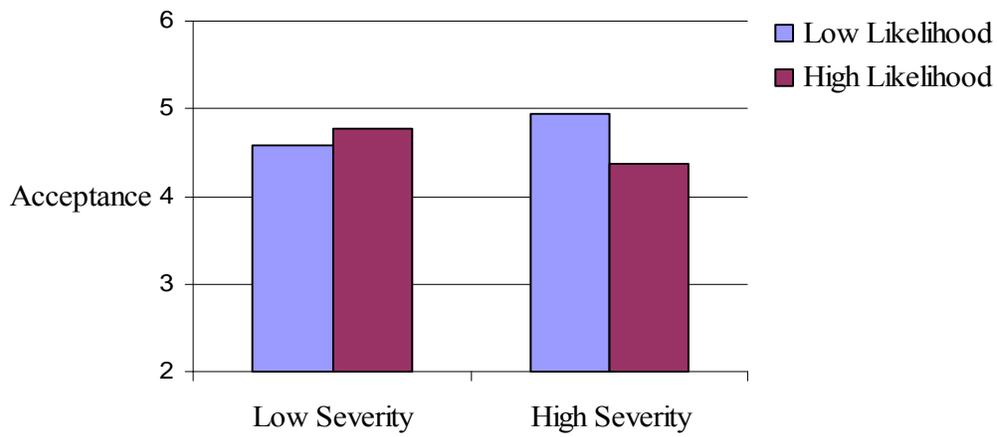


Figure 3-3. Responses of acceptance as a function of the interaction between likelihood and severity (Study 1).

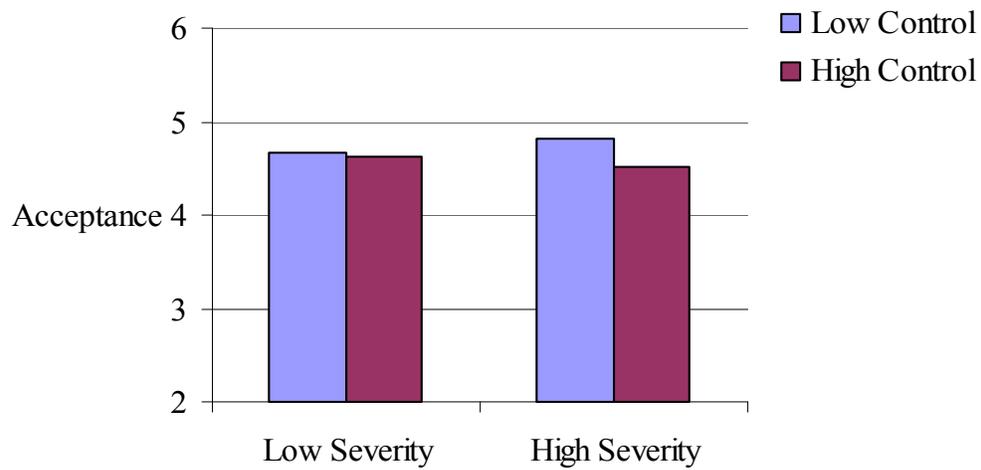


Figure 3-4. Responses of acceptance as a function of the interaction between controllability and severity (Study 1).

Table 3-1. Marginal means for 3-way interactions (Study 1)

Condition	Watchful waiting		Active change	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Low controllability				
Low likelihood				
Low severity	5.31	2.56	5.96	2.23
High severity	5.00	2.47	6.34	1.92
Low controllability				
High likelihood				
Low severity	3.34	2.17	7.43	1.65
High severity	2.45	1.87	7.90	1.55
High controllability				
Low likelihood				
Low severity	5.90	2.61	5.53	2.26
High severity	4.90	2.57	6.66	1.85
Low controllability				
High likelihood				
Low severity	3.76	2.31	7.18	1.69
High severity	3.15	2.02	7.80	1.39

Table 3-2. Study 1 frequency analyses of response choices

Condition	Watchful waiting		Active change		Acceptance	
	Frequency	%	Frequency	%	Frequency	%
Controllability						
High	268	29%	588	64%	64	7%
Low	216	24%	616	67%	86	9%
Likelihood						
High	85	9%	757	82%	78	8%
Low	399	43%	447	49%	72	8%
Severity						
High	194	21%	647	70%	78	8%
Low	290	32%	557	61%	72	8%

## CHAPTER 4

### STUDY 2

Study 2 attempted to replicate and clarify the findings from Study 1 in a health-related domain and using a between-subjects design. We designed Study 2 to improve some of the weaknesses of Study 1 in an effort to more clearly support the predictions of the Bad News Response Model. Whereas Study 1 used a familiar academic scenario, Study 2 used a health scenario that few participants are likely to have experienced. In addition, we used a between-subjects design to reduce the likelihood that individual differences in experience would interfere with our manipulations.

We also examined two additional hypotheses related to responses to bad news. Whereas the hypotheses tested in Study 1 examined the effects of the type of bad news on response decisions (Hypotheses 1-3), the additional hypotheses tested in Study 2 examine the possibility that responses to bad news may also depend on who chooses the response. In health-care situations, both patients and health-care professionals participate in treatment decisions, but may disagree on the best course of treatment. Research suggests that patients may prefer aggressive treatment options in an effort to “do everything they can,” even when such treatments are likely to do more harm than good. For example, one study of breast cancer patients found that 27% of women who reported that they made their own treatment decision opted for a mastectomy rather than a more conservative treatment. In contrast, only 16.8% of women who reported making the treatment decision jointly with their surgeon and 5.3% of women who reported that their surgeon made the treatment decision underwent a mastectomy (Katz et al., 2005). This finding implies that people generally prefer active responses when they are the recipient of bad news but are more likely to suggest a more conservative response to someone else receiving bad news.

The disconnect between the preferences of the bad news-recipient and the bad news-giver could arise for a number of reasons. For example, patients often fail to understand the details of their diagnoses (Baile et al., 2000; Ellis & Tattersall, 1999; Fallowfield & Jenkins, 2004; Loge, Kaasa, & Hytten, 1997; Quill, 1991), which could lead them to make uninformed treatment decisions. Alternatively, patients may feel a need to control the outcomes of their disease (e.g., Verhoef & White, 2002), and this need for control may lead them to choose aggressive treatment options. One purpose of this study was to examine whether people are truly more likely to choose more active responses for themselves than for others.

- **Hypothesis 4a:** People are more likely to choose watchful waiting for someone else than for themselves.
- **Hypothesis 4b:** People are more likely to choose active change for themselves than for someone else.

Finally, we examined the effect of experience with giving bad news on response choices. Although this hypothesis was somewhat speculative, we expected that experience with giving bad news increases understanding of the roles that controllability, likelihood, and severity play in choosing responses to bad news such that people with greater experience would recognize when each choice is most reasonable.

- **Hypothesis 5:** People who report having experience giving bad news are more likely to make response suggestions that take controllability, likelihood, and severity into account (Hypotheses 1-3 in Study 1) than are people who report little experience giving bad news. That is, the effects predicted by Hypotheses 1-3 are stronger for people with experience.

## Methods

### Participants

Participants were 434 undergraduates recruited through the web-based participant pool.

## Procedure

Participants read one of 16 possible versions of a scenario about a person with a suspicious mole. The scenarios varied in terms of a) the controllability of the possible type of skin cancer, b) the likelihood that the mole is cancerous, c) the severity of the possible type of skin cancer, and d) whether the participant took the role of the patient or the physician. Although we designed our scenarios to manipulate the variables of interest rather than to precisely represent the situation patients might actually face in a dermatologist's office, it is noteworthy that participants in a pilot test indicated that the scenarios were believable.

The *patient condition* scenario read as follows:

Imagine that you make an appointment with your doctor about a suspicious mole on your back. After examining the mole, your doctor determines that, *if the mole is cancerous*, it most likely is a **(non-severe / severe)** form of skin cancer that grows slowly and is unlikely to cause health problems. Although the mole **(cannot / can) be removed** through surgery, your doctor determines that there is **(only a 1-2% / a 50-60%)** chance that the mole is cancerous. Your doctor decides to biopsy the mole to determine if it is cancerous, and the biopsy results will be ready in 1-2 weeks.

Similarly, the *physician condition* scenario read as follows:

Imagine that you are a physician who must tell a patient about a suspicious mole on his back. After examining the mole, you determine that, *if the mole is cancerous*, it most likely is a **(non-severe / severe)** form of skin cancer that grows slowly and is unlikely to cause health problems. Although the mole **(cannot / can) be removed** through surgery, you determine that there is **(only a 1-2% / a 50-60%)** chance that the mole is cancerous. You decide to biopsy the mole to determine if it is cancerous, and the biopsy results will be ready in 1-2 weeks.

Participants next read descriptions of the three response types (watchful waiting, active change, and acceptance) and indicated the likelihood that they would engage in (*patient condition*) or recommend (*physician condition*) each response (*1 = very unlikely, 9 = very likely*). Participants also indicated which response they would choose if forced to select one response. Participants then indicated how likely they were/the patient was to have cancer (*1 = very unlikely, 9 = very likely*), how severe that outcome would be if it occurred (*1 = not at all*

*bad*, 9 = *very bad*), and how much control they/the patient had over the outcomes (1 = *little or no control*, 9 = *full control*). Finally, participants in the physician condition indicated how much experience they had with giving bad news (1 = *little to no experience giving bad news*, 9 = *frequent experience giving bad news*).

## Results

### Manipulations Checks

To test the effectiveness of our manipulations, we conducted separate 2 (Controllability: *high vs. low*) by 2 (Likelihood: *high vs. low*) by 2 (Severity: *high vs. low*) between-subjects ANOVA on the three manipulation check items. The manipulations of controllability, likelihood, and severity were quite successful. Analysis of the controllability manipulation check item yielded a single main effect of controllability,  $F(1, 427) = 9.45, p < .01, d = .30$ . Participants rated the outcomes as less controllable in the low control condition ( $M = 3.37, SD = 2.59$ ) than in the high control condition ( $M = 4.12, SD = 2.98$ ). Analysis of the likelihood manipulation check item yielded a single main effect of likelihood,  $F(1, 424) = 282.94, p < .0001, d = 1.63$ . Participants rated the negative outcome as less likely in the low likelihood condition ( $M = 2.35, SD = 1.68$ ) than in the high likelihood condition ( $M = 5.11, SD = 1.71$ ). Analysis of the severity manipulation check item yielded a main effect of severity,  $F(1, 426) = 41.55, p < .0001, d = .62$ . Participants rated the outcomes as less severe in the low severity condition ( $M = 5.75, SD = 2.23$ ) than in the *high severity* condition ( $M = 7.08, SD = 2.11$ ). Analysis also yielded an unexpected Severity by Controllability interaction for this item,  $F(1, 426) = 3.97, p = .05, d = .19$ . However, this interaction in no way qualified the main effect of severity. There were no other significant main effects or interactions, all  $F$ s  $< 1.41$ , all  $p$ s  $> .24$ , all  $d$ s  $< .12$ .

## **Likert-Type Ratings**

We tested the first set of hypotheses using 2 (Controllability: *high vs. low*) by 2 (Likelihood: *high vs. low*) by 2 (Severity: *high vs. low*) by 2 (Role: *patient vs. physician*) between-subjects ANOVAs on participants' ratings of the likelihood that they would choose watchful waiting, active change, and acceptance.

### **Watchful waiting**

We hypothesized that people would prefer watchful waiting when the controllability, likelihood, and severity of the negative outcome were low than when they were high (*Hypothesis 1*) and when they were making a response suggestion for someone else vs. themselves (*Hypothesis 4a*). Our hypotheses were confirmed. First, participants were more likely to choose watchful waiting when controllability was low ( $M = 6.27, SD = 2.54$ ) than when controllability was high ( $M = 5.39, SD = 2.84$ ),  $F(1, 416) = 10.80, p = .001, d = .32$ . Second, participants were more likely to choose watchful waiting when likelihood was low ( $M = 6.23, SD = 2.63$ ) than when likelihood was high ( $M = 5.45, SD = 2.76$ ),  $F(1, 416) = 11.32, p = .001, d = .33$ . Third, participants were more likely to choose watchful waiting when severity was low ( $M = 6.14, SD = 2.53$ ) than when severity was high ( $M = 5.54, SD = 2.87$ ),  $F(1, 416) = 7.75, p < .01, d = .27$ . Finally, participants were more likely to choose watchful waiting for others ( $M = 6.74, SD = 2.34$ ) than for themselves ( $M = 5.06, SD = 2.79$ ),  $F(1, 416) = 43.48, p < .0001, d = .65$ . No other significant effects emerged for Watchful waiting, all  $F$ s  $< 3.28$ , all  $p$ s  $> .07$ , all  $d$ s  $< .18$ .

### **Active change**

We hypothesized that people would prefer active change when the controllability, likelihood, and severity of the negative outcome were high than when they were low (*Hypothesis 2*) and when they were making a response suggestion for themselves vs. someone else (*Hypothesis 4b*). Once again, the analyses supported our hypotheses. First, participants were

more likely to choose active change when controllability was high ( $M = 7.00$ ,  $SD = 2.21$ ) than when controllability was low ( $M = 6.34$ ,  $SD = 2.26$ ),  $F(1, 418) = 7.55$ ,  $p < .01$ ,  $d = .27$ . Second, participants were more likely to choose active change when likelihood was high ( $M = 7.03$ ,  $SD = 2.07$ ) than when likelihood was low ( $M = 6.29$ ,  $SD = 2.39$ ),  $F(1, 418) = 11.67$ ,  $p < .001$ ,  $d = .33$ . Third, participants were more likely to choose active change when severity was high ( $M = 6.92$ ,  $SD = 2.09$ ) than when severity was low ( $M = 6.40$ ,  $SD = 2.40$ ),  $F(1, 418) = 8.97$ ,  $p < .01$ ,  $d = .29$ . Finally, analysis revealed a marginally significant tendency for participants to prefer active change for themselves ( $M = 6.82$ ,  $SD = 2.26$ ) than for someone else ( $M = 6.48$ ,  $SD = 2.24$ ),  $F(1, 416) = 3.43$ ,  $p < .06$ ,  $d = .18$ .

Analysis also yielded two unexpected interactions for active change. The first was a Severity by Controllability interaction,  $F(1, 418) = 3.95$ ,  $p = .05$ ,  $d = .19$  (Figure 4-1). Post hoc tests using the Bonferroni adjustment revealed that participants in the high severity condition were more likely to respond with active change when controllability was high ( $M = 7.42$ ,  $SD = 1.91$ ) than when controllability was low ( $M = 6.43$ ,  $SD = 2.15$ ),  $F(1, 418) = 11.68$ ,  $p = .0007$ ,  $d = .46$ . In the low severity condition, participants in the high ( $M = 6.55$ ,  $SD = 2.43$ ) and low ( $M = 6.25$ ,  $SD = 2.37$ ) controllability condition did not differ in their preference for active change,  $F(1, 418) = .28$ ,  $p = .60$ ,  $d = .05$ .

The second was a Severity by Role interaction,  $F(1, 418) = 3.81$ ,  $p = .05$ ,  $d = .19$  (Figure 4-2). Post hoc tests revealed that participants in the physician condition were more likely to respond with active change when severity was high ( $M = 6.96$ ,  $SD = 1.92$ ) than when severity was low ( $M = 5.94$ ,  $SD = 2.46$ ),  $F(1, 418) = 11.24$ ,  $p = .0009$ ,  $d = .47$ . In contrast, participants in the patient condition did not differ in their preference for active change when severity was high ( $M = 6.89$ ,  $SD = 2.24$ ) vs. low ( $M = 6.76$ ,  $SD = 2.30$ ),  $F(1, 418) = .60$ ,  $p = .44$ ,  $d = .08$ .

## Acceptance

We hypothesized that people would prefer acceptance when the controllability of the negative outcome was low than when it was high (*Hypothesis 3*). Analyses confirmed our hypothesis. Participants were more likely to choose acceptance when controllability was low ( $M = 4.12, SD = 2.61$ ) than when controllability was high ( $M = 3.50, SD = 2.12$ ),  $F(1, 424) = 6.95, p < .01, d = .26$ . No other significant effects emerged for acceptance, all  $F$ s  $< 3.66$ , all  $p$ s  $> .06$ , all  $d$ s  $< .19$ .

## Forced-Choice Responses

In addition to the Likert-type ratings for each response choice, participants also indicated which response they would choose if forced to pick one response to the scenario. We conducted Chi-square analyses examining the effects of controllability, likelihood, severity, and role on the frequency with which participants chose each response. Our predictions for participants' forced-choice responses were the same as our predictions for their Likert-type ratings.

Table 4-1 displays the number and percentage of participants who chose each response based on the manipulations of controllability, likelihood, severity, and role. The results were generally consistent with the hypotheses. Supporting Hypothesis 1, participants opted for watchful waiting more often when controllability was high than when controllability was low,  $\chi^2(1, N = 181) = 4.64, p = .03$ , and when likelihood was high than when it was low,  $\chi^2(1, N = 181) = 4.02, p < .05$ . However, severity had no effect on participants' response choices,  $\chi^2(1, N = 181) = .04, p = .84$ . Supporting Hypothesis 2, participants opted for active change more often when controllability was low than when it was high,  $\chi^2(1, N = 224) = 7.14, p < .01$ , and when likelihood was low than when it was high,  $\chi^2(1, N = 224) = 5.79, p = .02$ . However, once again, severity had no effect on participants' response chose,  $\chi^2(1, N = 224) = .07, p = .79$ .

The absence of an effect for severity on choices of watchful waiting and active change was surprising and inconsistent with the results from the Likert-type items. It is noteworthy that the mean response to the severity manipulation check item was above the scale midpoint of 5.0 in both the low severe and high severe condition. Perhaps the absence of an effect for severity was due to participants in both high and low severity conditions regarding the situation described in the scenario as above threshold in seriousness for a forced-choice response.

Supporting Hypothesis 3, participants opted for acceptance more often when controllability was low than when controllability was high,  $\chi^2(1, N = 30) = 8.53, p < .01$ . Supporting Hypothesis 4a and 4b, participants opted for watchful waiting more often when assuming the role of physician than when assuming the role of patient,  $\chi^2(1, N = 181) = 7.56, p < .01$ , yet opted for active change more often when assuming the role of patient than when assuming the role of patient,  $\chi^2(1, N = 224) = 18.28, p < .0001$ .

### **Does News-Giving Experience Matter?**

Hypothesis 5 proposed that participants who reported having more experience with giving bad news would be more likely to suggest responses in line with our predictions (e.g., watchful waiting when controllability, likelihood, and severity were low, active change when controllability, likelihood, and severity were high, and acceptance when controllability was low). To examine Hypothesis 5 we added experience (as a continuous variable after centering), to our 2 (Controllability) x 2 (Likelihood) x 2 (Severity) analysis of participants' Likert-type ratings of watchful waiting, active change, and acceptance (Cohen, Cohen, West, & Aiken, 2003). Recall that only participants in the *physician condition* completed the measure of news-giving experience. Support for Hypothesis 5 would appear as a significant two-way interaction of Experience and the other variables in the model.

Regarding ratings of watchful waiting, only the two-way interaction of Experience and Controllability approached significance,  $F(1, 182) = 3.57, p = .06, d = .28$ . For the purpose of illustration, we computed the mean watchful waiting response separately for participants in the low and high controllability conditions at three levels of experience: low (one standard deviation below the mean level of experience), medium (at the mean level of experience) and high (one standard deviation above the mean level of experience) (Cohen et al., 2003). The results appear in Figure 4-3. As predicted, when controllability was low, people with more experience were more likely to suggest watchful waiting than were people with less experience,  $t(104) = 2.09, p = .04$ . However, when controllability was high, level of experience was unrelated to preferences for watchful waiting,  $t(91) = -.52, p = .60$ .

Analyses also revealed an unexpected four-way interaction for preferences for watchful waiting,  $F(1, 182) = 7.38, p = .007, d = .40$ . Because this interaction was not predicted, we did not examine it further. There were no other significant interactions for watchful waiting, all  $Fs < .68$ , all  $ps > .41$ , all  $ds < .12$ .

Regarding ratings of acceptance, the interaction of Experience and Controllability was significant,  $F(1, 182) = 3.80, p = .05, d = .29$ . We once again plotted three levels of experience separately for participants in the high and low controllability conditions. The results appear in Figure 4-4. Contrary to predictions, when controllability was low, people with more experience were *less* likely to suggest acceptance than were people with less experience,  $t(104) = -2.17, p = .03$ . When controllability was high, experience and acceptance were unrelated,  $t(91) = .50, p = .62$ .

The interaction between Experience and Severity was also significant for ratings of acceptance,  $F(1, 182) = 10.15, p < .01, d = .47$ . The results appear in Figure 4-5. Contrary to our

predictions, when severity was high, people with more experience were *less* likely to suggest acceptance than were people with less experience,  $t(105) = -3.92, p < .001$ . When severity was low, experience and acceptance were unrelated,  $t(89) = 1.11, p = .27$ . No other interactions for acceptance reached conventional levels of significance, all  $F$ s  $< 3.04$ , all  $p$ s  $> .08$ , all  $d$ s  $< .26$ . We also found no interactions involving experience for preferences for active change, all  $F$ s  $< 1.98$ , all  $p$ s  $> .16$ , all  $d$ s  $< .21$ .

### **Discussion**

Study 2 had three goals. First, we attempted to replicate and clarify the findings of Study 1 using a different paradigm. Second, we examined whether people select different responses for themselves vs. someone else. Third, we examined the effect of experience of giving news on response choice. In most instances our hypotheses received strong support.

First, as expected participants were more likely to choose watchful waiting when negative outcomes of the news were uncontrollable, unlikely to occur, and/or non-severe (Hypothesis 1). Second, participants were more likely to choose active change when negative outcomes were controllable, likely to occur, and/or severe (Hypothesis 2). Third, participants were more likely to choose acceptance when negative outcomes were uncontrollable (Hypothesis 3). Study 2 was partly inconsistent with the Study 1, particularly regarding the effects of controllability on responses of active change and watchful waiting and the effect of likelihood on responses of acceptance. Future studies can examine whether the model-supportive findings in Study 2 are replicable in different domains and using different methods. Although it is possible that the model-inconsistent results in Study 1 are suggestive of limitations of the model, we strongly suspect that they are instead reflective of limitations in the design of the scenarios used in Study 1. Finally, although we also found a few unexpected interactions in Study 2, the results

of this study provide stronger support for the Bad News Response Model in comparison to the results of Study 1.

As predicted, participants were also more likely to choose watchful waiting for someone else vs. themselves and were more likely to choose active change for themselves vs. someone else (*Hypothesis 4a and 4b*). Finally, we speculated that participants who reported having experience giving bad news would make response suggestions more in line with our predictions than would participants who reported having little experience (*Hypothesis 5*). Only one finding supported this hypothesis. As predicted, when controllability was low participants with experience giving bad news were more likely to suggest watchful waiting than were participants with relatively little experience. However, no other effect of experience was in line with our predictions, and the effects of experience on suggestions of acceptance were inconsistent with our hypotheses.

Why did news-giving experience do so little to guide people in suggesting responses? The most likely explanation is a restriction of range. Our participants were undergraduates, not health-care providers. It is likely that the participants classified as having high experience giving bad news actually had very little experience, and certainly not the kind of experience that would guide them in suggesting how a patient should respond to health-related news. Supporting this explanation are the findings that 80% of our participants reported experience at or below the midpoint of our 9-point scale. Indeed, the mean experience rating was only 3.5. Clearly, research is needed examining participants with more experience giving bad news (physicians, nurses, etc.).

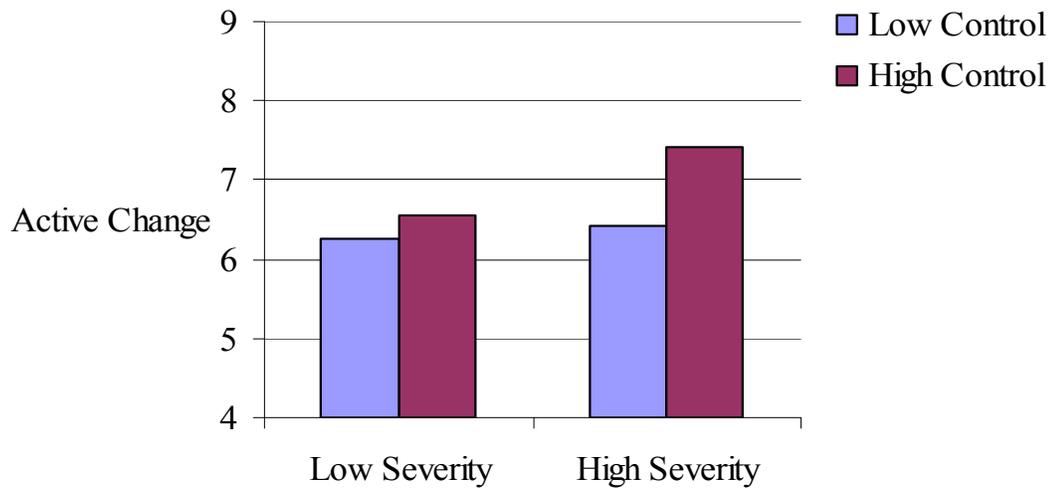


Figure 4-1. Responses of active change as a function of the interaction between controllability and severity (Study 2).

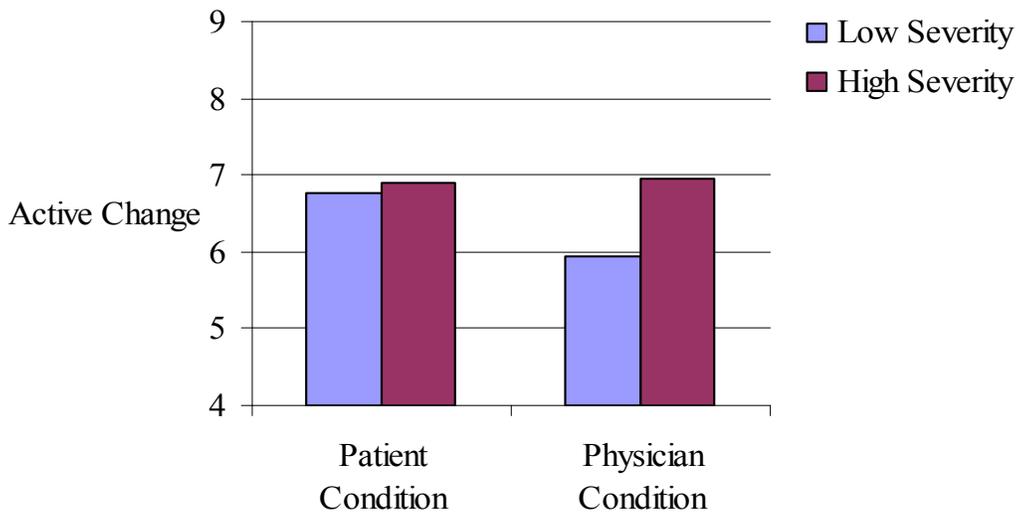


Figure 4-2. Responses of active change as a function of the interaction between role and severity (Study 2).

Table 4-1. Study 2 frequency analyses of response choices

Condition	Watchful waiting		Active change		Acceptance	
	Frequency	%	Frequency	%	Frequency	%
Controllability						
High	76	35%	588	62%	7	3%
Low	105	48%	616	42%	23	10%
Likelihood						
High	77	35%	757	58%	16	7%
Low	104	49%	447	44%	14	7%
Severity						
High	89	40%	647	51%	20	9%
Low	92	43%	557	52%	10	5%
Role						
Patient	72	31%	647	61%	19	8%
Physician	109	55%	557	40%	11	5%

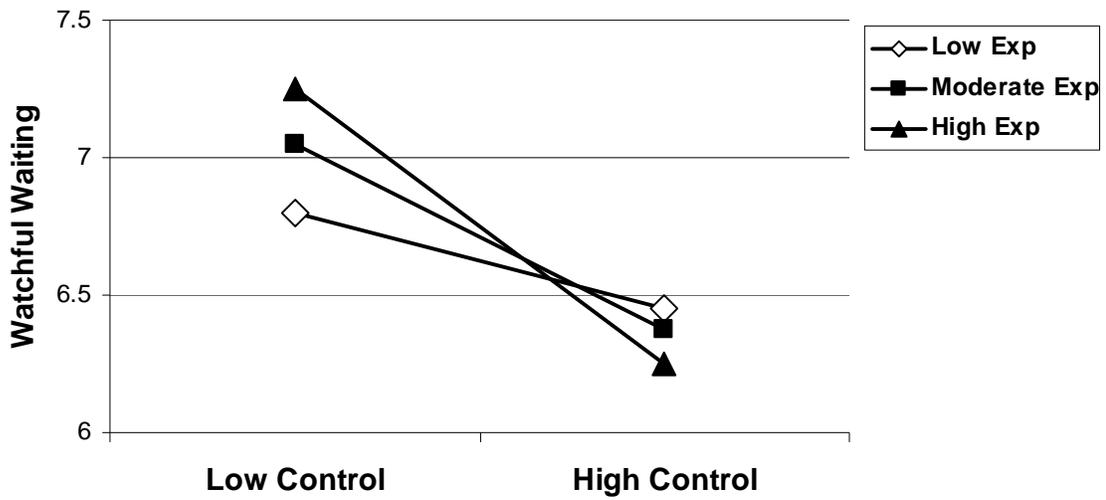


Figure 4-3. Suggestions of watchful waiting by participants reporting low, moderate, and high news-giving experience and for low and high controllability (Study 2).

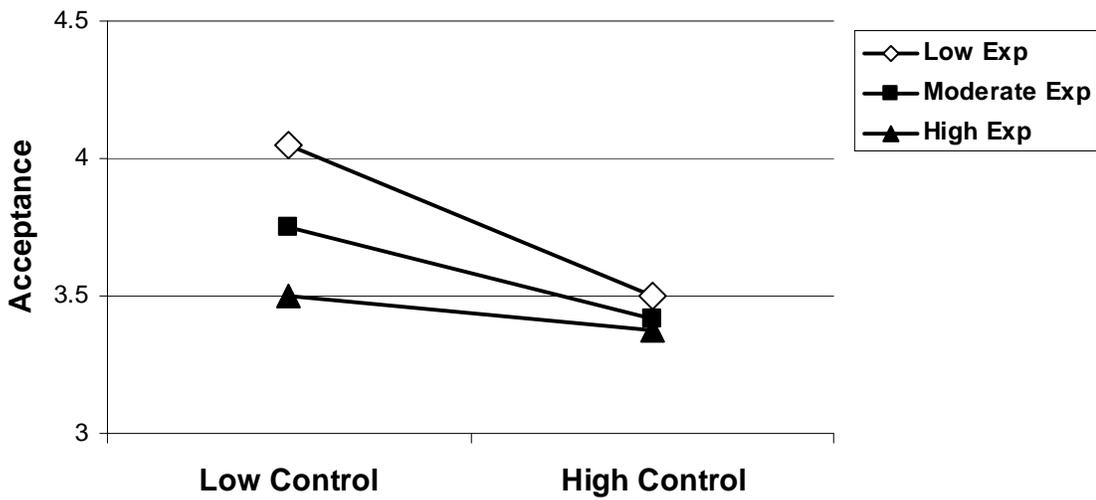


Figure 4-4. Suggestions of acceptance by participants reporting low, moderate, and high news-giving experience and for low and high controllability (Study 2).

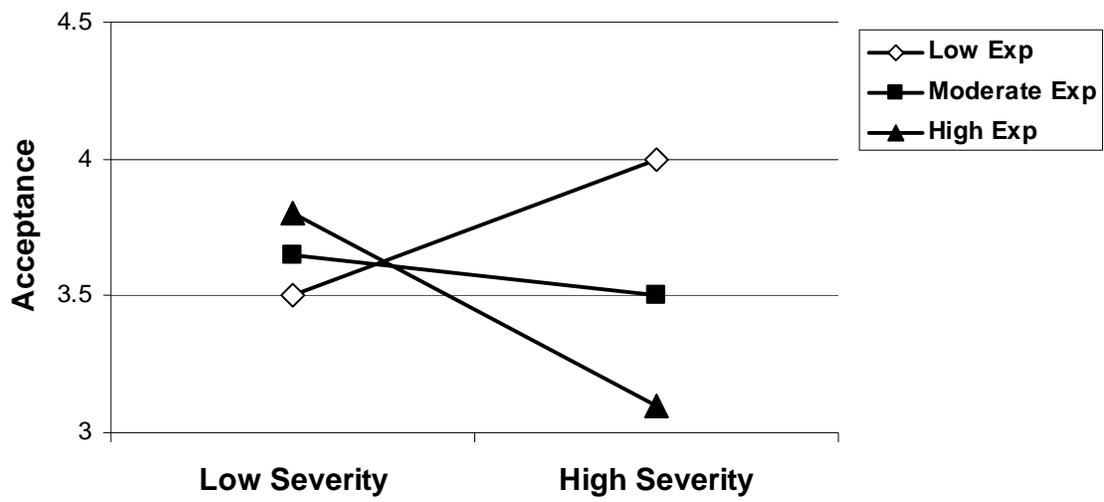


Figure 4-5. Suggestions of acceptance by participants reporting low, moderate, and high news-giving experience and for low and high severity (Study 2).

## CHAPTER 5

### STUDY 3

Study 3 examines how people perceive their response options. We propose that although different responses may be best suited to different types of news, people are more likely to choose some responses than others, regardless of the circumstances. We further suggest that two causes of differential response preferences may be 1) the emotions associated with a given response, and 2) the impressions people believe they will make by responding to bad news in a given way.

To illustrate how impression management concerns could influence response choices in the face of bad news, imagine an 80-year-old man who receives a diagnosis of prostate cancer. After talking with several physicians, the man chooses not to receive treatment at that time and informs his family of his decision. The man, like many prostate cancer patients interviewed by researchers (Chapple et al., 2002), may face significant opposition to his decision. His family members may see him as weak, preferring to see him as the type of man who would aggressively face any challenge that comes his way. In the face of such a negative impression, the cancer patient may reverse his decision and undergo an unnecessary and invasive treatment.

Our hypotheses regarding people's perceptions of their response options are summarized in Table 5-1. Regarding emotional associations with response options, we hypothesized that people would associate the most positive emotions with active change, the least positive emotions with non-responding, and watchful waiting and acceptance somewhere in between. However, we also hypothesized that people might perceive active change, which could require difficult or costly behaviors, as highly anxiety-provoking in comparison with other responses.

Based on the finding that people often prefer active responses to more conservative responses (Chapple et al., 2002; Denberg et al, 2006.; Mazur & Merz, 1996), we hypothesized

that people would generally form the most positive impressions of a person who chooses active change (i.e., as capable and admirable), the most negative impressions of a person who chooses non-responding (i.e., as weak, vulnerable, and disengaged), and moderately positive impressions of a person who chooses acceptance or watchful waiting.

People may have nuanced beliefs regarding some responses, so Study 3 also examined two speculative hypotheses. First, despite its benefits, active change entails the risk that action might be premature, excessive, or ineffective. Under some circumstances, taking immediate action could waste valuable time and energy, or take time and energy away from more important needs. For example, an elderly man who chooses expensive surgery for prostate cancer over a more conservative “watchful waiting” approach may compromise his family’s financial security for little medical gain and risk dangerous side-effects (Bangma et al., 2007). As such, we expected that people would anticipate making an impression of impulsivity by responding with active change. In addition, non-responding corresponds closely with denial, which may be seen as an immediate and highly reactive (i.e., impulsive) response to unbearable bad news. In a sense, people who react to bad news with denial are entirely focused on immediate gratification with little thought for long-term outcomes of their behavior. As such, we expected that non-responding would also be seen as highly impulsive and that watchful waiting and acceptance would be seen as less impulsive.

Second, previous research on acceptance as a response to loss or tragedy suggests that some people require a great deal of time to reach the point of acceptance (Gamliel, 2000; Kübler-Ross, 1969). It may be that acceptance requires a high degree of understanding or maturity that is achieved after engaging in other responses or with the passage of time. However, one pattern of responding to bad news cannot fit all situations or people (Wortman & Silver, 1989; Silver et al.,

2004), and thus some people may engage in acceptance immediately upon receiving bad news. We expected that people would perceive a person who responds with acceptance as having a high degree of maturity. We also anticipated that people would perceive a person who responded with active change as highly mature, in line with my other predictions regarding the general positivity of active change, and that people would perceive a person who responds with watchful waiting or non-responding as less mature.

## **Methods**

### **Participants**

We recruited 58 undergraduates through the web-based participant pool (45 males, 113 females).

### **Procedure**

Participants responded to four questionnaires in random order. For each questionnaire participants were instructed to imagine that their best friend responded to “some bad news” (rather than specific news for the purpose of generalizability) in one of four ways: watchful waiting, active change, acceptance, and non-responding. Each questionnaire provided a brief description of the response type. Best friends were used in an effort to reduce biases that might result from participants judging their own responses while maximizing the likelihood that participants could vividly imagine the target responding in each way. After reading each response description, participants first responded to an item that read, “By responding with [watchful waiting, active change, acceptance, or non-responding], I think my friend would feel...”. Participants were then presented with 29 affect items, and they indicated the extent to which they thought their friend would feel each way (1 = *strongly disagree*, 9 = *strongly agree*). Participants then responded to an item that read, “By responding with [watchful waiting, active change, acceptance, or non-responding], I think my friend is...”. Participants were then

presented with 38 trait items, and they indicated the extent to which they would characterize their friend in each way (1 = *strongly disagree*, 9 = *strongly agree*).

## Results

### Affect Items

Affect items were grouped into five reliable categories based on *a priori* assignments and pilot testing ( $N = 30$ ). The resultant categories and the included items for each were as follows (Cronbach's alphas represent the results from the sample used in Study 1,  $N = 158$ ): *positive* (excited, glad, happy, pleased, enthusiastic;  $\alpha = .89$ ), *negative* (depressed, sad, confused, angry, regretful, disappointed, distressed, weary;  $\alpha = .90$ ), *anxious* (anxious, tense, scared, on edge, nervous, worried;  $\alpha = .90$ ), *calm* (calm, relieved, serene;  $\alpha = .70$ ), *hopeful* (hopeful, energetic, inspired, determined;  $\alpha = .76$ ). Three items (alert, attentive, active) did not correlate well with any of the groupings or with one another; including or excluding these items did not change the nature of our conclusions, so they will not be mentioned further.

We hypothesized that participants would associate different emotions with different responses to bad news. Did response type make a difference in how participants rated the affect items? Table 5-2 presents the means for each response type. To test our hypotheses we conducted a one-way repeated measures MANOVA for each of the trait categories. As shown in Table 5-2, analyses revealed significant main effects of response type on all 5 affect categories. We further examined the specific pattern of means by testing specific contrasts between affect ratings for each response type. Recall our hypothesis that participants would rate active change most positively and non-responding least positively across most affect categories. This hypothesis was confirmed for ratings of *negative* and *hopeful*, and partially supported for ratings of *positive* (Table 5-2). We further hypothesized that acceptance and watchful waiting would both be viewed as equally *calm* and more so than active change or non-responding. This

hypothesis was partially supported. Although watchful waiting was seen as the least *calm*, acceptance was seen as more *calm* than active change and non-responding. Finally, we anticipated that participants would rate active change and non-responding as more *anxious* than either watchful waiting or acceptance. This hypothesis was also partially supported. Once again, watchful waiting was seen as the most *anxious*, but acceptance was seen as less *anxious* than either active change or non-responding (Table 5-2).

### **Trait Items**

Trait items were grouped into seven reliable “impression categories” based on *a priori* assignments and pilot testing ( $N = 30$ ). The resultant categories and items were: *capable* (capable, competent, responsible, practical, decisive, sensible, prepared;  $\alpha = .87$ ), *admirable* (admirable, respectable;  $\alpha = .90$ ), *mature* (mature, wise, careful, calm, relaxed;  $\alpha = .81$ ), *impulsive* (impulsive, reckless, headstrong, impatient, overconfident;  $\alpha = .81$ ), *weak* (weak, hopeless, pathetic, lazy, helpless;  $\alpha = .83$ ), *vulnerable* (vulnerable, fragile, unstable;  $\alpha = .84$ ), and *disengaged* (disengaged, indifferent, resigned, detached, apathetic;  $\alpha = .80$ ). Six items (resilient, hesitant, powerless, cautious, controlled, and stoic) did not correlate well with any of the groupings or with one another; including or excluding these items did not change the nature of the conclusions, so they are not discussed further.

We hypothesized that participants form different impressions of their best friend based on how the friend responded to bad news. To test our hypotheses we conducted a one-way repeated measures MANOVA for each of the trait categories. As shown in Table 5-3, analyses revealed significant main effects of response type on all 7 trait categories. We further examined the specific pattern of means by testing specific contrasts between impression ratings for each response type. Recall our hypothesis that participants would rate active change most positively and non-responding least positively across most impression categories. This hypothesis was

confirmed for ratings of *capable*, *admirable*, *weak*, *vulnerable*, and *disengaged* (Table 5-3). We further hypothesized that acceptance and active change would be viewed as equally *mature* and more so than watchful waiting or non-responding. This hypothesis was fully supported. Finally, we anticipated that participants would rate active change and non-responding as more *impulsive* than either watchful waiting or acceptance. This hypothesis was also fully supported (Table 5-3).

### **Discussion**

The results of Study 3 suggest that on a wide variety of measures, people view active change to be most positive, acceptance to be somewhat more positive than watchful waiting, and non-responding to be least positive. These results suggest that, regardless of the type of bad news, people perceive some responses to be more positive than others across a variety of measures. Of course, participants in Study 3 may have brought to mind a wide array of bad news examples. We did not specify the type of bad news participants should imagine in this study to maximize the generalizability of our findings to different types of bad news, but as a result participants were free to imagine different types of bad news in response to each of the four prompts. In other words, people may have imagined a type of bad news that demands action when asked to think about active change, but a type of bad news that calls for serene acceptance when asked to think about acceptance. Thus, people may have rated each response as more positive than they would have if they had imagined the same event across responses or imagined the response apart from any particular bad news. Although this limitation of Study 3 makes it difficult to predict how people would perceive each response within a specific context, it does not undermine the importance of the finding that people consistently rate some responses as more positive than others.

In addition, although this study did not attempt to examine whether these perceptions influence response choices, the emotional and impression associations people have with their

response options may predict the responses people will choose. People may be particularly likely to avoid responses that they believe would make a poor impression on others, such as being seen as weak or immature (Schlenker, 1980). Combined with the results of Studies 1 and 2, the findings of Study 3 suggest that responses to bad news may be foreseeable based not only on the type of news people receive but also their perceptions of their response options.

Table 5-1. Predicted results (Study 3)

	Non- responding	Watchful waiting	Active change	Acceptance
Affect categories				
Positive	Low	Moderate	Moderate	High
Negative	High	Moderate	Moderate	Low
Anxious	High	Low	Low	High
Calm	Low	High	High	Low
Hopeful	Low	Moderate	Moderate	High
Impression categories				
Capable	Low	Moderate	Moderate	High
Admirable	Low	Moderate	Moderate	High
Mature	Low	Low	High	High
Weak	High	Moderate	Moderate	Low
Disengaged	High	Moderate	Moderate	Low
Vulnerable	High	Moderate	Moderate	Low
Impulsive	High	Low	Low	High

Table 5-2. Affect category ratings across response types

Affect category	Response type				<i>F</i> (3,154)	<i>p</i>
	Non- responding	Watchful waiting	Acceptance	Active change		
Positive	2.68 <sub>a</sub>	2.90 <sub>a</sub>	3.44 <sub>b</sub>	3.99 <sub>c</sub>	21.90	< .0001
Negative	6.09 <sub>a</sub>	5.58 <sub>b</sub>	5.10 <sub>c</sub>	4.64 <sub>d</sub>	27.28	< .0001
Anxious	6.25 <sub>a</sub>	7.20 <sub>b</sub>	4.78 <sub>c</sub>	5.97 <sub>a</sub>	72.30	< .0001
Calm	3.16 <sub>a</sub>	2.63 <sub>b</sub>	4.88 <sub>c</sub>	3.92 <sub>d</sub>	59.10	< .0001
Hopeful	3.36 <sub>a</sub>	4.42 <sub>b</sub>	5.20 <sub>c</sub>	6.46 <sub>d</sub>	95.50	< .0001

Table 5-3. Impression category ratings across response types

Impression category	Response type				<i>F</i> (3,154)	<i>p</i>
	Non- responding	Watchful waiting	Acceptance	Active change		
Capable	3.34 <sub>a</sub>	4.98 <sub>b</sub>	6.11 <sub>c</sub>	7.13 <sub>d</sub>	149.90	< .0001
Admirable	2.89 <sub>a</sub>	5.31 <sub>b</sub>	6.83 <sub>c</sub>	7.71 <sub>d</sub>	191.19	< .0001
Mature	3.68 <sub>a</sub>	5.11 <sub>b</sub>	6.13 <sub>c</sub>	5.94 <sub>c</sub>	72.51	< .0001
Impulsive	3.86 <sub>a</sub>	3.19 <sub>b</sub>	3.22 <sub>b</sub>	4.09 <sub>a</sub>	20.45	< .0001
Weak	4.75 <sub>a</sub>	3.30 <sub>b</sub>	2.66 <sub>c</sub>	1.76 <sub>d</sub>	108.94	< .0001
Vulnerable	6.16 <sub>a</sub>	4.85 <sub>b</sub>	4.02 <sub>c</sub>	3.17 <sub>d</sub>	75.45	< .0001
Disengaged	5.15 <sub>a</sub>	3.84 <sub>b</sub>	3.63 <sub>b</sub>	2.66 <sub>c</sub>	65.33	< .0001

## CHAPTER 6

### STUDY 4

Studies 1 and 2 showed that the type of bad news people receive influences their response choices, and Study 3 showed that people associate specific emotions and impressions with each response option. Study 4 further examined the question of why people might choose certain responses over others by asking if people perceive certain responses to be more or less effective than other responses. More specifically, we asked people to recall a time when they had received bad news and then indicate whether their response had positive or negative consequences. Like Study 3, Study 4 did not specifically examine whether people choose certain responses based on perceptions of effectiveness. Instead, this study serves as a preliminary examination of another potential influence on response choices.

Based on both the general response preferences we found in Studies 1 and 2 (52% of participants chose active change in both Studies 1 and 2) and the beliefs people expressed in Study 3 (generally positive beliefs about active change, less positive beliefs about watchful waiting and acceptance), we expected that participants would perceive active change to be the most effective response choice, followed by watchful waiting and acceptance. That is, we hypothesized that participants who reported responding with active change would report that their response had generally positive consequences, compared with participants who reported responding with watchful waiting or acceptance.

### **Methods**

#### **Participants**

99 undergraduates were recruited through the web-based participant pool and participated in sessions of one to five.

## Procedure

Participants completed a questionnaire in response to both written instructions and instructions read by the experimenter. First, the experimenter asked participants to write about a time when they received bad news. The experimenter encouraged participants to provide as much detail as they could remember, but they were asked to limit this description to the time when they received the news and not to discuss anything after that experience. The experimenter described several examples to clarify the desired response. Participants then indicated how likely they were to experience negative outcomes as a result of the bad news (*1 = very unlikely, 9 = very likely*), how severe or important they expected these outcomes to be at the time they received the bad news (*1 = not severe, 9 = very severe*), and how much control they had over the consequences of the news at the time they received it (*1 = no control, 9 = complete control*). These items were included to test the generalizability of the findings in Studies 1 and 2.

Participants then wrote about their response to the bad news, including thoughts, emotions, and actions. Participants read descriptions of the three response types (watchful waiting, active change, and acceptance) and indicated the extent to which they had engaged in each response (*1 = not at all, 9 = very much*) and which response best described their response to the situation they described. Finally, participants wrote about short- and long-term consequences of their response to the news and indicated how their response affected their consequences or outcomes (*1 = made things much worse, 9 = made things much better*). Participants also indicated whether they experienced negative consequences as a result of their response to the bad news (*yes or no*), and if so, how long these negative outcomes lasted (*1 = not very long, 9 = a very long time*) and how severe they were (*1 = not very severe, 9 = extremely severe*).

## Results

### Situational Factors and Response Ratings

We hypothesized that participants' ratings of controllability, likelihood, and severity would be related to their responses to the bad news, as found in Studies 1 and 2. The relevant correlations are reported in Table 6-1. First, we hypothesized that participants would be more likely to report responding with watchful waiting to the extent that the controllability, likelihood, and severity of the news were low. This hypothesis was not supported. Participants' ratings of controllability, likelihood, and severity were not significantly correlated with the extent to which participants engaged in watchful waiting, all  $r_s < .14$ , all  $p_s > .18$ .

Second, we hypothesized that participants would be more likely to report responding with active change to the extent that the controllability, likelihood, and severity of the news were high. This hypothesis was partially supported. Participants were more likely to report responding with active change to the extent that the controllability of the news was higher,  $r(99) = .51, p < .0001$ . There was also a non-significant trend towards participants responding more with active change when the severity of the bad news was higher,  $r(99) = .17, p = .10$ . However, responses of active change were not significantly correlated with report of likelihood,  $r(99) = .12, p = .23$ .

Finally, we hypothesized that participants would be more likely to report responding with acceptance to the extent that controllability was low. This hypothesis was supported,  $r(99) = -.38, p = .0001$ . Thus, the results of Study 4 partially, but not completely, replicated the results of Studies 1 and 2. That is, as in Studies 1 and 2 participants were more likely to respond with active change when controllability and severity were high and were more likely to respond with acceptance when controllability was low. However, participants in this study were no more likely to respond with watchful waiting when controllability, likelihood, and severity were low, or with active change when likelihood was high.

## **Consequences of Responding**

The primary purpose of Study 4 was to examine participants' perceptions of the consequences of various types of bad news and various responses to bad news. Table 6-1 displays the correlations between the three response measures (watchful waiting, active change, and acceptance) and the three consequence measures (positivity/negativity of consequences, duration of any negative consequences, and severity of negative consequences). Table 6-1 also displays the correlations between each of the situational factors (controllability, severity, and likelihood) and the three consequence measures.

### **Likert-type ratings of responding**

We hypothesized that participants would perceive more positive consequences and fewer negative consequences to the extent that they reported responding with active change. This hypothesis was partially supported. Participants indicated that their response had a more positive effect on their outcomes to the extent that they responded with active change,  $r(99) = .41, p < .0001$ . To examine the relationship between responses and the duration and severity of negative consequences, we included only participants who indicated that they experienced negative consequences as a result of their response ( $n = 36$ ). Regarding active change, we found a marginally significant relationship between reported responses of active change and the duration of negative consequences,  $r(36) = -.30, p = .08$ , such that participants who reported responding with active change indicated that negative consequences were shorter in duration. However, responses of active change were not significantly correlated with severity of negative consequences,  $r(36) = -.18, p = .30$ .

We also hypothesized that participants would perceive more negative consequences and fewer positive consequences to the extent that they reported responding with watchful waiting.

This hypothesis was also partially supported. Participants indicated that their response had greater negative consequences to the extent that they responded with watchful waiting,  $r(99) = -.29, p < .01$ . We also found a non-significant trend between reported responses of watchful waiting and the severity of negative consequences,  $r(36) = .28, p = .10$ , such that participants who reported responding with watchful waiting indicated that negative consequences were more severe. However, responses of watchful waiting were not significantly correlated with duration of negative consequences,  $r(36) = .03, p = .87$ .

Finally, we also hypothesized that participants would perceive more negative consequences and fewer positive consequences to the extent that they responded with acceptance. This hypothesis was fully supported. Participants indicated that their response had a more negative effect on their outcomes to the extent that they responded with acceptance,  $r(99) = -.38, p = .0001$ . We also found a significant relationship between reported responses of acceptance and the duration of negative consequences,  $r(36) = .46, p < .01$ , such that participants who reported responding with acceptance indicated that negative consequences lasted longer. Furthermore, we found a significant relationship between reported responses of acceptance and the severity of negative consequences,  $r(36) = .43, p < .01$ , such that participants who reported responding with acceptance indicated that negative consequences were more severe.

### **Forced-choice measures of responding**

In addition to the Likert-type ratings for each response choice, participants also indicated which response they engaged in by choosing from a list of the three response types. We examined the effects of the forced-choice response selections on perceptions of consequences. Our predictions for participants' forced-choice responses were the same as our predictions for their Likert-type ratings. That is, we predicted that participants who indicated that they responded with active change would perceive more positive consequences and fewer negative

consequences, and participants who indicated that they responded with watchful waiting or acceptance would perceive more negative consequences and fewer positive consequences.

We conducted a one-way ANOVA with three levels (choice of watchful waiting ( $n = 13$ ), active change ( $n = 54$ ), or acceptance ( $n = 32$ ) for each of the consequence measures. Analyses revealed a main effect of response choice on overall consequences,  $F(2, 96) = 7.52, p < .001, d = .56$ . We then conducted planned contrasts comparing the consequences of each response. As predicted, participants who responded with active change perceived more positive consequences ( $M = 6.98, SD = 2.23$ ) than did participants who responded with watchful waiting ( $M = 5.62, SD = 1.45$ ),  $F(1, 96) = 4.45, p = .04, d = .43$ , and more positive consequences than did participants who responded with acceptance ( $M = 5.25, SD = 2.08$ ),  $F(1, 96) = 13.70, p < .001, d = .75$ . There was no difference in perceived consequences between participants who responded with watchful waiting and participants who responded with acceptance,  $F(1, 96) = .28, p = .60, d = .11$ .

For the measures of duration and severity of negative consequences we again included in our analyses only participants who indicated that they experienced negative consequences of their response ( $n = 36$ ). Analyses revealed a significant main effect of response choice on duration of negative consequences,  $F(2, 33) = 3.84, p = .03, d = .66$ . We once again conducted planned contrasts comparing the duration of negative consequences for each response choice. As predicted, participants who responded with active change ( $n = 54$ ) indicated that negative consequences were shorter in duration ( $M = 3.59, SD = 2.06$ ) than did participants who responded with acceptance ( $n = 32$ ) ( $M = 5.67, SD = 2.64$ ),  $F(1, 33) = 6.52, p = .02, d = .86$ . There was also a marginally significant difference in duration of negative consequences between participants who responded with watchful waiting and participants who responded with acceptance,  $F(1, 33) = 3.49, p = .07, d = .63$ . However, participants who responded with active

change did not perceive the duration of negative consequences differently than did participants who responded with watchful waiting ( $n = 13$ ) ( $M = 3.25$ ,  $SD = 1.71$ ),  $F(1, 33) = .07$ ,  $p = .79$ ,  $d = .09$ . Finally, there were no significant effects of response choice on severity of negative consequences,  $F(2, 33) = 2.11$ ,  $p = .14$ ,  $d = .49$ .

### **Situational factors and consequences of responding**

We also explored the relationship between the situational factors of the bad news (controllability, likelihood, and severity) and the consequences of responding (Table 6-1). Regarding general consequences of responding, participants indicated that their response had a more positive effect on their outcomes to the extent that the event was controllable,  $r(99) = .24$ ,  $p = .02$ . Participants also indicated that their response had more *negative* consequences to the extent that the event was likely to result in negative outcomes,  $r(99) = -.21$ ,  $p = .03$ .

Regarding duration of consequences, we found a positive relationship between likelihood of negative outcomes and the duration of negative consequences,  $r(36) = .35$ ,  $p = .04$ . For events that were likely to produce negative outcomes, participants indicated that negative consequences of their responses were longer in duration. We also found a positive relationship between likelihood of negative outcomes and the severity of negative consequences,  $r(36) = .47$ ,  $p < .01$ . For events that were likely to produce negative outcomes, participants indicated that negative consequences of their responses were more severe. Finally, we found a marginally positive relationship between severity of negative event outcomes and the severity of negative response consequences,  $r(36) = .29$ ,  $p = .08$ . For events that had severe negative consequences, participants indicated that negative consequences of their responses were more severe. No other correlations between situational factors and response consequences were significant,  $r_s < .27$ ,  $p > .10$ .

## Mediation Analyses

We explored the possibility that the relationships between situational factors and response consequences might be mediated by the way participants responded to the bad news. However, as described by Baron and Kenny (1986), we could not examine mediations involving likelihood or severity because these factors were not correlated with any of the three response measures (watchful waiting, active change, and acceptance). As such, we focus our attention on potential mediators of the effect of controllability on response consequences. We hypothesized that uncontrollable events might predict negative consequences because people are more likely to respond to these events with acceptance. In contrast, perhaps controllable events predict positive consequences because people are more likely to respond to these events with active change.

To examine the mediating role of acceptance, three conditions must hold true. First, controllability (the predictor) of the bad news should be correlated with consequences (the outcomes). As previously mentioned, it did,  $r(99) = .24, p < .02$ . Second, the extent to which people responded with acceptance (the mediator) should be significantly correlated with both the controllability of the bad news and the reported general consequences. It did, both  $r_s(99) = -.38, p < .0001$ .

Finally, to establish mediation, the relationship between controllability of the bad news and consequences should be significantly reduced when the effects of the mediator (acceptance) are partialled out (Baron & Kenny, 1986). We conducted multiple regression to test this condition. Before acceptance was entered into the regression, controllability of the bad news significantly predicted outcomes of the event,  $\beta = .24, t(97) = 2.40, p = .02$ . However, when acceptance was added to the regression, controllability no longer predicted outcomes,  $\beta = .11, t(96) = 1.07, p = .29$ . Thus, the extent to which participants responded with acceptance completely mediated the relationship between controllability and outcomes as a result. We also

conducted a Sobel test as a more conservative measure of the mediating effect of acceptance. The Sobel test for mediation was significant,  $z = 2.53$ ,  $p = .01$ , further supporting the mediating role of acceptance in the relationship between controllability and outcomes.

To examine the mediating role of active change responses, we first tested the appropriate bivariate correlations. As a reminder, controllability (the predictor) of the bad news was positively correlated with general consequences (the outcomes). Second, the extent to which people responded with active change (the mediator) was significantly correlated with both the controllability of the bad news and general consequences,  $r_s(99) = .51$  and  $.41$ ,  $p_s < .0001$ .

Finally, we conducted multiple regression to test whether active change mediated the relationship between controllability and outcomes. When active change was added to the regression, controllability no longer predicted outcomes,  $\beta = .04$ ,  $t(96) = .35$ ,  $p = .73$ . Thus, the extent to which participants responded with active change also completely mediated the relationship between controllability and outcomes. We also conducted a Sobel test of the mediating effect of active change. The Sobel test for mediation was significant,  $z = 3.05$ ,  $p < .01$ , further supporting the mediating role of active change in the relationship between controllability and outcomes.

## **Discussion**

Combined with the findings of Study 3, the results of Study 4 suggest that people may prefer active change because they perceive it to be both the most desirable and most effective response, far more so than watchful waiting and acceptance. Although participants in Study 4 did not indicate that the situational factors of bad news predicted their responses in quite the same ways as were shown in Studies 1 and 2, Study 4 suggests that the perceived effectiveness of response options may be powerful predictor of responding.

However, the impact of these findings is limited by the retrospective nature of this study. That is, participants reflected on an experience with bad news that occurred in the past, and their memories of the event and of the consequences of their response may be less than accurate. As such, we can only conclude with confidence that people perceive in hindsight that active change led to positive consequences, whereas watchful waiting and acceptance led to negative consequences. This finding may not be surprising in light of research suggesting that people tend to regret actions in the short-term but *inactions* over longer periods of time (Gilovich & Medvec, 1995). That is, if participants described bad news events that occurred far in the past, they may have been more likely to report that choosing watchful waiting or acceptance was a mistake simply because they represent relatively inactive choices. Researchers suggest that people may regret inactions over time for several reasons (Gilovich & Medvec, 1995). First, people may forget the reasons that they were reluctant to take action at the time (e.g., fear, lack of confidence, etc.). Second, negative consequences of choices people make are far more salient than potential negative consequences of choices they *don't* make. Thus, future research can pinpoint whether people truly perceive active change to be the most effective response or if people simply regret inactions more than actions when reflecting on their own experiences. However, in light of the fact that people may choose responses based in part on their memories of how the responses turned out in the past, the results of Study 4 provide a sense of the role perceived effectiveness may play when people respond to bad news.

Table 6-1. Correlations between situational factors, responses, and response consequences

	1	2	3	4	5	6	7	8	9
1. Controllability	1.0								
2. Likelihood	-.03	1.0							
3. Severity	.02	.68*	1.0						
4. Watchful waiting	-.14	-.04	-.11	1.0					
5. Active change	.51*	.12	.17 <sup>+</sup>	-.47*	1.0				
6. Acceptance	-.38*	.16	.00	.31*	-.54*	1.0			
7. Positive/negative consequences	.24*	-.21*	.12	-.29*	.41*	-.38*	1.0		
8. Duration of consequences <sup>a</sup>	-.27	.35*	.23	.03	-.30 <sup>+</sup>	.46*	-.55*	1.0	
9. Severity of consequences <sup>a</sup>	-.16	.47*	.29 <sup>+</sup>	.28 <sup>+</sup>	-.18	.43*	-.53*	.72*	1.0

<sup>a</sup> Includes only participants who indicated that the response had negative consequences ( $n = 36$ ).

\*  $p < .05$

<sup>+</sup>  $p < .10$

## CHAPTER 7 GENERAL DISCUSSION

The goal of the present set of studies was to examine several questions related to the Bad News Response Model. First, Studies 1 and 2 addressed how the type of bad news people give or receive affects response choices. In these studies we had several hypotheses. Regarding watchful waiting, we anticipated that people would be more likely to select watchful waiting when the controllability, likelihood, and severity of negative outcomes were low. This hypothesis was largely supported. In both Studies 1 and 2, participants were more likely to choose watchful waiting when likelihood and severity were low vs. high, and in Study 2 participants were more likely to choose watchful waiting when controllability was low vs. high. Regarding active change, we anticipated that people would be more likely to choose active change when the controllability, likelihood, and severity of negative outcomes were high. Again, this hypothesis was largely supported. In both Studies 1 and 2, participants were more likely to choose active change when likelihood and severity were high vs. low, and in Study 2 participants were more likely to choose active change when controllability was high vs. low. Regarding acceptance, we anticipated that people would be more likely to choose acceptance when controllability was low vs. high. This hypothesis was supported in both Studies 1 and 2.

Finally, Study 2 also examined the possibility that the role people play (i.e., news-giver vs. news-recipient) would affect their response choices. Indeed, we found that people playing the role of the news-giver tended to suggest watchful waiting, whereas people playing the role of the news-recipient tended to choose active change. This last finding is particularly interesting in light of the findings of Study 3, which showed that people view watchful waiting in a generally negative light. Although people were relatively unlikely to choose watchful waiting for themselves, they apparently viewed watchful waiting as somewhat more appropriate for others.

Perhaps participants playing the role of the physician in Study 2 were less focused on the negative beliefs they may hold about watchful waiting and more focused on the best suggestion they could make as a responsible physician.

Of course, we found several inconsistencies in Studies 1 and 2. Most notably, we predicted that controllability would predict responses of watchful waiting or active change, but these hypotheses were not supported in Study 1. As discussed earlier, these inconsistencies may indicate limitations of the ability of the Bad News Response model to predict responses. However, we believe it to be more likely that the exam scenarios used in Study 1 led participants to reinterpret our scenarios to make them consistent with their personal experience with academic bad news. That is, participants in Study 1 may not have seen our scenarios as believable given their typical exam performance, or they may have interpreted the “bad news” of a D grade differently depending on their typical exam performance. Future studies will examine whether the more model-consistent findings in Study 2 generalize to additional domains and methodologies.

Second, Studies 3 and 4 addressed the possibility that people may prefer certain responses over others, regardless of the type of bad news they receive. In Study 3, we hypothesized that people would associate primarily positive emotions and impressions with active change, primarily negative emotions and impressions with non-responding, and moderate emotions and impressions with acceptance and watchful waiting. This hypothesis was supported. Participants in Study 3 indicated that they felt most positive and hopeful and least negative when thinking about active change. Participants also indicated that someone who responds with active change is capable and admirable and not weak, vulnerable, or disengaged. Participants felt exactly the opposite about non-responding: they felt most negative and least positive and hopeful

when thinking about non-responding, and they felt that someone who responded this way was weak, vulnerable, and disengaged and not capable or admirable. As predicted, people had moderate associations with watchful waiting and acceptance, although people generally saw acceptance as somewhat more positive than watchful waiting.

Finally, Study 4 examined how people perceive the effectiveness of response options. We hypothesized that people may generally prefer active change in part because they believe it to be the most effective response. As expected, participants reported that active change had positive consequences in a personal experience receiving bad news. In contrast, participants reported that watchful waiting and acceptance had negative consequences in a personal experience receiving bad news. Furthermore, the response participants reported mediated the effects of controllability on negative outcomes, such that choosing active change when outcomes were controllable led to positive consequences, and choosing acceptance when outcomes were uncontrollable led to negative consequences.

### **Implications**

As a whole, the results of these four studies suggest that the type of bad news people receive, their feelings about each potential response and their perceptions of those responses' effectiveness may combine to predict response choices. Furthermore, the findings of Studies 1 and 2 provide support for the predictions of the Bad News Response Model, and the findings of Studies 3 and 4 suggest additional avenues for predicting and improving responses to bad news.

These findings can assist bad news-givers who otherwise must rely on their own limited experience or personal motivations when giving bad news. For example, bad news-givers can use these findings to evaluate their transmission of news after the fact. If news-givers observe recipients making an undesired response, they can examine their transmission strategy in light of these findings. The news-giver may have incorrectly assessed one or more of the situational

factors, or s/he may have failed to account for the news-recipient's personal beliefs about the response options. For example, physicians may be unaware of their patients' financial circumstances, and this lack of information could result in misjudgment of the severity and/or controllability of patients' medical conditions. Physicians might assume that expensive treatments are feasible when in fact the patient does not have insurance or the means to pay for the treatments, making the prognosis relatively uncontrollable. Alternatively, physicians might assume that patients find a "watch and wait" approach appealing when in fact patients believe this approach to be undesirable and ineffective.

Furthermore, bad news-recipients can use these findings to evaluate their responses to bad news, apart from the giver. After receiving bad news, recipients can evaluate the likelihood, severity, and controllability of the possible outcomes to understand how they should respond. For example, a woman who learns of upcoming layoffs at work can consider the likelihood that she will lose her job, how bad the consequences of a job loss would be, and if she has control over whether she is laid off. Having evaluated the situation, she may have a better sense of the most effective response. This process may help people to override responses based solely on fear or anxiety, misguided impression management concerns, or narrow beliefs about potential response effectiveness. In addition, recipients who find that their response to some news is ineffective can reexamine the situational factors involved and possibly adjust their responses accordingly. If the woman facing a possible job loss responds with active change and then finds that she is making no progress towards keeping her job, she may decide to shift towards acceptance by checking the want ads and telling her family about the layoffs.

### **Limitations and Future Directions**

Although the studies presented here provide a clear sense of how people are likely to respond to bad news, they stop short of demonstrating how responses affect short- or long-term

outcomes. As such, the next step for future research is to test the effectiveness of particular responses to bad news under different circumstances. The Bad News Response Model makes specific suggestions as to which responses will fare best given the controllability, likelihood, and severity of negative outcomes (Table 1-1), and future studies can examine whether these predictions hold true. Of course, Study 4 provides some sense of the most and least effective responses across situations, but the retrospective nature of this study limits our ability to generalize from these findings.

A second limitation of our studies is the largely hypothetical nature of the study designs. Studies 1-3 asked participants to imagine how they might respond to bad news or how they would feel about various responses to bad news, and as such their responses may or may not reflect how they would respond in a real-world situation. Although Study 4 attempted to use participants' personal experiences with bad news to examine responding and consequences of responding, the retrospective nature of this design may also limit the conclusions we can draw. Thus, another direction for future research is to examine responding and perceptions of responding in real bad news experiences. Although we have little reason to believe that responses will be systematically different in real vs. hypothetical situations, it is possible that people measure more carefully the cost of their response options when faced with a potentially consequential decision.

A third area for future research is the influence of individual differences on people's responses to bad news. The model attempts to make predictions that generalize across people and circumstances. However, individual differences may affect responding in two ways. First, individual differences likely affect people's natural responses to bad news. For example, self-efficacy could increase the likelihood of choosing active change over the other response

categories. Second, individual differences likely influence both the actual and perceived experiences of the likelihood, severity, and controllability of negative outcomes. The 80- and 40-year old men with prostate cancer described earlier provide one example of how differences such as age, priorities, and resources affect the best response to bad news. For example, the same disease with the same prognosis has more severe consequences for the man with responsibilities to his family than for the man with few responsibilities. Although the disease may be equally severe for the two men, the consequences of the disease on other areas of their lives are likely to differ in severity.

Finally, future studies can examine the application of the Bad News Response Model to different cultures and developmental stages. Several studies find that people give medical bad news differently in different cultures (Searight & Gafford, 2005). For example, patients in China often receive less information about their diagnoses than patients in the United States (Tse, Chong, & Fok, 2003), and cancer patients in England report that their doctors used the word “cancer” much less frequently than patients in the United States (Newall et al., 1987). These findings suggest that the Bad News Response Model may apply across cultures, but it is possible that cultural values and traditions may affect the way in which some aspects of the model are applied. As such, culture may act as an individual difference variable that affects natural responses to bad news. For example, differences in personal agency between Eastern and Western cultures may lead people to respond with active change more in the West than in the East, and this difference would affect the ease with which news-givers are able to guide people towards the three responses in different cultures.

Furthermore, although people of all ages receive bad news, the cognitive and emotional responses of children are likely not comparable to those of late-adolescents or adults. Young

children and adolescents may have a difficult time expressing complex emotional reactions and making complex decisions (Inhelder & Piaget, 1958). The Bad News Response Model may be applicable to all ages, but the nature of its applicability likely differs across developmental stages. For example, the model may apply better to the primary caregiver than to the child diagnosed with a severe illness, or better to the adult child than to the senile parent given news of failing health. The Bad News Response Model assumes that recipients of bad news are in a position to choose between different possible responses. In the cases just described, the family member, not the primary recipient of the news, will make decisions about treatment options.

### **Conclusions**

The Bad News Response Model is a systematic and theoretical model of responding to bad news, and several of the present findings provide empirical support for several of the model's predictions. Our findings suggest that people do not take a one-size-fits-all approach when responding bad news but rather tailor their responses to the type of news they receive. Most importantly, responses to bad news are not arbitrary but instead follow predictable patterns according to the controllability, likelihood, and severity of negative consequences that may follow from the news. Our findings further suggest that although both news-recipients and news-givers are sensitive to these variations in bad news, news-recipients lean toward active responses and news-givers toward more conservative responses. Finally, news-recipients might choose particular responses based not only on the type of news they face, but also on the perceived emotional and social consequences and the perceived effectiveness of their response options. These considerations may explain why news-recipients prefer active responses over more conservative responses. Future studies can use our findings as a starting point to both predict and improve people's responses to bad news under different circumstances.

APPENDIX A  
STUDY 1 SAMPLE QUESTIONNAIRE

(Participants read one of the following 8 scenarios and answered the following questions):

- 1) Imagine that you receive a D on a course exam. The exam counts for 50% of your grade in this course, so it is very likely that the poor exam grade could lead to a poor grade (i.e., a C) in the course. However, the course includes several opportunities for extra credit that could significantly improve your grade. In addition, you are taking this course with the pass/fail option.
- 2) Imagine that you receive a D on a course exam. The exam counts for 50% of your grade in this course, so it is very likely that the poor exam grade could lead to a poor grade (i.e., a C) in the course. The course does include several opportunities for extra credit that could significantly improve your grade. However, you cannot take this course pass/fail.
- 3) Imagine that you receive a D on a course exam. The exam counts for 50% of your grade in this course, so it is very likely that the poor exam grade could lead to a poor grade (i.e., a C) in the course. In addition, the course has no opportunities for extra credit to improve your grade, and dropping the course is not an option. However, you are taking this course pass/fail.
- 4) Imagine that you receive a D on a course exam. The exam counts for 50% of your grade in this course, so it is very likely that the poor exam grade could lead to a poor grade (i.e., a C) in the course. In addition, the course has no opportunities for extra credit to improve your grade, and dropping the course is not an option. Furthermore, you cannot take this course pass/fail.
- 5) Imagine that you receive a D on a course exam. The exam counts for only 10% of your grade in this course, so it is very unlikely that the poor exam grade could lead to a poor grade (i.e., a C) in the course. Furthermore, the course includes several opportunities for extra credit that could significantly improve your grade. In addition, you are taking this course pass/fail.
- 6) Imagine that you receive a D on a course exam. The exam counts for only 10% of your grade in this course, so it is very unlikely that the poor exam grade could lead to a poor grade (i.e., a C) in the course. Furthermore, the course includes several opportunities for extra credit that could significantly improve your grade. However, you cannot take this course pass/fail.
- 7) Imagine that you receive a D on a course exam. The exam counts for only 10% of your grade in this course, so it is very unlikely that the poor exam grade could lead to a poor grade (i.e., a C) in the course. In addition, the course has no opportunities for extra credit to improve your grade, and dropping the course is not an option. However, you are taking this course pass/fail.
- 8) Imagine that you receive a D on a course exam. The exam counts for only 10% of your grade in this course, so it is very unlikely that the poor exam grade could lead to a poor grade (i.e., a C) in the course. In addition, the course has no opportunities for extra credit to improve your grade, and dropping the course is not an option. Furthermore, you cannot take this course pass/fail.

Read carefully the following three descriptions of possible responses to the exam grade:

**Watchful Waiting:** This response involves a “wait and see” mentality regarding the course. People engaged in this response are aware that they are facing a possible threat. However, they

go about life as usual rather than take action. For example, if you responded in this way you would not get a tutor or spend much extra time studying. Instead, you would go about the final half of the course just as you did the first half.

**Active Change:** This response involves specific responses directed toward addressing the bad news. It includes three types of behavior: information-seeking, prevention, and addressing the problem. For example, if you responded in this way you might talk to others who have taken the course before you, get a tutor, or study harder for the final exam.

**Accommodation and Acceptance:** This response involves two types of behavior: information-sharing and accommodation. Information-sharing involves telling other people about the negative event. Accommodation involves making changes, not to affect the outcome, but rather to incorporate the negative event into one's life. For example, if you responded in this way you might tell your parents about the grade and look into ways to improve your GPA the following semester.

1. How likely would you be to respond with Watchful Waiting?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

2. How likely would you be to respond with Active Change?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

3. How likely would you be to respond with Accommodation and Acceptance?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

4. Of the three responses, how would you most likely respond to the failing exam grade? (Check one)

- Watchful Waiting
- Active Change
- Accommodation and Acceptance

5. Imagine that the event described in the scenario was really happening to you. How likely is it that, if you remained in the course, you would receive a poor grade (i.e., a C)?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

6. How bad would it be if you received a poor grade (i.e., a C) in the course?

1	2	3	4	5	6	7	8	9
Not at all Bad								Very Bad

7. How much control would you have in improving your grade?

1	2	3	4	5	6	7	8	9
Little or No Control								Full Control

APPENDIX B  
STUDY 2 SAMPLE QUESTIONNAIRE (PATIENT CONDITION)

Imagine that you make an appointment with your doctor about a suspicious mole on your back. After examining the mole, your doctor determines that, *if the mole is cancerous*, it most likely is a (non-severe / severe) form of skin cancer that grows (slowly / quickly) and is (unlikely / likely) to cause health problems. Although the mole (cannot / can) be removed through surgery, your doctor determines that there is (only a 1-2% / a 50-60%) chance that the mole is cancerous. Your doctor decides to biopsy the mole to determine if it is cancerous, and the biopsy results will be ready in 1-2 weeks.

The following descriptions represent three possible types of responses to bad news. Please read each description carefully.

**Watchful Waiting:** This response involves a “wait and see” mentality. People engaged in this response are aware that they are facing a possible threat. However, they go about life as usual rather than take action. For example, if the patient in the scenario engaged in Watchful Waiting, s/he would not undergo surgery or make any significant life changes. Instead, s/he would check the mole periodically for changes.

**Active Change:** This response involves specific actions directed toward addressing the bad news. It includes three types of behavior: information-seeking, prevention, and treatment. For example, if the patient in the scenario engaged in Active Change, s/he may read up on skin cancer, get a second opinion, stay out of the sun, and/or have the mole removed.

**Acceptance:** This response involves coming to terms with bad news rather than taking action to change the situation. Acceptance involves making changes, not to affect the outcome, but rather to incorporate the negative event into one’s life. For example, if the patient in the scenario engaged in Acceptance, s/he may update his/her will and tell others about the mole to get social support.

1. How likely would you be to recommend Watchful Waiting to the patient in the scenario?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

2. How likely would you be to recommend Active Change to the patient in the scenario?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

3. How likely would you be to recommend Acceptance to the patient in the scenario?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

4. Of the three responses, which would you be most likely to recommend?  
(Check one)

Watchful Waiting  
 Active Change  
 Acceptance

5. How likely is it that the patient in the scenario has cancer?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

6. How bad would it be if the patient in the scenario does have cancer?

1	2	3	4	5	6	7	8	9
Not at all Bad								Very Bad

7. How much control does the patient in the scenario have over the situation at this point?

1	2	3	4	5	6	7	8	9
Little or No Control								Full Control

APPENDIX C  
STUDY 2 SAMPLE QUESTIONNAIRE (PHYSICIAN CONDITION)

Imagine that you are a physician who must tell a patient about a suspicious mole on his back. After examining the mole, you determine that, *if the mole is cancerous*, it most likely is a (non-severe / severe) form of skin cancer that grows (slowly / quickly) and is (unlikely / likely) to cause health problems. Although the mole (cannot / can) be removed through surgery, you determine that there is (only a 1-2% / a 50-60%) chance that the mole is cancerous. You decide to biopsy the mole to determine if it is cancerous, and the biopsy results will be ready in 1-2 weeks.

The following descriptions represent three possible types of responses to bad news. Please read each description carefully.

**Watchful Waiting:** This response involves a “wait and see” mentality. People engaged in this response are aware that they are facing a possible threat. However, they go about life as usual rather than take action. For example, if the patient in the scenario engaged in Watchful Waiting, s/he would not undergo surgery or make any significant life changes. Instead, s/he would check the mole periodically for changes.

**Active Change:** This response involves specific actions directed toward addressing the bad news. It includes three types of behavior: information-seeking, prevention, and treatment. For example, if the patient in the scenario engaged in Active Change, s/he may read up on skin cancer, get a second opinion, stay out of the sun, and/or have the mole removed.

**Acceptance:** This response involves coming to terms with bad news rather than taking action to change the situation. Acceptance involves making changes, not to affect the outcome, but rather to incorporate the negative event into one’s life. For example, if the patient in the scenario engaged in Acceptance, s/he may update his/her will and tell others about the mole to get social support.

1. How likely would you be to recommend Watchful Waiting to the patient in the scenario?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

2. How likely would you be to recommend Active Change to the patient in the scenario?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

3. How likely would you be to recommend Acceptance to the patient in the scenario?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

4. Of the three responses, which would you be most likely to recommend?  
(Check one)

Watchful Waiting  
 Active Change  
 Acceptance

5. How likely is it that the patient in the scenario has cancer?

1	2	3	4	5	6	7	8	9
Very Unlikely								Very Likely

6. How bad would it be if the patient in the scenario does have cancer?

1	2	3	4	5	6	7	8	9
Not at all Bad								Very Bad

7. How much control does the patient in the scenario have over the situation at this point?

1	2	3	4	5	6	7	8	9
Little or No Control								Full Control

APPENDIX D  
STUDY 3 SAMPLE QUESTIONNAIRE

Imagine that *your best friend* received some bad news.

The following questionnaire asks you to imagine four possible ways your best friend could respond to bad news. For each possible response, read the description carefully and then answer the subsequent questions about how you think your friend would be feeling after responding in the described manner.

**Watchful Waiting**

This response involves a “wait and see” mentality. People engaged in this response are aware that they are facing a possible threat. However, they go about life as usual rather than take action. They may wait to see if the situation resolves itself, or they may wait until they have more information before making an active response.

For the items below, please indicate the extent to which you think your friend would feel each emotion as a result of responding with Watchful Waiting.

Use the scale below to respond to the following questions:

1	2	3	4	5	6	7	8	9
Strongly Disagree								Strongly Agree

**I think my friend would feel...**

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| <input type="checkbox"/> Anxious   | <input type="checkbox"/> Angry        |
| <input type="checkbox"/> Relieved  | <input type="checkbox"/> Attentive    |
| <input type="checkbox"/> Depressed | <input type="checkbox"/> Happy        |
| <input type="checkbox"/> Active    | <input type="checkbox"/> On edge      |
| <input type="checkbox"/> Tense     | <input type="checkbox"/> Nervous      |
| <input type="checkbox"/> Calm      | <input type="checkbox"/> Regretful    |
| <input type="checkbox"/> Inspired  | <input type="checkbox"/> Disappointed |
| <input type="checkbox"/> Scared    | <input type="checkbox"/> Determined   |
| <input type="checkbox"/> Alert     | <input type="checkbox"/> Energetic    |
| <input type="checkbox"/> Excited   | <input type="checkbox"/> Distressed   |
| <input type="checkbox"/> Sad       | <input type="checkbox"/> Pleased      |
| <input type="checkbox"/> Glad      | <input type="checkbox"/> Enthusiastic |
| <input type="checkbox"/> Serene    | <input type="checkbox"/> Worried      |
| <input type="checkbox"/> Confused  | <input type="checkbox"/> Weary        |
|                                    | <input type="checkbox"/> Hopeful      |

APPENDIX E  
STUDY 4 QUESTIONNAIRE

The experimenter will read instructions for each question on this form. Please do not respond to any questions until the experimenter has completed the instructions for that question.

1. Please describe a time you received bad news:

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2. When you received this bad news, how likely was it that negative consequences or outcomes (including emotional, financial, health-related, academic, etc.) would follow?

1	2	3	4	5	6	7	8	9
Not Likely								Very Likely

3. When you received this bad news, how important or severe did you expect the consequences or outcomes (including emotional, financial, health-related, academic, etc.) of the news to be?

1	2	3	4	5	6	7	8	9
Not Severe								Very Severe

4. When you received this bad news, to what extent did you have control over the consequences or outcomes (including emotional, financial, health-related, academic, etc.) of the news?

1	2	3	4	5	6	7	8	9
No Control								Complete Control

5. Please describe how you responded to the bad news. How did you feel? What were your thoughts? What actions did you take? If you responded in more than one way, please describe all of the ways you responded (continue on the back if you need more space).

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Below are a variety of things a person might do in response to bad news. Please indicate the extent to which you engaged in each in response to the bad news on the following scale:

1	2	3	4	5	6	7	8	9
Not at All								Very Much

(If the statement is Not Applicable, indicate that with an “x”.)

- \_\_\_\_\_ 6. I tried to distract myself by thinking about other things.
- \_\_\_\_\_ 7. I took immediate action to address the situation.
- \_\_\_\_\_ 8. I resigned myself to the fact that my life was in some way different now.
- \_\_\_\_\_ 9. I thought of reasons why this event was not a cause for alarm.
- \_\_\_\_\_ 10. I learned more about what options were available to improve the situation.
- \_\_\_\_\_ 11. I focused my energy towards understanding and accepting the situation.
- \_\_\_\_\_ 12. I went about my life as though nothing had changed.
- \_\_\_\_\_ 13. I made changes in my life to keep the situation from getting worse.
- \_\_\_\_\_ 14. I told others about the situation so they could help me cope.
- \_\_\_\_\_ 15. I took a “wait and see” approach to the situation.
- \_\_\_\_\_ 16. I set up a plan to take action.
- \_\_\_\_\_ 17. I spent time alone to try to adjust to the situation.

The following descriptions represent three possible types of responses to bad news. Please read each description carefully.

**Watchful Waiting:** This response involves a “wait and see” mentality. People engaged in this response are aware that they are facing a possible threat. However, they go about life as usual rather than take action. For example, people engaging in Watchful Waiting might do things to take their mind off the bad news and simply check in on the situation periodically.

**Active Change:** This response involves specific actions directed toward addressing the situation. It includes behaviors like seeking information, trying to change the situation for the better, and trying to prevent the situation from getting worse. For example, people engaging in Active Change might talk to other people in similar situations and look for ways to directly deal with their situation.

**Acceptance:** This response involves coming to terms with bad news rather than taking action to change the situation. Acceptance involves making changes, not to affect the outcome, but rather to incorporate the negative event into one’s life. For example, people engaging in Acceptance might tell friends and family about the bad news to get social support and adjust their future plans as a result of their situation.

18. To what extent would you say you responded to the bad news with **Watchful Waiting**?

1	2	3	4	5	6	7	8	9
Not at All								Very Much

19. To what extent would you say you responded to the bad news with **Active Change**?

1	2	3	4	5	6	7	8	9
Not at All								Very Much

20. To what extent would you say you responded to the bad news with **Acceptance**?

1	2	3	4	5	6	7	8	9
Not at All								Very Much

21. Of the three responses, which one describes best how you responded to the bad news? If you responded in more than one way, select the one that best describes your primary response. (Check one)

Watchful Waiting

Active Change

Acceptance

22. Write about the short-term and long-term consequences or outcomes of the bad news (including emotional, financial, health-related, academic, etc.). Specifically address how your response to the situation affected the outcomes. In other words, did your response to the news make the situation better or worse, or have no impact?

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23. How did your response to the situation affect the consequences or outcomes?

-4	-3	-2	-1	0	1	2	3	4
Made Things Much Worse				No Effect				Made Things Much Better

*If the consequences or outcomes of your responses were not negative, check this box instead of answering #24 and #25 (if the outcomes were negative, proceed to #24):*

24. If the consequences or outcomes of your response were negative, how long did the negative outcomes last?

1	2	3	4	5	6	7	8	9
Not Very Long								A Very Long Time

25. If the consequences or outcomes of your response were negative, how important or severe were they?

1	2	3	4	5	6	7	8	9
Not Very Severe								Extremely Severe

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