Fear appeals are persuasive messages that emphasize harmful physical or social consequences of failing to comply with message recommendations. Protection Motivation Theory (PMT) emphasizes cognitive or rational reactions to fear appeals and identifies four message components which initiate corresponding cognitive mediating processes of appraising message information: (1) identifying depictions of the probability of the occurrence of a specific threat; (2) identifying the magnitude of noxiousness of the threat; (3) descriptions of the effectiveness of the appeal's recommended responses for avoiding the threat; and (4) the appeal's characterizations of the reader's ability to carry out the recommended efficacy measures. Models that explain how fear appeals function can be used to teach students how to analyze written fear appeals. Such instruction helps students determine the appropriateness of their interpretations of and responses to what they read. Additionally, students who can identify and analyze these texts are less likely to be persuaded or scared into taking actions that are not in their best interests. Practicing such evaluation of fear appeals also supports a way of knowing that enriches students' reasoning ability through the critical reading of texts. (Contains 3 figures and 26 references.) (CR)
Summary. Fear appeals are persuasive messages that emphasize harmful physical or social consequences of failing to comply with message recommendations. Models that explain how fear appeals function can be used to teach students how to analyze written fear appeals. Such instruction helps students determine the appropriateness of their interpretations of and responses to what they read. Additionally, students who can identify and analyze these texts are less likely to be persuaded or scared into taking actions that are not in their best interests. Practicing such evaluation of fear appeals also supports a way of knowing that enriches students’ reasoning ability through the critical reading of texts.
Teaching Students How to Read Fear Appeals Critically

Fear appeals are “persuasive messages that emphasize the harmful physical or social consequences of failing to comply with message recommendations” (Hale & Dillard, 1995, p. 65). Readers encounter these messages on a daily basis, often in the form of advertisements, editorials, political speeches, or health warnings (e.g., This is your brain... This is your brain on drugs... Any questions?). These messages are frequently accompanied by startlingly grim photographs of wrecked automobiles or distorted histograms and graphs, all of which are manipulated to enhance the anxiety and fear arousal of message readers. Sometimes these messages are positive, ethical, and important; sometimes they are negative, unethical, and deliberately misleading. Regardless of their purpose, our goal as literacy instructors is to enable students to recognize fear appeals and provide students with the tools/criteria to assess their validity, veracity, and effectiveness.

In this article I describe an instructional application of a fear model proposed by Rogers, (1975, 1983) for enabling students to recognize fear appeals and read them critically. I present an example demonstrating how this model helps students analyze persuasive messages and fear appeals. Finally, I offer some remarks concerning teaching about fear appeals as an important aspect of teaching critical reading.

The Model—Protection Motivation Theory

Individuals faced with two or more courses of action will choose the one with the greatest subjective expected utility, meaning that individuals will “choose behaviors that maximize rewards and minimize punishments” (Stiff, 1994, p. 126). Protection Motivation Theory (Rogers, 1975, 1983) posits that individuals who are faced with a threat will choose a course of action that alleviates the threat contained in the fear appeal. Protection Motivation Theory (PMT) emphasizes cognitive, or
rational, reactions to fear appeals, and identifies four message components which initiate corresponding cognitive mediating processes of appraising message information (see Figure 1). The first component involves identifying depictions of the probability of the occurrence of a specific threat. The intensity and frequency of these depictions leads the message reader to appraise the depictions and their probability of occurrence, and to determine his or her perceived susceptibility to the threat. The second component addresses the magnitude of noxiousness of the threat. The reader's appraisal of the degree of noxiousness determines how severely the individual perceives the threat. The third component of PMT addresses descriptions of the effectiveness of the appeal's recommended responses for avoiding the threat. The reader's appraisal of the recommended responses leads to perceived response efficacy. If the recommendations are appraised as effective, the reader will perceive a high degree of response efficacy. If recommendations seem to be relatively ineffective measures for avoiding the threat, the reader's perceived response efficacy will be low. The fourth component addresses the appeal's characterizations of the reader's ability to carry out the recommended efficacy measures. Appraisal of these characterizations results in the reader's perceived self-efficacy. Self-efficacy is described by Bandura (1977, 1982) as a process of psychological change that operates through the alteration of the individual's expectancies of personal mastery or efficacy (in Maddux & Rogers, 1983). If the reader believes that he or she can carry out the recommended efficacy measures to avoid the threat's consequences, perceptions of self-efficacy will be high, and vice versa. To persuade a reader to adopt recommended actions or behaviors, fear appeals must contain action prescriptions (efficacy measures) that the reader can carry out to alleviate the threat.
Critical Reading Instruction and Protection Motivation Theory

Critical reading involves analytical and evaluative processes requiring readers to make rational judgments of content and style based on valid criteria (King, Ellinger, & Wolf, 1967). In making these judgments, critical readers perform such tasks as evaluating textual information, identifying and comparing sources, and synthesizing findings (DeBoer, 1946/1967). They “probe hidden assumptions, and evaluate the logic or illogic of the writer” within the context of the subject or field in which they are reading (Dale, 1965/1967, p. 26). Probing and evaluating also requires not only the personal reaction of readers to the material being read, expressly to the facts stated and ideas implied, but also to the writer and writing as author and composition (Piekarz, 1964/1967).

Critical readers typically approach texts with a questioning attitude: Who wrote this text? What is the author trying to accomplish? Protection Motivation Theory can serve as the basis for a unit developing students’ critical reading abilities. Its four components serve as a framework for analyzing and evaluating persuasive and fear arousing texts. Teaching students to recognize and identify the components in fear arousing texts encourages students to approach these texts with additional questions: Is the author trying to persuade me, and if so, what does the author want me to do or believe? What is the threat? How likely is the threat to affect me and how severe is it? How can the threat be alleviated? Can I avoid the threat by doing what the message recommends?

The Instructional Approach

Teaching students how to apply Rogers’ (1975, 1983) Protection Motivation
Theory to their reading helps them develop strategies for clarifying "relationships among ideas found in written discourse" (To-Dutka, 1991, p. 200). Based on my experiences with secondary and postsecondary students, I advocate an explicit explanation approach to instruction which emphasizes practicing the strategy in the context of reading authentic texts (Pearson & Gallagher, 1983). In this approach, students receive direct and guided instruction on the components of PMT using specially designed materials to introduce the strategy, then are given multiple opportunities to engage in independent practice with both specially designed and authentic materials. The rationale of this systematic approach is to lead students to transfer this newly acquired critical reading strategy to authentic materials.

Instructional Application of Protection Motivation Theory

I first used PMT while working with students (grades 9-11) attending a summer remedial English course at a private secondary school. I refined the sequence while working with freshman and sophomore students attending developmental reading courses at a small university, and while teaching reading improvement course at a larger university. The following instructional sequence is the product of these multiple experiences of using PMT and fear appeals with students at various grade and ability levels.

First, students are introduced to short fear appeals in both text and other media. Fear appeals are explained as persuasive messages designed to evoke fear in the reader/target audience in order to get them to act or change their beliefs in the manner prescribed by the message's author. Taking a written fear appeal as an example, students then are introduced to the four message factors of the PMT model (see Figure 1), in addition to being shown how words can be used to elicit an emotional response from the reader.
Students then receive instruction in creating their own written fear appeals, focusing on each component of the PMT model. Students first determine the threat or consequence they wish to write about. Then they create a short appeal that details the probability of the occurrence of that consequence. These appeals are then evaluated by collaborative groups of students for accuracy and plausibility. Next, students add a noxiousness factor to their message. Again these are evaluated by the groups for appropriateness given the message's topic and the probability of the consequence's occurrence. Finally, students add efficacy measures, things the reader can do to avoid the threat. Once these measures are decided upon and deemed plausible, students then detail how easily the reader can perform these measures to avoid the consequences of the threat.

Once students have been able to develop and produce two fear appeals, they are given expository passages about topics of interest to them, such as AIDS, smoking, safe sex, etc. The differences between expository passages and fear appeals are elucidated using examples selected or created by the instructor. Emphasis is placed on how words are used in both passages: to explain in the expository passage, and to evoke an emotional response in the fear appeal. Students are then asked to turn an expository passage they have been given into a fear appeal, explaining the changes they make in light of the PMT model.

Students are then asked to create a one- to two-page fear appeal from a list of selected topics. The following questions serve as a guide to creating the message:

What is the general focus or topic of the appeal?
What is the threat?
Who are my readers?

These first three questions help students focus on the purpose for writing the appeal.
Fear Appeals 7

How likely is the threat to occur?
This question addresses the first component of PMT, the probability of the threat’s occurrence.

How noxious should the threat be?
How are my claims/threats supported?
Addressing the second component of PMT, these two questions help the student create a threat that is designed to arouse fear (e.g., suntanning can lead to skin cancer) and is adequately supported with factual information from appropriate sources.

What are the efficacy measures to avoid the threat?
How do I make the efficacy measures seem easy to perform?
The final two questions address the final two components of PMT, efficacy and self-efficacy measures. These questions help students focus on ways in which message readers can avoid the consequences of the threat.

Sometimes using a diagram or web drawing is particularly useful when asking students to construct and evaluate their own or others' texts. To-Dutka (1991) strongly advocates using a schematic to analyze complex argumentative and expository texts. Such a diagram is useful in constructing and evaluating fear appeals, and exposes the relationships between the various message factors, showing how they work together to make an appeal effective (see Figure 2).

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Insert Figure 2 about here
-----------------------------

In groups, students evaluate and critique each others’ messages for overall effectiveness and rate the particular contribution of each of the message factors to that overall effectiveness. It is at this stage that students begin to perceive the importance of making appeals clear and cohesive, and thus understand the
effectiveness of appeals that exhibit clarity and cohesiveness. Students, once unaware of why they felt particularly persuaded to carry out an appeal's recommendations, now become aware of how they are persuaded and which factor or combination of factors contribute to the persuasive effect.

At this point, students are ready to begin analyzing actual fear messages selected by the instructor (see Figure 3). The first of these message texts are obvious fear appeals, to reinforce what students have learned to this point. Students identify message factors and circle words or phrases that evoke a particular emotional response, then describe what that response was. These analyses are discussed both in groups and as a class. In this way, students come to see that individuals process text differently, an important realization in terms of their own reading and writing.

Finally, students are asked to apply the model to textual advertisements and Public Service Announcements (PSAs) that they encounter. My students were surprised by the number of persuasive messages they encountered daily, and the number of fear appeals that were part of these messages. The key in this step is to reinforce students' transfer of this analytical approach to texts they encounter in the real world. Students become able to distinguish a persuasive message from a fear appeal, often debating in class the particular factors that lead them to perceive the message as persuasive or fear-arousing.

Fear-appeals and Critical Reading

The kind of exercise I describe here not only allows students to learn to distinguish between types of persuasive messages but also fosters elements of argumentative thinking. This exercise is not designed to promote skills about good
thinking, but to engage students in the practice of thinking (see Kuhn, 1992). Students try out their individual theories in small groups, then with the whole class. Such discourse serves as a corrective to what they have failed to take into account in a non-threatening way. The students correct and emend each other and themselves with minimal instructor intervention. The instructor's role at this stage, consistent with an explicit explanation approach to teaching, is that of facilitator.

I engage students in a great deal of verbalization about the process of creating and evaluating fear appeals (c.f., To-Dutka, 1991). An important issue that often emerges from these discussions is personal relevance. Students report reacting differently to messages that seem more or less personally relevant for them. Such findings in experimental studies of fear messages led Rogers (1983) and other researchers to emphasize the role of personal relevance in their theories and models of fear appeals. For this reason, during the instructional phases of this unit I emphasize the importance of knowing and recognizing a message’s intended audience, whether students are creating a message (knowing) or reading one (recognizing). Creating an environment for social dialogue provides students with a way to externalize their internal thinking strategies (Kuhn, 1992). According to Kletzien and Baloche (1994), “discussions that encourage students to evaluate texts and peers’ interpretations for accuracy, biases, and assumptions help students become critical readers” (p. 541). In small-group settings, students are able to explore their thinking and verbalize it in a less threatening, non-public environment. Thus, students are more confident about expressing their thoughts and beliefs about the message creation and evaluation processes during whole-class discussions.

The process of learning to develop and recognize fear appeals is a useful way for students to become aware of the emotional content of words and how words can be used to evoke an emotional response from the reader even in situations in which the
intent of the message is not persuasive. The importance of this recognition is that students become metacognitively aware of emotional appeals in written texts, whether the appeal tries to convince them of the particular worth or validity of a theory or to engross them in a work of fiction. Since a great number of persuasive messages occur in advertising and marketing techniques (Reardon, 1991), students become almost instantly aware of how persuasive appeals influence their responses and actions. Students become aware of how their emotions can be manipulated to cause them to abandon a critical, evaluative reading of a text and to accept the text's content based on emotional reaction rather than through practical reasoning (Harman, 1986). This awareness makes students less susceptible to irrational or ill-constructed fear appeals and persuasive messages while reinforcing the importance of approaching text with an evaluative eye.

This instruction also leads students to distinguish between fear appeals and persuasive messages. While the purpose of both communications may be the same, the approach can be critical to message adoption by the reader. Research on trait anxiety and chronic fear (Hale, Lemieux, & Mongeau, 1995) suggests that too much fear-arousal may inhibit critical reading. Students become aware of this not only by constructing persuasive fear appeals, but by reading them, recognizing when the emotional content of the message begins to interfere with the cognitive processes inherent in critical reading, thus enhancing comprehension of written text.

The goal of this instruction is to foster an environment in which students become critical readers. Such readers are evaluative knowers who engage in a process of knowing that entails thinking, evaluation, and in some cases, argument as debate. Research (e.g., Kuhn, 1992; Stein & Miller, 1991) supports that this way of knowing also enriches students' reasoning ability. Knowing is an "ongoing process of evaluation, which the ever present possibility of new evidence and new
arguments leaves always uncompleted” (Kuhn, 1992, p. 173). This particular exercise helps students see that knowledge is never an absolute phenomenon, but something to be constantly evaluated and updated subject to new discovery and thinking involving critical reading. Students who can recognize and read fear-arousing texts critically can learn to transfer this knowledge to other forms of communication involving attitude- or behavioral-change attempts (Maddux & Rogers, 1983). More importantly, such students are less likely to be persuaded or scared into taking actions that are not in their best interests.
References


Figure 1. Message Components and Appraisal Processes of Protection Motivation Theory.

<table>
<thead>
<tr>
<th>Persuasive Message Components (Factors)</th>
<th>Cognitive Appraisal Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability of occurrence</td>
<td>Appraised susceptibility</td>
</tr>
<tr>
<td>Magnitude of noxiousness</td>
<td>Appraised severity</td>
</tr>
<tr>
<td>Response efficacy depictions</td>
<td>Appraised efficacy</td>
</tr>
<tr>
<td>Self-efficacy depictions</td>
<td>Appraised self-efficacy</td>
</tr>
</tbody>
</table>

Adapted from Rogers (1975), Maddux & Rogers (1983), and Witte (1992)
Figure 2. Example of an analysis and identification of fear appeal component items.

Topic: tanning
Threat: suntanning leads to skin cancer
Intended reader(s): teens and young adults

Message Components...

<table>
<thead>
<tr>
<th>Probability of occurrence items</th>
<th>Noxiousness items</th>
<th>Efficacy depictions</th>
<th>Self-efficacy depictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>400,000 new cases of skin cancer diagnosed each year</td>
<td>Causes premature aging, wrinkles</td>
<td>Sunscreens Reflectors -Must reapply frequently -Not reliable</td>
<td>Apply PABA products night before tanning</td>
</tr>
<tr>
<td>Additional 22,000 diagnoses of malignant melanoma each year</td>
<td>Causes skin cancer.</td>
<td>Sun-burn</td>
<td>Apply liberally while tanning</td>
</tr>
<tr>
<td>Responsible for 5,000 skin-cancer deaths each year</td>
<td>Sun poisoning</td>
<td>Absorbers -absorb UV-As &amp; UV-Bs -Allows gradual tanning -High SPF ratings</td>
<td>Use products with high SPF rating</td>
</tr>
<tr>
<td>More than 1:100 people will develop malignant melanoma this year</td>
<td></td>
<td>Attitude and behavior changes</td>
<td>Avoid deodorant soaps, perfumes, make-up, antibiotics when tanning</td>
</tr>
</tbody>
</table>

...lead to these or similar Cognitive Appraisals

<table>
<thead>
<tr>
<th>How susceptible am I?</th>
<th>How do I feel?</th>
<th>What can be done?</th>
<th>What can I do easily?</th>
</tr>
</thead>
</table>

[Students fill in this bottom section after analyzing the appeal. This section can be completed by students working alone or in small groups.]
Figure 3. Example of a student's analysis of the suntanning fear appeal.

**Topic:** tanning  
**Threat:** suntanning leads to skin cancer  
**Intended reader(s):** teens and young adults

<table>
<thead>
<tr>
<th>Probability that bad things will happen</th>
<th>Consequences of tanning (from least severe to most severe)</th>
<th>Message recommendations</th>
<th>Easy ways to avoid consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>400,000 new cases of skin cancer diagnosed each year</td>
<td>Sun-burn</td>
<td>Sunscreens</td>
<td>Apply PABA products night before tanning</td>
</tr>
<tr>
<td></td>
<td>Sun poisoning</td>
<td>Reflectors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wrinkles</td>
<td>-Must reapply frequently</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Premature aging</td>
<td>Absorbers</td>
<td>Use products with high SPF rating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-absorb UV-As &amp; UV-Bs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Allows gradual tanning</td>
<td>Avoid deodorant soaps, perfumes, make-up, antibiotics when tanning</td>
</tr>
<tr>
<td></td>
<td>Skin cancer</td>
<td>-High SPF ratings</td>
<td></td>
</tr>
<tr>
<td>More than 1:100 people will develop malignant melanoma this year</td>
<td>Attitude and behavior changes</td>
<td>Avoid &quot;tanning&quot;</td>
<td></td>
</tr>
</tbody>
</table>

These message components lead me to the following questions and appraisals...

<table>
<thead>
<tr>
<th>Am I susceptible?</th>
<th>How do these consequences make me feel?</th>
<th>What can be done?</th>
<th>How can I avoid these consequences?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes if I continue to lay out in the sun a lot. Didn't know you could die.</td>
<td>The first two don't scare me as much as those last three.</td>
<td>Message says to use sunscreens, sunblocks, and stop tanning.</td>
<td>I can apply lots of sunscreen before and while I lay out in the sun. I can switch to a non-deodorant soap pretty easily. Having a really tan body isn't really all that important if I could die from getting it.</td>
</tr>
</tbody>
</table>
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