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THE ROLE OF EMOTION IN UNDERSTANDING AND PROMOTING
SUSTAINABILITY AND ECO-FRIENDLY BEHAVIOR

by

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ABSTRACT

Research has demonstrated the effectiveness of empathy and perspective-taking in influencing environmental concern (Sevilliano, Aragoes, & Schultz, 2007) Although there may be a number of internal factors that inhibit pro-environmental behavior, it is important to evaluate the ways by which we can use emotion to encourage this type of behavior. This study was designed to evaluate the impact of emotion on eco-friendly behavior by investigating the effect of viewing high- or low-fear appeals on changing consumers' food choices will have on their attitudes and behaviors. Results show that the likelihood that a participant intended to partake in more pro-environmental behaviors was generally greater after viewing the low-fear video after viewing the high-fear video. The investigation of emotions' role in sustainability suggests that while high-fear interventions may have a positive effect on intention to be more sustainable, a low-fear intervention may have an even greater progressive influence. These results provide preliminary evidence for the importance of emotion in efforts toward a more sustainable environment.

INTRODUCTION

Global warming, animal extinction, deforestation, and natural resource depletion are among the many signs that the Earth's natural environment is in danger. The consequences of environmental problems like these range from health problems to the very existence of the planet. Environmental problems have become a "hot topic" among politicians, experts, religious leaders, popular media stars, marketing strategists, and lay people. The push to "go green" is evident in our everyday lives—from the food we buy and the products we use in our homes, to our means of transportation and energy sources we support. The scope of environmental concerns extends well beyond national borders (Environmental Protection Agency, 2010). Such concern is certainly warranted; environmental problems occur in various forms and affect all members of the global society (Tenbrunsel, Wade-Benzoni, Messick, & Bazerman, 1997a). A failure to rectify these environmental problems jeopardizes the viability of our planet. If we intend to actually sustain our planet—to ensure that future generations can live on Earth—we all need to become allies of the planet, and engage in behaviors toward that goal.

Given these environmental concerns, it is imperative that we consider issues of environmental sustainability. Environmental sustainability is defined as "the urgent need ... to use the Earth's resources in ways that will allow human beings and other species to continue to exist acceptably on Earth in the future" (Oskamp, 2000). This definition is important because it appropriately places individual humans at the crux of the issue. The ways in which humans live have serious impacts for the future of the planet. Researchers argue that the most serious environmental problems—overpopulation, global warming, toxic waste, and overuse of agricultural and oceanic habitats—are not merely issues of science, but also of individual behavior. Solutions, therefore, must consider the role of the individual; how we can change

behaviors to be more environmentally conscious. Social psychology provides a framework for such solutions.

Social psychology is “the study of how people's thoughts, feelings, and behaviors are influenced by the actual, imagined, or implied presence of others,” (Allport, 1985). As such, it allows us to apply theories of human behavior to devise solutions for social dilemmas, like environmental sustainability. The current research focuses on one particular part of social psychology, namely, social cognition.

Cognition refers to our thought processes, and within social psychology, we study cognitive elements as part of the social environment (Fiske & Taylor, 1991). Research has shown that social cognition is an important determinant of behavior. How we think about the environment has the potential to influence sustainability efforts—from how well we are able to estimate positive and negative environmental impacts, to cognitive biases leading us to over or underestimate our use of a given resource. The way we think about environmental dangers may impact whether or not we behave in environmentally-friendly ways. This leads us to consider psychological factors (specifically, emotion) that may lead one to engage in behavior that supports sustainability efforts or, at the very least, minimizes the damage done to the Earth.

The experience of emotion is universal—from sadness and anger to joy and excitement (Ekman, 1994). Emotion is also important in shaping our beliefs, attitudes and values (Myers, 2007), and this is no different when considering affective relationships with the environment (Chawla, 1998, 1999). Researchers argue that one’s emotional reaction to the environment, particularly environmental degradation, is a strong predictor of engagement in pro-environmental behavior (Grob, 1991, as cited in Kollmuss & Agyeman, 2002).

Not everyone experiences the same emotional reaction to threats to environmental sustainability. This leads us to question the “what” and “why” of expressing concern for the environment. While this research does not seek to answer this very broad inquiry, it does consider ways in which we can study how emotion affects one’s likelihood of engaging in pro-environmental behavior.

Research has identified a number of emotional and affective components of pro-environmental behavior (Stern, 2000). For example, Kals, Schumacher, & Montada (1999) developed an “Emotional Affinity toward Nature” scale to quantify how people feel connected to nature and express positive feelings towards it. They hypothesized that individuals who score high on this measure are more likely to behave in a way that protects nature (Kals et al., 1999). Individuals may also express a sense of connectedness to the environment, reflecting an inclusion of nature to one’s cognitive representation of self (Schultz, 2002). This cognitive component has also been shown to be related to commitment, or one’s willingness to engage in pro-environmental behavior (Schultz, 2002).

Research has also demonstrated the effectiveness of empathy and perspective-taking in influencing pro-environmental concern. Sevilliano, Aragones, and Schultz (2007) found that empathy and perspective-taking of a harmed animal (e.g., a bird covered in oil) led participants to feel more global concern for environmental problems. This effect was moderated, however, by stress; participants who felt personal distress in empathic situations expressed greater concern for environmental problems that affect them personally and less concern for more global environmental problems. Although the study did not include a behavioral measure, it suggests that we may be more likely to act in pro-environmental ways if the impact directly affects us, or other living beings. This is consistent with research by Manzo & Weinstein (1987), who found

that people who have been harmed by some environmental problem are more likely to be active members of an environmental organization. More recent research confirms this finding by showing that our emotional reaction to environmental problems is stronger when we directly experience the degradation (Chawla, 1999; Newhouse, 1991). These effects are likely due to the fact that environmental harms produce distress, which lead us to psychological and behavioral responses aimed at relieving us from negative feelings or emotions (e.g., anger or sadness; Kollmuss & Agyeman, 2002).

Unfortunately, one's psychological response to experiencing negative reactions to environmental problems may not always lead to pro-environmental behavior. In fact, they may actually prevent engaging in behaviors that protect the environment. Kollmuss and Agyeman (2002) hypothesize that emotional reactions may even trigger defense mechanisms such as denial (refusing to accept reality of a situation; e.g., the belief that global warming does not exist) and apathy (feeling that there is little one can do to change the situation; Hines, Hungerford, & Tomera, 1987). People may also engage in rational distancing, whereby they create psychological distance from environmental problems by removing any personal sense of emotion from the problem (Kollmuss & Agyeman, 2002). This may also reduce one's internal motivation to engage in pro-environmental behavior.

For those who have not experienced environmental problems, there are still a number of psychological "roadblocks" to impede the likelihood that one will participate in environmentally sustainable behavior. One of the reasons people have a difficult time making decisions that promote environmental sustainability is because it is difficult to think about environmental impacts on a personal level (Lowenstein & Frederick, 1997). Regardless of whether environmental impacts are viewed as positive (e.g., recovering an endangered species from

extinction or improving air quality) or negative (e.g., disappearing rain forests or toxic lakes), personal valuations of significance are difficult to make unless one has directly experienced such impacts (see above). Furthermore, people often lack knowledge regarding the causes and consequences of environmental dangers, which may lead to emotional non-involvement (Hines, et al., 1987; Kollmuss & Agyeman, 2002), likely affecting one's willingness to engage in pro-environmental behavior. Sivek & Hungerford (1990) also found that lack of knowledge contributes to a belief that one has the necessary skills required for action. For example, if an individual knows that a programmable thermostat can help to reduce energy use, this knowledge may have little effect (and thus, benefit) if the individual does not know how to properly install and set the thermostat.

Though there may be a number of internal factors that inhibit pro-environmental behavior, it is important to consider how we can use emotion to encourage this type of behavior. While we may have little control over which emotions people organically feel when exposed to environmental degradation, we may be able to induce specific emotions in a way that fosters pro-environmental behavior.

We know through literature on social thinking that we can persuade people to change their thoughts or actions by inducing specific moods or emotion. This is why marketers and advertising firms attempt to induce positive moods for shoppers. They know that people in a positive mood are less likely to rely on the central route to persuasion. People who are in a positive mood strive to maintain that internal affective consistency and therefore generally only pay attention to peripheral cues from an advertisement. Thus, these people may be more likely to purchase a product without consciously processing whether or not the product is something they need or will use.

Advertisers may also use negative emotions to persuade you to change your behavior, particularly if that behavior has dangerous or aversive consequences. We know that fear is a strong motivator and it may change one's behavior away from a potentially negative outcome.

But do these “scare tactics” actually work? Research shows that it depends—on the individual, the amount of fear invoked, and whether or not the campaign provides helpful information on how to avoid the potentially aversive outcomes. For example, research on encouraging students to practice good oral hygiene produced mixed results when fear was induced (Janis & Feshback, 1953). Participants were randomly assigned to either a high- or low-fear condition. Participants in the high-fear condition viewed a very graphic and fear-arousing video showing the negative consequences of not brushing, flossing, rinsing and getting regular check-ups, such as cavities being filled and progressive gum disease. Participants in the low-fear condition read a pamphlet about the risks of not practicing good oral hygiene (including cavities and gum disease), but the pamphlet also included information on how to avoid these potential, aversive outcomes (e.g., daily brushing and flossing, regular dental exams, etc). As expected, the participants in the high-fear conditions reported experiencing a higher amount of fear compared to the low-fear condition. The high-fear participants, however, were not more likely to change their oral hygiene behaviors, whereas the low-fear participants were. Researchers attribute this finding to the nature of the pamphlet—it presented the negative outcomes of poor dental hygiene (inducing a low amount of fear), but it also provided participants with ways in which they could actively avoid the negative outcomes.

Another study looked at the effectiveness of inducing fear in student participants to avoid risky sex practices (Morris & Swann, 1996). In this study, researchers again used a high- and low-fear paradigm to show the risks of contracting HIV through risky sex behaviors. After

answering a number of questions about their own sex behaviors, participants were assigned to either the low- or high-fear condition. In the high-fear condition, participants watched a film which showed interviews with young adults (the same age as the participants in the study) who had contracted HIV through unprotected sex. The interviews were designed specifically to arouse a great amount of fear among the participants by illustrating the very real and negative effects of living with HIV. In the low-fear condition, participants were given a pamphlet about HIV, which included a list of protections people could employ to reduce their risk of contracting the virus. Similar to the dental hygiene study, participants in the high-fear condition expressed a higher amount of fear about HIV than participants in the low-fear condition, but the participants in the low-fear condition were more likely to change their own sex behaviors than participants in the high-fear condition. Interestingly, there was one group of students who were significantly influenced by the high-fear condition: those who had never engaged in sexual intercourse. For participants who had never had sex, the high-fear condition was especially influential in their decisions regarding safe-sex practice; these participants indicated less willingness to engage in risky sexual behavior more so than all other participants across both conditions. It is likely that the virgin participants already had constructed for themselves a number of reasons not to engage in sexual practices, so the fear of contracting HIV through sexual intercourse strengthened their decision. (Morris & Swann, 1996)

How does dental hygiene and safe sex relate to the environment? The use of “scare tactics” to change people’s behaviors is often applied to activities which bear harmful health consequences for the individual. Environmental concerns, just like unsafe sex, poor dental hygiene, and drug use, have been linked with a number of poor health outcomes for individuals. The use of chemicals in a number of products we use and consume have spurred consumer

concern in the past few years, which may lead individuals to purchase and use products that are not only better for them, but also for the environment.

One area, which has received a significant amount of attention, is concern for the food we eat. From pesticides that are used to keep weeds from destroying fruit, grain and vegetable crops, to choosing milk from cows that have not been treated with growth hormones, consumers are becoming more consciously aware of what they choose to fuel their bodies. In this age of convenience and cheap foods, there has been growing concern for not only the chemicals in our food, but the types of food we consume—from both a health and ethical standpoint. For example, many of the latest health and fitness strategies point consumers to the notion of eating whole, real, unprocessed food, but there's also been a push for plant-based diets, specifically, for choosing to not eat meat (vegetarians) or any animal products (veganism). The benefits of a plant-based diet are not limited to the consumer (or animal, for that matter) alone—there are a number of benefits to the environment as well.

The push for more conscious food choices is warranted. There are a number of factors that influence one's food choice—whether one purchases only organic foods to avoid harmful pesticides, or another who drives through a fast-food restaurant for the sake of convenience. The food we consume reflects a number of choices we make—not only for ourselves, but for the environment. There is a growing awareness that conventional farming practices are not only dangerous for the Earth and humans, but also for the animals raised for slaughter.

What foods we choose to eat (or not eat) represent not only our personal ethic codes or feelings toward animals, but also our concern for the environment. It is becoming widely known that the production of cheap and affordable food comes at a price—not only for the humans who consume it, the animals raised in concentrated animal feeding operation (CAFOs), and the

people growing it, but also for the environment. Animal agriculture is a large source of greenhouse gas emissions, and growing the crops necessary to feed the livestock requires much more of the Earth's water than human or crops for human consumption requires (Kirby, 2004). Commercial agricultural meat production poses a risk to the environment by threatening water resources, consuming energy, applying chemical fertilizers and pesticides, generating waste, and degrading land (Marlow, 2009).

In response to the current food crisis, food supplies will have to be amplified. The three approaches of increasing food supply are extensification, intensification, and decreasing grain-fed meat (Goodland, 1997). The process of extensification involves the expansion of cultivated land for food production, yet there is only so much land that can still be utilized for farming. Intensification requires that a greater amount of food product would need to be produced on the same amount of land. This can cause stress on the land to the point where it is no longer fertile. The third approach to increase food supply would be to decrease grain-fed meat. This method would essentially "cut out the middle man", by feeding grain directly to humans without first feeding it to livestock. Livestock consume about half of the total grain production worldwide (Goodland, 1997). The ratio of energy converted by animals is much less than that of energy converted by plants. By consuming a plant-based diet, a community could eat plants directly and absorb much more energy via much less food.

In this study, I examined the impact of viewing high- or low-fear appeals on changing consumers' pro-environmental attitudes and behaviors. I hypothesized that, like the research on dental hygiene and safe sex practices, high-fear appeals will not have a significant impact of consumers' attitudes and behaviors regarding their food choices (e.g., high fear appeals will not change a consumer's current behavior). I predicted that these high-fear appeals would influence

viewers' emotions such that they will express heightened fear, worry and empathy for living beings, but they will not be effective at influencing an individual's immediate or long-term food choices. Conversely, by showing participants a film that induces only a low amount of fear, participants will be more likely to express a change in their pro-environmental behaviors.

MATERIALS AND METHODS

Participants were recruited for the current study by offering extra credit in class for completing the study. Contact was made with the professor prior to distribution. In the end, 88 Nebraska undergraduate students voluntarily participated in the current study. They completed a survey on their own time and no compensation was given for participation. Their ages ranged from 19 to 54 years ($M= 23.93$; $SD=9.27$), and 64.8% ($n=57$) of them were women. Participants were randomly assigned to one of two conditions--a high-fear appeal in which participants view a disturbing video on raising animals for food, or a low-fear appeal, in which participants view a compelling video on the benefits associated with a plant-based diet.

A survey was created using Qualtrics Survey Software© and was distributed to the participants via email. The survey consisted of measures to assess an individual's current emotional state, and their environmental attitudes and behaviors.. Each participant completed the Positive Affect and Negative Affect (PANAS-X) scale as a means to measure one's emotional state (Watson, 1994). . This assessment was used as a baseline indicator for each participant. When prompted with an emotion, the participant was asked to rate how much they were experiencing that emotion at the present time, using a scale where 1 = not at all or very slightly; 2 = a little; 3 = moderately; 4 = quite a bit; 5 = extremely.

Next the participant completed the Environmental Identity Scale or EID, to determine the degree to which an individual views the environment as part of their identity (Clayton, 2003).

The scale is comprised of twenty-eight statements which the participants rated from strongly agree to strongly disagree according to their own views (Clayton, 2003). Each participant in the sample then completed the New Environmental Paradigm, or NEP, which measures an individual's perspective on the relationship between humans and nature (Dunlap, Van Liere, Mertig, & Jones, 2000). Like the EID, the NEP consists of statements to which the individual rates on a 5-point Likert-scale. Participants were then asked questions about their environmental behaviors, such as how much the individual recycles or drives an automobile.

Each participant then viewed one of two randomly assigned 5-minute videos—a high- or low-fear appeal. The low-fear video informed the viewer about potential benefits of a plant-based diet for society, one's health, and the environment. The high-fear video displayed negative aspects of the meat production industry. It included disturbing scenes of animal slaughter and off-putting practices of the industry. After the participant watched the video clip, they repeated the PANAS-X. This was used to determine the effect the video had on each individual's current emotional state. A filler task, or delay, was then completed to remove the focus of the study out of conscious awareness. The chosen task was to read an excerpt from a novel, and then the participant answered questions about the reading. Following the filler task, the participant then responded to questions about possible changes in their pro-environmental behaviors based on the video they saw, and finally, indicated general demographic information.

RESULTS

Quantitative findings. A total of 88 participants completed the survey. Group 1 (n=38) watched the low-fear video; group 2 (n=50) was presented with the high-fear video. Investigation

of initial survey data indicated that no differences in environmental attitude or pro-environmental behavior between groups were present as shown in Table 1.

	Average EID Score	Average NEP Score
Group 1	106.15	56.41
Group 2	107.6	57.08

Table 1. Average EID and NEP scores for group 1 (low-fear video) and group 2 (high fear video)

Table 2 compares average current emotional state for each group. Both groups became equally more distressed, upset, scared, and alert and equally less enthusiastic and excited after watching their assigned video. Neither group expressed a change in nervousness or inspiration. After watching the low-fear video, group 1 became less determined and group 2 had no fluctuation in determination.

The high-fear video and the low-fear video both induced participants to be more afraid, however, group 2 became much more afraid after viewing the high-fear video than group 1 after watching the low-fear video.

	Group 1		Group 2	
	Pre-video	Post-video	Pre-video	Post-video
Inspired	2.46	2.47	2.59	2.62
Distressed	2.16	3	2.17	2.98
Alert	3.13	3.38	3	3.28
Scared	1.51	2	1.5	2
Excited	2.8	1.91	2.81	1.97
Nervous	2.03	1.97	2.07	2.07
Enthusiastic	2.74	1.85	2.76	1.95
Upset	1.83	3.28	1.72	3.19
Determined	3.07	2.94	3.12	3.11
Afraid	1.48	1.84	1.52	1.93

Table 2. PANAS-X average current emotional rating on a 1-5 scale, 1 being not feeling this way at all and 5 being feeling like this very much, for each group before and after viewing their assigned video.

As reported in Figure 1, the likelihood that a participant would partake in more pro-environmental behaviors was generally greater after viewing the video about positive effects of reducing meat consumption on the environment. Figure 1 also shows that those who eat a wide variety of foods were more apt to engage in more pro-environmental behaviors after observing the negative video.

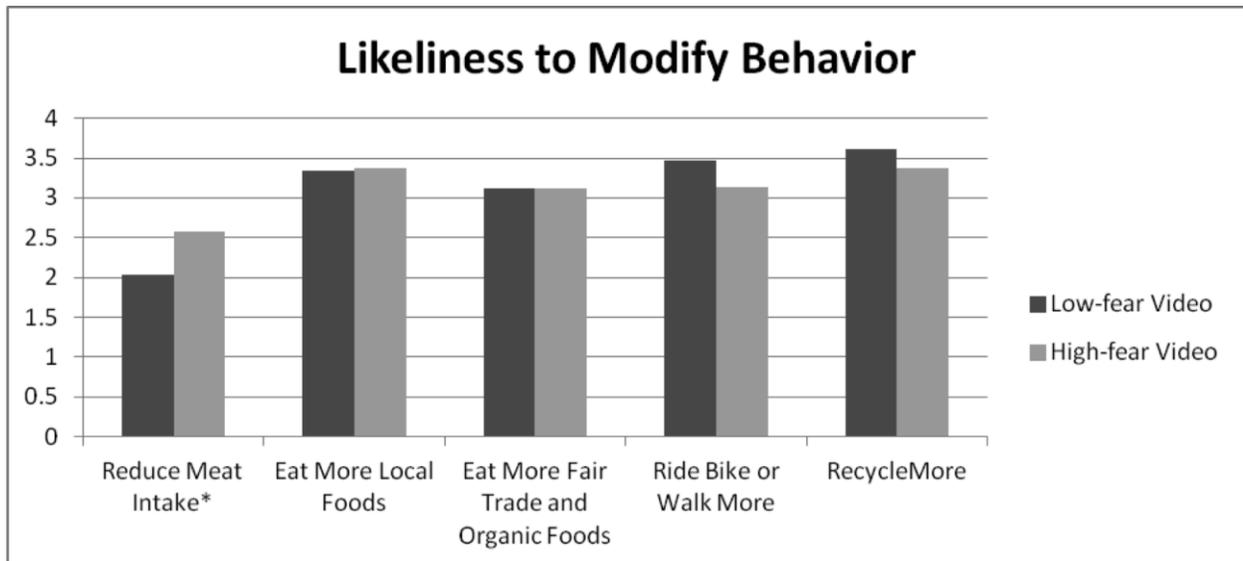


Fig 1. Anticipated post video behavior change for group 1 (low-fear video) and group 2 (high fear video) on a 1-5 scale, 1 being not at all likely and 5 being very likely.

Note that vegan and vegetarian subject responses were removed from the equation to calculate likeliness to reduce meat intake.

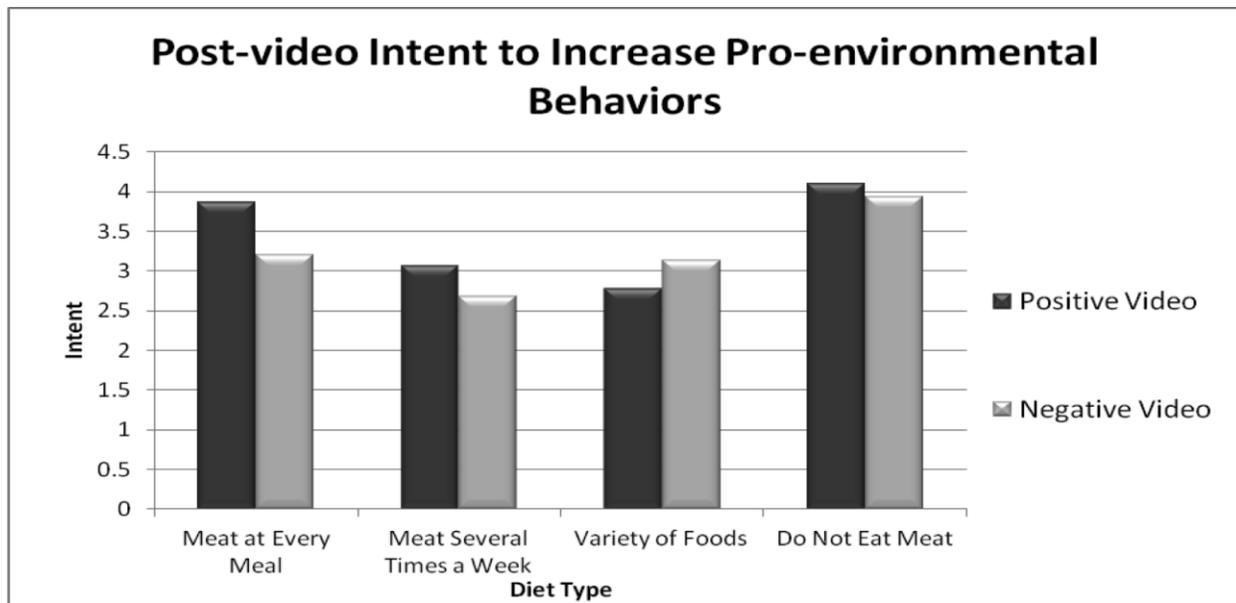


Fig 2. Participants average intent to increase eco-friendly behavior after viewing the assigned video. This shows responses by diet type. Each diet type was more likely to increase eco-friendly behavior after viewing the low-fear video with the exception on the group of participants that claimed to eat a wide variety of foods.

Responses indicate that the high-fear video aroused anger and defensive attitudes in participants. The low-fear video seemed to reassure participants about eco-friendly behaviors that they are already practicing. It is evident that there is an absence of understanding about reducing meat consumption in the responses from low-fear video viewers that did not intend to increase their eco-friendly behaviors.

Qualitative findings. When asked to comment on their intent to increase their eco-friendly behaviors after viewing their assigned video, participants provided many qualitative indicators of the reasoning for their intentions. The following quotes are from positive video viewers that did not intend to increase their eco-friendly behaviors.

“I didn't really feel like it applied to me. Like it seemed like they said everybody was being all environmental, and that's not really how I feel, like I wouldn't go out of my way to harm nature, but I'm not going to go out of my way to help it either.”

“Coming from a long line of ancestors that eat meat and process our own meat, I find nothing wrong with eating meat. But I'm not opposed to vegetarianism, it is just not the lifestyle I live, or ever will.”

“I disapprove of the vegan attitude, because I see a necessity for hunting and keeping a circle of life. I do not believe in hunting solely for sport, or killing over abundance of cows, but nature gives us an abundance of resources so that we can use some for meat and clothing, while still leaving nature to thrive and replenish.”

Below are samples of responses from low-fear video viewers that did indicate that they anticipate increasing their eco-friendly behaviors.

“I thought the video made a strong argument for the importance of what we eat. As a vegetarian, I believe that what we consume as individuals, food as well as other products, makes a substantial impact on the planet.”

“I liked the video. I am currently in the process of moving down the food chain for environmental reasons. Although I don't plan to be vegan nor vegetarian, I am attempting to consume less meat and buy more local foods.”

Responses from high-fear video viewers that did not intend to increase their eco-friendly behavior include:

“It was disturbing but I feel helpless and even though I probably won't eat pork for a couple days, I'll probably still eat it sometime in the future.”

“Humans are given animals for our own use”

“I'm really not concerned enough about the environment to put that much effort into making it better. I feel like the whole environmental issue right now is a cycle anyways, it will all work out eventually.”

Responses from high-fear video viewers that did intend to increase their eco-friendly behavior include:

“Organic food would be ideal if anyone could afford it, it's so expensive.”

“It makes me sad to see things like that happening to animals. I wish I could stop eating meat but I don't feel like it helps and it's hard to do that in college. I do wish there was some way I could do something besides donating money.”

“Factory farming should not be allowed in the U.S. We are smarter than that. People that eat meat and don't know where they are getting it from are doing a disservice to themselves and the earth.”

DISCUSSION

All participants were presented with information about meat production that they may have been oblivious to before participating in the study. It is natural that certain emotions would be triggered from either video. It seems that emotional response to both high-fear and low-fear appeals will induce eco-friendly behavior. However, those who were presented with the positive, low-fear video had higher expectations of themselves to be more sustainable. Respondents from group 1 claimed to be, on average, more upset and alert. Group 2 became more distressed and afraid after viewing the high-fear video. Both groups became less inspired and enthusiastic. The low-fear video did not induce more inspiration or determination as originally expected. Even still, the study shows that being upset and alert has more of an effect on one's intent to increase sustainability practices than experiencing distress and fear (Table 2).

The post-video questionnaire about a participant's intent to increase eco-friendly behavior shows little difference between groups, yet participants from both groups, on average, intended to increase their eco-friendly behavior. The average response to reduce meat intake is higher in the high-fear group than the low-fear group. This could be because responses from vegan and vegetarian subjects were omitted due to the fact that it is impossible for them to reduce their meat intake. Both groups stated that they would eat more local, fair trade, and organic foods to the same extent. Groups 1 and 2 both showed a great increase in intent to ride their bike, walk, and recycle more. Individuals in group 1 that viewed the low-fear video about the benefits of reducing meat consumption were more likely to ride their bike or walk more rather than driving and recycle more. This seems logical because changing a behavior like biking

or recycling seems a lot more feasible than changing ones diet. Those who were affected by the video to make a change may be reluctant to change their diet. (Fig 1)

There are many factors that may inhibit one's decision to adopt a lower meat focused diet including, financial barriers, dining situation, access, or lack of knowledge. Organic, fair trade, and local products tend to be more expensive than alternative commercial products. Many families do not budget for or simply cannot afford these increased prices for their food. Most of the study population consisted of students, many of these students may live in a dorm where preparing your own meals is almost impossible. Dining halls may have a very limited selection of organic, fair trade, local, or even meatless meal options. School-aged children are subject to eat what is provided to them through school lunch programs, most of which do not emphasize these foods. Also, there is limited access to these low-impact products. Most grocers do not carry them due to a lack of demand or minimal profit. Lack of knowledge about what we eat plays a huge role in our diet. In order for a consumer to make a sustainable decision about the food products they purchase and consume, they must understand the processing of the food and the packaging it comes in, where the food is coming from, and how the food was produced or raised before harvest or slaughter. The consumer also has to be able to identify which factors regarding this information are high or low-impact.

Figure 2 shows participants' intent to increase their eco-friendly behavior categorized into diet type. In general, each diet type is more likely to increase their eco-friendly behavior after watching the low-fear video with the exception of the group of participants that claimed to eat a variety of foods. There are likely a number of reasons for this finding. For example, People who eat a wide variety of foods do not consider any one food group to be a staple but rely on each individually. If one claims to eat a wide variety of foods, diet may not be a priority.

Therefore, the idea of reducing meat consumption or eating local or organic food may be of little concern.

Other groups may feel guilty about their meat consumption but rely on meat products as a main food source. While not deciding to reduce meat intake they may “make-up” for it by recycling or biking more than those in the group of wide variety consumers who experience little guilt.

The low fear-video was not effective in making participants feel more inspired, excited, and determined. A positive video featuring more benefits for the environment by reducing meat consumption may have been more affective. Further research should be conducted to determine the effects of anger, fear, and inspiration as individual motivators for more eco-friendly behavior. The population sample for this study may have been biased towards meat consumption. The study was performed in the Midwest where livestock feedlots and agriculture are a major source of revenue. When presented with the facts about meat production and the benefits of reducing it, many participants may have been defensive. The sample is neither large nor broad, so further research with a larger and more expansive sample population is crucial for the next step of examination.

After participants viewed their assigned video they completed a filler task and then answered questions about their intents after the video, which assesses only short-term behavioral intentions. If the participants were to be reevaluated a couple weeks or months after the initial study, the results may be different. For example, participants may no longer be experiencing the effects of the video, and may not have actually changed their behaviors. Future research should focus on the effect of emotion on eco-friendly behavior based on actual actions over a period of time.

CONCLUSION

It is believed that one becomes a vegetarian for moral or health reasons (Rozin, 1997), and it is reasonable to speculate that a person's decision to become more eco-friendly may be motivated by the same reasons. Emotion, for example, is an important factor in the motivation to shape moral norms (Wong, 2009). In theory, appealing to a person's emotion may influence one's likelihood participate in more eco-friendly behaviors.

The investigation of emotions' role in sustainability suggests that high-fear situations have a positive effect on one's intent to be more sustainable, yet a low-fear condition has a greater progressive influence. Results support the position that low-fear emotional triggers have a great effect on an increase in eco-friendly behaviors than experiencing a hear-fear situation that evokes distress and fear. An understanding of inspirational emotions remains unanswered. Observations indicate that those with a greater connection towards the environment are more likely to be more eco-friendly than those with little connection to nature. Further research will explain if emotion has a significant impact on humans' choice to be more pro-environmental.

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