# Are We Addicted to Oil? Lessons from Mental Health

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### Abstract

Despite mounting evidence regarding global climate change and its associated impacts, the United States has not transitioned away from oil and other fossil fuels toward more sustainable sources of energy. This article examines a common cultural narrative regarding U.S. energy policy—the notion that we are "addicted to oil." While this phase is often used in discussions regarding energy policy in the United States, the term "addiction" is a charged one, and it has potential implications worthy of examination. This article describes the criteria for addiction using the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). It then applies those criteria to our nation's relationship to oil. Application of Prochaska and DiClemente's Stages of Change Model (1983) then provides a basis for drawing further parallels regarding the role of addiction in diminishing human potential that may be applied on a cultural scale.

**Keywords:** climate change, addition, oil consumption, U.S. energy policy.

# Introduction

The Deepwater Horizon oil platform explosion off the Louisiana coast in April 2010 killed eleven workers and released an estimated 207 million gallons of oil into the Gulf. Despite collective public outrage over the largest oil spill in history and mounting concern about global climate change, Congress was unable to pass comprehensive energy legislation making a transition in the United States away from oil and other fossil fuels and toward more sustainable sources of energy. Over the past several decades, many factors have influenced ongoing discussions regarding the need to reduce our dependence on oil. They include several "energy crises," characterized by high oil prices, ecological disasters including the Exxon Valdez and now Deepwater Horizon oil spills, and the increasingly alarming threats associated with global climate change.

Within geography, scholarship from across the discipline has made important contributions to the public's understanding of oil and its corresponding

Southwestern Geographer, Vol. 14, 2010, pp. 122-136 © 2010 by Southwest Division of the Association of American Geographers social and environmental impacts. Regarding climate change alone, there are hundreds of peer reviewed publications on wide ranging issues associated with physical geography, including sea level rise (Edwards 2007) and shifting climate and biodiversity patterns (MacDonald, Bennett et al. 2008). Within human geography, research has examined environmental justice concerns (Bulkeley and Betsill 2005) and new trends in governance (Liverman 2004). Yet despite mounting evidence of both the problems associated with oil consumption and potential solutions, changing our ways has proved difficult.<sup>1</sup>

In an effort to understand our nation's reluctance to commit to the changes necessary to meaningfully address the problems associated with the use of oil, the concept of "addiction" may be of help. The phrase "addicted to oil" is commonly used in discussions regarding energy policy in the United States, and it has become a powerful cultural narrative (Figure 1). But should we be using this term so casually, or at all? This article approaches the question by applying the diagnostic criteria for "addiction" from the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (2000) to our oil use in the United States. Applying the medical model's criteria for addiction at this scale provides a helpful thought exercise, allowing us to look at the issue of oil consumption in a new way. After drawing conclusions based on this "diagnosis," it explores how treatment models for addiction, particularly Prochaska and DiClemente's (1982) model for Stages of Change, may inform our addiction to oil. By examining our use of oil through the lens of addiction, we have an opportunity to squarely acknowledge the challenges associated reducing our dependence on oil and then see what might be required to actually do something about it.<sup>2</sup>

### Making a Diagnosis: Are We Addicted to Oil?

The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (2000) is the guide mental health professionals use to make decisions about how to diagnose and treat their patients. When your psychiatrist asks you if you've had trouble sleeping lately or are experiencing a loss of appetite, these are not idle questions. This information is used to figure out what is wrong and how to make your life better. In the case of addiction (termed "substance dependence" by the DSM-IV) there are seven individual indicators or criteria. Where three or more of these criteria are met, a diagnosis of substance dependence is appropriate.<sup>3</sup> This article now takes each of these criteria in turn and applies them to our nation's oil consumption.

# One: tolerance for the substance increases.

Tolerance is present when there is a need for markedly increased amounts of the substance to achieve the desired effect or when there is markedly diminished effect with continued use of the same amount of the substance. For example, a person addicted to alcohol eventually needs to drink more to experience the same level of intoxication he or she once felt after just one or two



Figure 1. Courtesy of Frank Boyle.

drinks. Applying this criterion to our use of oil requires an examination of two questions: (1) what is our consumption rate and (2) what is our experience of that use in relation to the "desired effect"?

The rate of consumption can be tricky to estimate accurately. While overall consumption of oil has increased, increased efficiencies in use and fuel switching (for example, the move in the late 1970s from oil to natural gas to heat our homes) have meant that the U.S. economy has become less dependent on oil per unit of economic growth. Oil currently comprises approximately thirty seven percent (37%) of our overall energy supply. And with a per capita average of approximately three gallons per day, we (along with Canada), use dramatically more oil than most countries in the world (U.S. Energy Information Administration 2010).

There are several reasons for our current consumption and use. The major one is transportation. With private vehicles as our primary mode of transportation, approximately two-thirds of our current oil consumption in the U.S. goes to moving us around (U.S. Energy Information Administration 2010). Another reason is food. Pollan (2008) estimates that after cars, the food system uses more fossil fuel that any other sector of the economy—19 percent. Our approach to agriculture is heavily dependent on oil, with petroleum-based fertilizers and larger scale farms that require mechanized machinery to operate. Most food today is grown in monocultures far from urban environments, and transportation of food from farmer to market consumes a tremendous amount of oil. The typical vegetable now travels 1,500 miles to reach the average consumer (Smith and Mackinnon 2008). Another factor is extent to which petroleumbased products have become integrated into our daily lives. As it turns out,

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"plastics" was good advice.<sup>4</sup> Petrochemicals form the basis of many modern conveniences, including computers, cell phones, clothing and cleaning solvents.

Turning to the next question, we look at our consumption in relation to the "desired effect." This requires us to examine what we hope to experience as a result of our oil consumption and how that experience has changed over time. There is little question that our culture is predicated on cheap, plentiful oil. We live in suburbia, hours from our daily work. We fly to Hawaii for our winter vacations and we can eat grapes from Chile in January. But are we actually better off?

At first glance, one might think so. With a GDP of \$14.4 trillion, the United States has the largest economy in the world (U.S. Central Intelligence Agency 2010). The U.S. has maintained relatively stable economic growth over that past several decades (recent economic rescission notwithstanding). This may look desirable, until one looks at the other side of the balance sheet-debt. The U.S. external debt (debt is owed to creditors outside the country) is currently over \$13.9 trillion, which is also larger than any other country in the world (U.S. Department of Treasury 2010). So while we have experienced economic growth, that growth has been increasingly leveraged. Moreover, the economic prosperity of many Americans has stagnated since the mid 1970s, despite overall economic growth. Wolff (2004) notes that real wage income (the average hourly wages and salaries of production and nonsupervisory workers in the private sector, adjusted for inflation) has been falling since 1973. Average earnings almost doubled between 1947 and 1973 but advanced by only 11 percent between 1973 and 2000 and by only 9 percent from 1989-2000. This suggests the stagnation of labor earnings signals a shift in national income strategy away from labor towards capital. These wage statistics are also reflected in the median family income, which grew 100 percent from 1948-1973 but only 7 percent from 1973-1993 (Shellenberger and Nordhaus 2007).

Yet economics tell only part of the story. Brooks (2008) draws from studies in psychology, economics and other social sciences to examine national trends in happiness over the past several decades. Happiness, as subjectively reported by Americans over the past quarter century, has remained relatively stable. In 1972, 30 percent of the population said they were very happy, compared with 31 percent in 1993 and 32 percent in 2006. Similar trends exist for those who consider themselves "not too happy"—at a general average of 13 percent. For most Americans, increased consumption of oil has brought neither economic prosperity nor increased happiness.

#### Two: withdrawal symptoms.

The next criterion, withdrawal, is manifested by either (a) the characteristic withdrawal symptom for the substance or (b) the same (or closely related) substance is taken to relieve or avoid withdrawal symptoms. Anyone who has

had a hangover can relate to (a) and anyone who has tried a little "hair of the dog," to relieve their symptoms, can relate to (b). When an addict is dependent on a substance, especially over a long period of time, the body adjusts to its presence in its system and often reacts negatively when the substance is removed.

The U.S. has never really gone "cold turkey" from oil, allowing us to evaluate what the result might be. But there are clues, and they definitely point toward the potential for serious withdrawal pains. Take for example the 1973 Oil Embargo, which occurred when the newly formed Organization of Arab Petroleum Exporting Countries (OPEC) cut off oil exports in opposition to the United States' support of Israel in the Arab-Israeli conflict. From October 1973 to March 1974, OPEC cut production of oil and placed an embargo on shipments of crude oil to the United States. The resulting "oil shock" led to skyrocketing prices and a decline of U.S. oil consumption over a period of two years that were generally blamed for the recession that followed. In his book The End of Oil: On the Edge of a Perilous New World Paul Roberts (2006) argues that seven of the last eight global recessions were preceded by spikes in oil prices (Roberts 2006).<sup>5</sup>

Looking ahead, many experts are exploring the withdrawal symptoms associated with "peak oil." As a finite resource, the availability of oil will inevitably decline. The term "peak oil" is used to describe the point at which the maximum rate of extraction is reached. After the peak, oil resources will continue to decline, regardless of market demand. Predictions based on peak oil, combined with actual experience with past oil shocks, support a conclusion that, if oil is removed from our system, withdrawal symptoms will occur.

Our increased focus on developing other sources of energy may be viewed as meeting part (b) of the criterion. Rather than fundamentally questioning whether we should be decreasing our energy use overall, we discuss how other fuel sources might get us our fix. While natural gas is often nominated as the successor to oil, it is still a finite resource, and it produces only 30% less carbon dioxide than oil. Wind and solar are no free lunch, either. Locating industrial scale wind and solar facilities is almost always controversial. Communities want wind power, but they don't like looking at wind turbines. As a result, these projects are being pushed onto public lands in areas like California's Mojave Desert, where the attendant habitat disturbance threatens sensitive habitats and endangered species including the Desert Tortoise. Nuclear power has similar problems finding a hospitable neighborhood and much greater challenges associated with long storage of its associated waste. Admittedly, conservation and efficiency efforts are always included in discussions over energy policy. But former vice president Dick Cheney's now famous statement, "conservation may be a sign of personal virtue, but it is not a sufficient basis for a sound, comprehensive energy policy," reflects an embarrassing truth about our culture (Nichols 2001). We enjoy cheap and plentiful energy, and we have no intention of giving it up.

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# *Three: the substance is often taken in larger amounts or over a longer period than intended.*

One main characteristic of addiction is the addict's inability to control their use of the substance on which they are dependant. In this case, it is difficult to assess this criterion, because it is hard to determine whether we've ever really intended to cut down on our use. Certainly there has been consistent rhetoric since the first oil shock that we need to "reduce our dependence on foreign oil," but these statements usually imply that domestic sources will be able to pick up the slack. Within the Republican Convention mantra "drill baby drill" there is at a perception that domestic oil supplies can meet our needs. This is unrealistic—the United States hit its peak production in the mid 1970s (Deffeyes 2005). On the other hand, the prospect of global climate change has led many in the United States to reexamine the consequences of our oil use. Because this is closely related to the next criterion, which focuses on efforts to "cut down" on our use of oil, the next section may provide some answers for both criteria.

# Four: there is a persistent desire or unsuccessful efforts to cut down or control substance use.

This criterion points to one of the more telling elements of an addiction. Regardless of how much or how often the individual uses a substance, is that use still a choice? Unsuccessful efforts to limit or control use can be a clear sign of dependency. With regard to our addiction to oil, we must look at both (1) whether we have demonstrated a persistent desire to "cut down" on our oil use and (2) whether those efforts have ever been successful.

Certainly following the first oil embargo, some policy changes were made to try to decrease our use of oil. President Jimmy Carter wore his sweater during a publicly televised address to the nation, encouraging everyone to crank down their home thermostats and turn off lights when leaving a room. And to reinforce the point, he put solar panels on the White House. Around the same time, Congress lowered the speed limit on interstate highways to 55 mph in order to conserve fuel. But these initiatives did not last. When President Ronald Reagan came into office, he promptly removed the solar panels on the White House. This act became symbolic of a larger social rejection of Carter's vision. In 1987, Congress allowed states to raise speed limits back to 65 mph on rural Interstate highways, and in 1995, it lifted federal speed limit controls altogether (Moore 1999). As a culture, we have made some efforts to "cut down" but these efforts have rarely been sustained. Very much like an addict, who goes back and forth as to whether there is really a "problem," our resolve fluctuates, more often in response to the price of oil rather than in response to any larger concerns over our use.

*Five: a great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.* 

This element of the diagnosis examines the level of preoccupation associated with the substance. This includes how much time is spent trying to make sure there are the resources necessary to acquire and use the substance. Once the substance is used, does the resulting intoxication, withdrawal symptoms or other side effects make it difficult to function? The issue of "recovering from the effects" of oil will be assessed in the next criteria. This section examines just how much time and energy the United States spends acquiring access to oil.

One could argue that the bulk of our post Cold War foreign policy efforts are either directly or indirectly involved with maintaining access to oil. Roberts (2006) chronicles America's relationship with oil, including its willingness to go to war. With domestic production in decline since the 1970s, he observes how our increasing dependence on "foreign oil" has required the United States to become an international bully. The Persian Gulf War and the current Iraq War were indisputably about securing oil reserves in the Middle East. Some argue that the "war on terror" and our role in Afghanistan are also really about oil. The Trans-Afghan pipeline provides important access to both oil and natural gas reserves in the Caspian Basin (Rashid 2000).

Securing this oil comes at a cost. Estimates are that the United States has spent over a trillion dollars on the Iraq and Afghanistan wars to date. There is also a human cost. The U.S. Department of Defense estimates that 4,361 military personnel have died in the Iraq War so far, and many of these deaths are actually directly related to use of oil. A 2009 article highlighting the Pentagon's attempts to reduce its own fuel consumption reported that about half of the U.S. military casualties in Iraq and Afghanistan are related to attacks with improvised explosive devices on convoys carrying fuel (Vogel 2009). The toll on human life outside the military is much higher. The Associated Press estimates that more than 110,600 Iraqis have died in violence since the 2003 U.S. led invasion (Gambel 2009).

# *Six: important social, occupational, or recreational activities are given up or reduced because of substance use.*

This criterion focuses on the role addiction plays in diminishing human potential. When someone gives up the things they love in order to accommodate their continued use of a substance—relationships, jobs, friends, hobbies, etc.—there is evidence of addiction. Applying the question of human potential on a cultural scale, we must ask what our lives in the United States might look like if we did not rely on oil. What would our foreign policy look like? Our national budget? Our air quality? Our climate? We must also look at what we have given up as a result of our relationship with oil. While many aspects of culture could be examined here, perhaps the most compromised one is something deeply cherished by most Americans—our natural environment.

In order to use oil for fuel, we must first find it, extract it from underground, and then burn it. All these actions have environmental consequences. In terms of extraction, the reality is that most of the easy domestic oil is gone. The remaining deposits are mostly in sensitive ecological areas such as the Arctic National Wildlife Refuge in Alaska or require deepwater offshore drilling, as was the case with the Deepwater Horizon platform in the Gulf of Mexico. Once extracted, the oil must be transferred to market, either by pipeline, oil Anyone who remembers the 1989 Exxon Valdez spill is tanker, or both. aware of the ecological risks of transporting oil. Approximately 11 million gallons of oil spilled into Alaska's Prince William Sound, resulting in a billion dollars in environmental damages. And the Exxon Valdez spill doesn't even rank among the top 50 largest oil spills around the world. (Lovgren 2004). The long term impacts of the Deepwater Horizon spill are still unknown. Lesser spills, mostly in the form of pipeline leaks, still occur frequently. While they rarely make national headlines, these events are evidence of our tacit acceptance of the environmental trade-offs necessary to support our continued use of oil. And while damage to terrestrial systems is significant, it pales in comparison to our damage to our atmosphere-the focus of our last criteria.

# Seven: the substance use is continued despite knowledge of having a persistent physical or psychological problem that is likely to have been caused or exacerbated by the substance.

This criterion focuses on whether someone can stop using the substance once a real serious problem is discovered that is associated with its use. For example, alcoholics often continue to drink well after a diagnosis of cirrhosis of the liver. This indicates a level of dependency associated with a willingness to sacrifice overall wellbeing, despite lasting negative consequences. Notice that the language of the criteria only requires that the problem is "likely to have been caused or exacerbated" by the substance. It does not require absolute proof. And for good reason—such certainty in this area of medicine is almost always hard to come by. The complexities of the human system, which involve genetic predispositions, lifestyle choice, and environmental factors, make direct linkages difficult at best.

The same goes for our climate system. The Intergovernmental Panel on Climate Change (IPPC) has been clear that anthropogenic emissions of greenhouse gases (mostly notably for our purposes CO<sub>2</sub>, a byproduct of our oil consumption) are causing changes in the earth's climate (Oreskes 2004) These conclusions were first reached in 2001, and over the years with successive reports based on new findings, the IPPC's conclusions have become increasingly confident. In 2007, it declared that the "warming of the climate system is unequivocal" and that "most of the observed increase in globally averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations" (Intergovernmental Panel on Climate Change 2007, 5).

And yet, despite this scientific consensus, recent polls demonstrate a sharp decline in overall concern over climate change. The Pew Center on the People and The Press (2009) estimates that there has been a decline over the past year in the percentage of Americans who say there is solid evidence that global temperatures are rising. And fewer also see global warming as a very serious problem -35% say that today, down from 44% in April 2008. More recent polls place climate change dead last among 21 priority issues, lagging far behind the economy, jobs and terrorism (Pew Center 2010). Just like an addict who continues to use well after the body begins to shut down, there is an element of denial underlying our use of oil. At times, we are concerned, but, in many cases, due to other stressors (e.g., the recent economic downturn) our willingness to face our problem and do something about it dwindles.

## **Conclusions: Lessons from Mental Health**

Based on the above assessment, it is fair to say that we are indeed addicted to oil. The reader can be the judge, but remember that we needed to meet only three of the outlined criteria in order to qualify for the diagnosis, and there is evidence to suggest that our use of oil meets all seven. The question now is: what can we do about it? There are many treatment models for substance dependence. Most require a real commitment before they can be effective. Where, as is the case here, it is unclear how ready we are to really engage in treatment, a helpful starting point is Prochaska and DiClemente's (1982) transtheoretical model for Stages of Change. This model provides a basis for assessing the viability of successful treatment by first examining the addict's willingness to address the problem. The model conceptualizes willingness to change into seven distinct stages, ranging from "precontemplation" (not even thinking about changing behavior in the foreseeable future) to "termination" (no chance of relapse). For each stage, the model provides suggested approaches for motivating positive behavior and progress to the next stage (Table 1).

This is an important concept when applied to our use of oil. Many of our efforts to date have simply assumed that—once faced with the "facts"— changes would be made and problems would be addressed. But our actual experience indicates otherwise. Rather than making steady progress, our efforts closely resemble those of an addict who vacillates between concern and denial. Applying the Stages of Change Model to our collective behavior has the potential to allow us to move forward more effectively in formulating an effective response.

It's probably fair to say that we have moved beyond the precontemplation stage. Precontemplation requires almost complete denial, and while there are certainly climate change skeptics out there, almost everyone agrees that our dependence on "foreign oil" is a problem. Even if the focus is on energy independence rather than concerns over climate change or peak oil, our culture has reached the point at which our reliance on oil is of general concern.

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Stage of Change	Characteristics	Therapeutic Techniques
Pre- contemplation	Not currently con- sidering change: "Ignorance is bliss"	Validate lack of readiness; Clarify: deci- sion is theirs; Encourage re-evaluation of current behavior; Encourage self- exploration, not action; Explain and per- sonalize the risk.
Contemplation	Ambivalent about change: "Sitting on the fence"	Encourage evaluation of pros and cons of behavior change; Identify and promote new, positive outcome expectations.
Preparation	Some experience with change and are trying to change: "Testing the waters"	Identify and assist in problem solving re: obstacles; Help patient identify social support; Verify that patient has underly- ing skills for behavior change; Encourage small initial steps.
Action	Practicing new be- havior	Focus on restructuring cues and social support; Bolster self-efficacy for dealing with obstacles; Combat feelings of loss and reiterate long-term benefits.
Maintenance	Continued commit- ment to sustaining new behavior	Plan for follow-up support; Reinforce internal rewards; Discuss coping with potential relapse.
Termination	No longer a need to work to prevent relapse	None.

Table 1.

Our collective behavior to date probably places us at the "contemplation" stage of change. The contemplation stage is often described as "sitting on the fence," a situation in which the problems associated with the substance use are recognized, but there remains some indecision about what, if anything, to do about it. This stage is often characterized by doubts about whether the long-term benefits of action outweigh the short-term costs. The underlying ambivalence described at the contemplation stage is certainly evident within many of the current debates in Congress over climate legislation. The economic recession has many leaders asking whether we can "afford" to invest in the changes

necessary to make the drastic reductions in overall emissions currently recommended by scientists: 80 percent below 1990 levels by 2050 (den Elzen, M. and Höhne 2008). Reaching this goal would require drastic changes in our overall energy policy—pretty much immediately. The decline in concern over climate change that is reflected in recent polls suggests that Americans struggle to balance the need for a new energy policy with other priorities facing the nation, many of which have a much more immediate influence on their daily lives.

An optimist might argue that we have reached the "preparation stage" of change. The preparation stage involves efforts to become educated about both the addiction and possible treatment methods and taking some small, experimental steps leading up to real change. The Environmental Protection Agency's recent decision to regulate  $CO_2$  as a "pollutant" under the Clean Air Act is an important step, as are the proliferation of climate initiatives at the local, state, and regional levels (Benson 2010). While these efforts may not in themselves be sufficient, they are important because they will inform later action.

The action stage will be met when new behaviors are embraced that, if maintained, place our reliance on oil squarely in the past. This stage often involves a complete change in lifestyle, lots of support, and open discussions about the possibility of relapse and how to prevent it. In the case of oil, this will require a new relationship with energy in general and oil in particular. The greenhouse gas emissions target of 80 percent below 1990 levels by 2050 cannot be met without a reconfiguration of our transportation systems, including our relationship with food (Chilean grapes in January—really?).

The final stage of termination is reached when there is no longer a threat of returning to old habits and substance dependence. Some experts argue that this stage is never reached and that constant vigilance is necessary to avoid relapse. In the case of oil, a new energy economy predicated on renewable resources would be necessary to reach this stage. Once reached, however, there is every reason to believe it could be sustained. The Stages of Change model posits that in order to reach this stage, there are no short cuts. To make the real changes necessary and sustain them over time and reach this stage, we must be willing to acknowledge our willingness to change and where we are right now.

If we are at the contemplation stage, the model suggests two main approaches for moving forward. The first is to openly weigh the pros and cons. Oil had many advantages as an energy source. It provided the cheap and abundant energy. As a result, we have experienced enormous wealth, significant advancements in our standard of living, and lots of personal freedom. It was fun, while it lasted. All of the problems associated with our use oil use oil described above must also be openly discussed. Honestly weighing the pros and cons helps us to see that change is worth it.

The second recommendation is to begin shifting focus toward the positive aspects of change. This is where we allow ourselves to contemplate freedom

from oil, actually look forward to it, and become excited about the possibilities of a creating a new energy economy based on sustainable resources. For example, we can move toward an agricultural economy based in local, fresh food that is produced free of petroleum-based fertilizers and herbicides. Not only is this food better for you, it tastes better, too. We have the technological capacity to make these changes right now—what we need is the commitment to change. By focusing on the positive aspects of the change, we can move forward. President Obama's emphasis on "green jobs" as a basis for economic recovery is an example of this shift in emphasis.

For the most part, however, the approaches recommended here stand in stark contrast to efforts to address our oil dependency to date. Mainly, we've used the tools of scientific inquiry to study the issue extensively and then tried to use that information to influence our behavior. Thousands of scientific studies inform the consensus-based conclusions of the IPPC. These findings have been cited and discussed extensively in international negotiations and congressional hearings. But they have not motivated Americans to change.

We've also tried to motivate ourselves through fear. We fear our "dealers" (the hostile countries that own most of the world's remaining oil supply) will cut us off. We fear the impact of petrochemicals on our health, many of which have been linked to cancer, endocrine disruption, and other problems. We fear the impact of high oil prices on our economy and our ability to afford gas at the pump. Increasingly, we fear the impact of global climate change.

Finally, we've use the tactic of shame. We are bombarded with photographs of polar bears searching for a way across melting ice. And the message is clear: your lifestyle is making others suffer. But as any addictions counselor can tell you, these tactics have little value. Rational arguments have little effect because the addict is not motivated by reason. Fear and shame only push the addict further away from wanting to face the situation. Taking on the challenge of reducing our dependency on oil will require more effective means of motivation. In their 2007 book Breakthrough: From the Death of Environmentalism to the Politics of Possibility, Michael Shellenberger and Ted Nordhaus make a similar point while addressing environmental challenges more generally. They argue that the significant advancements in environmental protection achieved in the early 1970s were achieved during an unpredicted period of cultural confidence. In other words, the Clean Water Act, Endangered Species Act and other groundbreaking environmental laws passed during that period were motivated by optimism rather than fear.

The lesson from mental health is that facing our addiction to oil is a great challenge but also an enormous opportunity. If Americans are indeed more likely to take on environmental causes when they feel secure and prosperous, the current economic recession provides all the more reason for us to address the issue of readiness more squarely. Unless and until there is a collective willingness to take on this challenge, attempts at change will be undermined, and it will only take longer to make the real, sustained progress necessary to

face our addiction. Approaching our situation honestly and intentionally, we can move past our addiction on oil.

## Notes

- 1. The terms "us" and "we," refer to those living in the United States, though of course there are many parallels with other industrialized nations.
- 2. This article is not intended to be a literal application of the diagnostic criteria for addiction. And while there is in a sense no unified "we" in the United States that makes decisions and takes action with regard to oil consumption, terms such as "we" and "us' are employed here in order to examine our use of oil on a cultural level by looking through a relatively unfamiliar lens—that of mental health. While some might suggest that it is politically naïve to ignore the social and economic disparities between winners and losers within our nation regarding the use of oil, I believe that there is value in a collective reexamination of oil use in the United States.
- 3. When used for individuals, the DSM-IV looks at whether three or more of the criteria are met over a period of a year. Applying these criteria on a cultural rather than individual scale, this analysis assesses our use over several years in order to provide a more accurate picture of oil consumption patterns in the United States. The DSM is currently being revised and the fifth edition (DSN-V) should be out sometime in 2011. Early reports indicate that there will be revisions to the diagnostic criteria for substance dependence, including a return to the term "addiction."
- 4. This pop culture reference comes from the movie *The Graduate*. In that 1967 film, Ben (Dustin Hoffman's character) is a recent college graduate. At his welcome home party, Ben receives perhaps the most famous advice in cinematic history from a friend of the family:

Mr. McGuire: I just want to say one word to you - just one word.
Ben: Yes sir.
Mr. McGuire: Are you listening?
Ben: Yes I am.
Mr. McGuire: 'Plastics.'
Ben: Exactly how do you mean?
Mr. McGuire: There's a great future in plastics. Think about it. Will you think about it?
Ben: Yes I will.
Mr. McGuire: Shl! Enough said. That's a deal.
The Graduate. 1967. Los Angeles, CA: MGM Studios.

 Roberts' book was published before the most recent recession, but he predicts it, and the EIA figures on oil prices further confirm the theory. *See* U.S. Energy Information Administration, 2009. *World Crude Oil Prices*. http://tonto.eia.doe.gov/dnav/pet/hist/LeafHandler.ashx? n=PET&s=WTOTWORLD&f=W.

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