

## Editorial

# Addiction and free will

## KATHLEEN D. VOHS<sup>1</sup> & ROY F. BAUMEISTER<sup>2</sup>

<sup>1</sup>Department of Marketing, Carlson School of Management, University of Minnesota, Minneapolis, MN, USA and <sup>2</sup>Department of Psychology, Florida State University, Tallahassee, FL, USA

(Received 15 October 2008; accepted 16 October 2008)

Whether people believe that they have control over their behaviors is an issue that is centrally involved in definitions of addiction. Our research demonstrates that believing in free will – that is, believing that one has control over one's actions – has societal implications. Experimentally weakening free will beliefs led to cheating, stealing, aggression, and reduced helping. Bolstering free will beliefs did not change participants' behavior relative to a baseline condition, suggesting that most of the time people possess a belief in free will. We encourage a view of addiction that allows people to sustain a belief in free will and to take responsibility for choices and actions.

Keywords: Free will, belief, attribution

Belief in addiction is often tantamount to a disbelief in free will, at least within the circumscribed behavioral sphere involving the addiction. Our recent research has suggested that such a belief can cause problems.

The idea that people are not fully in control of their own behavior stretches back into antique notions of demonic possession, divine command, and other supernatural volition. In modern life, people often claim reduced responsibility for their own actions by citing social factors, societal oppression, emotional distress, external provocation, mental illness, drugs, and other factors.

In a curious parallel to ideas of demonic possession, modern science has promoted the view that people are not free to choose or control their actions. Unconscious processes, genetic determinism, brain mechanisms, chemical forces (e.g., the "twinkie defense") and other scientific theories tell people that their actions are not chosen, despite people's impression to the contrary. Moreover, many scientists insist that all human actions are caused by prior events, which makes free will entirely an illusion (e.g., Skinner 1972; Crick 1994).

Correspondence: K. D. Vohs, Department of Marketing, Carlson School of Management, University of Minnesota, 3-150 321 19th Ave So., Minneapolis, MN 55455, USA. E-mail: kvohs@umn.edu

People from all around the world generally tell surveys that they feel in control of their lives (International Social Survey Programme 1998). To many scientists, this is at best wishful thinking. In any case, whenever people might want to believe that they are not free to choose how to act, science stands by them ready to supply supportive rationalizations.

Addiction is a particularly potent form of the belief that people cannot control and are not responsible for their actions. Addicts take drugs or drink alcohol or indulge other pleasures to the point that these indulgences become destructive and harmful, to themselves and often to the people around them. At this point, a libertarian philosophy would hold them responsible for shirking their duties and harming others. To say "I can't help it" might reduce their culpability and would therefore be appealing to them.

## Belief in free will

Our own recent research has explored the effects of believing *versus* disbelieving in free will. This line of work was begun by Vohs and Schooler (2008), who developed several methods for manipulating beliefs toward greater free will *versus* toward more rigid determinism. These methods included having research participants read a scientific essay lampooning as absurd the idea of free will (Crick 1994) and having them meditate on a series of statements affirming either human freedom or deterministic inevitability. Vohs and Schooler found that making people disbelieve in free will caused them to cheat more than others on a test, especially when they could make money by cheating.

Further work has confirmed the antisocial effects of disbelieving in free will. These effects include increased aggression toward other innocent persons and reduced helpfulness toward needy strangers (Baumeister et al. in press). Disbelief in free will seems to make people less likely to think for themselves, as reflected in greater conformity to other people's judgments (Alquist and Baumeister 2008/unpublished) and lesser willingness to articulate personal lessons from their own guilty misbehaviors (Stillman and Baumeister 2008/ unpublished). Meanwhile, though, when people reflect on their past misdeeds and feel guilty, they prefer deterministic views over any belief in free will (Stillman and Baumeister 2008/unpublished), presumably because such views reduce guilt by making people think their misdeeds were inevitable and they could not help acting as they did. Hence, it is no wonder that many addicts may be attracted to views that downplay free will.

Some of these studies have included conditions that push in both directions, that is, both increasing and decreasing belief in free will, as well as a neutral control. The typical finding is that two conditions produce the same result: Promoting belief in free will produces results similar to the neutral control. Reducing belief in free will yields the discrepant result. The implication is that most people have a belief in free will most of the time. Disbelief in free will departs from the norm.

Taken together, these results suggest that society generally promotes belief in free will, and for good reason. When people believe in free will, they behave better than when they disbelieve in it. The matter is far from permanently resolved, however. Many factors occasionally promote disbelief in free will.

### Addiction as disbelief in free will

The term "addiction" may have been first used by Shakespeare, and for three centuries or so it denoted merely a strong liking for something. Around 1900, however, a medical usage emerged, in which addiction meant strong devotion to or inclination to usage of some drug. The medical usage treated addiction as a disease, which carried the new connotation that some users may be unable to resist taking the drug. Addiction therefore acquired the connotation of loss of free will.

Over the years, various influential forces in Western culture have elaborated and promoted the deterministic or disease model of addiction that depicts it as loss of free will. Sensational films have shown individuals deranged by uncontrollable cravings for alcohol and drugs, perhaps most famously (if inaccurately) the berserk marijuana users in "Reefer Madness." Scientists, never terribly fond of the idea of free will anyhow, have contributed their support by showing that various genetic and other biological factors predispose people to addiction. The medical profession embraced the idea of addiction as a disease that requires medical treatment (even, somewhat paradoxically, via drugs) rather than willpower. Grassroots movements such as Alcoholics Anonymous found it useful to stress the powerlessness of the individual to control addiction, even though they bring benefits by providing social support for willpower in self-restraint.

Undoubtedly, the rising popularity of the deterministic view of addiction owes much to its appeal to addicts themselves. This is based on an attributional exercise in excuse-making or "functional attribution," as Davies (1997), Peele (1998), and others have elucidated. Given a choice between saying, "I freely choose to indulge in unproductive pleasures instead of discharging my social responsibilities" *versus* "I am a helpless victim of biological forces and inherently dangerous foreign substances," many people will understandably prefer the latter. Over the years, a long series of celebrities have found their lives shattered and their highly profitable careers jeopardized by drug, alcohol, and of late sexual indulgence, and it is hardly surprizing that they have taken refuge in the victim role in the hope of attracting enough public sympathy (and perhaps legal system indulgence) to salvage their glamorous careers. These high-profile retreats to prominent clinics and detox centers have helped legitimize the view that addicts lack free will.

The appeal of the deterministic model of addiction starts long before one begins seeking an explanation, excuse, or functional attribution for a ruined life. As analyzed by Davies (1997), the belief that one has no free will contributes to forming and sustaining the addiction from quite early in the process. In his analysis, people take drugs for pleasure. The idea of addiction as external compulsion allows for continuing and indulging to excess. In this analysis, the belief that addiction destroys free will makes it more difficult for people to control their usage or to quit.

### Beyond either/or

Our view is that the debate about free will in addiction, like the broader debate about free will in all human behavior, is unlikely to be won by either extreme view (Baumeister 2008). Self-control is an important form of what people understand as free will, and the capacity for self-control is real but limited – thus neither complete nor completely lacking. The traditional notion of willpower may be useful here, especially if one understands willpower as a kind of psychological energy that fluctuates as people use it up and then re-charge it (Baumeister et al. 1998; Vohs and Heatherton 2000). Free will is a partial, sometime thing.

There is certainly room to incorporate biological and genetic vulnerabilities in such a model. People may vary as to the reward power of drugs and alcohol: Some people get more pleasure than others from them. Social factors and personal experiences may also contribute to individual differences in such propensities. Thus, some people end up with stronger cravings than others.

Still, some freedom remains. The wine does not pour itself into a glass and thence down the alcoholic's throat. The person thus makes a choice between competing impulses: indulging pleasure now *versus* abstaining for the sake of nonspecific but substantial delayed gains. Choosing the path of virtuous abstention depends on willpower, however. When willpower has been depleted (such as by other acts of self-control, or even by decision making in any context; see Vohs et al. 2008), their likelihood of choosing the immediate pleasure increases.

If a disease model for addiction is to be retained, we suggest abandoning the virus or germ models in favor of something more like Type II diabetes. One does not become infected with diabetes. Rather, a natural bodily vulnerability becomes exacerbated by experiences, many of which are based on personal choices. Many people will not become diabetics regardless of what they eat, but others will suffer diabetes to varying degrees as a function of diet and exercise. Moreover (and again unlike a virus), there is no definite boundary that separates the sick from the healthy. Diabetes, and by analogy addiction, is a continuum. Those who are constitutionally vulnerable move themselves along this continuum by virtue of the choices they make.

Such an approach might produce a more socially beneficial "mythology" of addiction. Our research findings have suggested that promoting disbelief in free will produces destructive, antisocial behaviors generally. We propose that similarly destructive effects are likely to come from depicting addiction as loss of free will. People who have made bad choices like to hear and to think that they did not really or freely make those choices. But catering to that view excuses their behavior and sometimes contributes to enabling them to continue making similar choices.

Instead, we advocate a view that biology is not destiny. Being born with a genetic receptivity to liking drugs or alcohol does not guarantee a life of addiction. It is perhaps a form of bad luck, but one that can be overcome with prudent though sometimes difficult choices. Difficult choices are difficult because they consume relatively large amounts of psychological energy. Depicting addiction in this way may encourage people to sustain belief in free will and to take responsibility for their own choices and actions. As our research findings suggest, such an attitude is likely to produce behaviors that are beneficial for both the individual and society.

**Declaration of interest:** The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

The authors thank McKnight Land-Grant Professorship and National Institute of Health grant 1RL1AA017541 funds for support.

### References

Alquist J, Baumeister RF. 2008/unpublished. Conformity increases with disbelief in free will. Florida State University, Tallahassee FL.

Baumeister RF. 2008. Free will in scientific psychology. Perspectives on Psychological Science 3:14-19.

- Baumeister RF, Bratslavsky E, Muraven M, Tice DM. 1998. Ego depletion: Is the active self a limited resource? Journal of Personality and Social Psychology 74:1252–1265.
- Baumeister RF, Masicampo EJ, DeWall CN. in press. Prosocial benefits of feeling free: Disbelief in free will increases aggression and reduces helpfulness. Personality and Social Psychology Bulletin.

Crick F. 1994. The astonishing hypothesis. New York: Scribner's.

Davies JB. 1997. The myth of addiction. Amsterdam: Harwood Academic Publishers.

International Social Survey Programme. 1998. Religion II. GESIS. Available from: http://www.gesis.org/en/ data\_service/issp/data/1998\_Religion\_II.htm

Peele S. 1998. The meaning of addiction: An unconventional view. San Francisco: Jossey-Bass.

Skinner BF. 1972. Beyond freedom and dignity. New York: Vintage Books.

Stillman TS, Baumeister, RF. 2008/unpublished. Guilt and free will. Florida State University, Tallahassee FL.

- Vohs KD, Schooler JW. 2008. The value of believing in free will: Encouraging a belief in determinism increases cheating. Psychological Science 19:49–54.
- Vohs KD, Heatherton TF. 2000. Self-regulatory failure: A resource-depletion approach. Psychological Science 11:249–254.
- Vohs KD, Baumeister RF, Schmeichel BJ, Twenge JM, Nelson NM, Tice DM. 2008. Making choices impairs subsequent self-control: A limited resource account of decision making, self-regulation, and active initiative. Journal of Personality and Social Psychology 94:883–898.