Resist or Yield? What to do with temptations?

**Abstract**:

An important recent distinction in the empirical literature about self-control is between resisting and avoiding temptations. While we have some evidence that avoiding temptations is the more efficient method of the two, philosophers have focused almost exclusively on resisting temptations. The aim of this paper is to examine what the ability to avoid temptations depends on and argue that it depends primarily on how fragmented one’s mind is: on the inconsistencies in one’s mental setup. The fragmentation of mind requires a significant amount of mental effort to conceal from oneself and this leads to a weakened ability to resist temptations.

**Keywords**: self-control, trait self-control, temptations, cognitive dissonance, ego-depletion

**I. Introduction**

An important recent distinction in the empirical literature about self-control is between resisting and avoiding temptations. While we have some evidence that avoiding temptations is the more efficient method of the two, philosophers have focused almost exclusively on resisting temptations. The aim of this paper is to examine what the ability to avoid temptations depends on and argue that it depends primarily on how fragmented one’s mind is: on the inconsistencies in one’s mental setup.

I start with an analysis of the concept of trait self-control in Section II, which is a good way of keeping apart the ability to resist temptations and the ability to avoid temptations. In Section III, I argue that trait self-control, which tracks our ability to avoid temptations, depends on how fragmented one’s mind is. After pointing out some systemic reasons why fragmentation is the rule and not the exception (Section IV), I argue that we actively conceal the fragmentation of our mind from ourselves and this takes significant mental effort (Section V and VI), which leads to a weakened ability to resist temptations. Conversely, both resisting and yielding to temptations leads to increased fragmentations (Section VII). I conclude with some ways in which the mind can be defragmented (Section VIII).

**II. Trait self-control**

My starting point is the concept of trait self-control – commonly referred to as a measure of how good an individual is at self-control. The method for establishing the trait self-control value is questionnaire-based (Tangney et al. 2004) and it has become a crucial concept in understanding self-control *per se*.

 One important assumption researchers make about trait self-control is that it is constant in an individual’s lifetime. This assumption is often implicit, but sometimes it is made explicit (as in Gottfredson and Hirschi 1990, see also Matsuela 2008, pp. 104-105). But even when it is not made explicit, it serves as a crucial premise of many self-control studies, for example, in studies that demonstrate correlation between childhood self-control and unemployment in adult life (Daly et al. 2015, see also Moffitt et al. 2011).

 The general vision behind these studies is that the trait self-control is established in childhood and once it is established, this is what we need to work with for the rest of our life. I want to argue against this picture of trait self-control. We have no reason to think that trait self-control is a constant in an individual’s lifetime. Trait self-control depends on a number of factors and as these factors change in an individual’s lifetime, so does trait self-control.

 The idea that trait self-control is fixed throughout one’s life is also a very dangerous idea inasmuch as it may encourage people to just give up on any attempt to have a higher level of self-control (whatever that means) given that the researchers and the press say that this is blatantly impossible.

One major question about trait self-control is about whether it tracks one’s ability to resist temptation or one’s ability to avoid temptation. The two are very different. If I know that I am bad at refusing another glass of wine, there are two ways of avoiding getting drunk: going to the bar and ordering one glass of wine and then trying hard not to order another one or trying not to go anywhere near a bar. The first of these is resisting temptation. The second is avoiding temptation.

The consensus in the trait self-control literature now is that trait self-control measures our ability to avoid temptation. Hofmann et al. 2012. Ent et al. 2015, see also deRidder et al. 2012’s metaanalysis).

Some of the confusions about whether trait self-control is to be identified with the ability to resist temptations or the ability to avoid temptations may be behind the assumption that trait self-control is constant during one’s lifetime. Probably the most famous social psychology experiment is about resisting temptations: those kids who resisted the temptation to eat a marshmallow now for the reward of two marshmallows later are said to have a more successful life (see Mischel et al. 1972, 1989 for the main claims of this ever-growing marshmallow literature).

A number of worries can be and have been raised about these marshmallow findings – for example, the studies did not control for the subjects’ socio-economic status or their general level of trust in adults. So according to one interpretation, the decision to choose one marshmallow now (rather than two later) has little to do with self-control and more with expectations about whether promises (about future food supply) are kept (Duckworth et al. 2013, Kidd et al. 2013).

So more would need to be said about the link between the performance in the marshmallow experiments in childhood and the future success in adult life. The popularizing narrative, according to which the inability to resist eating the marshmallow forecasts the inability to stop playing video games instead of studying and then the inability to stick to a task and finish it in one’s job and the inability to say no to drugs, has very little support in the actual studies.

But even if we bracket these worries, it is important to note that the marshmallow studies are about resisting temptation and not about avoiding temptation. So strictly speaking they say absolutely nothing about trait self-control. If the assumption that trait self-control is fixed throughout one’s life has its origins in the marshmallow studies, this assumption needs to be re-evaluated.

**III. The fragmentation of the mind**

On the basis of recent findings about the trait self-control scale, we can conclude that trait self-control is not directly related to the ability to resist temptation, but rather with the ability to avoid temptation. But what does it mean to say that a subject can avoid temptation?

 Avoiding temptation means avoiding situations where my desire conflicts with the kind of person I take myself to be. Given that tempting sensory stimulus is rife, one can avoid temptation only of one’s desires are in tune with what thinks of oneself. In other words, if trait self-control measures the ability to avoid temptation, it measures the degree to which one’s desires are in tune with everything one thinks of oneself.[[1]](#footnote-1)

 I will use the metaphor of fragmentation to drive home this point. The mind can be more or less fragmented. If it is fragmented, then what goes on in some part of one’s mind has little to do with what goes on in other part of the mind. So one can have desires that are very much inconsistent with what one thinks of oneself. If I want to do drugs but my self-image is of a person who is off drugs, this is an indication that my mind is fragmented.

 In contrast, if my mind is not fragmented, my desires are by and large in tune with what I think of myself. I may want to do drugs, but I know I’m the kind of person who sometimes wants to do drugs. So there is no inconsistency there. If trait self-control measures the ability to avoid temptation and not the ability to resist temptation, then trait self-control is really a measure of the fragmentation of our mind.

 The question is what the degree of the fragmentation of our mind depends on. And, more specifically, whether the degree of the fragmentation of our mind varies in the course of our life span. If it does, then trait self-control is clearly not something fixed throughout our life.

 And we can see a lot of variation in the fragmentation of our mind in the course of our life span. The fragmentation of our mind depends on a number of factors, as some of the classic cognitive dissonance literature demonstrates (Festinger 1957, Bem 1967, Elliot and Devine 1994, Scher and Cooper 1989, see Harmon-Jones and Mills 1999 and Carruthers 2011 for summaries). To put it very simply, the more cognitive dissonance we undergo, the more fragmented our mind becomes.

So we get a simple link of counterfactual dependence. Trait self-control depends on the degree of the fragmentation of our mind and the degree of the fragmentation of our mind depends on cognitive dissonance. As there are demonstrated fluctuations in cognitive dissonance in one’s life span, we can conclude that there are also fluctuations in one’s trait self-control.

**IV. Fragmentation and the changing self**

I should emphasize that fragmentation is the norm, not the exception. The cards are stacked against us. The main reason for this is the simple fact that we all change more than we think we do.

An elegant demonstration of this is the End of History Illusion (Quoidbach et al. 2013): we consider ourselves to be a finished product. While we acknowledge that we may have changed in the past – we may be different from the way we were five or ten years ago, we flat out deny the possibility that we might be different in five or ten years time. Nonetheless we do change, often radically. And some of these changes happen in a way that is not salient to us.

 Some mechanisms of this change are well understood. I will mention two. One of them is the mere exposure effect – the well-known phenomenon that repeated previous exposure to a stimulus makes the positive appraisal of this stimulus more likely. The research on the mere exposure effect goes back at least as far as the very beginnings of what we now know as experimental psychology (Fechner 1876 and Titchener 1910). But the concept was made famous by Robert Zajonc (Zajonc 1968, 2001).

A lot is known about the mechanism behind the mere exposure effect, but what matters most for our purposes is that even unconscious exposure increases the probability of positive appraisal – say, if the stimulus is flashed for a very short time (under 200 milliseconds) or if the stimulus is masked (a couple of milestone examples from the vast literature: Bornstein & D’Agostino, 1992; Kunst-Wilson & Zajonc, 1980; Monahan et al., 2000). So if you are looking at a certain kind of stimulus a lot, your preferences for stimulus of this kind will slowly but surely change – and this holds even for fairly complex stimuli, for example, of an aesthetic kind, which can change your aesthetic preferences (Cutting 2003, 2006a, 2006b, 2007, Nanay 2016, Cutting 2016). And given how integral our preferences are for our sense of self, this is not a trivial change.

 The second mechanism I want to mention has to do with a very useful distinction in the psychological study of desire between wanting and liking (Berridge and Zajonc 1991, Berridge and Robinson 1995, 2003). Crucially, we can have a strong desire for something we do not actually enjoy – this happens in the case of addiction and also, arguably, in many weakness of will cases. This distinction is incorporated into many contemporary philosophical accounts of desire (Schroeder 2004, Holton 2009).

The experiment I want to focus on is about what happens if our desires get frustrated – something that happens to all of us on a regular basis. More precisely, there is empirical evidence that if one’s desire to do X is frustrated, this leads to a stronger desire to X and a weaker liking of X (Litt et al. 2010). So if I want to eat a chocolate cake, but I can’t, this makes my desire for the chocolate cake stronger. At the same time, the amount of enjoyment I get out of eventually eating the chocolate cake decreases.

If there are systematic reasons for why one’s desire for X is frustrated, then this process leads to stronger and stronger desires for X and a deeper and deeper dislike of X itself. And this whole process can happen unconsciously. In fact, it normally happens unconsciously because any indication of the blatant contradiction between what we desire and what we like is systematically suppressed.

So we do change, and do so without noticing that we do. But the values and the self-image we have about what kind of people we are and what kind of things we do and like are fixed: they fail to change with us. Eventually, there will be a discrepancy between our changing self and our fixed self-image/ values. And this amounts to the fragmentation of the mind.

**V. Fragmentation and mental effort**

Why is fragmentation a bad thing? If your desires don’t line up with what you think about yourself and what kind of person you are or what kind of things you should do, it is difficult to see how one can avoid temptation. As we have seen, avoiding temptation means avoiding situations where my desire conflicts with what I take to be the important features of myself. If there is a rift between your standing desires and your values/self-image, it is only a matter of time until you encounter situations where your corresponding occurrent desire is induced.

One could respond that this is not the only way one can avoid temptation. Even if your desires are not in tune with the rest of your mind, as long as you are aware of that, you can try to avoid triggers that would induce these desires. The problem with this proposal is that, as it is well-known in the addiction literature, it is not only the object of the desire that can serve as a trigger, but any kind of stimulus that is associated with the object of the desire (Zironi et al. 2006, See 2005, [Childress et al., 1999](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144275/#R6); [Di Ciano & Everitt, 2003](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144275/#R9); [Fuchs et al 2008](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144275/#R11); [O'Brien et al. 1998](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144275/#R19)). And given the reach of these association networks, it is difficult to live your life in a way that would avoid anything that could possibly remind you of what you desire.

In other words, there is no easy way of dealing with a conflict between your desires and the rest of your mind. And if such conflict is present, you will eventually get into tempting situations. The question is: What happens in these situations?

Here we need to highlight an important consequence of fragmentation. It is not easy to hide it from yourself the discrepancies in your mental life. It takes effort. You can’t just let your mind wonder anywhere, you need to establish no-go zones in your mind and police their borders. And with all that mental effort permanently employed to cover up the cracks (or fault lines) of our minds, we have very little mental effort remaining to do anything else.

Importantly, if much of your mental effort is allocated to cover up the fragmentations of your mind and to the policing of what parts of this fragmented mind are too unsafe to go to, you will have very little mental energy left to prevent you from resisting temptation when you do encounter it.

We have seen that the ability to resist temptation is not the same as the ability to avoid temptation. But there is an important interaction between the two. If you’re bad at avoiding temptation, this is likely to lower your ability to resist temptation because your mental energy is constantly taken up with hiding the fragmentations of your mind and this leaves very little mental energy to anything else – and especially to resist temptations.

**VI. Fragmentation vs. Ego depletion**

I need to do some product differentiation. One may wonder how my concept of fragmentation differs from the popular concept of ego depletion. I argued that if one’s mind is fragmented, a lot of mental effort needs to be spent on maintaining this compartmentalization – to use the metaphor I used in the previous section, to cover up the cracks of our mind.

This may sound very similar to the well-known general argument about ego depletion (Baumeister et al. 1998, Heatherton & Vohs 1998, Baumeister & Vohs 2007, Hagger et al. 2010, Inzlicht & Schmeichel 2012). In the ego depletion paradigm, it is shown that depleting the mental resources of a subject influences future behaviour in a way that could be interpreted as suppressing self-control. In one of the most widely discussed experiments, doing long divisions for a long time led to the subject’s choosing unhealthy food like chocolate cakes instead of healthy snacks (Baumeister et al. 1998).

If we accept the ego depletion paradigm, we should expect high levels of ego depletion in people with fragmented minds. Keeping the fragmentations of the mind concealed from ourselves could be said to deplete mental resources as much as long division can. And while the subjects in the long division experiment only had to do long divisions for half an hour, people with fragmented minds need to exert mental energy to maintain the illusion of cohesion all the time.

These days not everyone would want to accept the ego depletion paradigm. Many of the ego depletion findings are now in the middle of the replication crisis that has been sweeping through much of social psychology. Some of the specific ego depletion findings do not seem to replicate and a recent meta-analysis found no evidence for any ego depletion effect (see, e.g., Job et al. 2010, Molden et al. 2012, Carter et al. 2015, Hagger et al. 2016).

The question then is the following: in what way does my claim rely on the ego depletion paradigm? And it should be clear that my claim is very different from any claims about ego depletion. My claim is that fragmented minds are more prone to yielding to temptations. The ego depletion claim is that subjects can be manipulated (by ego depleting tasks) into becoming more prone to yielding to temptations.

One way of seeing how these two claims are different is to consider an empirical finding that may seem to contradict my claim. It was demonstrated that subjects with higher trait self-control score get more ego depletion effects (Imhoff et al. 2014). Given that I argue that higher trait self-control score amounts to a lesser degree of fragmentation of the mind, one may wonder whether this contradicts my claim that the fragmentation of the mind makes yielding to temptations more likely.

But it should be clear that the two claims are very different. My claim about the relation between fragmentation and resisting temptations says nothing about how the subject would react if her mental resources were depleted with some long division or other tasks. And the Imhoff et al. 2014 experiment says nothing about how likely these high trait self-control score subject are to resist temptation without being prompted with depleting mental tasks.

In order to get a contradiction between these two claims we would need to add a further assumption, namely, that *any* mental task (both long division and the concealing of the fragmentations of our mind) would use up a general mental energy resource. But this assumption, the claim that there is just one mental energy source and all mental tasks deplete this energy source, is exactly the claim that seems to be the most problematic one in the light of the recent replication crisis (Carter et al. 2015).

When an experiment fails to replicate (and even when a number of experiments of a certain kind fails to replicate), we should not throw the original findings out altogether. This should be seen as an opportunity to refine the original findings and find hidden variables that may be behind the failure of the replication. Adding a layer of complexity to the relation between trait self-control and the ability to resist temptations may be an important piece of the puzzle of finding some consistency between the seemingly contradictory findings about ego depletion.

**VII. Resisting or not resisting**

I have been focusing on how the degree of fragmentation of one’s mind influences one’s ability to resist temptations. But the converse direction of influence is also very important. If you do get into a tempting situation, would the choice between resisting and yielding have lasting impact on your trait self control?

One of the most famous bonmots about resisting temptations comes from Oscar Wilde. He says in *The Picture of Dorian Grey*:

The only way to get rid of a temptation is to yield to it. Resist it, and your soul grows sick with longing for the things it has forbidden to itself, with desire for what its monstrous laws have made monstrous and unlawful.[[2]](#footnote-2)

It seems like a typical Oscar Wilde reversal of expectations, but I want to suggest that it captures something really important about the relation between resisting temptations and trait self-control.

 We have seen that the fragmentation of the mind makes it less likely that you can resist temptations. But Oscar Wilde suggests an important link between these two mental phenomena that goes in the opposite direction: resisting temptation may lead to such general malaise that prevents one from avoiding temptations.

 We can place Wilde’s hypothesis in a broader context. The “soul’s growing sick with longing for the things it has forbidden to itself” is a pretty good description of what a fragmented mind looks like. Fragmented mind decreases our ability to resist temptation, but Wilde’s line is that resisting temptation, in turn, leads to fragmented mind (see Miller et al. 2015 for a recent empirical confirmation of a version of this claim).

 Are we better off just yielding to temptation then? Would that break the vicious circle of worse and worse fragmentation and worse and worse ability to resist temptations? I don’t think so. Yielding to temptation could mean certain death for some drug addicts. More generally, in the case of at least non-behavioral addictions, the more one yields to temptation, the stronger the craving becomes (see Berridge and Zajonc 1991).

 But we don’t have to go as far as addiction cases to see that yielding to temptation will not solve any problems. According to a new finding, one act of dishonesty makes it much easier to be dishonest next time – and there are neural reasons for this (Garrett et al. 2016). We form habits easily. And yielding to temptation can establish a habit of going back for more (and not only in the case of addiction).

It’s a no-win situation once you have the temptation to do something. If you yield, it establishes a habit. If you don’t yield, this could contribute to the fragmentation of your mind. So the best option is to avoid temptation. That is, having high scores of trait self-control: having a defragmented mind.

**VIII. Conclusion: Defragmenting the mind**

It seems that the only way to increase self-control is by trying to avoid temptations. Resisting temptations can be counterproductive and yielding to temptations lead to dangerous habits. But how can we avoid temptations? How can we defragment our mind?

One recent set of studies show that some improvements can be made with the help of what is called the ‘hypocrisy paradigm’. In the ‘hypocrisy paradigm’, the conflict between a subject’s desires and her beliefs can be reduced by making this conflict salient to her (see, for example, Stone & Fernandez 2008, Stone et al. 1994, Kantola et al. 1984, Dickerson et al. 1992, Fointiat 2004).

While the ‘hypocrisy paradigm’ has been applied successfully in order to achieve behavioural changes like not wasting water, its application range seems limited. The main problem is that in order for the ‘hypocrisy paradigm’ to work, the subject must be aware of both her desire and her beliefs so that the contradiction between the two, when pointed out and driven home can have traction. The problem is that most of the cracks in a fragmented mind are concealed very successfully – so much so that the hypocrisy paradigm leads nowhere (see Harmon-Jones and Mills 1999 for a summary).

What can we do then? I see only one way out: As we have seen, the main reason why our mind gets fragmented is that we change all the time, but our self-image remains unchanged, and this drives a wedge between who we are and who we think we are (or who we think we should be).

If we accept and cherish our ever-changing self, these discrepancies could be kept to the minimum. If the self changes all the time and if the rift between self and self-image leads to fragmentation, we seem to have only one option: loosen our self-image. If your self-image remains fixed while your self changes, the self-image needs to be treated as less set in stone. This is not easy: we have a natural propensity to essentialize ourselves: we tend to think of ourselves as having some of our properties essentially (Sripada 2009). But having such fixed self-image puts our ever-changing self in a straightjacket – and this, sooner or later, will lead to the fragmentation of mind.

 And our culture is full of institutions that serve as such straightjacket. Religion is a very important example – when there is a conflict between your desire and your religious views, your desires are suppressed as harmful and unreligious, leading to more and more fragmentations. In short, religion makes the mind more fragmented and makes self-control more difficult. I should note that this is an especially interesting result in a paper partly funded by the Templeton Foundation. And the same is true of moral principles or what Philip Kitcher calls ‘ethical projects’ that we should devote our lives to (Kitcher 2011).

Living life without any such mental straightjacket is a first step toward defragmenting our mind. And this first step amounts to a step in the direction of freedom in a very important sense of the word. As Robert Musil says:

Inner freedom consists in being able to think everything, in knowing – in every human situation – why one need not bind oneself to it, and in never knowing what one would wish to be bound by![[3]](#footnote-3)

**References:**

Baumeister, Roy F.; Bratslavsky, E.; Muraven M. & Tice D. M., 1998, “Ego-depletion: Is the active self a limited resource?”, *Journal of Personality and Social Psychology* 74: 1252-1265

Baumeister, Roy F. & Vohs, Kathleen D., 2007, “Self-Regulation, Ego Depletion, and Motivation”, *Social and Personal Psychology Compass* 1: 1-14

Bem, D. (1967) Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review* 74:183–200.

Berridge, K. C., & Robinson, T. E. (1995). The mind of an addicted brain: Neural sensitization of wanting versus liking. *Current Directions in Psychological Science*, 4(3), 71-76.

Berridge, K. & T. E. Robinson. 2003. Parsing reward, *Trends in Neurosciences*, 26, 507-513.

Berridge, K. C., & Zajonc, R. B. (1991). Hypothalamic cooling elicits eating: Differential effects on motivation and pleasure. *Psychological Science*, 2(3), 184-188.

Bornstein, R. F., & D’Agostino, P. R. (1992). Stimulus recognition and the mere exposure effect. *Journal of Personality and Social Psychology* 63: 545-552.

Carruthers, P. (2011) *The opacity of mind: An integrative theory of self-knowledge*. Oxford: Oxford University Press.

Carter, E.C., Kofler, L.M., Forster, D.E., & McCullough, M.E. 2015 A series of meta-analytic tests of the depletion effect: Self-control does not seem to rely on a limited resource. *Journal of Experimental Psychology: General* **144**, 796-815.

Childress AR, Mozley PD, McElgin W, Fitzgerald J, Reivich M, O'Brien CP. 1999 Limbic activation during cue-induced cocaine craving. *American Journal of Psychiatry* 156: 11–18.

Cutting, J. E. 2003 Gustave Caillebotte, French Impressionism, and mere exposure. *Psychonomic Bulletin and Review* 10: 319-343.

Cutting, James E. (2006a). ‘The Mere Exposure Effect and Aesthetic Preference’ in P. Locher et al (eds.) *New Directions in Aesthetics, Creativity and the Psychology of Art*. New York: Baywood, pp. 33‐46.

Cutting, J. E. (2006b). *Impressionism and its Canons*. Washington, DC: University Press of America.

Cutting, J. E. (2007). Mere exposure, reproduction, and the Impressionist canon. In A. Brzyski (Ed.) *Partisan canons.* Durham, NC: Duke University Press.

Daly, M., L. Delaney, M. Egan and R. F. Baumeister 2015 Childhood self-control and unemployment throughout the life span. *Psychological Science* 26: 709-723.

deRidder, D. T., Lensvelt-Mulders, G., Finkenauer, C., Stok, F. M., & Baumeister, R. F. (2012). Taking stock of self-control a meta-analysis of How trait self-control relates to a wide range of behaviors. *Personality and Social Psychology Review*, 16(1), 76-99.

Desteno, D., Y. Li, L. Dickens and J. S. Lerner 2014 Gratitude: A tool for reducing economic impatience. Psychological Science 25: 1262-1267.

Di Ciano P, Everitt BJ. 2003 Differential control over drug-seeking behavior by drug-associated conditioned reinforcers and discriminative stimuli predictive of drug availability. *Behavioral Neuroscience*. 117: 952–960.

Dickens, L., & DeSteno, D. 2016. The grateful are patient: Heightened daily gratitude is associated with attenuated temporal discounting. *Emotion* 16: 421-425.

 Dickerson, C. A., Thibodeau, R., Aronson, E., & Miller, D. (1992). Using Cognitive Dissonance to Encourage Water Conservation. *Journal of Applied Social Psychology, 22*, 841-854.

Duckworth, A. L., Tsukayama, E., & Kirby, T. A. (2013). Is it really self-control? Examining the predictive power of the delay of gratifcation response. *Personality and Social Psychology Bulletin, 39*, 843-855.

Elliot, A. & Devine, P. (1994) On the motivational nature of cognitive dissonance:Dissonance as psychological discomfort. *Journal of Personality and Social Psychology* 67:382–94.

Ent, M. R., Baumeister, R. F., & Tice, D. M. (2015). Trait self-control and the avoidance of temptation. *Personality and Individual Differences*, 74, 12-15.

Fechner, G.T. (1876). *Vorschule der aesthetik*. Leipzig: Breitkoff & Hartel.

Festinger, L. A. (1957) *A theory of cognitive dissonance*. Stanford University Press.

Fointiat, V. (2004). "I know what I have to do but..." When hypocrisy leads to behavioral change. *Social Behavior & Personality: An International Journal, 32*, 741-746.

Fuchs RA, Ramirez DR, Bell GH. 2008 Nucleus accumbens shell and core involvement in drug context-induced reinstatement of cocaine seeking in rats. *Psychopharmacology* 200: 545–556.

Garrett, N., S. C. Lazzaro, D. Ariely and T. Sharot 2016 The brain adapts to dishonesty. *Nature Neuroscience* 19: 1727-1732.

Gottfredson, M. R. and T. Hirschi 1990 *A General Theory of Crime*. Palo Alto: Stanford University Press.

Hagger, Martin S.; Wood, Chantelle & Stiff, Chris, 2010, “Ego Depletion and the Strength Model of Self-Control: A Meta-Analysis”, Psychological Bulletin, Vol. 136, pp. 495-525.

Hagger, M.S. & Chatzisarantis, N.L. 2016 A multi-lab pre-registered replication of the ego-depletion effect. *Perspectives on Psychological Science* **11**, 546-573.

Harmon-Jones, E., & Mills, J. (1999). *An introduction to cognitive dissonance theory and an overview of current perspectives on the theory.* Washington: American Psychological Association.

Heatherton, Todd F. & Vohs, Kathleen, 1998, “Why is it so difficult to inhibit behavior?”, Psychological Inquiry, Vol. 9, pp. 212-216.

Ho, S.-Y., Tong, E. M. W., & Jia, L. 2016 Authentic and hubristic pride: Differential effects on delay of gratification. Emotion 16*:* 1147-1156.

Hofmann, W., Baumeister, R. F., Förster, G., & Vohs, K. D. (2012). Everyday temptations: an experience sampling study of desire, conflict, and self-control. *Journal of Personality and Social Psychology*, 102(6), 1318.

Holton, R. 2009 *Willing, Wanting, Waiting*. Oxford: Oxford University Press.

Imhoff, R., A. F. Schmidt and F. Gerstenberg 2014 Exploring the interplay of trait self-control and ego depletion: Empirical evidence for ironic effects. *European Journal of Personality* 28: 413-424.

Inzlicht, M. & Schmeichel, B. 2012. “What is Ego Depletion? Toward a Mechanistic Revision of the Resource Model of Self-Control.” *Perspectives on Psychological Science* 7(5): 450-465.

Job, V., Dweck, C. S. & Walton, G. M. (2010) Ego depletion – Is it all in your head?: Implicit theories about willpower affect self-regulation. *Psychological Science* 21:1686–93.

Kidd, C., H. Palmeri, R. N. Aslin 2013 Rational snacking: Young children’s decision-making on the marshmallow task is moderated by beliefs about environmental reliability. *Cognition* 126: 109-114.

Kitcher, P. 2011 *The Ethical Project*. Cambridge MA: Harvard University Press.

Litt, A. U. Hjan and B. Shiv 2010 Lusting while loathing: Parallel counterdriving of wanting and liking. *Psychological Science* 21: 118-125.

Kantola, S. J., Syme, G. J., & Campbell, N. A. (1984). Cognitive dissonance and energy conservation. *Journal of Applied Psychology, 69*, 416-421.

Kunst-Wilson, W. R., & Zajonc, R. B. (1980). Affective discrimination of stimuli that cannot be recognized, *Science* 207: 557-558.

Matsuela, R. L. 2008 On the compatibility of social disorganization and self-control. In E. Goode (Ed.), *Out of control: Assessing the general theory of crime*. Palo Alto: Stanford University Press, pp. 102–126.

Miller, G. E., T. Yu, E. Chen and G. H. Brody 2015 Self-control forecasts better psychosocial outcomes but faster epigenetic aging in low-SES youth. *PNAS* 112: 10325-10-330.

Mischel, W., Ebbesen, E. B., & Zeiss, A. R. (1972). Cognitive and attentional mechanisms in delay of gratification. *Journal of Personality and Social Psychology, 21*, 204-218.

Mischel, W., Shoda, Y., & Rodriguez, M.L. Delay of gratification in children. *Science* **244**, 933-938 (1989).

Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H. L., & Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences of the United States of America, 108*, 2693-2698.

Molden, D. C., Hui, C. M., Scholar, A. A., Meier, B. P., Noreen, E. E., D’Agostino, P. R. & Maritn, V. (2012) Motivational versus metabolic effects of carbohydrates on self-control. *Psychological Science* 23(10):1137–44.

O'Brien CP, Childress AR, Ehrman R, Robbins SJ. 1998 Conditioning factors in drug abuse: Can they explain compulsion? *Journal of Psychopharmacology* 12:15–22.

Quoidbach, J., Gilbert, D. T. and Wilson, T. D. 2013: The end of history illusion. *Science* 339, 96-98.

Scher, S. & Cooper, J. (1989) Motivational basis of dissonance: The singular rule of behavioral consequences. *Journal of Personality and Social Psychology* 56:899–906

Schroeder, T. 2004 *Three Faces of Desire*. Oxford: Oxford University Press.

See, R. E. 2005 Neural substrates of cocaine-cue associations that trigger relapse. *European Journal of Pharmacology* 526: 140-146.

Sripada, C. S. 2009: The deep self model and asymmetries in folk judgments about intentional action. *Philosophical Studies*, 151(2), 159–76.

Stone, J., Aronson, E., Crain, A. L., Winslow, M. P., & Fried, C. B. (1994). Inducing Hypocrisy as a Means of Encouraging Young Adults to Use Condoms. *Personality and Social Psychology Bulletin, 20*, 116-128.

Stone, J., & Fernandez, N. C. (2008). To Practice What We Preach: The Use of Hypocrisy and Cognitive Dissonance to Motivate Behavior Change. *Social and Personality Psychology Compass, 2*, 1024-1051.

Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self‐control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72(2), 271-324.

Titchener, E.B. (1910). *Textbook of psychology*. New York: Macmillan.

Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology, Monograph Supplement* 9: 1-27.

Zajonc, R. B. (2001). Mere exposure: A gateway to the subliminal. *Current Directions in Psychological Science* 10: 224-228.

Zironi, I., C. Burattini, G. Aicardi and P. H. Janak 2006 Context is a trigger for relapse to alcohol. *Behavioral Brain Research* 167: 150-155.

1. This is consistent with the recent findings on how our emotional state influences our ability to avoid temptations, see Dickens and DeSteno 2016, Ho et al. 2016, DeSteno et al. 2015. [↑](#footnote-ref-1)
2. Oscar Wilde: The Picture of Dorian Grey. Barnes and Noble’s 1995, p. 26. [↑](#footnote-ref-2)
3. Robert Musil: The Man without Qualities. (trans. Eithne Wilkins and Ernst Kaiser) London: Picador, 1979 (1930/1932), p. 314. [↑](#footnote-ref-3)