Psychopathology arises from intertemporal bargaining as well as from emotional trauma

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Abstract: The role of emotional trauma in psychopathology is limited. One additional mechanism is predictable from hyperbolic discounting: When a person uses willpower to control urges each success or failure takes on extra significance through recursive self-prediction, potentially motivating several constricting defense mechanisms. The need for eliciting emotion in psychotherapy is as the authors say it is, but their hypothesis about reconsolidation of memories adds no explanatory power.

Text: There is wide agreement that fostering corrective experience entails re-creating avoided situations in real time, whether literally or in the transference, and supporting the person in "practicing a new way of behaving and experiencing the world in a variety of contexts" (Abstract). By contrast, a rationale for why a person's symptoms have grown and persisted in the first place has escaped consensus over the years. The authors adopt a model of emotional trauma, "a single event" or "a repeated pattern of abuse or mistreatment" (sect. 2, para. 8), the effects of which do not fade with time because of the somewhat autonomous nature of emotion – that it may grow with rehearsal in the absence of new provocations (or unconditioned stimuli): "When a memory is recalled … the recollected event and its newly experienced emotional response will be re-encoded into a new and expanded memory trace. Thus, memory for the original traumatic incident is strengthened" (sect. 7, para. 8). They say that such episodic memories form "boundary conditions or expectations" for the person's semantic "decision rules" (sect. 6, para 4.). They review recent research showing that rehearsal under new conditions changes original memories, and suggest, without specific findings, that successful treatment changes the rules by changing the memories.

This account may be true, but no reason is given for why a person must reconsolidate an original memory to overcome its effects. Furthermore, putting traumatic memories at the core of pathogenesis overstates the case. With the exception of post-traumatic stress disorder and, arguably, borderline personality disorder (Gunderson & Sabo 1993), most psychopathology does not originate in trauma (Wenar & Kerig 2006). Even phobia, the disorder one might think most likely to spring from trauma, cannot usually be traced to any such root (Poulton & Menzies 2002; Rachman 1977). Where a conditioning process can be seen, for example in the progression of panic attacks into

panic disorder, the unconditioned stimulus for anxiety is panic itself, which is not externally caused (Bouton et al. 2001). Many causes have been proposed for the various disorders that respond to psychotherapy, but it is striking that most therapies have targeted misguided and overgrown attempts at self-control: "cognitive maps" (Gestalt), "conditions of worth" (client-centered), "musturbation" (rational–emotive), "overgeneralization" (cognitive–behavioral), and of course the punitive superego (summarized in Corsini & Wedding 2011). True, the person often ascribes these burdens to parental or social demand, but the great amount of projection that such reports usually represent leaves unexplained the person's issues with self-control.

In most cases there has been no crucial event, but rather a long history of poor coping. People come to therapy entangled in a lot of old learning. We are high-strung organisms, prone to fears from our evolutionary past that require active learning to get over (Muris 2006; Poulton & Menzies 2002). The self-sustaining nature of emotion that the authors describe is undoubtedly another factor. Additionally, I have argued that we have an inborn warp in how we evaluate the future, and that our attempts to correct for this warp can account for a good deal of psychopathology in the absence of any victimization (Ainslie 1999, 2005). I summarize my proposal as one of an unknown number of contributing mechanisms: An inborn tendency to discount the value of future experiences as a hyperbolic function of expected delay is now well established (Bickel & Marsch 2001; Green & Myerson 2004; Kirby & Santiesteban 2003). The result is temporary preference for outcomes that we would avoid at a distance and which we regret afterwards. Many of the choices we face are asymmetrical situations in which slow-paying options that appeal to our reason are pitted against urges, a problem that is universal but which is magnified by inborn susceptibilities in some people (Goldsmith et al. 1997; Goodwin 1986; Van Houtem et al. 2013). Urges may feel negative but hard to resist (to panic, to attend to an obsession), or they may be consciously tempting (to use drugs or get into destructive relationships), but for all of them we face the choice of giving in or trying to control them. We monitor our attempts to control urges with recursive self-prediction, and in doing so create the history of successful and failed commitments that entangles us:

As we face particular kinds of urge repeatedly, we notice that our current choice predicts what we will choose next time, and so we increasingly come to act under the weight of our anticipated future. Our awareness of current choices as test cases for future choices creates personal rules, which are often *implicit,* in the authors' terminology – we sense the extra significance of the choice but cannot articulate what is at stake. With high degrees of such awareness our decision-making becomes legalistic, abstracted away from the here-and-now – in clinical terms, *compulsive.* In effect we are playing repeated prisoner's dilemma games with our expected future selves, the logic of which is weighted toward defection and self-mistrust (Monterosso et al. 2002). Lapses damage our confidence in our intertemporal cooperation, engendering guilt and leading us to abandon attempts at self-control in areas where it has failed. Thereafter we avoid the kind of situation where we were overwhelmed, concluding that we "can't face embarrassment" or "can't stand heights," thus establishing a circumscribed symptom. For addictive urges this abandonment is called the *abstinence violation effect* (Marlatt & Gordon 1980;

Polivy & Herman 1985). To restore intertemporal cooperation we redefine our rules with rationalization, and we develop repression and denial to avoid recognizing lapses. Over time we accumulate commitments and failures of commitments that make us rigid in much the way old economies or bureaucracies become rigid (Olson 1982).

Defending brittle truce lines between urge and control may thus be a major motive – at least as great as that of escaping traumatic memories – for developing rationalizations, resistances, and other "avoidance of emotional pain through regulatory actions" (sect. 2, para. 13). In this view the role of psychotherapy is to encourage creative destruction of these truce lines. It does so by inviting the person into the situations that provoke relevant anxieties while supporting her trial of new responses, the same procedure indicated for overcoming emotional trauma, and, indeed, for psychotherapy generally.

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