Editorial

Rationality and the Adolescent Mind

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In this monograph, instead of reviewing or meta-analyzing the literature in the field of adolescent risk, Reyna and Farley provide what the field needs much more—a metatheoretical reorientation. Two of their major metatheoretical choices are, I think, exactly right: the emphasis on a broad theory of rationality and the emphasis on dual-process models of cognition.

Reyna and Farley rightly see that assumptions about rationality partly determine the scientific theories that dominate the field at any given point in time. The field of adolescent risk has largely derived its background assumptions from so-called "thin" theories of rationality (Elster, 1983). These theories emphasize the coherence of actions, given beliefs and desires, and they are called thin because they do not attempt to evaluate or critique the nature of those beliefs and desires. The strengths of this conception of rationality are well known. For example, restricting oneself to a thin theory, many powerful formalisms (such as the axioms of decision theory) are available to serve as standards of optimal behavior.

However, the weaknesses of the thin theory are equally well known (e.g., Kahneman, 1994; Nozick, 1993; Simon, 1983). A startlingly broad range of human behavior and cognition escapes the evaluative net of the thin theory, thus removing the motivation to undertake cognitive reform. For example, in not evaluating desires, a thin theory of rationality might well determine that Hitler was a rational person as long as he acted in accordance with the basic axioms of decision theory as he went about fulfilling his grotesque desires. Likewise, if we submit beliefs to no evaluative criteria, the psychiatric ward patient who acted consistently upon his belief that he was Jesus Christ might well be judged a rational person.

In contrast, a broad view of rationality is one in which the content of beliefs and desires are subject to evaluation. In precise contradiction to Hume's famous dictum ("reason is, and ought only to be the slave of the passions"), broad theories necessitate the reasoned evaluation of the content of desires and goals. Such theories avoid the so-called "rational Hitler problem" but at the cost of introducing a host of philosophical complexities (Millgram, 2001).

Reyna and Farley clearly recognize the difficulties that go with the broader view, but they wisely opt for it nonetheless. I

agree with their choice, because I think that their monograph amply demonstrates how the study of adolescent decision making will be liberated by removing the presumption of thin-theory rationality. For example, such a presumption has fueled the interest in adolescent invulnerability theories and the idea that adolescents underestimate risks. The presumption serves to avoid the attribution of irrationality to adolescents who engage in high-risk behavior. If these adolescents have strong feelings of invulnerability, or if they drastically underestimate the probabilities of negative outcomes, then a thin-theory consequentialist calculation might well make engaging in high-risk behaviors rational for them.

The problem with this conception is, as Reyna and Farley outline in their review, that adolescents do not tend to underestimate the probability of major risks, nor are they uniquely characterized by feelings of invulnerability. If the field can assimilate this conclusion, it will be freer to explore a wider range of conceptual possibilities—including the possibility that such adolescents are characterized by truly irrational cognition. Moving beyond a presumption of thin-theory rationality will also be more likely to spawn broad-theory critiques of the contents of the goal structures of adolescents. Such a critique is discouraged by adherence to a presumption of thin-theory rationality. This is because thin theories are radically subjectivist (indeed radically relativistic) in accepting whatever goals are already instantiated in the adolescent's psychology. In contrast, a broad theory would bring in nonsubjectivist criteria of the type that are being discussed in the philosophical literature on human well-being (Flanagan, 2002; Sen, 1999). Also relevant will be philosophical and economic analyses that stress the importance of the future self (Ainslie, 2001; Parfit, 1984).

Such a project of cognitive reform finds additional motivation from an observation that is consistent with all of the classes of dual-process theories that Reyna and Farley discuss: Many adolescents making these poor choices are alienated from the choices they make. As Reyna and Farley put it, "people who take unhealthy risks often agree that their behavior is irrational, on sober reflection, but they gave in to temptation or were not thinking at the time of the decision and are worse off for having done so" (p. 35). Instead of the economics-like assumption of

adolescents as coherent rational actors, such "multiple minds" theories, from Minsky (1985) and Dennett (1996) to their contemporary incarnations (e.g., Evans, 2003, in press), highlight the image of a decision maker in conflict. This comports well with the fact that many adolescents with behavior problems will indeed verbally reject their own behavior. This second-order judgment (to desire to desire differently)—a critical component of some dual-process views (see Stanovich, 2004)—is something that can be built upon therapeutically.

Reyna and Farley's advocacy of, at least in some cases, "intuitive all-or-none categorical avoidance of dangerous risks" (p. 35)—that is, sharp, easily-computed boundaries—can be understood within either fuzzy-trace dual-process theories or more traditional dual-process theories that allow that rules practiced to automaticity can enter the autonomous system. As some philosophers have argued (see Nozick, 1993, pp. 3-26, for a particularly nuanced discussion), adhering to a crude principle may, in the long run, be more advantageous than engaging in a utilitarian calculus in each instance. Thus, paradoxically, global consequentialist criteria may sometimes dictate abandoning consequentialism at the micro-level of decision making. Furthermore, adhering to a principle sends a signal to the self: "I am the type of person who adheres to a principle such as this" (see Nozick, 1993; Stanovich, 2004). Such a signal can serve to shape the future self in ways that engaging in a utilitarian calculus does not. Thus even on a consequentialist analysis, adhering to a deontological principle may be more optimal in the long run through its shaping of the decisions of the future person you will be (Parfit, 1984). Such a philosophical reorientation

could, as Reyna and Farley demonstrate, have profound implications for how we interpret many well-known findings in the area of adolescent decision making.

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