

Grit  
(Forthcoming in *Ethics*)

Jennifer M. Morton (City College and Graduate Center—CUNY)  
Sarah K. Paul (University of Wisconsin—Madison)

\* Many thanks to audiences at the American University of Beirut, NYU—New York, NYU—Abu Dhabi, Ohio State, Stanford University, UNC—Chapel Hill, and the University of Southern California, as well as to the participants in workshops at the CSMN/University of Oslo, Florida State, NYU—Abu Dhabi, the NYC Early Career Ethics Workshop, the University of Copenhagen, and the Yale Moral Psychology Working Group. Additional thanks are due to Michael Bratman, Harry Brighouse, Sarah Buss, Agnes Callard, Clinton Castro, Ben Schwan, and Mike Titelbaum for helpful conversations and to Nomy Arpaly, Luc Bovens, Michael Della Rocca, Beri Marušić, Sarah Stroud, two anonymous referees, and several Associate Editors at *Ethics* for written comments. This paper was made possible through the support of a grant from the John Templeton Foundation. The opinions expressed in the paper are our own and do not necessarily reflect the views of the John Templeton Foundation. It was also supported by research funds from NYU-Abu Dhabi. The authors contributed equally to this essay.

*Abstract:* Many of our most important goals require months or even years of effort to achieve, and some never get achieved at all. As social psychologists have lately emphasized, success in pursuing such goals requires the capacity for perseverance, or "grit." Philosophers have had little to say about grit, however, insofar as it differs from more familiar notions of willpower or continence. This leaves us ill-equipped to assess the social and moral implications of promoting grit. We propose that grit has an important epistemic component, in that failures of perseverance are often caused by a significant loss of confidence that one will succeed if one continues to try. Correspondingly, successful exercises of grit often involve a kind of epistemic resilience in the face of failure, injury, rejection, and other setbacks that constitute genuine evidence that success is not forthcoming. Given this, we discuss whether and to what extent displays of grit can be epistemically as well as practically rational. We conclude that they can be (although many are not), and that the rationality of grit will depend partly on features of the context the agent normally finds herself in. In particular, grit-friendly norms of deliberation might be irrational to use in contexts of severe material scarcity or oppression.

In theorizing about human agency, we philosophers tend to focus on short-term acts like flipping a light-switch, pumping water to refill a cistern, or baking a cake. These mundane deeds are important to understand, but there is a sense in which they are unrepresentative of our agency. Many of the small things we do are ultimately directed at much more diffuse goals that take weeks,

months, or even a lifetime of effort to achieve. We turn on lights in the process of trying to become esteemed novelists or celebrated athletes, and we bake cakes as part of engaging in long-term relationships like parenting and marriage. A complete theory of agency should aim to understand what is involved in pursuing this kind of long-term goal.

Many of our long-term goals and activities are difficult to succeed in, which means that the risk of failure is high. When we seek an explanation of why one person succeeded in some challenging long-term pursuit while another person failed, we must take into account factors like talent, opportunity, social context, and a good deal of luck. But even holding these factors fixed, a potential difference remains in how those people responded to the obstacles, setbacks, rejections, injuries, and other experiences that are characteristic of trying to do something hard. Some tend to persevere in the face of these obstacles, while others are disposed to give up. Call this difference “grit.” What precisely do we mean when we say that one person has grit, where another lacks it?

At first glance, it is natural to suppose that it is a difference in the capacity for *willpower* or *continence*. The traditional understanding of willpower takes it to be the capacity to resist temptation in the form of strong or bad appetites, desires, and emotions.<sup>1</sup> A motivational influence is identified as a temptation by reference to some goal or other commitment the agent currently has, and which that motivational influence threatens to undermine. The cast of characters in the typical examples includes the child who must resist the lure of one marshmallow in order to get two; the dieter who struggles to abstain from the cookie; the runner who longs to curl up in bed rather than going for her morning workout; and the mother who tries to restrain herself in the face of an angry impulse to slap her child. Such examples, in which agents fight to resist the force of passions that are contrary to their larger goals, favor a model on which willpower is quasi-literally a kind of strength. Both in philosophy and psychology, many have found it helpful to liken the will to a muscle, in that it can be stronger or weaker, toughened with exercise over time, and depleted with overuse.<sup>2</sup>

Resisting the temporary corrupting influence of appetite and emotion is certainly important for successful long-term agency. However, the muscle model of willpower is not well suited to explain why some agents permanently give up on their goals after experiencing setbacks while others persevere. To quit is not simply to be unable to resist the urge to give up. Think of the graduate student who receives a series of journal rejections and ultimately opts to leave academia, or the athlete who injures her hamstring yet again and decides to switch to coaching. It is misleading at best to characterize their choices as a matter of succumbing to appetitive or desiderative temptation. True, continued effort in the face of rejection or injury is often painful and frustrating, and may cause us temporarily to quit pursuing our goals or to act in akratic ways that impede progress on those goals. Any given instance of failing to get some writing done or neglecting a day of physical therapy might best be explained by the desire to avoid the painfulness of these activities, or to pursue the greater pleasure of some alternative. But pains, frustrations, and temptations are normally transitory, and many long-term pursuits can survive temporary interruptions. As long as the agent’s moments of weakness have not rendered success outright unsalvageable for her, she can recommit to her goal after the pain or contrary desire subsides. And yet, in some cases, she doesn’t.

This is not to deny that one might gradually reach the point of not even trying anymore after a string of weak-willed choices to indulge in something easier at the expense of making progress on one's book or working to save one's relationship. But even a long series of weak instances does not suffice for having permanently given up; indeed, if the final instance of the series is a weak-willed action, then the agent must still have the relevant goal. Nor is it necessary – an aspiring novelist who rarely experiences the temptation to avoid work and who does not find rejection unduly painful might still opt at some point to quit. Willpower is part of the story, but there is more to grit than this.

In many cases, we abandon our goals because we have undergone a stable change in view about the relative value of the goal or activity. The Ph.D. student might come to believe after more experience in the field that a career in academia would be less personally fulfilling and less of service to society than she had thought, and so permanently change her mind about whether it is a worthy pursuit. We will set aside cases in which a lack of perseverance is directly attributable to a stable change in the agent's evaluation of the goal, since these do not seem to be paradigmatic cases of a failure of grit. Our focus is on the phenomenon of abandoning a pursuit while continuing to take that pursuit to be more-or-less as valuable as ever, or when changing one's mind about the value of the goal only because of "sour grapes."<sup>3</sup> Those who give up in these circumstances are often characterized as lacking grit, those who stick with difficult pursuits as having it. What is it?

The full answer is no doubt complex, and we do not aim here to give an exhaustive account or to provide necessary and sufficient conditions for the manifestation of grit. Our first, more narrow ambition is to highlight an important aspect of grit that the purely volitional model of willpower is ill-suited to capture. We hypothesize that in many cases, the failure to persevere has an epistemic explanation: it is attributable to a significant decrease in confidence that one is likely to succeed if one continues to try. The journal rejections or repeated hamstring injuries are relevant not just because they are painful, but because they are viewed by the agent as evidence that she lacks the ability, the opportunity, or the self-discipline to achieve her goal. In contrast, those who persevere tend to respond to the evidential significance of these obstacles differently, in a way that is conducive to maintaining confidence that the desired outcome is achievable for them. Grit is not simply the ability to withstand the pain of effort and setbacks, or to resist the siren song of easier rewards; it is a trait or capacity that consists partly in a kind of epistemic resilience.<sup>4</sup>

This is a descriptive rather than a normative claim, and it has not gone unnoticed by psychologists who study perseverance. Angela Duckworth emphasizes the relevance of hope in underwriting the capacity for grit, where hope is defined as the expectation that one's efforts will pay off.<sup>5</sup> And Martin Seligman touts the importance of optimism, which involves a distinctive style of explaining to oneself why good and bad events happen.<sup>6</sup> But the epistemic dimension of grit raises a number of philosophical puzzles that psychological work on this topic simply does not aspire to address. Most importantly, what are the *rational* constraints on the kind of optimism that is often involved in being gritty, especially as one acquires genuine evidence that the risk of failure is high? If grit involves some amount of epistemic resilience, how could this be anything other than an irrational response to one's evidence? For that matter, what is the value involved in having the capacity for grit – why not simply switch to an easier goal if the risk of failure is high?

The second aim of this paper is to articulate a way of thinking about what it is to respond rationally to evidence on which the resilience involved in grit can be epistemically as well as practically rational. The case for this will be broadly pragmatic, in that it appeals to the instrumental value of the capacity for grit rather than characterizing it as a virtue or a moral achievement. However, the view we will defend is consistent with denying that there are practical or ethical reasons for belief, understood as the kind of thing that can serve as a premise of reasoning about what to believe or cited as the grounds upon which one believes. We take it to be a virtue if the epistemic dimension of grit can be vindicated without appeal to the controversial assumption that we can or should hold our beliefs on the basis of considerations showing them to be useful or good. Instead, we will argue that pragmatic considerations can legitimately shape the *standards by which* we reason about our evidence. But as we shall also argue, this does not mean that the requirements of epistemic rationality fail to apply altogether when it comes to our agential commitments. Some instances of grit are sustained by delusional optimism, and such agents ought to quit given the evidence they have about their chances of success. Our account aims to do justice to this fact.

As we will see, the rationality of grit will be constrained not only by the agent's evidence, but also by other features of her situation. In particular, we suggest that it is ecologically constrained, such that the context an agent normally finds herself in can matter for whether she ought to reason in a way that promotes grit. In contexts of poverty or severe discrimination, for example, it might be that an agent will do better if she is more rather than less sensitive to new evidence. Public policies and educational programs aimed at promoting the development of grit without an eye to the effect of context may therefore risk doing more harm than good.

It follows on our view that although not all manifestations of grit are epistemically irrational, many are. This is not as modest a conclusion as it might sound, however. The cases we will vindicate are those in which the agent's commitment to her end must itself do substantial normative work, since other features of her situation do not conspire to make perseverance rational. The upshot is that these cases show us something about what it is to commit: committing to an end can alter the way in which an agent should subsequently reason about whether to abandon that end.

### I. *Considering the evidence*

To begin, the conjecture that grit frequently involves a form of epistemic resilience must be fleshed out in more detail. We hope that most will find this claim intuitively compelling and consistent with their own experience, and so aspire simply to motivate it further rather than to convince a thoroughgoing skeptic. The first point in favor of the claim is that many of the experiences characteristic of pursuing a difficult goal are in fact evidentially significant. Paradigmatic examples of grit involve perseverance in the face of obstacles, both internal and external; it is not merely a matter of doing something that happens to take a long time. These obstacles, and our responses to them, often bear on the question of whether success is attainable. For example, while most successful novelists receive many rejections before finally achieving recognition, vastly more who receive those rejections never achieve recognition. They are not

conclusive evidence that one lacks the requisite writing ability, or that an audience will never be found for one's work, but they do point in that direction. Similarly, while having a history of being weak-willed and repeatedly giving in to temptation does not dictate that one cannot exhibit more resolve going forward (as Sartre's gambler is meant to illustrate), it is certainly relevant to predictions about what will happen in the future.<sup>7</sup> Any account of perseverance in the face of difficulty will need to explain how the agent views the evidential significance of such setbacks.

Other challenging experiences arguably have little genuine evidential value, but can be processed by the agent as if they do. Take the experience of being a minority in a group of people pursuing a similar goal, especially if there is a relevant negative stereotype or stigma associated with one's identity. Although research on the existence of "stereotype threat" and its mechanisms is ongoing, one hypothesis has been that this kind of experience can impair performance by inducing self-doubt.<sup>8</sup> In such circumstances, it is easy to think "I am not the kind of person who usually succeeds at this activity." Further, there is some specific evidence that confidence levels can mediate performance by way of influencing how easily the subject gives up. Estes and Felker (2011) report that they were able to effectively erase the robust result that men perform better than women on spatial reasoning tests simply by requiring that participants respond to every question on the test, rendering confidence irrelevant to finishing the test. And in general, there do appear to be differences in attrition rates that fall along gender, race, and socioeconomic lines in areas like STEM-field jobs. Rather than concluding that women and minorities run out of willpower at higher rates, or that they are systematically revising their beliefs about the value of STEM pursuits, we should consider the idea that they are, or feel as though they are, getting different information about the likelihood of their succeeding in this area.

Thus, if agents who have set themselves to accomplish a difficult long-term goal sometimes come to despair of success, this will often be a perfectly intelligible response to the evidential significance of their experiences. Further, these kinds of adverse experiences can cause the phenomenon we earlier referred to as "sour grapes:" the agent might undergo a shift in her judgment about whether her goal is worthy or desirable *as a result* of losing confidence that she will be able to succeed.<sup>9</sup> The Ph.D. student might come to doubt the value of scholarly pursuits as a result of getting negative feedback on her work, rather than by learning information that genuinely bears on the value of scholarship. This too may count as a failure of grit, in that grit involves the avoidance of sour grapes. It is tempting to try to distinguish sour-grapes cases from legitimate changes of preference or evaluative judgment by reference to the reason for the shift, and whether it is of the "right kind" or not.<sup>10</sup> The difficulty is that evidence of potential failure may not always be a reason of the wrong kind, since it might in some cases legitimize having adaptive preferences in response to oppressive social structures.<sup>11</sup> We will not attempt to fully adjudicate this issue here; it will suffice to note that despairing of success can lead one to quit by having illicit effects on one's value judgments, and that this is a further sense in which grit has an epistemic dimension.

The second point in favor of our claim is that on almost all ways of understanding rational choice, the agent's expectation of success *ought* to bear on her decision about whether to persevere. To be practically rational in continuing to try, she need not be certain that she will succeed, or even close to certain. However, she does need to suppose that there are no other options available

to her that she would overall prefer to her current course of action. And a rational agent's preferences will be determined not only by how much she values various outcomes or pursuits, but also by her expectations about what will happen if she goes in for those pursuits. Therefore, a rational agent's choices about whether to persevere will be affected by substantial decreases in confidence, such that she will be disposed to quit and switch to a more promising option if she receives enough unfavorable evidence.<sup>12</sup> How much unfavorable evidence her preferences can absorb without changing will depend on how much she values her chosen activity over all the alternatives. Perhaps becoming a great artist is the only thing she cares about, or perhaps she sees herself as having no good option other than to stay in her marriage and make it work. But for most of us, most of the time, the choices are not this lopsided; there are usually numerous alternatives that we would consider to be quite good even if not our first preference. In this vastly more usual choice situation, a decrease in the probability the agent assigns to the outcome in which she succeeds at  $\phi$ -ing can easily lead to a situation in which it is irrational for her to pay the opportunity costs of continuing to try, rather than switching to a less valued but more viable alternative. The more she comes to doubt that her skills and abilities will ever be adequate, or that her circumstances will permit her to succeed, or that she has the requisite self-discipline, the more perseverance will seem to a rational agent like futile stubbornness.

Of course, most of us are not perfectly rational decision-makers. The explanatory hypothesis is only bolstered by rational considerations if people are disposed to make rational choices. This observation might lead us to conclude simply that grit often involves some form of irrationality, either practical or epistemic. Perhaps the decision to persevere in the face of difficulty is only all-things-considered rational if the agent wants to succeed at her chosen task far more than she wants any other available option,<sup>13</sup> or if she believes she has no other good options. Otherwise, grit must be a matter of persevering even though one assigns a higher expected utility to another option, or of maintaining optimism by ignoring or failing to respond rationally to any countervailing evidence. We are happy to grant that these latter cases are possible: exhibitions of grit are often somewhat crazy, and that can even be a part of what we admire about them. The central question here is whether grit *must* be either dependent on a monomaniacal view about what is worth doing, or the product of desperation, or sustained by an irrational response to the available evidence.

The problem with these options, we suggest, is that it *can* be rational to display grit even when one has a multiplicity of good options. A student might well need grit to stick with a Ph.D. program, and sticking with it can be a rationally permissible decision even if she would also value being a lawyer and believes she would more easily succeed in law school. And if persevering in these circumstances can be a rational decision to make, then we should try to avoid the conclusion that a rational agent cannot decide to do it in a way that is clear-eyed and intelligible to herself. But grit cannot be clear-eyed if we must rely on tactics like avoiding or ignoring evidence, or nurturing positive illusions about our abilities and the extent of our control. Such illusions can have some benefits,<sup>14</sup> but they can also be self-undermining, impeding awareness of things that need to change if the project is to succeed and thus leading to a waste of time and resources that one might not be able to afford. On the other hand, deciding to persevere while believing that

other good options are significantly more likely to pay off must seem to a rational agent like unreasonable obstinacy. If possible, we should prefer an account that can make sense of the decision to persevere in such circumstances without attributing these kinds of rational defects to the agent.

## II. *Commitment and belief*

The first step is to identify why grit is something we are right to value, on at least some occasions. What kind of failing, if any, is involved in abandoning a goal one has adopted? There may be goals that are obligatory for us to have independently of our desires and other commitments, and if there are such goals, the explanation of why we are obligated to have them will presumably also reveal the mistake in abandoning them. The puzzle is that many of the pursuits available to us are valuable and permissible but not obligatory. A talented undergraduate who has good reason to pursue a Ph.D. in English may also have good reason to aim for a career as an actor, a lawyer, or numerous other professions or lifestyles. Similarly, there are countless people with whom we could enter into valuable relationships. When we are faced with multiple permissible choices in this way, we can simply pick. But it is implausible to think that by picking a particular career or friendship, the other valuable options are suddenly rendered impermissible. Why, then, should there be anything wrong with giving up on a goal one is not required to have?

To abandon a goal, one must have adopted it in the first place. Our question is thus related to a more general puzzle about the normative significance of deciding on, intending, or committing to a goal: how does one thereby change one's normative situation in favor of pursuing that goal? Much of the otherwise fascinating work on this question focuses on the problem of having options that are equally or incomparably valuable. The worry there is that committing to one of multiple options that are normatively on a par must do something to justify sticking with that choice rather than switching, on pain of leaving us vulnerable to a series of swaps that are together inferior to the utility of sticking with one choice (think of John Broome's example of Abraham indecisively taking Isaac back and forth from the mountain, displeasing God as well as his son).<sup>15</sup> Proposed solutions generally take the form of explaining how a practical commitment like an intention can tip the scales with respect to the *value* of proceeding. Some have argued that willing is intrinsically normative, in that as long as  $\phi$ -ing is otherwise permissible, making it one's end is itself a reason in favor of  $\phi$ -ing.<sup>16</sup> Others argue instead that external factors like the costs of reconsideration and the creation of expectations in others provide a new reason of economy, thereby reducing the relative costs of moving forward.<sup>17</sup> And a third suggestion is that under certain conditions, the agent would be more diachronically self-governing if she continued to pursue her goal than if she abandoned it, and that this is itself a good thing.<sup>18</sup>

Whether or not any of these proposals succeed, however, they do not adequately address a different problem that commitment needs to solve. Commitment-based reasons adding to the value of moving forward will not be enough if the impetus for switching is having come to despair of success. As noted earlier, if we take into account only the agent's expectations and desires or values, the decision to abandon a goal as soon as another option has more expected value or utility

is not only unproblematic, but rationally required. This can easily happen even if the agent values succeeding in her chosen goal more highly than any of her alternatives. The problem is that being disposed to quit as soon as another good option appears to have a higher chance of success will render difficult long-term projects and relationships inaccessible to us, absent a good deal of luck to clear our paths of obstacles and rough patches. These kinds of pursuits are normally only possible for us if we are able to stay committed to them through times when the prospects appear dim. Therefore, just as we have need of the ability to make lasting commitments in the face of equally or incomparably valuable alternatives, we have need of the ability to make lasting commitments that can survive periods in which one's prospects appear gloomy.<sup>19</sup>

By motivating the problem in terms of expected utility, it might seem that what is needed is a modification to orthodox decision theory. For instance, Lara Buchak has defended an alternative conception of decision theory on which the agent's attitudes toward *risk* can matter, in addition to expected utility.<sup>20</sup> Might we then conclude that what is needed to solve our problem is not commitment, but high risk-tolerance? In a way, yes – the perseverant behavior we are attempting to explain and justify can be formally modeled as imperviousness to risk, in the sense that the evidence suggesting a high chance of failure will have less of an impact on this kind of agent. But the possibility of a risk-weighted decision theory does not commit us to being realists about risk-attitudes; the question remains open as to what it is about the psychology of an agent, such that her preferences exhibit a tolerance for risk. Further, Buchak's approach is motivated primarily by the observation, heavily supported by research in economics and psychology, that the majority of people are actually *risk-averse* in many circumstances.<sup>21</sup> Thus, the appeal to the psychological notion of commitment is at worst compatible with a formal theory that allows a role for "risk functions," and at best explanatorily more powerful, in that it accounts for the plausible thought that risk-averse people can still be gritty.

A natural suggestion for understanding how commitment aids in perseverance is to suppose that the gritty person simply refuses to reconsider whether to continue with a plan once she has adopted it. For instance, Michael Bratman has defended an influential view of intention according to which it is part of the functional role of intention to resist reconsideration.<sup>22</sup> He argues that planning agents like ourselves will generally reap pragmatic benefits in achieving our goals and acting together with others if we have the non-reflective disposition not to reconsider a plan unless we encounter a significant problem for that plan. Alternatively, perhaps commitment is a matter of faith. Buchak has (separately) argued for an understanding of faith on which it involves a commitment to act on a hypothesis without seeking out counterevidence or considering the counterevidence that one may encounter in the future.<sup>23</sup> On her view, this kind of faith is justified if (a) one has a high credence in the hypothesis; (b) the counterevidence is not conclusive; and (c) the risk-weighted expected utility (REU) of making and acting on such a commitment is higher than the REU of the other available options. Thus, one possible proposal is that perseverance in the face of unfavorable evidence is justified by the rational refusal to reconsider one's plans or commitments.

The problem with refusing to reconsider one's plans is that quitting is often the right thing to do, and so it is important to retain our sensitivity to the reasons to quit. Bratman himself notes



that we ought to reconsider if there is “... a relevant divergence between the world as one finds it and the world as one expected it to be when settling on the plan,” and suggests that when the stakes are high and there are opportunities for low-cost, cool-headed deliberation, there should actually be a presumption in favor of occasional reconsideration.<sup>24</sup> Relevant divergences will surely include new evidence that one’s abilities, circumstances, or self-discipline are falling short of what is needed for the task.<sup>25</sup> Thus, simply refusing to reconsider our plans would render us unable to monitor the line between rationally permissible risk-taking and foolish stubbornness.<sup>26</sup>

Buchak’s view of faith averts this problem by building in that the commitment is only rational to make if one anticipates the possibility of counterevidence and still assigns higher overall utility to seeing the commitment through. In the kind of cases at issue, however, we will frequently be unable to fully anticipate the risks that will be involved, the opportunities we will have to forego, or what it will truly mean to succeed in our aspirations.<sup>27</sup> To the extent that these factors are not fully foreseeable, the potential costs cannot simply be priced in to the utility calculation at the outset. A second problem in this context concerns the practice of refusing to seek out or examine the counterevidence. If the agent declines to gather information about the state of her abilities, the felicity of her circumstances, or her capacity for self-discipline – by never actually running a race or getting feedback on her writing, say – then she will not be in a position to make the improvements that are needed if she is ever to succeed. The same difficulty arises if she is confronted with the evidence, but treats it as irrelevant to her practical reasoning. A view of practical commitment is needed that involves neither a refusal to examine new evidence, nor a refusal to reconsider in light of that evidence.

Berislav Marušić defends an understanding of commitment that attempts to strike this balance.<sup>28</sup> On his view, a resolution to act is insincere, or manifests bad faith, if one lacks the belief that one will succeed. Thus, as long as an action is up to the agent and he has sincerely resolved to do it, he ought to believe that he will do it – even if there is substantial evidence suggesting otherwise. If he has resolved to run a marathon, for instance, the fact that many people who resolve to run marathons never finish or even start them should not prevent him from believing that *he* will complete the marathon. This is possible because on Marušić’s view, if an action is up to you, you ought not to treat the counterevidence as a basis for predicting that you might fail. The fact that running a marathon is up to you licenses you to settle for yourself whether you will run it on the basis of the *practical* reasons in favor of running it, rather than the theoretical reasons concerning the likelihood of success. To be clear, Marušić allows that evidence of difficulty can function both as a practical reason not to adopt an end in the first place and as a consideration bearing on how to go about achieving that end – a reason to train well in advance rather than simply jumping into the race, for example.<sup>29</sup> It simply should not be taken into account as a basis for prediction. Following Marušić, we will call this the Sartrean View.

Marušić’s central examples – maintaining a loyal marriage, quitting smoking, running a marathon – are actions that often require grit. This suggests an understanding of the Sartrean View on which an agent who has adopted this kind of end ought to start out believing that he will succeed, and ought to treat any further evidence he receives about his prospects as irrelevant for predictive purposes (although again, it can be relevant to his choice of means). The problem with

losing confidence in success, then, is that it manifests bad faith. Where the “non-reconsideration” model faced difficulty distinguishing rationally permissible manifestations of grit from mere obstinacy, this interpretation of the Sartrean View would have trouble distinguishing them from delusional optimism

But there is reason to think this is not quite Marušić’s view. A crucial feature of the view is that it is restricted to actions that are “up to us.” Marušić does not give an extensive treatment of what it is for an action to be up to us, but he offers the following analysis: “it is up to us to  $\phi$  if and only if we will not fail to  $\phi$  as long as we try to  $\phi$  and continue trying.”<sup>30</sup> He does not mean to deny that in almost every case, there is the possibility that one’s body, or implements, or physical and social circumstances could impede success; rather, the claim is that these are unexpected and implicit release conditions on which our resolutions are conditional. Still, even bracketing the unlikely ways one might be interfered with, we suggest that this restriction has the effect of rendering the Sartrean View inapplicable to nearly all cases in which grit is required.

As we see it, the central question for an agent considering whether to persevere is “will continued effort be enough?” This is often something one is not in a position to know at the outset of a long-term, difficult project or relationship, when one often has only a vague understanding of what it will require.<sup>31</sup> Take the student who is deciding whether to commit to the goal of getting a Ph.D. Is getting a Ph.D. an action that is up to her? For most people, it is not, but let us stipulate that she was a very strong undergraduate student and has been accepted to a good graduate program with full funding. She has some reason to think she has the needed talent and support, but she has never attempted anything this demanding before, and the attrition rate of the program is substantial. The rational response to this evidential situation, we suggest, is to be uncertain whether success in getting a Ph.D. depends only on continuing to try. And insofar as her initial efforts are met with resistance that was in any way unanticipated, this is new evidence that bears on the question of whether it is really up to her.

The point is that it is not a matter of insincerity or bad faith to question whether  $\phi$ -ing is up to you, or to be on the lookout for new evidence about whether it is up to you, since a positive answer to this question is a precondition of the Sartrean conclusion. We submit that this is nearly always the position an agent in need of grit will be in. It does not follow that such an agent’s commitment to  $\phi$ -ing must be insincere; indeed, we frequently structure much of our lives around such commitments and endure significant sacrifice in order to pursue them. When the student turns down a lucrative job offer and moves alone across the country to enroll in a Ph.D. program and live on a meager stipend, there is nothing lacking in her commitment, even if she remains uncertain about whether she will succeed. Thus, we see no reason to deny that an agent can sincerely commit herself to the goal of  $\phi$ -ing while having only that degree of belief in her eventual success that she takes to be supported by her evidence. Depending on her practical reasons, her expectations may well be fairly low; at minimum, she must only believe that it is possible to succeed in order to commit.

Let us take stock. We have rejected the idea that one is pragmatically justified in simply refusing to reconsider one’s plans in the face of significant new evidence bearing on one’s prospects.

We have also rejected the idea that sincerity in our commitments requires us not to view our own missteps as relevant to our beliefs about whether we will succeed. On our view, failures and other setbacks are relevant to predictions of success, and we should periodically reconsider our plans as this new information comes in. The question now is *how* an agent's assessment of the likelihood of her success should continue to adjust in light of new evidence. Imagine that when our student arrives at graduate school, all of the most respected senior faculty and most of the other students are male and white, giving her some evidence (even if misleading) that she is not the kind of person who usually succeeds at this kind of activity. She gets a poor grade on a term paper that she had worked very hard on. She becomes depressed and finds it difficult to write as much as she needs to, ultimately missing a series of deadlines that she had to meet. Her advisers take longer to get back to her with feedback than she had anticipated at the outset. How should these experiences impact whatever beliefs she started with?

The account we will now offer aims to locate a middle ground between the views of commitment canvassed so far. Sincerely committing to a difficult end should be consistent with subsequently making the rational decision to quit and invest one's resources in a more viable alternative, and this decision should be governed in part by the evidence bearing on the chances of success. On the other hand, we agree with the Sartrean insight that the way an agent should think about the evidence bearing on activities she herself is committed to is potentially different from the way an impartial observer would reason about the same body of evidence. Our account, which we will call the Evidential Threshold account, attempts to accommodate both of these thoughts.

### III. *The Evidential Threshold Account*

Thus far, we have been noncommittal as to whether the agent's epistemic attitudes should be understood in terms of credences or all-out beliefs about the probability of success conditional on remaining committed to her goal. We will continue in this vein, since we intend our account to apply to whichever doxastic attitude one thinks should govern the decision about whether to persevere in an activity. It is simpler and more natural to defend the view in the context of an all-out belief framework, on which this decision is made in light of one's belief about the likelihood of success. This is the version we favor. However, for those readers who think the decision should be governed by credences, we intend the broad outline of the view to apply to credences, although we do not aim to work through the details here. Readers who think we operate only with credences, but who are not inclined to accept the Evidential Threshold account as applied to credence, are encouraged to take the argument as a *Modus Tollens* against the view that we can do without belief.

Further, for the rest of the paper, we will assume that practical or ethical considerations cannot serve as legitimate grounds on which to hold a belief or as premises in reasoning about what to believe.<sup>32</sup> Though we have not canvassed all possible versions of this kind of view, we are primarily interested in the extent to which the epistemic resilience involved in grit can be justified without going so far as to deny that our (non-foundational) beliefs should be held solely on the basis

of the evidence that supports them.<sup>33</sup> Our focus in this section will be on the *standards by which we reason* about what to believe on the basis of our evidence. The difference between reasons and standards is the difference between the considerations that figure as premises in reasoning and the principles that tell us how to move from those premises to a conclusion. The latter principles do not themselves feature in reasoning or serve as reasons to believe; rather, they operate in the background, guiding us in how we update our attitudes in response to our evidence.<sup>34</sup>

The standard of reasoning we are interested in here concerns a thinker's sensitivity to new evidence. In a given context, how much evidence is required – that is, how compelling must the evidence be – before the thinker comes to a conclusion about what to believe or revises her current beliefs? Call this the “evidential threshold” for belief change that a thinker employs in a given situation. The important point is that evidential thresholds are not simply fixed across contexts; they go up and down. In some circumstances (for example, when the stakes of getting the right answer are low), a thinker might use a low threshold, such that she will proceed to draw a conclusion on the basis of relatively weak evidence. In other circumstances, her threshold for belief change will be higher, leading her to require strongly compelling evidence before she updates her beliefs. It will be useful to speak of a thinker's evidential thresholds in a context as being governed by implicit attitudes or guidelines that we will refer to as “evidential policies.”<sup>35</sup> We wish to remain neutral about what such policies come to psychologically, except to say that they are not normally something we explicitly deliberate about or choose. They operate habitually in the background of epistemic reasoning, and while it is not impossible to make them explicit to ourselves and reflectively alter them, it is relatively unusual and cognitively costly. Moreover, since these policies govern the way in which we respond to evidence in a given situation, they cannot themselves be called into question while first-order reasoning is in progress.<sup>36</sup>

The question now arises: can equally rational thinkers differ in the policies that govern their evidential thresholds, such that they might disagree to some extent about how much evidence is required to draw a conclusion in a context? We think it highly plausible that the answer is ‘yes’. This amounts to denying that the evidence always determines a uniquely rational attitude one can take to any proposition – a thesis commonly referred to as “Uniqueness.”<sup>37</sup> The debate over Uniqueness is more complicated than we can hope to prosecute in detail here, but we take the motivations for embracing the “Permissivist” alternative to be powerful. Permissivism is a weaker thesis than Uniqueness, in that it holds only that there are some cases in which there is more than one rationally permissible doxastic response to a body of evidence. That said, the most well-motivated version of Permissivism is not limited to tiny differences in permissible responses; it allows that in extreme cases, it might be rational for one thinker to believe P and another to believe not-P on the basis of the same evidence.<sup>38</sup> One motivation for embracing Permissivism is the Jamesian thought that there are multiple permissible ways for a thinker to balance competing epistemic desiderata (such as avoiding error while believing significant truths).<sup>39</sup> A second motivation is that it is difficult to see what kind of metaphysical fact could ground the existence of an objective evidential support relation that extends beyond deductive reasoning, and that is independent of our interests and the language we use to frame our hypotheses.<sup>40</sup>

The evidential situation of an agent who has reasonably adopted a difficult long-term goal is a compelling example of a case in which a range of rationally permissible responses is available, since the evidence bearing on how it will turn out is often inconclusive. Predictions about the future are notoriously never ironclad. Statistical evidence concerning the success rate of others is relevant, but does not license a straightforward inference about what will happen in one's own case. And a lack of ability or conducive circumstances now does not necessarily indicate that these things will not improve with hard work. It is immodest to believe that you will be the exception to the rule, but on the other hand, it happens. The point is that it will often be the case that the available evidence does not compel a single conclusion for any rational thinker, and indeed allows significant latitude for disagreement.<sup>41</sup> This is not to say that agents who permissibly set out to  $\phi$  never subsequently receive compelling evidence of their inability to  $\phi$  given their circumstances – this is an all-too-common occurrence as well. The popular writing on grit has problematically ignored this fact, implying that the usefulness of optimism suffices to justify it no matter how delusive.<sup>42</sup> Our claim is merely that in the relevant cases, in which the horizon for achieving one's end is distant and flexible, there will normally be latitude for rational disagreement about when the evidence is compelling enough to conclude that success is highly unlikely.

If no single evidential policy is rationally required of all thinkers, what determines whether a given evidential policy is rationally permissible? Our view on this question has a tiered structure, and is not pragmatic at its foundation. On a first pass, a candidate evidential policy ought to be shaped solely by epistemic concerns like accuracy or conduciveness to knowledge. Notice, however, that the best policy even from a purely epistemic perspective might not recommend updating on every new piece of information. Given the limitations we face on cognitive resources like working memory, we may do better epistemically if we prioritize updating on information we expect to have a relatively large impact on our current attitudes.<sup>43</sup> Further, given the need for such policies to operate habitually in the background rather than foreground of reasoning, they will be better to the extent that they are more general in scope, allowing the thinker to cope reflexively with a variety of situations without the need for explicit reconsideration.

Insofar as epistemic concerns do not uniquely pick out the policy one ought to have, however, we suggest that pragmatic and ethical concerns can play a legitimate role on the second pass.<sup>44</sup> Among those policies that are epistemically permissible, a given policy will be better to the extent that it is more conducive to promoting the agent's non-epistemic goals, in the context(s) that she reliably finds or expects to find herself in. For instance, the best evidential policy will lead her to require more evidence to form or update a belief concerning matters where it is very important to get it right, less when it is less important. If it matters very much whether the bank is open, she will require more compelling evidence before she draws a conclusion than she needs if the stakes are low.<sup>45</sup> Further, it will be sensitive to limitations on time, striking a balance between the value of gathering as much evidence as possible and the need to decide what to do.

It follows that if grit is a valuable capacity to have in our practical lives, then *ceteris paribus* and within the set of epistemically permissible policies, an evidential policy is better insofar as it protects to some extent against despair.<sup>46</sup> In other words, we have *pro tanto* reason to have evidential policies that are grit-friendly. A grit-friendly evidential policy will result in some degree of inertia

in the agent's belief about whether she will ultimately succeed, relative to the way in which an impartial observer would tend to update on new evidence. As a consequence of committing to a goal, the agent's threshold should go up for how compelling new evidence must be before she revises her belief about the likelihood of succeeding if she continues to try. Again, the claim is not that any particular belief or credence should be arrived at via deliberating about pragmatic considerations bearing on the usefulness of that attitude. It is only at the level of the agent's policy governing her threshold for belief change that conduciveness to grit can play a role. Further, we are not committed to supposing that any latitude remains once the thinker's evidential standards are fixed; at that point, for all we have said, a unique response to the evidence is rationally required.<sup>47</sup>

Other things equal, the gritty agent's evidential threshold for updating her expectations of success will tend to be higher than the threshold an impartial observer would use. This is not because the perspective of the impartial observer is epistemically privileged, however; the Permissivist latitude applies to the policies of the agent and the observer alike. Rather, it is because the observer has no need to respond to the evidence in a way that guards against premature despair, and this should be reflected in his evidential policies. The agent faces a special problem, in that she is the one who must decide whether to keep going, and even temporarily believing that her prospects are too dim can make perseverance seem futile to her. There is no special problem for the observer who is otherwise uninvested, however, and so there is no grit-based reason for him to use a high evidential threshold to update on new information – though there might well be other pressures like interest, time, and stakes that will favor pushing his threshold in one direction or another.<sup>48</sup>

This point holds equally for the agent herself in thinking about the likelihood of success prior to adopting a course of action. When deliberating between various options that are all permissible but not obligatory, we may not need much evidence at all to be justified in concluding that we do not have the ability, self-discipline, or conducive circumstances needed to invest in a particular option. If English, Physics, and Political Science are all perfectly good subjects to major in, and a student hasn't yet committed herself to any of them, one disastrous grade on an English paper could be sufficient to conclude that she is not good enough at English (relative to the other subjects) and rule it out as a major. But upon deciding to study Physics, her evidential threshold should go up, such that she now requires much more compelling evidence than a single bad exam performance to conclude that she does not have the requisite ability and would do better to quit.

To be clear, the claim is not that the evidence provided by the bad performance is simply ignored. Here it will be useful to contrast the Evidential Threshold account with a somewhat similar view defended by Richard Holton.<sup>49</sup> Modeled on Bratman's view of intention, Holton suggests that beliefs too should be resistant to reconsideration, even in situations where it would be rational to revise the belief if she did reconsider. The central idea is that cognitively limited thinkers like us will do better to have beliefs that are stable, and that this rationalizes the disposition not to reconsider our beliefs whenever we acquire new evidence. Of course, we should not be dogmatically insensitive to new evidence either; the correct disposition to have will strike a balance between stability and dogmatism. The crucial point for Holton's model, however, is that resistance

to new evidence is a matter of ignoring it, even in situations where it would be rational to revise one's belief if one took that evidence into account.

We find much to like in Holton's account, but our view does not require or even recommend that evidence go ignored. Rather, the claim is that it is rational not to change one's belief about the likelihood of success even once the new evidence has been absorbed, up to a point.<sup>50</sup> This absorption will not show up directly in the agent's prediction about her prospects, but it will show up in other ways. She ought to take it to bear on the current state of her abilities, circumstances, and capacity for self-discipline, and adjust her plans accordingly.<sup>51</sup> It may also impact her disposition to update over the long run, such that while her prediction of success does not change in the short run, she takes the information she is getting to be relevant to that prediction and is keeping track. If the negative evidence continues to mount, there will be a point at which she revises her confidence sharply downward. Again, the epistemic leeway here is limited; the evidential policies that are permissible will not license the refusal to update one's doxastic commitments in the face of compelling evidence that success is impossible or highly unlikely. Delusive optimism will be ruled out by any policy that is within the set of what is epistemically permissible, even if it is occasionally advantageous from a practical point of view (more on this point in Section IV).

The inertia in the agent's expectations of success will help to protect her against temporary dips in confidence that might otherwise lead her to quit. It will also make her less sensitive to the positive evidence, however. We might worry that the advantages and the disadvantages therefore cancel each other out. But in fact, the advantages and disadvantages of inertia are not symmetrical. First, in addition to protection against misleading negative evidence, we also need protection against misleading positive evidence, since overconfidence can be destructive. True, high expectations of success – deserved or not – can sometimes be self-fulfilling, contributing directly to a good outcome.<sup>52</sup> If the goal is to become a great public speaker, being confident is most of the battle. But in many more cases, the most direct causes of success are things like effort, practice, compromise, and sacrifice, and an over-confident agent is less likely to recognize that these things are needed. A high threshold for belief change will help to avoid counter-fulfilling bubbles in confidence caused by a small amount of good news. In contrast, there is nothing terribly problematic about missing out on the small increases in confidence that a lower threshold would have allowed, as long as one is optimistic enough to make sense of continuing to try. If anything, it will incline the agent to work harder than is needed. The point is that the downside of a high threshold is relatively minor in comparison to the advantages.

What if the agent never should have adopted the goal in the first place? One might worry that the Evidential Threshold account will license a kind of bootstrapping, in that an agent who unreasonably adopts the end of becoming a world-class middle-distance runner even though she has never broken ten minutes in the mile (and is an adult, and has tried many a time) will now be rationally permitted to persevere in the face of new evidence that it will never happen. Two things are important to note about this kind of case. First, the change in threshold does not apply retroactively; resolving on a goal should have no effect on how one understands the significance of the evidence one already has. Second, the old evidence does not get screened off. This means that

even though this agent's evidential threshold is raised as a result of her foolish resolution, it will have no effect on what she is rationally permitted to believe in light of her evidence, since she already had compelling evidence that she will not succeed even by her new evidential standard. Any new evidence she gets will rationally compel her to conclude that she will not make it as a world-class runner, since it will be added to the undeniable body of evidence she already has.

We are now in a position to respond to a different kind of objection, which is that what makes grit rational is not belief but some other, less cognitive attitude: perhaps there is a distinct attitude of hope, or "acceptance," that should guide the agent's practical reasoning in the relevant cases. Perhaps the gritty agent need not actually believe that success is likely, or have a reasonably high credence in the proposition that she will succeed; she need merely be licensed to reason and act as though she does. Let us call all versions of this view, including hope,<sup>53</sup> acceptance,<sup>54</sup> and "practical credences,"<sup>55</sup> the "two sets of books" approach. What unifies these views is the thought that there are two sets of attitudes that we have about the same question: "Will I succeed, if I continue to try?" The agent's beliefs/credences are responsive to the evidence, but her second set of attitudes is not, and it is the latter that should govern her decision about whether to persist.

One worry about this kind of approach concerns the coherence of the agent's point of view. She will have two attitudes toward the same question, which she might express by saying "I am hopeful that I will pull it off yet, although there is very little hope." This falls just short of sounding Moore's Paradoxical. A second worry is that hope or acceptance make most sense in contexts other than those we have been discussing. The classic defenses of acceptance turn on the thought that it is rational to act as though P while lacking confidence that P if the stakes of being wrong are low, and rational to act as though not-P while being quite confident that P when the stakes of being wrong are high.<sup>56</sup> For instance, an agent might believe that a two-story ladder is in good working order, but accept for the sake of practical reasoning that it may not be, since the cost of error is so high. But in situations requiring grit, the proposal would be that we should reason and act as though P even though we are in fact dubious of P, and where the cost of being wrong about P is high. If an agent perseveres when he should not, devoting months or years to a goal that he never achieves while enduring frustration and forgoing other opportunities, this is a high price to pay. Accepting that one is likely to become a celebrated novelist if one tries and thus forging ahead, believing all the while that the chance is very low, is rather like accepting that the ladder is sound while believing that it isn't.<sup>57</sup>

The best cases for justifying hope, in contrast, are cases in which there are no good alternatives. The examples in that literature gravitate toward what Martin (2013) calls "trials:" facing serious illness, enduring an unjust prison sentence, or surviving a concentration camp. We have no wish to deny that hope is an important phenomenon in its own right, but it is more difficult to see how it can justify perseverance when the agent has other good options available. If the evidence that things will not work out is compelling, then hoping otherwise will tend to be destructive. And if it is not, then we have argued that the agent's beliefs themselves can reflect this fact, rendering two sets of books unnecessary. The claim is not that there is no way to work out the details on a two-sets-of-books approach in a way that gets plausible results in these cases, but other things being equal, one set of books is better than two.



Do the examples we began with – the student attempting to get a Ph.D., the athlete aspiring to compete at a high level – turn out to be rational manifestations of grit on our view? We think the Evidential Threshold account shows how they can be. It must have been permissible for them to adopt the end in the first place, but we have seen no reason to suspect that this condition is overly difficult to satisfy; depending on their other preferences, the only epistemic constraint we have committed to is that they must believe it is possible to succeed. The evidence they subsequently receive about their chances of success must be inconclusive, but we have offered reasons to think that this will normally be the case as long as the timeline for success is extended and flexible. The Evidential Threshold account explains how they can weather what would otherwise amount to potentially debilitating fluctuations in their confidence without ignoring important information, deluding themselves, or refusing to even consider whether it makes sense to go on. Not all cases of grit will meet these conditions, to be sure. But by grounding the rationality of grit-friendly evidential policies in the instrumental value of grit, the view ensures that the cases that do meet these conditions are also the ones that are central to justifying the general capacity for grit.

#### IV. *Context matters*

The argument of Section III was qualified at a crucial point. We claimed that *if* grit is a valuable capacity to have in our practical lives, then *ceteris paribus* and within the set of epistemically permissible policies, an evidential policy is better insofar as it protects to some extent against loss of confidence in success. In this section, we will comment briefly on how to think about the question of whether we ought *simpliciter* to be such as to reason in a grit-friendly way.

Philosophical discussions about norms of reasoning tend to proceed on the assumption that the aim is to identify requirements that apply to all rational thinkers, or dispositions of thought that are virtuous for all human beings. On our view, this is the wrong way to think about the norm of epistemic reasoning that partly constitutes having grit (or, for that matter, most norms of reasoning).<sup>58</sup> We suggest that whether or not an agent should reason with a grit-friendly evidential policy is contingent upon the environmental context that agent normally or reasonably expects to find herself in.

This view of gritty reasoning builds on an ecological conception of rational norms defended by Morton.<sup>59</sup> On this view, the deliberative norms a person should accept and employ are not universal and necessary requirements, but rather a contingent function of factors such as her cognitive capacities, her environmental context, and her ends. For example, many agents living in poverty appear to deliberate in a way that is highly sensitive to short-term efficiency at the expense of making decisions that are effective in achieving their long-term goals.<sup>60</sup> Where many have concluded that this is simply irrational, or that it falls short of ideal agency, Morton argues that agents in resource-scarce environments actually ought to employ different deliberative norms than those in resource-moderate environments. These norms are adapted to the context in which these agents deliberate, which is not a context that generally rewards long-term decision-making. Patterns of deliberation that would constitute an irrational form of myopia or lack of self-control

for an agent in a resource-moderate context might be the right deliberative habits for the agent in poverty to have.

We propose that a similar conclusion applies to the question of how an agent who has adopted a goal should reason about new evidence bearing on success. There is no blanket rational requirement that applies simply in virtue of the fact that one has made a practical commitment; here, too, the context must be taken into account. On one hand, there is a mounting body of scientific work indicating that the capacity for perseverance is in fact a significant predictor of success in a variety of domains.<sup>61</sup> Those who score highly on measures of grit are more likely to make it through “Beast Barracks” at West Point, get good grades at Ivy League schools, and perform better in the National Spelling Bee. And as we observed in Section II, the capacity for grit gives us access to difficult, long-term accomplishments and relationships that we would otherwise have to be merely lucky to sustain. However, these activities and relationships tend to have a “high risk, high reward” structure. For agents who can afford the risk, like most Ivy League students and West Point cadets, the capacity for grit is not only instrumentally useful but also in certain ways transformative. They therefore have good reason to use grit-friendly norms of deliberation.

However, it may be that in situations of extreme scarcity, agents should have reasoning habits that lead them to remain maximally sensitive to evidence of potential failure even after adopting a difficult goal. Put simply, perseverance may not serve such agents well. One reason is that such environments tend to be more unpredictable, and so the agent’s initial assessment of the likelihood of success might be less robustly justified. Another is that for an agent with scarce resources, events that would constitute small setbacks for someone else can be devastating. A low-income student who perseveres rather than dropping a college class and ultimately receives a failing grade could lose his funding, have no parental back-up, and be forced to leave college. Given the high stakes of failure, retaining a low evidential threshold even after commitment may be more rational than the alternative.

This is not simply an abstract possibility. Consider the following anecdote reported by Claude Steele:

Carol is a social psychologist who has devoted much of her career to bettering the undergraduate experience at universities like Princeton and Stanford ... Carol rather offhandedly told me about something she and others had seen while advising students about organic chemistry. This course is a national gateway to medical school; doing badly in it can derail your chances of getting in. It’s also difficult, so Princeton students have developed strategies for getting through it. Some students sit through it one entire time before taking the course a second time for a grade. Others take the course during the summer at a presumably less competitive school and then try to have the credit for it transferred back to Princeton. When advisers see students having difficulty in this course, they might suggest one of these strategies so that the students don’t stay in the course, get a bad grade, and undermine their chances for medical school. Carol said that when this advice is offered to white and Asian students, most of them readily take it, dropping the

course for a grade and following one of the alternate strategies. To Carol's surprise, though, when the advice is offered to black students having trouble, they more often rejected it, persisting in the course past the point when one can drop it without getting a grade, and thus often getting a low grade that jeopardized their medical school chances.<sup>62</sup>

Steele refers to this phenomenon as "over-efforting" and argues that it can be a counterproductive response to stereotype threat. Furthermore, as epidemiologist and sociologist Sherman James was first to notice, goal-oriented people who have a strong commitment to hard work and a drive to succeed, but who are confronted with high levels of psychosocial stressors like financial insecurity, familial instability, and discriminatory acts, tend to exhibit significantly worse health outcomes compared to those who are gritty and socially advantaged or those who do not engage in gritty behavior.<sup>63</sup> Known as "John Henryism," this phenomenon (especially prevalent in African-American populations) includes elevated risk of hypertension, cardiovascular disease, obesity, and other symptoms associated with an excess of the stress hormone cortisol.<sup>64</sup> For agents who regularly operate in unsupportive or even discriminatory contexts, or for whom failure would be catastrophic, grit can lead to the investment of more effort than is effective or healthy. Consequently, it may be that agents in contexts of severe material and emotional scarcity ought not to have an evidential policy that enables grit at the expense of caution and self-protectiveness. This is not to claim that they should give up on pursuing difficult long-term goals altogether, but merely to say that they should at the same time remain highly responsive to evidence that pure effort will not be enough.

More empirical research would be required to draw any kind of definitive conclusion here. But the worries we have raised do potentially have the implication that the very same exhibition of grit could count as epistemically rational in a context of privilege and epistemically irrational in a context of scarcity. This is a distressing result, although it is important to note that the view also implies that a *lack* of perseverance in contexts of scarcity might well be the result of good reasoning rather than some defect. Nor does it follow that agents whose grit is epistemically irrational in a context are necessarily at fault. If anything, it is far more natural to say that the fault lies in the injustice of their circumstances. Moreover, the implication is not that all exhibitions of grit in resource-scarce or discriminatory environments are epistemically irrational. There may be a variety of goals that are rational to persevere at in these contexts, even without the cushion of heightened epistemic resilience.<sup>65</sup>

What of cases in which the agent is in a context in which he ought to have a more cautious evidential policy, but instead employs a high evidential threshold, perseveres, and pulls it off? We tend to idolize stories in which a character triumphs against what he knows to be great odds. But for each case like this, there are many more in which an agent in an evidentially similar situation persevered and did not pull it off, paying opportunity costs along the way. In other words, in addition to talent and effort, the first agent enjoyed a substantial amount of luck in getting the outcome he did (at least, given what he knew). These relatively exceptional cases make bad law. If norms of reasoning should be evaluated globally, for their tendency to be most beneficial to an agent in a context over a variety of deliberative situations, it will be possible to use the right norm

and get the wrong result, or reason badly and get a good outcome. We can admire the result of the lucky agent's perseverance, while at the same time maintaining that he was irrational to reason as he did. In fact, we need not admire such a person's grit any less because it was irrational – sometimes being a little crazy can help us accomplish great things. But we should not conclude from our admiration that this kind of case is what justifies having the capacity for grit.

This is a cause for wariness about the recent focus on promoting the development of grit in educational settings, especially as a strategy for combatting the disadvantages of socioeconomic inequality. Inspired by the evidence on the importance of grit for life outcomes, several charter schools, such as the Knowledge is Power Program (KIPP), have made grit a centerpiece of their character-education curriculum. Whereas much of the research demonstrating the advantages of grit for life outcomes was done on middle- and upper-middle-class students, these programs specifically cater to low-income and Black students. If we are right, this kind of intervention is at best insufficiently supported by the state of the research on grit and at worst potentially harmful. For one thing, the severely disadvantaged students are probably getting different evidence than their middle-class counterparts about whether even herculean efforts to, say, get a college degree will pay off. If so, quitting school might be a rational response to that evidence rather than a failure of grit-based optimism. For another, these students might live and work in such unsupportive contexts that the exercise of grit might come at the cost of their own mental and physical health.

These are ultimately empirical questions. What we have attempted to highlight here is the importance for this research of moving away from a model on which the capacity to persevere over the long term is primarily volitional, analogous to a kind of muscular power, and something that benefits all human agents in the same way. Disentangling the epistemic component of grit from its more obvious volitional and emotional aspects is essential for doing the kind of nuanced investigation that will allow us to arrive at conclusions for education and public policy.

- 
- <sup>1</sup> Chandra Sripada defines willpower in this way, for instance (“Philosophical Questions about the Nature of Willpower,” *Philosophy Compass* 5, no. 9 (2010): 793–805).
- <sup>2</sup> Richard Holton, *Willing, Wanting, Waiting* (Oxford: Clarendon Press, 2009); Roy Baumeister, Kathleen D. Vohs, and Dianne M. Tice, “The Strength Model of Self-Control,” *Current Directions in Psychological Science* 16, no. 6 (2007): 351–55. For a multi-lab replication attempt casting doubt on the so-called “ego-depletion” effect associated with the muscle model of willpower, see Martin S. Hagger, Nikos L. D. Chatzisarantis, Hugo Alberts, Calvin Octavianus Anggono, Cédric Batailler, Angela R. Birt, Ralf Brand, et al., “A Multilab Preregistered Replication of the Ego-Depletion Effect,” *Perspectives on Psychological Science* 11, no. 4 (2016): 546–73.
- <sup>3</sup> Jon Elster, *Sour Grapes: Studies in the Subversion of Rationality* (Cambridge: Cambridge University Press, 1983).
- <sup>4</sup> Which is not to imply that every particular display of grit must involve epistemic resilience. If the trait is a cluster of dispositions, abilities, attitudes, and so forth, then any given instance need not manifest all components of the cluster.
- <sup>5</sup> Angela Duckworth, *Grit: The Power of Passion and Perseverance* (New York: Scribner, 2016).
- <sup>6</sup> Martin E.P. Seligman, *Learned Optimism: How to Change Your Mind and Your Life* (New York: Vintage Books, 2011).
- <sup>7</sup> Sarah Paul, “Diachronic Incontinence Is a Problem in Moral Philosophy.” *Inquiry* 57, no. 3 (2014): 337–55.
- <sup>8</sup> Stereotype threat is the sense of being at risk of being viewed through the lens of a negative stereotype, or of doing something that seems to confirm that stereotype. In Steele and Aronson’s seminal research, African-Americans underperformed on an SAT-type test when they were told that the test was diagnostic of their verbal abilities and negative stereotypes concerning African-Americans were activated (“Stereotype Threat and the Intellectual Test Performance of African Americans,” *Journal of Personality and Social Psychology* 69, no. 5, 1995: 797–811). Schmader et al. proposes an integrated process model of stereotype threat that assigns a central role to self-doubt (Toni Schmader, Michael Johns, and Chad Forbes, “An Integrated Process Model of Stereotype Threat Effects on Performance,” *Psychological Review* 115, no. 2 (2008): 336–56). For concerns about the replicability of the original experiments, especially with respect to gender, see Gijsbert Stoet and David C. Geary, “Can Stereotype Threat Explain the Gender Gap in Mathematics Performance and Achievement?” *Review of General Psychology* 16, no. 1 (2012): 903–102.
- <sup>9</sup> Some treatments of sour grapes, including the seminal work of Elster in *Sour Grapes*, characterize it in terms of preferences rather than evaluative judgments. The important thing for our purposes is that sour grapes can affect those of our pro-attitudes that are appropriately assessed as either rational or irrational, and that at least some cases of sour grapes are irrational. See Luc Bovens, “Sour Grapes and Character Planning,” *The Journal of Philosophy* 89, no. 2 (1992): 57–78 for a helpful discussion.
- <sup>10</sup> See Jan Gertken and Benjamin Kiesewetter, “The Right and the Wrong Kind of Reasons,” *Philosophy Compass* 12, no. 5 (2017): 1–14 for a survey of the right kind/wrong kind of reason distinction.
- <sup>11</sup> Donald W. Bruckner, “In Defense of Adaptive Preferences,” *Philosophical Studies* 142, no. 3 (2009): 307–24; Serene J. Khader, *Adaptive Preferences and Women’s Empowerment* (New York: Oxford University Press, 2011).
- <sup>12</sup> Possibly, this disposition will also be mediated by the agent’s attitudes toward risk; see Lara Buchak, *Risk and Rationality* (Oxford: Oxford University Press, 2013).
- <sup>13</sup> Perhaps because of a phenomenon we might call “sweet grapes,” in which adversity causes the agent to value the goal or activity more highly than she otherwise would.
- <sup>14</sup> See John Doris, *Talking to Our Selves: Reflection, Ignorance, and Agency* (Oxford: Oxford University Press, 2015), Chapter Six for a convincing defense of the ways in which “illusions of self” can sometimes enable and enhance agency.
- <sup>15</sup> John Broome, “Are Intentions Reasons? And How Should We Cope with Incommensurable Values?” In *Practical Rationality and Preference: Essays for David Gauthier*, ed. Christopher Morris and Arthur Ripstein (Cambridge: Cambridge University Press, 2001), 98–120.
- <sup>16</sup> Very broadly construed, and with important differences in the details, Christine M. Korsgaard, “The Normativity of Instrumental Reason,” in *Ethics and Practical Reason*, ed. Garrett Cullity and Berys Gaut (Oxford: Clarendon Press, 1997), 215–254; J. David Velleman, “Deciding How to Decide,” *ibid.*, 29–52; and Ruth Chang, “Grounding Practical Normativity: Going Hybrid,” *Philosophical Studies* 164, no. 1 (2013): 163–87.

<sup>17</sup> T. M. Scanlon, “Reasons: A Puzzling Duality,” in *Reason and Value: Themes from the Moral Philosophy of Joseph Raz*, ed. R. Jay Wallace, Philip Pettit, Samuel Scheffler, and Michael Smith (Oxford: Clarendon Press, 2004), 231-246.

<sup>18</sup> Michael E. Bratman, “Time, Rationality, and Self-Governance,” *Philosophical Issues* 22, no.1 (2012): 73–88.

<sup>19</sup> We should be careful not to overstate this point. Not all achievements or long-term relationships are the product of some grand, overarching plan or moment of lifelong commitment; it is possible to end up there after focusing only on smaller, day-to-day tasks. This requires a fair amount of good luck, however. In most cases, being in a position to train or write for hours each day requires financial, geographical, and social sacrifices, and such sacrifices will be hard for the agent to make sense of without having some further ambition. Likewise, maintaining a relationship through a rough patch rather than moving on may not seem worthwhile in the absence of a commitment. Grit makes these activities and accomplishments possible for us without having to rely on good luck to remove impediments.

<sup>20</sup> Buchak, *Risk and Rationality*. Thanks to an anonymous referee for pressing us to address this apparent alternative.

<sup>21</sup> *Ibid.*, Chapter One.

<sup>22</sup> Michael Bratman, *Intention, Plans, and Practical Reason* (CSLI Press, 1987), especially Chapter Five.

<sup>23</sup> Lara Buchak, “Faith and Steadfastness in the Face of Counter-Evidence,” *International Journal for Philosophy of Religion* 81, no. 1-2 (2017): 113–33.

<sup>24</sup> Bratman, *Intention, Plans, and Practical Reason*, 136-7.

<sup>25</sup> Of course, the agent will usually know at the outset that it will be hard. But this very abstract expectation cannot be enough to block the “divergence” requirement, since it is highly relevant to find out *how* hard it will be, and in what specific ways it will be hard. Sometimes you should give up even though you knew from the beginning that it would be hard.

<sup>26</sup> To be clear, nothing we say here is meant to apply to the case of desiderative temptation, in which it may well be rational not to reconsider an earlier plan.

<sup>27</sup> Agnes Callard, *Aspiration: The Agency of Becoming* (New York: Oxford University Press, 2018).

<sup>28</sup> Berislav Marušić, *Evidence and Agency: Norms of Belief for Promising and Resolving* (Oxford: Oxford University Press, 2015).

<sup>29</sup> *Ibid.*, 130-131.

<sup>30</sup> *Ibid.*, 167.

<sup>31</sup> Callard, *Aspiration*.

<sup>32</sup> This assumption does not rule out the possibility of beliefs being justified in virtue of being self-fulfilling. If self-fulfilling beliefs are justified, it is because they will be true if believed, not because they will be good if believed (though the latter consideration might be a catalyst in forming the belief, it does not serve as the reason for which the agent holds the belief). We are skeptical that self-fulfilling beliefs will play much of a role in facilitating grit, since it will rarely be the case that merely believing that one will succeed suffices to make it true in these cases.

<sup>33</sup> See Nishi Shah, “A New Argument for Evidentialism.” *The Philosophical Quarterly* 56, no. 225 (2006): 481–98 and Thomas Kelly, “The Rationality of Belief and Some Other Propositional Attitudes,” *Philosophical Studies* 110, no. 2 (2002):163–96 for the kind of argument we find most compelling: roughly, to quote John Searle, “You have to be able to reason with reasons,” and pragmatic considerations cannot be the grounds on which we can reason to a conclusion about what is true (*Rationality in Action* (MIT Press, 2003). Whether or not this “transparency” argument ultimately works, we think it is enough to motivate interest in a view of epistemic resilience that does not help itself to the idea of believing for pragmatic or ethical reasons.

<sup>34</sup> The view defended here and in the next few paragraphs is summarized in similar terms in Paul and Morton, “Believing in Others,” forthcoming in *Philosophical Topics*.

<sup>35</sup> Paul Helm, *Belief Policies* (Cambridge: Cambridge University Press, 2007); Krista Lawlor, “Exploring the Stability of Belief: Resiliency and Temptation,” *Inquiry* 57, no. 1 (2014): 1–27.

<sup>36</sup> Morton makes a similar point about the norms of practical reasoning in “Reasoning Under Scarcity,” *Australasian Journal of Philosophy* 121 (2016): 543-59.

<sup>37</sup> Richard Feldman, “Reasonable Religious Disagreements,” in *Philosophers Without Gods: Meditations on Atheism and the Secular*, ed. Louise Antony (New York: Oxford University Press, 2007), 194–214; Roger White, “Epistemic Permissiveness.” *Philosophical Perspectives* 19, no. 1 (2005): 445–59.

<sup>38</sup> Recent defenders of Permissivism include Miriam Schoenfield, “Permission to Believe: Why Permissivism Is True and What It Tells Us About Irrelevant Influences on Belief,” *Noûs* 48, no. 2 (2014): 193–218; Schoenfield, “Permissivism and the Value of Rationality: A Challenge to the Uniqueness Thesis,” forthcoming in *Philosophy and Phenomenological Research*; Thomas Kelly, “Evidence Can Be Permissive,” in *Contemporary Debates in Epistemology*, 2<sup>nd</sup> Edition, ed. M. Steup, J. Turri, and E. Sosa (Malden, MA: Blackwell Publishing, 2013), 298–31; Christopher Meacham, “Impermissive Bayesianism,” *Erkenntnis* 79, no. 6 (2014): 1185–1217; Meacham, “Deference and Uniqueness,” forthcoming in *Philosophical Studies*; and Michael Titelbaum and Matthew Kopec, “When Rational Reasoners Reason Differently,” forthcoming in *Reasoning: Essays on Theoretical and Practical Thinking*, ed. M. Balcerak-Jackson and B. Balcerak-Jackson (Oxford: Oxford University Press). For dissent, see Roger White, “Epistemic Permissiveness” and “Evidence Cannot Be Permissive,” in *Contemporary Debates in Epistemology*, 2<sup>nd</sup> Edition (2013); Sinan Dogramaci and Sophie Horowitz, “An Argument for Uniqueness about Evidential Support,” *Philosophical Issues* 26, no. 1 (2016); Horowitz, “Epistemic Value and Jamesian Goals,” forthcoming in *Epistemic Consequentialism*, ed. Jeffrey Ahlstrom-Vij (Oxford: Oxford University Press); and Daniel Greco and Brian Hedden, “Uniqueness and Metaepistemology,” *Journal of Philosophy* 113, no. 8 (2016): 365–395). The version of Permissivism are inclined toward in this context is sometimes referred to as “immodest,” in that when equally rational thinkers disagree, they need not view each other as equally rational – each thinker can, and perhaps must, take her own attitudes to be most rational. Thanks to Sophie Horowitz for clarification on this point.

<sup>39</sup> Kelly, “Evidence Can Be Permissive.”

<sup>40</sup> Michael Titelbaum, “Not Enough There There: Evidence, Reasons, and Language Independence,” *Philosophical Perspectives* 24, no. 1 (2010): 477–528; Schoenfield, “Permission to Believe.”

<sup>41</sup> Some such disagreement might be mediated by “mindsets” concerning factors like whether certain traits and talents are fixed or malleable; see Carol Dweck, *Mindset* (New York: Ballantine Books, 2016). The importance of having a “growth mindset” is potentially compatible with everything we say here, although it cannot be the whole story; an agent who believes she can improve her abilities must still discover just how much room for improvement there is, and what her limits are.

<sup>42</sup> Duckworth, *Grit*, Chapter 9; Paul Tough, *How Children Succeed: Grit, Curiosity, and the Hidden Power of Character* (Houghton Mifflin Harcourt, 2012) and “What If the Secret to Success is Failure?” *New York Times Magazine*, September 14<sup>th</sup>, 2011.

<sup>43</sup> Justin Dallman, “When Obstinacy is a Better (Cognitive) Policy,” *Philosophers’ Imprint* 17, no. 24 (2017): 1–17.

<sup>44</sup> Our proposal bears some similarity to pragmatically-grounded views about basic belief-forming methods (David Enoch and Joshua Schechter, “How Are Basic Belief-Forming Methods Justified?” *Philosophy and Phenomenological Research* 76, no. 3 (2008): 547–79; Ralph Wedgwood, “Primitively Rational Belief-Forming Processes,” in *Reasons for Belief*, ed. Andrew Reisner and Asbjørn Steglich-Petersen (Cambridge: Cambridge University Press, 2011), 180–200). There, the thought is that a belief-forming method can be justified by its indispensability for intelligent agency (Wedgwood) or our rationally required projects (Enoch and Schechter). Our claim is distinct, since their focus is on the question of why certain methods provide *grounds* for belief, whereas we are concerned with the justification of *closing the question*. Thus, the methods they consider – perception, memory, inference to the best explanation – bear directly on *what* to believe, whereas the agent’s evidential standards bear on *when* to believe. But otherwise, we follow them in drawing a tight connection between epistemic rationality and agency. Thanks to an anonymous referee for pointing out this connection.

<sup>45</sup> Jason Stanley, *Knowledge and Practical Interests* (Oxford: Oxford University Press, 2005).

<sup>46</sup> Epistemically better, or practically better? On our approach, this distinction breaks down at the level of the standards that govern theoretical reasoning. We might say it is epistemically better, in that it is better as a standard of theoretical reasoning, but we might also say that it is practically better, insofar as it is better in light of practical considerations. As we prefer to put it, it is simply better *qua* evidential policy.

<sup>47</sup> One might wonder whether the gritty agent and the quitter ever have exactly the same evidence. Perhaps not, but the thought is rather that the very same person with a single body of evidence could either be the gritty agent or the quitter, and which way that person goes might depend in part on how she responds to that evidence.

<sup>48</sup> Intriguing questions are immediately raised about whether there is a “second-personal” space here, in which those who are partial to the agent might be permitted to respond to the evidence more like the agent herself than like the impartial bookie. We discuss this question in detail in our forthcoming paper “Believing in Others.”

<sup>49</sup> Richard Holton, “Intention as a Model for Belief,” in *Rational and Social Agency: Essays on the Philosophy of Michael Bratman*, ed. Manuel Vargas and Gideon Yaffe. (New York: Oxford University Press, 2014).

- 
- <sup>50</sup> Brian Skyrms, “Resiliency, Propensities, and Causal Necessity,” *The Journal of Philosophy* 74, no.11 (1977): 704–13.
- <sup>51</sup> In this point, we are in agreement with Marušić.
- <sup>52</sup> Doris, *Talking to Our Selves*, Chapter 6.
- <sup>53</sup> Philip Pettit, “Hope and Its Place in Mind,” *The Annals of the American Academy of Political and Social Science* 592 (2004): 152–65; Luc Bovens, “The Value of Hope,” *Philosophy and Phenomenological Research* 59, no. 3 (1999): 667–81; Adrienne Martin, *How We Hope: A Moral Psychology* (Princeton, NJ: Princeton University Press, 2013).
- <sup>54</sup> Michael Bratman, “Practical Reasoning and Acceptance in a Context,” *Mind* 101, no. 401 (1992): 1–16; Jonathan Cohen, “Belief and Acceptance,” *Mind* 98, no. 391 (1989): 367–389.
- <sup>55</sup> Ralph Wedgwood, “Outright Belief,” *Dialectica* 66, no. 3 (2012): 309–29.
- <sup>56</sup> Bratman, “Practical Reasoning in a Context” and Cohen “Belief and Acceptance.”
- <sup>57</sup> There might be situations in which it is rational to accept a proposition or theory that one assigns a relatively low probability to even when the stakes of being wrong are high – namely, when the stakes of being right are even higher. For instance, Jacob Ross argues that “in deciding what theory to accept, although we have *pro tanto* reason to prefer more probable theories to less probable ones, we also have *pro tanto* reason to prefer theories according to which the differences or dispersion among the values of our options is higher to theories according to which this dispersion is lower” (“Rejecting Ethical Deflationism,” *Ethics* 116, no. 4 (2006): 742–768, p. 758). But even if this is right, it will only apply to those cases in which succeeding in one’s chosen goal is valued far higher than succeeding at any available alternative. As we have argued, this would be to leave out important cases of grit.
- <sup>58</sup> Morton and Paul, “The Norms of Practical Reasoning,” forthcoming in *The Routledge Handbook of Practical Reason*, ed. Ruth Chang and Kurt Sylvan.
- <sup>59</sup> Morton, “Reasoning Under Scarcity.”
- <sup>60</sup> Sendhil Muillanathan and Eldar Shafir, *Scarcity: Why Having Too Little Means So Much* (New York: Henry Holt and Company, 2013).
- <sup>61</sup> Angela Duckworth, Christopher Peterson, Michael D. Matthews, and Dennis R. Kelly, “Grit: Perseverance and Passion for Long-Term Goals,” *Journal of Personality and Social Psychology* 92, no. 6 (2007): 1087–1101. There are ongoing questions about how significant this effect is; for a meta-analysis offering reasons for skepticism, see M. Credé, C. Tynan, C., and P. Harms, “Much Ado about Grit: A Meta-Analytic Synthesis of the Grit Literature,” *Journal of Personality and Social Psychology* 113, no. 3 (2017): 492–511.
- <sup>62</sup> Claude M. Steele, *Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do* (New York: W. W. Norton, 2010), 104.
- <sup>63</sup> Sherman A. James, “John Henryism and the Health of African-Americans,” *Culture, Medicine and Psychiatry* 18, no. 2 (1994): 163–82.
- <sup>64</sup> Gary G. Bennett, Marcellus M. Merritt, John J. Sollers III, Christopher L. Edwards, Keith E. Whitfield, Dwayne T. Brandon, and Reginald D. Tucker, “Stress, Coping, and Health Outcomes among African-Americans: A Review of the John Henryism Hypothesis,” *Psychology & Health* 19, no. 3 (2004): 369–83.
- <sup>65</sup> Thanks to an anonymous referee for pressing us to clarify these points.