Situationism, virtue epistemology, and self-determination theory

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Abstract Situationists (e.g., Doris in *Lack of character: personality and moral behavior*, Cambridge University Press, Cambridge, 2002; Harman in *Proc Aristot Soc* 99:315–331, 1999. <https://doi.org/10.2307/4545312>), with reference to empirical work in psychology, have called into question the predictive and explanatory power of character traits and on this basis have criticized the empirical adequacy of moral virtue. More recently, Alfano (*Philos Q* 62(247):223–249, 2012; *Character as moral fiction*, Cambridge University Press, Cambridge, 2013) has extended the situationist critique from virtue ethics to virtue epistemology. On the line he advances, virtue responsibilism—the view that intellectual character traits play an important part in traditional and untraditional epistemological inquiries—is criticized as empirically inadequate in light of the extent to which individuals are shown to be susceptible to seemingly trivial and epistemically irrelevant situational influences. Alfano’s attempted redeployment of the situationist challenge to virtue responsibilism is on closer inspection not as straightforward as he claims. It is granted that the empirical adequacy of virtue responsibilism will be eventually threatened if it can be shown that virtuous motivation is, in light of situational factors, causally ineffective. As it turns out, various psychological studies which situationists have overlooked, suggest that virtuous motivation is causally efficacious in a way that favours the position of the virtue responsibilist over the situationist. In the first part of this paper, I outline the hard core of virtue theory: both a rich motivation requirement, and a commitment to the inherent relation between virtue and a good life; then I assess whether these are undermined by situationist criticism. I address the confusion of the existing debate, and the conclusion drawn is that virtue theory ultimately remains unscathed. In the second part of my

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paper I defend the empirical adequacy of virtue theory based on self-determination theory. When we afford closer attention to studies on the orientation of our motivation, it becomes clear how the dynamics of our motivation have a tremendous influence on desirable behavioural outcomes: a good life.

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1 Introduction

Virtue ethicists believe that acquiring praiseworthy character traits like honesty and kindness is necessary if we are to flourish (e.g. Hursthouse 1999, p. 185). This position is often contrasted with other normative ethical views, in that it focuses on processes rather than consequences or rules. Recently, the notion of intellectual virtue has gained popularity in epistemology, especially with those epistemologists who regard intellectual virtues as offering new possibilities for addressing traditional epistemological problems within the theory of knowledge (e.g. Zagzebski 1996; Sosa 2007, 2010; Greco 2010, 2012).¹ The virtue-based approach in epistemology, known as virtue epistemology, is divided into two main camps: virtue reliabilism, and virtue responsibilism. Virtue reliabilists (e.g. Sosa 2010, 2015; Greco 1999, 2003, 2012) view intellectual virtues as reliable abilities or faculties, which qualify as intellectual virtues in so far as they predominantly issue epistemic goods such as knowledge, and allow one to achieve truth.² Representative examples include perception, inference, and memory. Whereas virtue responsibilists (e.g. Axtell and Carter 2008; Montmarquet 1992; Baehr 2011; Roberts and Wood 2007) regard intellectual virtues as intellectual character traits, typical examples of which include open-mindedness, intellectual courage and tenacity. Virtue responsibilists share the ideal that research on intellectual virtues will help us elucidate non-traditional epistemological problems; problems such as what kind of epistemic agents we ought to aim at becoming.³

The resurgence of virtue ethics has prompted criticism based on social psychological data. These data consist of a vast range of experimental results, which purport to show that our behaviour is influenced to a significant extent by morally irrelevant

¹ To be more precise, intellectual virtues (or, epistemic virtues) were first introduced in epistemology by Sosa (1980). In this paper, I focus on virtue responsibilism, with reference to Zagzebski's (1996) groundbreaking book on virtue responsibilism. Virtue responsibilism traces its roots earlier, to Montmarquet (1992) and Code (1987).

² Recent work by Sosa places agential virtues in the reliabilist framework (Sosa 2015). The distinction between reliabilism and responsibilism becomes ever subtler; however it is beyond the purview of this paper.

³ Virtue responsibilist Linda Zagzebski goes further, using the study of intellectual virtues to answer traditional epistemological problems such as analysis of knowledge (Zagzebski 1996).

factors.⁴ For instance, it was discovered that among bystanders hearing an epileptic seizure over earphones, subjects who believed that they were among other witnesses were less likely to seek help for the victim than were subjects who believed they were the only person in the experiment (Darley and Latane 1968). We believe it is morally right to help a person suffering from a seizure regardless of the fact there is a bystander close by. Such a factor is understood as “morally irrelevant” by the experimenters; however, that is exactly what predicted people’s subsequent moral behavior.

This group of philosophers, now known as *situationists* (e.g. Harman 1999; Doris 2002), argue that the psychological data according to which our behaviour is significantly influenced by morally irrelevant factors is incompatible with the virtue ethicist’s description of moral virtues as cross-situationally coherent character traits (also known as global traits). They appeal to psychological data in combination with a particular interpretation of virtue theory and a particular methodological constraint on ethical theorizing to support skepticism about virtue. This constraint is called *psychological realism*: the idea that ethical reflection should be “predicated on a moral psychology bearing a recognizable resemblance to actual human psychologies” (Doris 2002, p. 112). If you are a psychological realist, then your normative ethical view should be constructed on well-entrenched psychological studies.⁵ Complying with this methodology, these philosophers claim that virtue ethics is empirically inadequate.⁶ If virtue responsibilism is an epistemological counterpart of virtue ethics, then it might be thought that the situationist critique of virtue ethics naturally extends to virtue responsibilism *mutatis mutandis*: if virtue ethics is empirically inadequate in light of the psychological data, then so is virtue responsibilism. As Mark Alfano (2012) has recently argued, there are social psychological data implying epistemic virtues are rarely observed. In an experiment, subjects are asked to fix a candle to a corkboard in such a way that wax does not drip. They are given three items: a book of matches, a box of thumbtacks and a candle. Subjects who saw a comedy film or were given some candy before engaging in the task were more likely to give a proper and creative answer to the question: to empty the match box and tack it to the cork board (Isen et al. 1987). In this experiment, creative behavior was linked to mood elevators, and so our apparent intellectually virtuous behaviours are more aptly explained by situational

⁴ The representative examples of situationist data are as follows: mood effects, bystander intervention, good samaritan experiments, honesty and deception experiments in schoolchildren, Milgram experiments, and the Stanford prison experiment (Alzola 2008). See also (Darley and Batson 1973; Isen and Levin 1972; Latane and Rodin 1969; Milgram 1963; Zimbardo et al. 1973). Also, in this paper, “situationist data” includes an even wider range of experimental results from social science in general. Such data also imply our behavior is widely and easily influenced by the subtle environmental factors surrounding us.

⁵ Gilbert Harman argues against virtue ethics in a similar fashion (Harman 1999).

⁶ In this paper, I am not going against situationism *simpliciter*; rather, I aim to argue against the conclusion that the situationist data could invalidate virtue ethics. It is my view that situationist data and virtue theory are compatible.

factors than personal quality. Alfano infers from such data that virtue responsibilism is empirically inadequate.^{7,8}

Is it really the case that virtue theory—I'll use this term hereafter to refer to both responsibilist virtue epistemology and virtue ethics—is empirically inadequate? I will argue that the problem of this situationist debate lies in the fact that both camps hold different assumptions concerning the hard core of virtue theories: what makes virtue theory a virtue theory. Section 2 will address what the hard-core of virtue theory really amounts to. The hard-core involves motivational requirements and an inherent relation between virtues and a good life. Further, it is often claimed by situationists that virtue theory requires a commitment to a few theoretical assumptions such as explanatorism, egalitarianism, and consistency. They argue that situationist data invalidates these assumptions. In Sect. 3 I will discuss the existing debate over the aforementioned theoretical assumptions shared by situationists. I will show that these assumptions do not have the strong theoretical implications on the hard-core of virtue theories that situationists claim they do, as well as showing what is missing in their argument. This first part of my paper (Sects. 2 and 3) is aiming at articulating why the current debate is indecisive, and also at motivating why a further empirical data to support virtue theory is necessary. One way of doing this is to offer an empirically plausible theory supporting virtue theorists. The second part (Sect. 4, 5, 6) of my paper introduces some empirical data supporting virtue theoretical camp. One of my counter-arguments draws from recent psychological research on our motivation and passion, now known as self-determination theory. The group of psychologists working on this theory, believe that the orientation of our motivation predict and explain some dispositions of our behavior and they believe that such orientation is inherently tied to our good life. Section 4 will introduce this theory and Sects. 5 and 6 will focus on its implications for virtue theory and situationism respectively. My defense of virtue theory leads to the conclusion that virtue theorists can be psychological realists in a different way to situationists.

2 The hard core of virtue theory?

Before scrutinizing the situationist debate, some clarification on the nature of virtue would be helpful. While it is impossible to pin down the common features shared by all virtue theorists, the virtue theories developed in the past few decades share a few core ideas about the psychology of our good character and the relation between virtue

⁷ In his book, Alfano criticizes virtue responsibilism as empirically inadequate, whilst also admitting that, with the help of appropriate environmental scaffoldings, people can act according to virtues (Alfano 2013, chapter 7). I agree with that virtuous acts are facilitated and inhibited by social environments (Alfano 2014b); what I am objecting in this paper is his overly negative conclusion on intellectual virtues (inquiry responsibilism in his terminology) based on social psychological data. He takes this experiment as suggestive of how people behave under the influence of trivial and epistemically irrelevant situational factors such as mood; it shows how people tend to be swayed by emotional elevators. He generalized his critique so as to apply to various kinds of epistemic virtues, not just intellectual creativity. I explain why his objection to responsibilist epistemology is too strong, and not convincing in the later sections.

⁸ Alfano also attacks the empirical adequacy of virtue reliabilism (Alfano 2013, 2014a), but it is beyond the purview of this paper to go in depth with this debate.

to our good life. In this section I will illustrate what the hard core of virtue theory amounts to in neo-Aristotelian virtue theories, broadly construed.

Virtues are known as excellent personal character traits; they are the traits that show our values, purposes, and motivations. As Linda Zagzebski famously put: virtues are “a deep and enduring acquired excellence of a person, involving a characteristic motivation to produce a certain desired end and reliable success in bringing about that end” (1996, p. 137). This definition reveals virtues are not just behavioral patterns. One characterization shared by virtue theorists is *proper motivation*. As virtue responsibilist Jason Baehr remarks:

all intellectual virtues have in common something like a ‘love of truth’ or desire for knowledge, but that (b) each individual virtue has its own distinctive and more immediate focus or motivation—a focus or motivation on account of which it can be individuated from other intellectual virtues. But [...] the immediate focus or concern characteristic of particular intellectual virtues is ‘grounded in’ or ‘flows from’ the more basic concern with truth, knowledge, or the like. (Baehr 2013, p. 100).

For instance, in order for a subject to cultivate open-mindedness, she must be motivated by epistemic goods, e.g. knowledge. Because of this love of knowledge, the person forms an individual disposition of a cognitive detaching from a default cognitive standpoint (Baehr 2011, pp. 152–162).^{9,10} Therefore, according to virtue responsibilism, our psychological reason-responsiveness is the key for the acquisition of our intellectual virtues.

Along similar lines, virtue ethicist Rosalind Hursthouse (1999) has emphasized the importance of being appropriately motivated by goods in moral virtue acquisition.¹¹ She maintains that the virtuous choose virtuous actions for their own sake. She elaborates on this idea:

‘The virtuous agent chooses virtuous actions “for their own sake” means ‘the virtuous agent chooses virtuous actions for at least one of a certain type or range of reasons, X’, where ‘the type or range X’ is typical of, and differs according to, whichever virtue is in question. What are reasons ‘typical of’ a virtue? They will be the sorts of reasons for which someone with a particular virtue, V, will do a V act. (Hursthouse 1999, pp. 127–128).

Let us call this condition, the *motivation requirement*. Unsurprisingly, the details of how to articulate this motivation requirement vary amongst virtue theorists. Settling this issue is beyond the purview of this paper, however it is important to show some examples to see what is at issue among them.

⁹ “Love of knowledge” is here understood as a theoretical concept, rather than sheer attachment with our epistemically praiseworthy states. Our psychological states, that are being motivated by epistemic goods (knowledge, truth, wisdom, understanding, cognitive contact with reality) for their own sake, are important in a virtue epistemological light.

¹⁰ See also Carter and Gordon (2014), for further discussion of open-mindedness.

¹¹ See also Adams (2006).

First, it is helpful to describe what is *not* required by the motivation requirement. It is widely recognized that it is not necessary for the virtuous person to consciously deliberate the values of the traits in question when she acts. Virtue theorists regard such a requirement as too strong and psychologically overdemanding to be a necessary condition (Baehr 2013, p. 102). In addition, Hursthouse (1999, pp. 132–136), points out there are some cases where apparent virtuous action (actions that appear to be what a virtuous person would do in the circumstances) fail to be genuinely virtuous. This will be the case when children, severely mentally handicapped people, and also, the case of people who act with an appropriate reason for virtue, yet in an *uncharacteristic way* (not from their dispositional character, they fail to be genuinely virtuous actions because their action is not their characteristic way of life). She summarizes what it is missing in these cases, namely the agent's being "really committed" to the value of her V acts.

In relation to this point, some virtue epistemologists detail further requirements for virtue. To be genuinely virtuous, the traits in question must be *integrated into the person's character in a relatively deep, enduring, and personal way* (Baehr 2013, p. 103). Precisely, she ought to take a positive view of the trait, be aware of its value, and thus identify with the trait.¹²

One way of characterizing this integration is having a positive or negative attitude toward the actions. This last point reveals genuine virtue comes with emotional reactions. A genuinely kind person would help people in need not only because she wants to, but because she is also happy to do it. A virtuous person would be angry at unjust behavior in his society, and rightly so. The motivational requirement not only tracks the proper reasons for virtuous action, it also tracks our proper emotional reactions.

Another important point of agreement amongst virtue theorists is a broader theoretical aim. It is often claimed that virtue theory is primarily aimed at answering how one should live, in reference to virtues. Merritt believes this is the principal normative claim shared by virtue theorists:

"[Virtue theorists believe] the life that offers the surest chance of being, from the point of view of the person who lives it, a very good life, is the life of having the virtues" (Merritt 2000, p. 370).

Virtues are a necessary component for attaining the good life, and there is an inherent relation between the two. All the luck and contingency in our lives aside, from an agent's point of view, pursuing virtues is a necessary part of living a good life. This view is widespread in virtue theory broadly construed (Hursthouse 1999; Zagzebski 1996; Baehr 2011).

As we have seen, the hard core of virtue theory is to have both a rich motivation requirement, and a commitment to the inherent relation between virtue and a good life. The existing situationist debate seeks to invalidate these core commitments, both

¹² Furthermore, Baehr emphasized the importance of a person becoming the significant part of the explanation of her possession of the traits in question (Baehr 2013, p. 104). In this way, if an apparent virtuous trait T turns out to be merely infused by her community or parents, and the possession of the traits are solely explainable by these external factors, we rightly dismiss this case as not virtuous because the trait is not creditable to the person.

through appeal to the situationist data and by calling on some assumptions they believe we as virtue theorists have. In the next section, I'll address these issues and show how the situationists' argument is not convincing enough to reach their conclusion.

3 Implication of situationists arguments

According to situationists, virtue theories have the following theoretical commitments: explanatorism, egalitarianism, and consistency (Doris 2002; Alfano 2013). It is true, as the situationist presents, that these three theoretical commitments make virtue theorists extremely vulnerable to situationist attack; however, it is not clear if virtue theorists are in fact agreed upon these commitments, nor if such commitments necessarily follow from the hard core of virtue theory. In this section, I will give a closer inspection of each commitment, with some commitments shown to be overly restrictive.

3.1 Explanatorism

What sort of roles are virtues supposed to serve in virtue theories? Alfano emphasizes that the apparent advantage of virtue ethics is its “empirically adequate moral psychology” (Alfano 2012, p. 231). Situationists maintain that virtues are supposed to play an important part in the explanation and prediction of human behaviour. As Doris puts it:

Attributing a quality of character invokes a depiction of behaviour and psychology: The brave person acts distinctively, with distinctive motives, affects, and cognitions. Attributions also underwrite explanation and prediction: Knowing something about a person's character is supposed to render their behaviour intelligible and help observers determine what behaviours to expect (Doris 2002, p. 5).

Let us call this view *explanatorism*: virtues are supposed to serve as an explanation and prediction of our behaviour. The above line of reasoning, together with the psychological data introduced earlier, can be reconstructed in the following manner.¹³

1. Virtue theory is correct only if virtue is to serve as the primary explanation and prediction of human behaviour in general;
2. Social psychology gives us a genuine explanation and prediction of our behaviour in general, which is not compatible with the properties involved in virtue;
3. Thus, it is not the case that virtue theory is correct.

It is true that the psychological data implies the general dispositions of people's behavior, and, as a result, our behaviour might be more aptly explained and predicted by situational factors than by appealing to virtue theory. To put this differently, situationists believe that, according to the virtue theorist, virtues are supposed to explain and predict general human behaviour.

¹³ Alfano also made this explicit: “Extrapolating, I will suggest that if similar arguments apply to the other global virtues, then much of our epistemic conduct can be explained without reference to such dispositions. If this is right, inquiry responsibilism cannot claim empirical adequacy” (Alfano 2012, p. 241).

Virtue theorists could answer such a worry in two ways: first, the simple response would be to claim that virtue theory has a different theoretical target than situationists have demonstrated. Virtues are aiming at describing and predicting the behavior of those who are admirable, but not normal human beings. However, the actions and life of the virtuous can tell us something about the non-virtuous (e.g. what non-virtuous ought to look into.) So, in this sense, predictions and explanations of non-virtuous people is what this theory is trying to achieve. Virtues explain the dispositions of the virtuous; they give us some understanding of why a virtuous agent would behave in a certain way in a certain situation, or why a non-virtuous agent ought to act in a certain way, in a certain situation. Explaining virtuous behaviour through virtue is compatible with most of us not exhibiting this behaviour.

Situationists might not be convinced by such simple reply. They emphasized the fact virtues and virtue-related terms are widespread in our languages, and we do have practices of praising and blaming normal people with such terms. Hence, based on situationist findings, they claim our conducts of virtue and vice attribution are systematic errors (because in many cases where we make such attribution, it is situational factor that primarily explains our behavior, not our character traits). And from such errors, situationists think we ought to disregard the virtue paradigm all together. The problem of this kind of criticism is that there is a huge gap between the ideas that our moral practice is in error and that the moral theory is in error. What situationists have so far demonstrated is support for the former, not the latter.

Secondly, the sort of explanatory and predictive power at issue is very short-sighted; research focuses on our immediate behavior influenced by the environment close to it. It is underdeveloped if virtues have explanatory and predictive power in a long run. If the hard core of virtue psychology was shown to make a difference in people's behaviour, the strength of the situationist critique regarding explanatorism would be substantially weakened. I will revisit this point in the second half of my paper.

3.2 Egalitarianism

Closely related to explanatorism, is a view called *egalitarianism*, which is the thesis that virtues are instantiated by many ordinary people (Doris 2002). According to the characterization of virtue theory offered by Alfano, egalitarianism is widespread among virtue theorists (Alfano 2011, 2012, 2013). This point, I believe, is doubtful, and so suggests an uncharitable reading of virtue theory on behalf of the situationist. Egalitarianism is not necessary for the hard-core of Virtue Theory; and virtue as an ideal does not suffer from the problems posed by situationists.

The first problem related to the egalitarianism assumption relates to the difficulties of virtue acquisition. It is hard to deny the difficulties of virtue cultivation. Prominent virtue theorists have in various places explicitly conceded that genuine virtue is hard to come by. On this point, Aristotle first noted that becoming genuinely virtuous is extremely difficult (NE 1106b; 1109b). Heather Battaly also summarized that the egalitarian view is not at all widespread among virtue epistemologists (Battaly 2008, p. 660).

Being egalitarian in Alfano's sense may not be necessary for advocating virtue theory; we could maintain the hard core of virtue theory without committing to egali-

tarianism. A representative case by Zagzebski is *exemplarist virtue theory*. According to this paradigm, virtues are assumed to be possessed by a few exemplars in a society, and individuals refer to these exemplars when they emulate virtues. (It is even possible for a fictional character to take this role.) (Zagzebski 2010). It may be true that some virtue theorists take for granted that virtue is realized often by normal individuals [such as MacIntyre (1981)]; but it is entirely within the purview of available options for a virtue theorist to simply revise, rather than abandon, this theory in the face of situationist critique.

Given that virtue possession is a matter of degree, it is possible to hold simultaneously that genuine virtue is hard to come by and that virtue is at least *partly* instantiated by some ordinary people. This moderate view is compatible with Alfano and Doris' supposition. It is far from clear that virtue theorists should be understood as egalitarian in Alfano's sense.¹⁴

The second problem with the egalitarian assumption can be subsumed under a more general and typical reply on behalf of the virtue theorist camp; which is that virtues are what we should aim at, or our ideals, not what we usually achieve. Doris and Alfano are skeptical about this style of reply.

Alfano questions the adequacy of virtue theory by making reference to the ought-can implication. He maintains, "if virtue is rare and exceedingly difficult to attain, it might be that they[people] really cannot" (Alfano 2014a, p. 108). According to Sreenivasan, there is a way we could understand the hidden assumption of situationism, which is as follows: "an ideal of virtuous character has normative purchase only if it is easy for the average human being to acquire the relevant character trait" (Sreenivasan 2013, p. 297). It is not clear why situationists hold this hidden assumption, and situationists need further supports to make this case.

This hidden assumption turns out to be even more questionable, when we realize being virtuous and acquiring virtue are two distinct processes, which need distinct attention. The acquiring process is generally regarded to be as important as the acquired state in virtue theory; consider that virtues are often described as *habituated* character traits. It is articulated that virtue is an acquired trait as opposed to an innate ability (Baehr 2011; Zagzebski 1996). In the situationist debate, the static side of virtue has been at the heart of the argument. It remains mysterious as to how situationist data mostly showing that "we are not virtuous" could invalidate the cultivation of virtues; in other words, the empirical inadequacy of striving for virtues is yet to be achieved.

It is true that virtues are exceedingly difficult to attain, and that this appears to contradict the ought-can implication. This is however, a common predicament shared by any normative theory; it is also exceedingly difficult to comply with what consequentialist or deontic ethicists tell you to do. In so far as the criticism at issue is just an expression

¹⁴ King recently explicitly opposes the situationist conclusion by proposing that "even in some of the most 'situationist-friendly' studies, 13–20% of the subjects were reported to exhibit the relevant behaviour. If we take the studies at face value, and their results as representative of the population at large, there may still be hundreds of millions of people who exhibit responsibilist virtues" (King 2014, p. 252). If virtue theories describe the properties of the disposition of those 13–20% of human beings, there is no reason to doubt that the descriptions might help the rest of us who are striving for virtues. The more precise descriptions of virtues we find, the better the possibilities of appreciating those virtues. Thus we might be able to encourage further investigation on virtues, rather than giving up on this endeavor.

of this ubiquitous kind of pessimism, it is not a serious worry for the virtue theorist in particular that virtue theory falls prey to a general skepticism about moral theory.¹⁵

Related to this point, another situationist Doris (2002: Chap. 6–7) would argue that virtue as a deliberate ideal is not a welcoming revision for virtue theorists because it would undermine the advantages of virtue theory over other normative ethical theories. This problem is called “theoretical mediation”. Doris states:

“worries about theoretical mediation” (see Railton 1984) are reintroduced on the idealized conception. One attraction of character-based approaches is that they appear to escape worries about what we might call the “creepiness” of theory-driven moral reflection; the decreased authenticity and increased alienation that are supposed to afflict theoretical approaches to morality (Doris 2002, p. 152)

Fair enough, if virtue theory falls back to deliberate ideal, and requires people to reflect on a virtuous exemplar when they behave, then it reintroduces the problem of theoretical mediation other normative ethics have suffered from. As Stocker famously noted, visiting a friend in hospital because it is your duty does not sound quite right (Stocker 1976); as does the case in which you visit because that is what morally virtuous people would do.

This criticism is, on closer inspection, not entirely clear. It involves another hidden assumption: if virtue is an idealized concept, virtue would be only acquired through deliberation on the theory. Remember here that virtue involves both cognitive and emotional factors. In a recent paper, virtue epistemologist Battaly introduced an “emotional contagion” as the key phenomena in rehabilitating our vices (Battaly 2016). Emotional contagion is an involuntary non-cognitive process that enables us to catch emotions from other people. Her suggestion is to put vicious people in a friendly environment so that they can catch the virtuous emotions of exemplars via contagion. Her suggestion of rehabilitating vicious people through the emotional (anti-intellectual) part of virtue is illuminating; it implies many options are available in our virtue cultivation. It is entirely within the purview of virtue theory to start cultivating virtue in a non-cognitive way, as well as to simultaneously pursue virtue as an ideal in a cognitive way. The strength of the argument of theoretical mediation is much weaker than Doris has assumed.

3.3 Consistency

It is assumed by situationists that virtuous people respond the same way whenever they have the same reason (Alfano 2012, p. 230).¹⁶ As we have addressed earlier, this point is widely agreed upon by virtue theorists. However, the situationist position on this issue has not been sufficiently addressed, which has caused tremendous confusion

¹⁵ This is, in fact, similar to a famous objection to utilitarianism known as the demandingness objection: that it is too demanding by Bernard Williams (Williams 1985). See also Singer (1972).

¹⁶ As a part of criticism on the consistency of virtues, it could be argued that virtue theorists admit of the unity of Virtue. In believing this, Doris states that the virtue theorists commit to an evaluative integration (Doris 2002, pp. 20–22). However, the unity thesis is a highly controversial claim that not every virtue ethicist advocates. I do not go into this debate here, as I believe it is entirely within the purview of available options for a virtue theorist to simply abandon it (Sreenivasan 2009).

in the debate. The situationists' statement that virtue ethics is empirically invalidated was based on the data showing many people do not act morally in a cross-situationally consistent way (e.g. Doris 2002; Sreenivasan 2002, 2008; Webber 2006). Much of the discussion over the consistency of our behaviour was about the interpretations of situationist data, such as whether those situationist data with one-time performance are sufficient for the claim that there is no such thing as cross-situational character traits (Sreenivasan 2008, 2013).

Yet not enough attention has been paid to the theoretically rich notion of the motivation requirement of virtues. Though behavioral consistency is important even among virtue theorists, the stronger emphasis is rather put on the fact that virtuous people choose their acts for the right reasons and hence, they act consistently. In such a framework, consistent actions are only the result of the reason-responsiveness of the virtuous. Whether the situationist empirical data on our actions reveals the empirical inadequacy of virtues is, on closer inspection, not as clear as it appears, because they always suffer from a "masking problem". Sreenivasan points this out through reference to classic situationist experiments on honesty conducted by Hartshorne and May (1928). He argues, students in these experiments were given multiple "honesty-related" tests. Two actions were fixed as cases of dishonest behaviour by the experimenter: taking change left on the table in an empty classroom, and a situation presenting an opportunity to make a false report. However, in laying out the concrete situations, reasons for action can be masked: it might have been the case that some people had a policy of "finders keepers" in the former scenario, and that making a false report could serve to prevent another child from getting into trouble in the latter. In which cases, subjects are not necessarily agreed that the situations are "honesty eliciting" (Sreenivasan 2013, pp. 301–303).

If showing the empirical inadequacy of virtue theory is what situationists are ultimately trying to achieve, the fruitful outcome should come from the empirical study of our reason-responsiveness, rather than from single-pass behavioural differences.¹⁷ In saying this, I do not disagree with situationists in that situationist data implies that the majority of us are not acting morally in certain situations. Rather, what I would like to emphasize is that these data remain ambiguous due to the nature of the empirical setting; it is always open for virtue theorists to interpret the study charitably, thereby making the debate indecisive.

In sum, the situationist's criticism of the empirical adequacy of virtue was based on an uncharitable reading of virtue theory. Egalitarianism is not a necessary component of advocating virtue theory and it is not entirely clear explanatorism is shown to be threatening for virtue theorists. It is true that people behave morally and epistemically in a non cross-situationally consistent way, but it is yet to be shown how this fact undermines the validity of the process of acquiring virtues.

The first part of my paper has shown that the situationist debate is perplexed due to the ambiguity of interpretation and theoretical implication of the data, as well as strong

¹⁷ Candace Upton also identifies this problem when she writes: "empirical research would have to establish either that most humans are not in a virtuous frame of mind, or that while many humans are in a virtuous frame of mind, they also possess additional adverse mental features that would preclude their virtuous behavior" (Upton 2009, p. 182).

assumptions of virtue theory by situationists. It is also true that there was no positive empirical data from the virtue theorists; all we could hope for from them was the reinterpretation of situationists' data and arguments, making the whole debate indecisive, at best. In the second part of my paper, I will introduce some recent developmental psychology as support for the empirical adequacy of virtue theory.¹⁸

4 Self-determination theory

We have seen in the earlier section that the proper motivation is widely accepted as a necessary condition of virtue. What virtue theorists need is empirical support for such a commitment: namely that character traits are responsive to our motivation. If it turns out that our motivation is causally ineffective in our character cultivation, then this accordingly counts against the empirical adequacy of virtue theory.

An important question becomes: how has it been proven that we form our dispositions based on our motivations? Many virtue theorists implicitly take this as a prerequisite for their theory. However, if it is not feasible to show that this is the case on any justificatory ground, then an important assumption of the view is mistaken. In this section, empirical support for this assumption of virtue theory will be introduced, and in particular, I will engage with the psychological study of our motivation.

The series of works on self-determination theory (henceforth, SDT; also known as the study of intrinsic/extrinsic motivation) initiated by Ryan and Deci (e.g. Ryan and Deci 2000), suggests that it is not the quantity or magnitude of our motivation, but the quality of motivation which matters with respect to predicting action and the outcome of our behaviour. This quality of motivation is more commonly identified as the orientation of our motivation. The most basic distinction made with regards to the orientation of our motivation is between *intrinsic* and *extrinsic* motivations. Intrinsic motivation is motivation to do something because it is inherently interesting or enjoyable, whereas extrinsic motivation is motivation to do something because it leads to some further desirable outcome. SDT proposes that our performances are significantly enhanced when intrinsically rather than merely extrinsically motivated (Ryan and Deci 2000).

Already, in the early stages of motivation studies, the empirical results indicated that those who are extrinsically motivated to solve certain puzzles (e.g. under the threat of punishment, or having the payment of money contingent upon their performances), are less likely to perform puzzle solving activity than subjects who solved the same puzzles

¹⁸ There is also a situationist debate over the Big Five: five scores (openness, conscientiousness, extraversion, agreeableness, and neuroticism) that are given to us that tell us a great deal about the ways we behave through our lives (Nettle 2007). (See also, Judge et al. 1999; Mendiburo-Seguel et al. 2015). Miller argues the Big Five contradicts virtue theory because those personality traits implied by the data are relatively fixed, tied to our genetic makeup, and variations in traits are produced as a result of natural selection (Nettle 2006; Cravchik and Goldman 2000), hence, such traits are not suitable for our ethical evaluation as virtue theorist assume (Miller 2014). While settling this ongoing debate is beyond the purview of this paper, even if we are born with natural temperaments, based on such temperaments, the actual behaviours are up to us. Outlets of our actual behaviours, together with our goals and values in life is what matters when we judge ourselves to be morally, or epistemically, praiseworthy, and this crucial part of virtue theory seems unscathed in the face of their critique (See also, Nettle 2007).

without threats or rewards but who were motivated by pure interest in its activity (Deci 1972, p. 220). According to Deci, when subjects are extrinsically motivated, their interest in the activity (the inclination of engagement of the activity) is diminished.

A more recent study on the orientation of our motivation indicates that extrinsic motivations can issue very different results depending on how far the motivation for one's behaviour emanates from one's self.¹⁹ For instance, when an individual has identified the importance of the activity, integrating this importance fully to herself, this type of extrinsic motivation is called *integration*. And integration together with intrinsic motivation, are grouped as “*autonomous*”, “*self-determined*” motivation. Empirical studies have shown that the qualitative differences between the extrinsic motivations also explain the different outcomes of extrinsically motivated behaviour.

The latest study on SDT extends to our passion. Vallerand defines passion as a strong inclination toward a self-defining activity that one likes, finds important and meaningful, and in which one invests time and energy (Vallerand et al. 2003, p. 757). In this paradigm, researchers found that our passion could be shaped into different forms. One of these forms is called harmonious passion; it results from an autonomous internalization of the activity into the person's identity and self (Vallerand 2012, pp. 47–48). According to Vallerand, the difference between self-determined motivation and harmonious passion comes down to how the activity is self-defining. Passion is directed particularly towards identity-defining activities such as professional sports and music (Bonneville-Roussy et al. 2011; Vallerand et al. 2008), while self-determined motivation is not.

Empirical results suggest that when people have a harmonious passion toward certain activities, they are more inclined to achieve high-level performances. Bonneville-Roussy conducted a study on 187 professional musicians, mostly from Canada and America (Bonneville-Roussy et al. 2011). The subjects answered a questionnaire to determine if their passion toward music is harmonious (e.g. “playing my instrument is in harmony with the other activities in my life”) or not (e.g. “I have difficulties controlling my urge to play my instrument”). They were also asked what their goals of engagement in playing an instrument are (“e.g. it is important for me to develop my skills as thoroughly as possible”), and how often they deliberately practice (e.g. “when I do my practice, I slowly repeat difficult excerpts”). The results were astounding; musicians with harmonious passion were more inclined to have a goal of improving their ability and master new skills (mastery goals). Such goals were associated with the type of training in which the explicit aim is to improve performance, such as repeating the difficult part of the song (deliberate practice), and, such training predicted the numbers

¹⁹ It is known that external motivation constitutes five different kinds: *amotivation*, the state of lacking intention to act; *external regulation*, behaviours performed to satisfy an external demand or to obtain an externally imposed reward; *introjection*, behaviours with a type of internal regulation yet quite controlling—performing actions upon feeling the pressure to avoid guilt or anxiety, or to attain ego-enhancement or pride; *identification*, behaviours in which a person has identified with its personal importance and has accepted its regulation as being his or her own; and *integration*: behaviours in which identified regulations have been fully assimilated to the self (Ryan and Deci 2000, pp. 61–62).

of solo concerts given by the subjects, which implied a higher level of performance.²⁰ Generally put, harmonious passion leads to mastery goals: people aim to learn and eventually master new skills. Mastery goals then predict deliberate practices, which are positively associated with higher performance over time (Vallerand 2012, p. 49).²¹

What this suggests is that SDT has theoretical implications which support the motivational requirement of virtue theory. The experiments designed and conducted on SDT are feasible only if it is possible that our behavioural outcomes change in a way that is sensitive to the orientation of our motivation. In other words, it shows our behaviour is influenced in a systematic way by our evaluations of our activities. SDT shows that our motivation plays an important explanatory and predictive role in terms of our behavior. As Vallerand states: “motivational process matter greatly with respect to living a meaningful life (Vallerand 2012, p. 49)”.

It is our behaviours, and the dispositions of our behaviours, that are significantly affected by the orientation of our motivation. The fruitful results of the SDT research paradigm are suggestive of empirical support for the motivational requirement. The relation between the two theories will be addressed in more detail in the next section.

5 SDT and virtue theory

In this section, theoretical implications of SDT for virtue theory will be addressed. Both SDT and virtue theory are theories of meaningful life. There is strong empirical support for SDT that also lends weight to virtue theory. The SDT research programme has produced data showing self-determined agents experience high performance in important domains of our life. In the last part of this section, some critical evaluation of SDT will be also provided.

5.1 SDT as a formal theory of good life

First, it should be noted that the structural similarity between SDT and virtue theory is beyond appearance. Ryan et al. (2008) have explicitly noticed the intimate relationship between SDT and Aristotelian ethics (eudemonism), and they accordingly depict SDT as *a formal theory of eudaimonia*. They maintain:

“[Many of the] elements in Aristotle’s conception of eudaimonia [living well, being actively engaged in excellent activity, reflectively making decisions, and behaving voluntarily toward ends that represent the realization of our highest human natures] are at the core of self-determination theory’s (SDT’s) conceptions of wellness. (Ryan et al. 2008, pp. 145–147).”

²⁰ In order to avoid the performance variable being solely a reflection of the number of years of music involvement, the numbers of concerts given by participants was divided by the numbers of years of experience (Bonneville-Roussy et al. 2011, p. 130).

²¹ Obsessive passion predicts mixed achievement processes; some are adaptive and others are maladaptive (Vallerand 2012).

Therefore, SDT is trying to construct an empirical theory of eudaimonia. The connection between virtue theory and SDT I have proposed is not just superficial, but rather embedded in the SDT framework.²² As addressed in the first section, the hard core of virtue theory was the shared belief that virtue is necessary for leading a good life; this inherent relation between virtue and a good life is also found in SDT. This implies the more positive outcomes we obtain from SDT, the more likely that virtue theoretical assumptions are shown to be on the right track.

Secondly, as a formal theory of eudaimonia, SDT places a focus on subjects who engage in desirable behaviours in a variety of contexts. SDT is applied to domains such as sports, subjective-wellbeing, healthcare, and education (Ryan and Deci 2000).²³ The importance of achievement in these domains is commonly acknowledged. Here education is particularly salient. The SDT literature on education suggests the virtue acquisition process (cultivation of certain attitudes, abilities, dispositions and motivations) is one that runs parallel to education. Virtue acquisition is comprised of the cultivation of various abilities, and education shares this ideology.²⁴ Moreover, our understanding of successful or ideal agents in education is commonly shared, with less controversy compared to other domains, such as morality. In terms of morality, what moral success consists of is itself a central topic in theoretical ethics, and ethicists do not always agree on this matter. However, it is less problematic to talk about educational success; denying the idea that success in education contributes towards our meaningful life is especially controversial in the modern world.

According to the studies on SDT and its application to education, students who are regulated by autonomous motivations (i.e., intrinsic and integrated) are more likely to experience positive consequences at school (Guay et al. 2008, p. 234).²⁵ That is, “doing school activities out of choice and/or pleasure will produce higher levels of achievement than engaging in school activities for external reasons and/or internal pressure” (Guay and Vallerand 1996, p. 225). Self-determined motivation predicts students’ persistence in high school and college. In one study, students answered a questionnaire on educational activities during the semester in the class, and the motivational profiles of those who dropped out of the course were assessed at the end of semester. Students whose answers indicated they were intrinsically motivated to study were less likely to have dropped out of high school (Vallerand and Blssonnette 1992; Vallerand et al. 1997).²⁶

²² This point implies the possibility that SDT might be able to shed some theoretical light on virtue theory, especially on the nature of the motivational requirement; and that virtue epistemology can in turn suggest that moral goods and epistemic goods might be truly worthwhile and are of inherent or intrinsic human worth. In future research, virtue theory will go hand in hand with SDT.

²³ Intrinsic motivation and harmonious passion is known to predict subjective well-being and good mental health (Niemiec and Ryan 2009).

²⁴ For instance, Pritchard makes it explicit that our educational goal is not just the acquisition of knowledge, but rather the cultivation of students’ understanding. Understanding in this sense demands an elevated level of ability (Pritchard 2013).

²⁵ These consequences can take different forms: behavioural, cognitive, or affective (Guay et al. 2008).

²⁶ It has also been shown that autonomous motivation predicted greater achievement in education over a one-year period (Guay and Vallerand 1996). Note that this finding is a long term experiment and thus implies the orientation of our motivation influences not only our single actions, but our behavioural dispositions.

Another connected and interesting result involves creativity. According to psychologists, creativity involves the development of a novel product, idea, or solution to a problem that is of value to the individual and/or the larger social group (Hennessey and Amabile 2010). A classic study conducted by Amabile suggests subjects who have intrinsic motivations for writing poems were found to be more creative than their extrinsically motivated counterparts (Amabile 1985). In more recent studies on identified (self-determined) motivation and creativity, undergraduate students in social science courses were asked to join an experiment. They first answered a questionnaire on the importance of various values as a guiding principle in their lives; subsequently, they participated in creativity-relevant tasks (math, art, and verbal). In an artistic task, participants were given 10 min to create small drawings with the following titles (e.g. circle, rectangle, person, and motion). Some undergraduate research assistants were trained as judges. Judges were instructed to employ their own subjective understanding of creativity to rate each product relative to the others. They used a rating scale ranging from not at all creative to highly creative. For the titles such as “circle” and “triangle,” many participants drew the shapes in a straightforward manner; however, other participants created drawings that displayed alternative, nongeometric interpretations (e.g., a circle of friends, a relationship triangle). This demonstrated an unusual perspective on the shapes, and such drawings were evaluated as creative by the judges. This study showed that subjects who held an identified motivation toward the value of creativity were judged to be more creative in the subsequent task (Kasof et al. 2007). It is striking that our creative behaviour is observed by agents with autonomous orientation of motivation, because, as we have addressed earlier, creativity is one of the intellectual virtues Alfano has shown to be explained and predicted by situational factors (Alfano 2012, p. 235). Here, the SDT data casts doubt on the situationists’ overly strong and negative conclusion, implying that our virtue could explain and predict our behavior in a different way from situationist on the same phenomena.

Another empirical result comes from a study on our passion. Young competitive water-polo and synchronized swimming athletes were asked to join an experiment (Vallerand et al. 2008). These athletes were high-level performers; at the time of this study, they had been engaged in their sport very seriously.²⁷ These swimmers answered a questionnaire at the beginning of the season (Time 1). This assessment examined their passion, measuring their agreement with statements such as “synchronized swimming is in harmony with other activities in my life”.²⁸ Swimmers were also asked about their goals of engagement in the sport (e.g. “It is important to develop my skills as thoroughly as possible this season”). Four months later (Time 2), swimmers were asked how much they engaged in individual deliberate practices such as the exercise of concentration and reflection to have a better control during the game. Finally, at the end of the season (Time 3), their coaches assessed and answered a questionnaire on the performance of individual players relative to others. They were asked to answer

²⁷ According to the researcher, the subjects had played the sport an average of 5.21 years, 4.73 times per week, each time for an average of 110.32 min.

²⁸ At time 1, assessment was also conducted on their life satisfaction (e.g. Swimmers were asked if “I’m satisfied with my life”). And as expected, the harmonious passion predicted the higher subjective well-being among swimmers.

questions such as, “Since the beginning of the season, compared to the other athletes of his or her age, this athlete has been performing well under pressure”. The results indicated that swimmers who believed playing their sport (e.g., water-polo) was in harmony with other activities in their life, tended to believe it was important to develop their skills as thoroughly as possible during the season. Further, this goal correlated with the swimmer undertaking additional practice independent of the supervision of their coaches. Swimmers who engaged in deliberate practices were more likely to be judged as having better performed by their coaches at the end of the season. The researchers maintain that by holding harmonious passion, these swimmers did not experience the need to compare themselves to others, and did not have internal or external pressure to practice, known as maladaptive for high-quality performances (Vallerand et al. 2008).

Thus, SDT has shown that the orientation of our motivation has a strong influence on the achievement of desirable educational goals. This is relevant to virtue epistemology. Responsibilist virtue epistemologists ask what is necessary for individuals to become responsible, intellectual agents. They submit that this is achievable via the cultivation of intellectual virtues. In essence, as we have already seen in the second section, this is best attained when we are *motivated* by epistemic goods for their own sake. In other words, cultivating individual character traits derived from these motivations is equivalent to internalizing the value of the activity to the self. These conditions, imposed upon us, have significant overlap with the motivational structure of agents with autonomous motivation and harmonious passion who are led to desirable outcomes in SDT research. We have already seen that students with desirable educational outcomes tend to be motivated by educational activities in themselves, or that they have internalized educational values. In so doing, they de facto meet the conditions imposed upon us by virtue epistemologists to be responsible inquirers. Thus, it can be inferred that these empirical findings support in an important respect the adequacy of the empirical component of (intellectual) virtues.

5.2 Some critical evaluation of SDT

I should also raise some critical awareness of the problems on the current framework of SDT for facilitating future research between SDT and virtue theory.

First, one might be skeptical about the empirical validity of first-person data such as first person reports of motivational profile and deliberate practice in SDT. Due to the nature of the SDT, it is inevitable that people’s motivational orientations are based on first-person introspective reports (e.g. answering questionnaires). One might also worry that such reports might not accurately represent people’s internal state. Such a worry often comes from a position that introspective reports are private rather than public, and that science should be carried out with public method. However, Piccinini points out that a scientific method is public if and only if, any investigator can apply the method to the same questions, and that the method generates the same results regardless of who is applying it (Piccinini 2003b). He goes on to say that introspective reports accord with these methods, as “psychologists do not ask introspecting subjects to collect data by introspecting; rather, they record the subjects’ reports, and

then the psychologists themselves extract data from those reports by following public procedures that are analogous to those followed by other scientists in generating their results” (Piccinini 2003b, p. 609).²⁹ Moreover, even some situationist data includes introspective reports as part of their experiments. In the infamous Samaritan experiment, subjects were asked to complete a questionnaire on their religiosity (Darley and Batson 1973). While there might be room for improvement in experimental settings in the future, in the current debate, experiments including introspective reports do not seem to undermine the legitimacy of arguments.

My second worry for the current SDT program is a possible oversimplification of our motivational orientation. It seems a perfectly feasible explanation that a person could be motivated to swim because it is inherently interesting as well as out of concern for her health. In SDT our motivational profile is pushed into one category among a few different profiles, and it remains unexplained why two motivational profiles never coexist.

Related to this point, it appears there is an important dissimilarity between SDT and virtue theory. The lack of a developmental sequence in the internalization of the value of an activity in SDT framework might worry virtue theorists. It is a necessary part of the cultivation of virtue, that the value of a worthwhile activity is integrated into the self. A non-virtuous agent learns and gradually integrates the value of an activity into their self, and finds their activity pleasurable. Whereas SDT seems open to the possibility of us being natural-born moral saints, or natural-born epistemic sages. The problem lies in the current model in that it is a theoretically feasible option on SDT for a person to be intrinsically motivated towards an activity without the value of the activity being integrated whilst pursuing a meaningful life. In the standard Aristotelian model, both motivational profiles are vitally important in acquiring virtues. Virtue acquisition requires an agent to both be intrinsically motivated towards moral and epistemic activity, as well as integrating the value of activity into their self.

In this section, I have addressed some theoretical implications of SDT. SDT, as a formal theory of a good life, has an intrinsic connection with virtue theory. It is more than a superficial resemblance. As a theory of a good life, SDT has shown our motivational profile has a big explanatory and predictive role in worthy activities such as education. It is also worthwhile to note there are some worries in an SDT framework and a potential dissimilarity between SDT and virtue theory for the future development of this research. In the last section, further implications of SDT and situationism will be addressed.

6 SDT and situationism

In this last section, I want to touch upon the relationship between situational factors and SDT. According to researchers, SDT can accommodate some situational factors as facilitating our autonomous motivation. This leads to a problem concerning the

²⁹ This is an ongoing debate in philosophy of science. See also Dennett (1991), and Piccinini (2003a, b, 2010).

causation of our actions. If the orientation of our motivation plays some important role in the cause of our actions, SDT warrants attention equal to situationism.

Deci and Ryan (1985) have identified three basic needs bearing on the development of internalized motivation: autonomy, competence, and relatedness.³⁰ Psychologists working on SDT investigate the factors that enhance these human needs. Many such factors are situational, in the sense that they come from outside of our body; in this respect, situational factors constitute an indispensable part of the SDT research programme. For instance, college students are known to be more prone to having autonomous motivation to learn than high school students (Ratelle et al. 2007; Guay et al. 2008). Guay maintains that the educational setting in college has lesser constraints compared to high school and this situational factor influences student motivation towards learning. This finding implies that students' motivational profiles are context sensitive. Furthermore, autonomy and a relatedness supportive environment for students (e.g. supportive parents) have been shown to predict students' intrinsic/extrinsic goal outcomes (Kasser et al. 1995).³¹

Situationists might at this point reply by insisting that situational factors bring out the behavioural outcome but not our motivations. While SDT researchers investigate situational factors influencing our behaviour, it is important to note that they never explain data away by appealing to sheer situational factors. Beachboard et al. write, "SDT hypothesizes that environments that support perceptions of social relatedness improve motivation, thereby positively influencing learning behavior" (Beachboard et al. 2011, p. 853). Notice here that it is alleged that situational factors do not cause our behaviour but rather influence human behaviour via motivation.

The situationist, at this juncture, might attempt to dispute the above causal claim, which raises a more general and difficult question of causation. What is the cause of action, constitutes a devastating philosophical problem and it is beyond the purview of this paper to settle such a question; however, one prominent line, which accounts for how one event causes the other (e.g. a short-circuit causes a fire), is Mackie's much discussed INUS conditions³²:

"the so-called cause[short-circuit] is, and is known to be, an insufficient but necessary part of a condition which is itself unnecessary but sufficient for the result[fire]. [...] I suggest that when we speak of the cause of some particular event, it is often a condition of this sort that we have in mind (Mackie 1965, p. 245)"

³⁰ Researchers of SDT not only find superficial differences between the consequences of autonomous and non-autonomous motivation, they also investigate why it turns out like this. According to their findings, human beings have three basic psychological needs (autonomy, competence, and relatedness) and intrinsic motivations are more likely to lead to desirable behavioural outcomes than extrinsic motivations due to the fact that they are mediated through fulfillment of these psychological needs.

³¹ A similar finding is reproduced in the study of our motivation (Mageau and Vallerand 2003), also in the study of passion. When coaches are autonomy supportive, athletes tend to have harmonious passion rather than obsessive passion (Mageau et al. 2009).

³² The nature of causation is an ongoing debate and some might not agree with the INUS condition (See for instance, Contrasted view: Northcott 2008) however, it is beyond the purview of this paper to go in depth with this debate.

According to this view, a fire could be set with malicious intent by an arsonist, but this fact does not hinder a short-circuit from being the cause of the fire at issue. Thus the INUS condition observes a short-circuit as a primary cause of fire. Along the same line, I take it that psychologists understand our proper motivation as an insufficient but necessary part of a condition which itself is unnecessary but sufficient for our desirable behavioural outcomes, such as high quality performance in music and swimming, and school persistence in education. It is true that such outcomes might in some cases be produced in the absence of good motivation (or even with vicious motivation); however, just like the fire might have been caused by arson, or someone forgetting to put out a cigarette, this itself has nothing to do with the fact that virtuous motivation can take a necessary and important causal role in producing the same kind of outcome in different cases.³³

To be clear, I am happy to accept the fact that situational factors can constitute INUS conditions in some circumstances where our desirable epistemic behaviours are observed. If, however, the situationist intends to show the empirical inadequacy of the assumptions of virtue theory based on their best data, situational factors (but not our motivations) must have played the role of the INUS condition in every case or at least in a significant part of our life. At least, they should convince us that situational factors are the causes of the event in most cases rather than our orientation of motivation. Put another way, the situationist ought to show us that motivation could not take a role of an INUS condition in many occasion. Nevertheless the situationists' alleged conclusion has this implication, and it is far from clear how this argument would succeed.

Here the problem lies with what constitutes the primary explanation of our behavior. According to the situationist, it is the situational factor that most aptly explains and predicts our subsequent moral and epistemic behavior. For instance, in a situationist experiment, subjects who found a dime placed in a phone booth, subsequently helped a person in need (also a staged part of the experiment). As the situationist explains it, the situational factor (i.e. finding the dime) causes one to perform the helpful act in the test, not our morally-relevant motivation. On the other hand, according to the SDT framework, our motivational orientation is the factor in the experiment aptly explaining and predicting our behaviour. On closer inspection, the situationist and SDT research programmes are similar in experimental design. Yet based on experiments from each side, their argument appeals to the factor they are correlating with the result. Finding a dime was the factor in the former case, and having autonomous motivation played the same role in the latter case. If situationists want to keep being skeptical about the results of the experiments proposed by SDT framework, they need further arguments as to why they think so, in the face of the structural similarity of their experiments.

We have addressed even some situationists elements that could be integrated into this SDT framework. The decades long studies of SDT indicate that our motivational orientation has genuine explanatory and predictive power. Situationists might be skept-

³³ Some philosophers have criticized responsibilist virtue epistemology in this vein, insisting that many responsibilist intellectual virtues are auxiliary, but not constitutive of knowledge (Sosa 2015). Sosa's point is only convincing if we restrict our epistemological interest only to knowledge; however, some apparent auxiliary virtues might turn out constitutive of some other epistemic goods, such as understanding, or wisdom. Carter and Gordon (2014) also imply this possibility. This is an ongoing debate on how much responsibilist virtues are constitutive of our epistemic goals.

tical as to the causal power of our motivation; however, we have addressed that both situationist and SDT researchers seem to share the causal explanation of our behavior. Thus on closer inspection, their evidential statuses are, at best, on a par.

7 Conclusion

Although situationists have criticized virtue theory for its empirical inadequacy in combination with the commitment to psychological realism, the nature of this criticism has been problematically ambiguous. This is due to their misunderstanding of the hard core of the virtue theory and their stipulation of theoretical commitments of virtue theory. In this paper, I have addressed the confusion of the existing debate, and the conclusion drawn is that virtue theory ultimately remains unscathed. While situationists have assumed that social psychological studies undermine the empirical adequacy of virtue theory, such studies show, at most, that not many of us are genuinely virtuous. When we afford closer attention to studies on the orientation of our motivation, it becomes clear how the dynamics of our motivation have a tremendous influence on desirable behavioural outcomes: a good life. Moreover, the empirical components of virtues are in fact supported by such empirical motivation studies, and they correspond well with the way people are motivated when they engage in important activities. Supporting virtue theory and being a psychological realist are, thus, compatible, and further research on this perspective should be undertaken for the future debate to be productive.

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References

- Adams, R. M. (2006). *A theory of virtue: Excellence in being for the good*. Oxford: Clarendon Press.
- Alfano, M. (2011). Explaining away intuitions about traits: Why virtue ethics seems plausible (even if it isn't). *Review of Philosophy and Psychology*, 2(1), 121–136. <https://doi.org/10.1007/s13164-010-0045-9>.
- Alfano, M. (2012). Expanding the situationist challenge to responsibilist virtue epistemology. *The Philosophical Quarterly*, 62(247), 223–249.
- Alfano, M. (2013). *Character as moral fiction*. Cambridge: Cambridge University Press.
- Alfano, M. (2014a). Expanding the situationist challenge to reliabilism about inference. In A. Fairweather (Ed.), *Virtue epistemology naturalized (Synthese Library)* (Vol. 366, pp. 103–122). Berlin: Springer.
- Alfano, M. (2014b). Stereotype threat and intellectual virtue. In A. Fairweather & O. Flanagan (Eds.), *Naturalizing epistemic virtue*. Cambridge: Cambridge University Press.

- Alzola, M. (2008). Character and environment: The status of virtues in organizations. *Journal of Business Ethics*, 78(3), 343–357.
- Amabile, T. M. (1985). Motivation and creativity: Effects of motivational orientation on creative writers. *Journal of Personality and Social Psychology*, 48(2), 393–399. <https://doi.org/10.1037/0022-3514.48.2.393>.
- Aristotle, (2000). *Nicomachean ethics* (Terence Irwin Trans. 2nd edition). Hackett Publishing.
- Axtell, G., & Carter, J. A. (2008). Just the right thickness: A defense of second-wave virtue epistemology. *Philosophical Papers*, 37(3), 413–434.
- Baehr, J. (2011). *The inquiring mind: On intellectual virtues and virtue epistemology*. New York: Oxford University Press.
- Baehr, J. (2013). The cognitive demands of intellectual virtue. In T. Henning & D. P. Schweikard (Eds.), *Knowledge, virtue, and action: Putting epistemic virtues to work* (Vol. 51). New York: Routledge.
- Battaly, H. (2008). Virtue epistemology. *Philosophy Compass*, 3(4), 639–663.
- Battaly, H. (2016). Developing virtue and rehabilitating vice: Worries about self-cultivation and self-reform. *Journal of Moral Education*, 45(2), 207–222. <https://doi.org/10.1080/03057240.2016.1195732>.
- Beachboard, M., Beachboard, J., Li, W., & Adkison, S. (2011). Cohorts and relatedness: Self-determination theory as an explanation of how learning communities affect educational outcomes. *Research in Higher Education*, 52(8), 853–874. <https://doi.org/10.1007/s1162-011-9221-8>.
- Bonneville-Roussy, A., Lavigne, G. L., & Vallerand, R. J. (2011). When passion leads to excellence: The case of musicians. *Psychology of Music*, 39(1), 123–138.
- Carter, J. A., & Gordon, E. C. (2014). Openmindedness and truth. *Canadian Journal of Philosophy*, 44(2), 207–224.
- Code, L. (1987). *Epistemic responsibility*. Andover, NH: University Press of New England.
- Cravchik, A., & Goldman, D. (2000). Neurochemical individuality: Genetic diversity among human dopamine and serotonin receptors and transporters. *Archives of General Psychiatry*, 57(12), 1105–1114. <https://doi.org/10.1001/archpsyc.57.12.1105>.
- Darley, J. M., & Batson, C. D. (1973). “From Jerusalem to Jericho”: A study of situational and dispositional variables in helping behavior. *Journal of Personality and Social Psychology*, 27(1), 100–108.
- Darley, J. M., & Latane, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, 8(4, Pt. 1), 377–383.
- Deci, E. L. (1972). The effects of contingent and noncontingent rewards and controls on intrinsic motivation. *Organizational Behavior and Human Performance*, 8(2), 217–229. [https://doi.org/10.1016/0030-5073\(72\)90047-5](https://doi.org/10.1016/0030-5073(72)90047-5).
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Berlin: Springer.
- Dennett, D. C. (1991). *Consciousness explained*. Boston: Brown.
- Doris, J. (2002). *Lack of character: Personality and moral behavior*. Cambridge: Cambridge University Press.
- Greco, J. (1999). Agent reliabilism. *Noûs*, 33(s13), 273–296.
- Greco, J. (2003). Knowledge as credit for true belief. In M. DePaul & L. Zagzebski (Eds.), *Intellectual virtue: Perspectives from ethics and epistemology* (pp. 111–134). Oxford: Oxford University Press.
- Greco, J. (2010). *Achieving knowledge: A virtue-theoretic account of epistemic normativity*. Cambridge: Cambridge University Press.
- Greco, J. (2012). A (different) virtue epistemology. *Philosophy and Phenomenological Research*, 85(1), 1–26.
- Guay, F., Ratelle, C. F., & Chanal, J. (2008). Optimal learning in optimal contexts: The role of self-determination in education. *Canadian Psychology/Psychologie Canadienne*, 49(3), 233–240. <https://doi.org/10.1037/a0012758>.
- Guay, F., & Vallerand, R. J. (1996). Social context, student’s motivation, and academic achievement: Toward a process model. *Social Psychology of Education*, 1(3), 211–233. <https://doi.org/10.1007/bf02339891>.
- Harman, G. (1999). Moral philosophy meets social psychology: Virtue ethics and the fundamental attribution error. *Proceedings of the Aristotelian Society*, 99, 315–331. <https://doi.org/10.2307/4545312>.
- Hartshorne, H., & May, M. A. (1928). *Studies in the nature of character, Vol. I. Studies in deceit* (Vol. I). New York: Macmillan.
- Hennessey, B. A., & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology*, 61(1), 569–598. <https://doi.org/10.1146/annurev.psych.093008.100416>.
- Hursthouse, R. (1999). *On virtue ethics*. Oxford: Oxford University Press.

- Isen, A. M., Daubman, K. A., & Nowicki, G. P. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, 52(6), 1122.
- Isen, A. M., & Levin, P. F. (1972). Effect of feeling good on helping: Cookies and kindness. *Journal of Personality and Social Psychology*, 21(3), 384.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52(3), 621–652. <https://doi.org/10.1111/j.1744-6570.1999.tb00174.x>.
- Kasof, J., Chen, C., Himself, A., & Greenberger, E. (2007). Values and creativity. *Creativity Research Journal*, 19(2–3), 105–122. <https://doi.org/10.1080/10400410701397164>.
- Kasser, T., Ryan, R. M., Zax, M., & Sameroff, A. J. (1995). The relations of maternal and social environments to late adolescents' materialistic and prosocial values. *Developmental Psychology*, 31(6), 907–914. <https://doi.org/10.1037/0012-1649.31.6.907>.
- King, N. L. (2014). Responsibility virtue epistemology: A reply to the situationist challenge. *The Philosophical Quarterly*, 64(255), 243–253.
- Latane, B., & Rodin, J. (1969). A lady in distress: Inhibiting effects of friends and strangers on bystander intervention. *Journal of Experimental Social Psychology*, 5(2), 189–202.
- MacIntyre, A. (1981). *After virtue: A study in moral theory*. London: Duckworth.
- Mackie, J. L. (1965). Causes and conditions. *American Philosophical Quarterly*, 2(4), 245–264.
- Mageau, G. A., & Vallerand, R. J. (2003). The coach–athlete relationship: A motivational model. *Journal of Sports Sciences*, 21(11), 883–904. <https://doi.org/10.1080/0264041031000140374>.
- Mageau, G. A., Vallerand, R. J., Charest, J., Salvy, S.-J., Lacaille, N., Bouffard, T., et al. (2009). On the development of harmonious and obsessive passion: The role of autonomy support, activity specialization, and identification with the activity. *Journal of Personality*, 77, 601–646. <https://doi.org/10.1111/j.1467-6494.2009.00559.x>.
- Mendiburo-Seguel, A., Páez, D., & Martínez-Sánchez, F. (2015). Humor styles and personality: A meta-analysis of the relation between humor styles and the Big Five personality traits. *Scandinavian Journal of Psychology*, 56(3), 335–340. <https://doi.org/10.1111/sjop.12209>.
- Merritt, M. (2000). Virtue ethics and situationist personality psychology. *Ethical theory and moral practice*, 3(4), 365–383.
- Milgram, S. (1963). Behavioral study of obedience. *The Journal of Abnormal and Social Psychology*, 67(4), 371–378.
- Miller, C. (2014). Moral virtues, epistemic virtues, and the Big Five. In A. Fairweather & O. Flanagan (Eds.), *Naturalizing epistemic virtue*. Cambridge: Cambridge University Press.
- Montmarquet, J. (1992). Epistemic virtue and doxastic responsibility. *American Philosophical Quarterly*, 29(4), 331–341.
- Nettle, D. (2006). The evolution of personality variation in humans and other animals. *American Psychologist*, 61(6), 622–631.
- Nettle, D. (2007). *Personality: What makes you the way you are*. Oxford: Oxford University Press.
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133–144.
- Northcott, R. (2008). Causation and contrast classes. *Philosophical Studies*, 139(1), 111–123.
- Piccinini, G. (2003a). Data from introspective reports: Upgrading from common sense to science. *Journal of Consciousness Studies*, 10(9–10), 141–156.
- Piccinini, G. (2003b). Epistemic divergence and the publicity of scientific methods. *Studies in History and Philosophy of Science Part A*, 34(3), 597–612. [https://doi.org/10.1016/S0039-3681\(03\)00049-9](https://doi.org/10.1016/S0039-3681(03)00049-9).
- Piccinini, G. (2010). How to improve on heterophenomenology: The self-measurement methodology of first-person data. *Journal of Consciousness Studies*, 17(3–1), 84–106.
- Pritchard, D. (2013). Epistemic virtue and the epistemology of education. *Journal of Philosophy of Education*, 47(2), 236–247.
- Railton, P. (1984). Alienation, consequentialism, and the demands of morality. *Philosophy & Public Affairs*, 13(2), 134–171.
- Ratelle, C. F., Guay, F., Vallerand, R. J., Larose, S., & Senécal, C. (2007). Autonomous, controlled, and amotivated types of academic motivation: A person-oriented analysis. *Journal of Educational Psychology*, 99(4), 734–746. <https://doi.org/10.1037/0022-0663.99.4.734>.
- Roberts, R. C., & Wood, W. J. (2007). *Intellectual virtues: An essay in regulative epistemology*. Oxford: Oxford University Press.

- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>.
- Ryan, R. M., Huta, V., & Deci, E. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, 9(1), 139–170. <https://doi.org/10.1007/s10902-006-9023-4>.
- Singer, P. (1972). Famine, affluence, and morality. *Philosophy & Public Affairs*, 1, 229–243.
- Sosa, E. (1980). The raft and the pyramid: Coherence versus foundations in the theory of knowledge. *Midwest Studies in Philosophy*, 5(1), 3–26.
- Sosa, E. (2007). *A virtue epistemology: Apt belief and reflective knowledge* (Vol. I). Oxford: Clarendon Press.
- Sosa, E. (2010). *Knowing full well*. Princeton: Princeton University Press.
- Sosa, E. (2015). *Judgment and agency*. Oxford: Oxford University Press.
- Sreenivasan, G. (2002). Errors about errors: Virtue theory and trait attribution. *Mind*, 111(441), 47–68.
- Sreenivasan, G. (2008). Character and consistency: Still more errors. *Mind*, 117(467), 603–612.
- Sreenivasan, G. (2009). Disunity of virtue. *The Journal of Ethics*, 13(2), 195–212. <https://doi.org/10.1007/s10892-009-9048-0>.
- Sreenivasan, G. (2013). The situationist critique of virtue ethics. In D. Russell (Ed.), *The Cambridge companion to virtue ethics* (*Cambridge companions to philosophy*) (pp. 290–314). Cambridge: Cambridge University Press. <https://doi.org/10.1017/cc09780511734786.014>.
- Stocker, M. (1976). The schizophrenia of modern ethical theories. *The Journal of Philosophy*, 73(14), 453–466. <https://doi.org/10.2307/2025782>.
- Upton, C. L. (2009). The structure of character. *The Journal of Ethics*, 13(2–3), 175–193.
- Vallerand, R. J. (2012). From motivation to passion: In search of the motivational processes involved in a meaningful life. *Canadian Psychology/Psychologie Canadienne*, 53(1), 42–52. <https://doi.org/10.1037/a0026377>.
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., et al. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85(4), 756–767. <https://doi.org/10.1037/0022-3514.85.4.756>.
- Vallerand, R. J., & Blssonnette, R. (1992). Intrinsic, extrinsic, and amotivational styles as predictors of behavior: A prospective study. *Journal of Personality*, 60(3), 599–620. <https://doi.org/10.1111/j.1467-6494.1992.tb00922.x>.
- Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, 72(5), 1161–1176. <https://doi.org/10.1037/0022-3514.72.5.1161>.
- Vallerand, R. J., Mageau, G. A., Elliot, A. J., Dumais, A., Demers, M.-A., & Rousseau, F. (2008). Passion and performance attainment in sport. *Psychology of Sport and Exercise*, 9(3), 373–392. <https://doi.org/10.1016/j.psychsport.2007.05.003>.
- Webber, J. (2006). Character, consistency, and classification. *Mind*, 115(459), 651–658.
- Williams, B. (1985). *Ethics and the limits of philosophy*. Harvard: Harvard University Press.
- Zagzebski, L. (1996). *Virtues of the mind: An inquiry into the nature of virtue and the ethical foundations of knowledge*. Cambridge: Cambridge University Press.
- Zagzebski, L. (2010). Exemplarist virtue theory. *Metaphilosophy*, 41(1–2), 41–57. <https://doi.org/10.1111/j.1467-9973.2009.01627.x>.
- Zimbardo, P. G., Haney, C., Banks, W. C., & Jaffe, D. (1973). A Pirandellian prison: The mind is a formidable jailer. *New York Times Magazine*, 8(1973), 38–60.