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Making Emotions Trustworthy

by

Xiaoyu Ke

A dissertation presented to
Washington University in St. Louis
in partial fulfillment of the
requirements for the degree
of Doctor of Philosophy

Aug 2022
St. Louis, Missouri

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Acknowledgments

I have immense gratitude for my advisor, Allan Hazlett, for his constant guidance, help, and support throughout this process and at every stage of writing and editing. I am so lucky to have him as my advisor. I would not have come this far without him. I am sincerely grateful to my committee – Ron Mallon, Zoe Jenkin, Matt McGrath, and Tammy English – for generously lending their time and expertise. I am also indebted to Anne Baril, Carl Craver, John Doris, Roy Sorensen, Will Fleisher, Eric Brown, for helping me develop my ideas and writing. Thanks also to my colleagues for their support and encouragement, especially to Jeremy Henry, Ge Fang, Christiane Merritt, Katie Rapier, Judith Carlisle, Gabriel Siegel, Nicky Drake, Jordan Shaw, and Derek Braverman. Thanks to Washington University in St. Louis philosophy department for providing the financial support that made this project possible.

I especially want to thank my dearest friends Quan Jin, Yiling Zhou, Chong Yuan, Xuya Ma, Lina Han, Haicheng Zhao, Wenqing Zhao, and Ruodan Zhang for their support and inspiration throughout this journey. Thanks to Ciloue Steward Cheng and Karolyn Senter, who helped me go through dark times. I am thankful to my parents for their constant love and support. I'm thankful to my cat, Lola, for keeping me company when I write.

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Washington University in St. Louis

Aug 2022

ABSTRACT OF THE DISSERTATION

Making Emotions Trustworthy

by

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Doctor of Philosophy in Philosophy-Neuroscience-Psychology

Washington University in St. Louis, 2022

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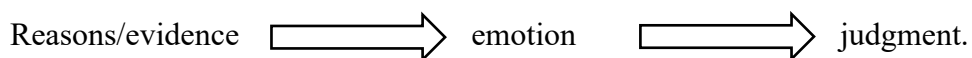
I investigate ways by which agents can make their emotions more trustworthy from a perspective that's informed by recent psychological research on the nature of emotion regulation. This dissertation is a collection of three articles, each addressing one type of cases of untrustworthy emotions in a particular context. Chapter one (Developing Appropriate Emotions) concerns emotions that are untrustworthy because they are irrelevant to the moral or epistemic judgements at hand. By situating the problem in the context of a situationist challenge to neo-Aristotelian virtue ethics, I argue that we can address this problem by developing ameliorative abilities such as emotion differentiation. Chapter two (How to Make Emotions Epistemically Trustworthy) concerns emotions that are untrustworthy because they are not fitting. I argue that proper emotion regulation is needed for making emotions fit. I propose a new account of proper emotion regulation that goes beyond the traditional view of reflective control. Chapter three (Zetetic Norms for Emotions) considers "whether emotions should always be epistemically justified in a context of inquiry". I argue that conflicts can arise between epistemic norms and zetetic norms for emotions and suggest that sometimes successful inquiry may require emotions be epistemically unjustified.

Introduction

The philosophical literature is rife with examples of untrustworthy emotions. To cite a few: a father's moral judgments about his son's allegedly kind and generous actions is biased by his love for his son; my belief that you have wronged me can be misled by a mistakenly formed anger; a person's persistent fear of flying is not epistemically justified if he ignores abundant evidence that flying is safe.¹The abundance of untrustworthy emotions have led many philosophers to take emotions – and affective states in general - to be generally untrustworthy for moral and epistemic judgments. Call this view “emotion skepticism”.

In this dissertation, I investigate ways by which agents can make their emotions more trustworthy from a perspective that's informed by recent psychological research on the nature of emotions and emotion regulation. My focus is on the question of how to make emotions trustworthy rather than on emotion skepticism itself. Many philosophers have argued against emotion skepticism and for the positive role of emotions in ethics and epistemology, but fewer have paid attention to the problematic emotions that do cause trouble. Even fewer have paid attention to how emotions are actually regulated, which serves as an empirical ground for thinking about untrustworthy emotions.

Not all emotions are untrustworthy in the same way. I categorize untrustworthy emotions into three kinds and address each of them in each of the three chapters. The categorization is based on the following idea:



¹ The first case is originally raised by Hume and cited by Goldie (2008).

First, the generation of emotions can be based on reasons or evidence. Given this fact, questions arise regarding how we should assess emotions' epistemic justifiability. Thus, the first category concerns cases in which emotions are untrustworthy by being epistemically unjustified. The fear of flying as described above is an illustration of this kind of untrustworthy emotions. Second, when an emotion is generated, we can ask whether the emotion is fitting or not, in the sense of whether it correctly represents features of the world. Thus, in the second category, emotions are untrustworthy by being unfitting. The foregoing case of anger is a representative case in this category. Third, emotions can serve as the basis for our judgments. In the third category, emotions are untrustworthy by virtue of being incorrectly taken as information for an irrelevant judgment. The father's love for his son is one such case.

I start by addressing the third category of untrustworthy emotions in Chapter One – emotions that are untrustworthy not because they are unjustified or unfitting, but because they lead our moral and epistemic judgment-making astray. Specifically, I situate the problem in the context of a situationist challenge to neo-Aristotelian virtue ethics. The situationist challenge is essentially a challenge about how we can become better (or more virtuous) moral and epistemic agents in face of the fact that our judgment-making process is often easily led astray by irrelevant affective states. Drawing from empirical psychology, I argue that we can address this problem by developing ameliorative abilities such as emotion differentiation.

In Chapter Two, I address the second category of untrustworthy emotions – emotions that are untrustworthy because they are unfitting. The central task is to explore how to make our emotions fitting. I first motivate the idea that emotions have distinct ways of being regulated. I then discuss a traditional view in philosophy which models emotion regulation after belief regulation. This view is held by philosophers such as Descartes, Zagzebski (2012), and Brady

(2013). While the traditional view has many merits, I argue that it also has some shortcomings. I propose a new account of proper regulation which incorporates insights from psychological theories of emotion regulation. I argue that we can make emotions fit in a better way by taking into account ways of regulation other than reflection, as well as the practical constraints on emotion regulation.

In Chapter Three, I address the first category of untrustworthy emotions – emotions that are untrustworthy because they are epistemically unjustified. Rather than giving a general account of emotions’ epistemic justifiability, I focus on a particular angle of the problem by situating the issue in the context of inquiry, where I argue that conflicts can arise between epistemic norms and zetetic norms for emotions. Thus, more specifically, rather than considering “how to make emotions justified”, I consider “whether emotions should always be epistemically justified in a context of inquiry”. And rather than giving a solution of some sort, I raise doubts about the priority of epistemic normativity of emotions, given emotions’ unique functional roles in inquiry. I argue that sometimes successful inquiry may require emotions be epistemically unjustified.

The question of how to make emotions trustworthy is intimately connected with the nature of emotion generation and regulation. Emotions are not theoretical posits but real mental episodes that people experience every day. Thus, it is important to recognize what emotions are empirically. My overall approach is to ground my philosophical arguments in psychological theories and findings on emotions.

In recent decades, empirical psychology has made great progress in understanding psychological mechanisms underlying emotions, emotion regulation, and the relationship

between emotions and judgment-making. In this dissertation, I engage with several important theories and lines of research. Here I highlight some of the major ones.

The first is “feelings-as-information” theory. According to Schwarz (2012), people use their feelings as a source of information for making judgments at hand, where “feelings” include emotions as well as other types of affective states. Two important insights are: first, feelings tend to influence our judgments only when they are perceived by us to be relevant to the judgments; second, we often make mistakes about which feelings are relevant to a certain judgment.

“Feelings-as-information” theory provides an empirical basis for addressing the third kind of untrustworthy emotions. The second is the process model of emotion regulation proposed by Gross (1998). According to Gross, emotions can be regulated in different ways depending on when we intervene during their generative process. Gross’ theory provides a rich resource for thinking about the second kind of untrustworthy emotions – especially in terms of going beyond the traditional philosophical method of reflection to make emotions fit. More generally, it also provides a descriptive framework for thinking about how to better regulate our emotions depending on our different regulatory goals. Finally, research on emotion differentiation conducted by Barrett and colleagues (2001) and the theory of emotional intelligence proposed by Salovey (1990) provide rich resources for thinking about how to develop emotion-related skills and knowledge.

Chapter 1: Developing Appropriate Emotions

1.1 Introduction

Adam works in a senior care center. He is typically disposed to feel compassion for people in need and motivated by this compassion to help them. However, his disposition to feel compassion varies. Given the same senior people with the same sorts of needs, on days when he is in a good mood, say, because a good friend is coming to visit him, he feels more compassion for them and tends to extend more help; on days when he is in a bad mood, say, when he has just had a quarrel with a friend, he feels less compassion for them and tends to extend less help.

Sophie is a researcher who investigates the safety of drugs. She is typically disposed to worry about evidence that hasn't been found and motivated by this worry to continue the investigations, such as collecting further evidence and making sure that no errors have been made. However, Sophie's disposition to worry, like Adam's disposition to compassion, varies. Given the same evidence, on days when she is in a good mood, she feels less worried about the potential contrary evidence and tends to close her investigation earlier; on days when she is in a bad mood, she feels more worried about potential contrary evidence and tends to continue investigating longer.

Is Adam a kind person? Is Sophie an intellectually conscientious person? According to neo-Aristotelian virtue theories in ethics and epistemology, Adam does not have the virtue of kindness and Sophie does not have the virtue of intellectual conscientiousness. This is because neo-Aristotelian virtue theories maintain that virtues require robust dispositions to feel appropriate emotions. I'll call this the "appropriate emotion requirement."² Given the appropriate

² Defenders of neo-Aristotelian virtue theories include Hursthouse (1999), Battaly (2008), Code (1987), Zagzebski (1996), Monmarquet (1992), Baehr (2011), Roberts & Wood (2007), Hookway (2003), Sherman & White (2003).

emotion requirement, Adam does not have the moral virtue of kindness, because his disposition to feel appropriate compassion is not robust, and Sophie does not have the intellectual virtue of conscientiousness, because her disposition to feel appropriate worry is not robust.

Moreover, there are reasons to worry that, given the appropriate emotion requirement, Adam and Sophie cannot ever develop the virtues of kindness and intellectual conscientiousness, respectively. Philosophical situationists contend that human beings do not possess robust dispositions to have appropriate emotions, given evidence from empirical psychology that our emotions are too easily influenced by morally and epistemically irrelevant situational affect – and by moods, in particular.³ The influence of situational affect is so huge that Alfano (2014) contends it is “at the heart of the situationist challenge” (p.50).⁴ This raises the possibility that this kind of influence is part of human nature – that we cannot help but be influenced in this way. If so, we cannot acquire robust dispositions to have appropriate emotions, and the appropriate emotion requirement cannot be met.

In this chapter, drawing from empirical psychology, I will argue that there are ameliorative ways to counteract situational affect, which are developing abilities such as emotion differentiation and emotional clarity. The upshot of my argument is that recognizing the power of situational affect does not require denying the possibility that people can develop robust dispositions to have appropriate emotions. Existing responses to situationism have focused on changing the environments we commonly find ourselves in to be more conducive to virtuous conduct, rather than taking an agential approach of exploring how to develop more robust

On the appropriate emotion requirement, see Hursthouse (1999), Kamtekar (2013), Sherman (1997), Zagzebski (1996, 2003), Sherman & White (2003), Morton (2010), Brady (2019).

³ Philosophical situationists include Olin & Doris (2014); Alfano (2011, 2013); Fairweather (2017); Harman (1999), Doris (1998). On the role of moods in situationism, see Alfano (2013), Battaly (2014), Smith (2017), Coplan (2010).

⁴ Many examples of situational influence involve situational mood effects. See, for example, the famous phone booth experiment cited in Doris (1998), where participants’ differential behaviors are explained by the change of mood brought by finding a dime. There are also numerous examples cited in Alfano (2014).

dispositions.⁵ However, situational affect like moods is simply unavoidable, and changing the environments does not seem like a promising method. In contrast, my solution will be agential by exploring ways in which people can take control of their emotional dispositions.

The chapter is organized as follows. In section 1.2, I explain the appropriate emotion requirement and what it means for a disposition to be robust. In section 1.3, I present the situationist challenge to the possibility of meeting the appropriate emotion requirement. In section 1.4, I show how people can counteract situational affect by developing abilities such as emotion differentiation and emotional clarity.

1.2 The Appropriate Emotion Requirement

According to the *appropriate emotion requirement*, moral and intellectual virtues require robust dispositions to have appropriate emotions. In this section I'll clarify and explain the appropriate emotion requirement and its role in neo-Aristotelian virtue theories.

Aristotle maintained that virtue requires “having...feelings at the right times, about the right things, towards the right people, for the right end, and in the right way” (Nicomachean Ethics, 1106b). In line with this, neo-Aristotelian virtue theorists argue that moral virtues require dispositions to have appropriate emotions, where “appropriateness” refers to an intermediate state that is neither excessive nor deficient, as well as having feelings for the right reasons. For example, Hursthouse writes that in moral virtues “emotions will be felt on the right occasions, towards the right people or objects, for the right reasons” (p. 84, 1999). This line of argument is extended by virtue responsibilists to include emotions involved in intellectual virtues.⁶ These virtue theorists argue that emotions play essential motivational and attentional roles in all virtues.

⁵ E.g., Battaly (2014), Pritchard (2014), Alfano (2013).

⁶ See Sherman and White (2003, p.41), Morton (2010), Zagzebski (1996, 2019).

Different virtues involve different emotions. For example, the virtue of open-mindedness might involve curiosity, while the virtue of courage (moral and intellectual) might involve both confidence and fear. I suggested, above, that the virtue of kindness involves compassion and the virtue of intellectual conscientiousness involves worry. Whichever emotion is involved, given the appropriate emotion requirement, having the virtue requires that one be disposed to have that emotion in an appropriate way.

To further illustrate the idea of appropriateness, consider examples of how one can fall short of virtue by failing to have appropriate emotions. A misanthrope who does not feel much compassion when seeing someone collapsing to the ground in distress is deficient in the feeling of compassion. This deficiency makes her emotional state inappropriate, and thus her disposition falls short of the virtue of kindness. On the other hand, people who are easily pained by even the slightest sign of suffering also fall short of being virtuous because their compassion is excessive. Such inappropriateness could be manifested in various manners, in terms of intensity, duration, or object.

I am going to assume that the dispositions to have appropriate emotions must be *robust*, where a robust disposition is a tendency to respond in a relatively enduring and consistent fashion across time in trait-affording situations (Roberts et al., 2009). This assumption is not unfounded. It follows naturally from virtue theorists' view that virtues are a species of character traits, where a character trait is defined as a temporally stable and cross-situationally consistent disposition to behave in certain characteristic ways (Sreenivasan, 2013). Since the dispositions to have appropriate emotions are an important component of virtue, it is reasonable to assume that they must also be robust.

What does it mean for a person to respond in a relatively enduring and consistent fashion across time in trait-affording situations? Psychologically, it means that a person acts or feels in the *same* characteristic way in a variety of situations, each of which has features relevant to the characteristic behavior or emotions in question. For example, there is a variety of situations that involve features that call for courageous behavior, such as when a person is threatened by a criminal in the street, a child is drowning in deep water, or someone is confronted by a bear in the wild. A person's disposition to act courageously is robust if she is disposed to respond in the same way across these situations, such as by risking herself to save someone from danger. In the same vein, possessing robust dispositions to have emotions means that a person is disposed to respond emotionally in the same characteristic way across situations that are relevant to the emotions.

Robust dispositions to have appropriate emotions are a subset of robust dispositions to have emotions. Possessing robust dispositions to have appropriate emotions means that a person is disposed to feel in the same appropriate way across situations that call for such feeling. Thus, if Adam's disposition to feel appropriate compassion were robust, then it would have been the same in the good mood situation and the bad mood situation so long as the features that are relevant to compassion across these situations have not changed. As long as the relevant trait-affording features – features that call for virtue – stay the same, we expect that the virtuous person be disposed to feel the same as a result of recognizing these features.

Robust dispositions must be “global” in Doris' (1998) sense, not “local”. “Local” dispositions are dispositions that are only consistent in a narrow range of situations, and thus do not amount to being “cross-situationally consistent”. For example, the disposition to have “compassion-only-when-in-good-mood” is local because it only holds in the specific situation

where the individual is in a good mood. Local dispositions cannot meet the requirement of virtue because the virtuous person is supposed to act and feel virtuously *whenever* virtue is called for, not just when circumstances are conducive to doing so.⁷

Robustness clearly comes in degrees. Just how robust must a disposition to have appropriate emotions be to satisfy the appropriate emotion requirement? I shall assume that a relatively high level of robustness is required. Baehr (2017) distinguishes three levels of virtue: maximal, robust, and minimal. According to him, possessing a maximal virtue is when a person is disposed to act virtuously across *all* virtue-relevant contexts; possessing a robust virtue is when a person is disposed to act virtuously across *a wide range of* virtue-relevant contexts; and possessing a minimal virtue is when a person is disposed to act virtuously across *some* of virtue-relevant contexts. Although this distinction is helpful conceptually, in practice it would be difficult to empirically demonstrate which level of virtue one achieves. Thus, I will not devote further effort to specify “robustness” but rely on a commonsense notion of a wide range of virtue-relevant contexts. I will also not be concerned with the issue of whether virtues should be viewed as normative ideals.⁸ My focus will be on whether people can develop relatively highly robust dispositions to have appropriate emotions.

1.3 The Situationist Challenge from Incidental Affect

The distinctive form of situationist challenge that I will present in this section is this: empirical evidence shows that people’s integral emotions are easily influenced by epistemically and morally irrelevant situational affect (§1.3.1). If this is how our affective system works, it

⁷ It’s worth noting that there may be kinds of local traits. For example, “compassion-only-when-seeing-senior-people-in-need” is a local trait, but its situation is individuated by trait-relevant features. In contrast, “compassion-only-when-in-good mood” is also a local trait, but its situation is individuated by trait-irrelevant features. As Alfano (2014) rightly points out, “both trait-relevant and trait-irrelevant features should be allowed to vary if global virtues are being investigated” (p.71).

⁸ For discussions of this issue, see, for example, Baehr (2017), Doris (1998), Sreenivasan (2013).

suggests that people rarely possess robust dispositions to have appropriate emotions because an emotion is appropriate only if integral (§1.3.2). This challenges the idea that we can develop robust dispositions to have appropriate emotions (§1.3.3).

1.3.1 The Phenomenon of Affect Misattribution

Psychologists distinguish between integral emotions and incidental affect.⁹ The distinction is used to describe two types of influence that affective states have on judgments and decision-making. “Integral emotions” are defined as emotions stemming from consideration of the judgmental targets at hand, whereas “incidental affect” refers to any kind of affective states which are carryovers from other places, such as a previous event or factors in the environment, which are irrelevant to the judgmental targets (Schwarz & Clore, 1983; Loewenstein & Lerner, 2003; Västfjäll et. al., 2016). Thus, incidental affect can be emotions that were about a previous event or diffuse affective states such as moods that are not about any particular objects. Here, “judgmental target” literally means the target of a judgment, which could be an incident, event, or anything that a judgment is about. The type of judgment concerned can be varied: it can be moral, social, or epistemic judgments. Additionally, some psychologists also use “decision targets”, where the target situation is one that requires the participants’ to make decisions about, such as deciding whether to make a donation at a charity event.

Put in another way, integral emotions are *related* to the judgmental target at hand in the sense that they are caused by it, whereas incidental affect is *unrelated* to the judgmental target at hand but nevertheless present at the time of the judgment.¹⁰ Suppose a boss got angry at his employee because he failed to show up at his birthday party. His anger is integral to the birthday

⁹ “Affect” used throughout this chapter will be an umbrella term for all affective states in general, including emotions, moods, feelings, and so on.

¹⁰ Since there can be incidental emotions or moods, I use the generic term “incidental affect” to cover both.

party incident. However, if the boss later decides to not give his employee a raise by taking this anger as a source of information, then this anger is no longer integral but incidental, as it is not relevant to the decision about giving a raise. Furthermore, whether an affective state is related to a judgmental target or not depends on the specific judgmental target in question. The distinction between “integral” and “incidental” is relative and indexed to a specific judgmental target. One exception is moods. There may not be “integral moods” as moods are not about any particular objects.

However, integral emotions and incidental affect are difficult to disentangle because people usually consider their experiences to be “about” whatever is in the focus of their attention (Schwarz & Clore, 2007). According to feelings-as-information theory (Schwarz & Clore, 2007), when people draw on their affective experiences as a source of information for making judgments, their affective experiences only influence judgement when they are taken to be relevant to the task at hand (p. 386).¹¹ If the affective experiences are deemed as irrelevant, they would no longer influence the judgment at hand as their informational value would be called into question. Thus, whether one’s incidental emotion or mood can influence his judgment depends on whether he takes it to be related to the judgment at hand.

“Affect misattribution” refers to the phenomenon of mistakenly attributing incidental affect to a judgmental target (Schwarz & Clore, 1983). Affect misattribution occurs when the subject cannot distinguish integral emotions from incidental affect and thus treats any currently experienced affect as a reaction to the target currently attended (Schwarz & Clore, 2007; Västfjäll et al., 2016). This process is often automatic and does not require conscious attribution. Consequently, integral and incidental affect often jointly determine the “total affective reaction

¹¹ Note that this does not require conscious attribution of one’s feelings to the target, according to Schwarz and Clore (2007).

to a target” (Västfjäll et al., 2016). Recall our case in the beginning of the chapter. It’s likely that Adam commits misattribution errors as he mistakes his moods to be related to the judgmental target that someone needs help.¹²

The experiments conducted by Cameron et al. (2013) represent an example of how incidental and integral disgust jointly determine one’s total affective reaction to a judgmental target. For each trial, participants were first exposed to an affective prime stimulus, which were either a neutral image or a disgusting image from the International Affect Picture System. The contents of these images were irrelevant to the target stimuli and thus they were designed to induce incidental disgust. A target stimulus then appeared overlaid on top of the prime before disappearing, while the prime stimulus remained for the entire trial. The target stimuli used in these trials were short text descriptions of actual cultural practices which are generally considered to be morally wrong in American society. For example, one of the descriptions is “people are buried alive when they are too ill to speak.” These stimuli were thus designed to elicit integral emotions such as disgust. After the target stimulus disappeared, a moral judgment prompt appeared on the screen, asking the participants to judge the degree to which the target behavior is morally wrong regardless of the culture in which it is practiced. The researchers found that incidental disgust led participants to rate the target behavior to be morally wrong to a greater degree, thus making stronger moral judgments compared to the control group. Thus, whereas the control group was only influenced by integral disgust, the experimental group was clearly influenced by both incidental and integral disgust. More specifically, since they are the same kind of emotion, the findings suggest that incidental disgust causally affected integral

¹² The sense of “error” I use throughout this chapter refers exclusively to incorrectly or mistakenly attributing the cause of an affective state, not false judgments caused by misattribution.

disgust by increasing its intensity. In other words, the participants must have mistakenly taken the incidental disgust to be relevant to the moral judgments.

Numerous studies have shown that affect misattribution is pervasive in daily life (e.g., Loewenstein & Lerner, 2003; Clore & Huntsinger, 2009; Lerner et al., 2015). In a recent review, Västfjäll et al. (2016) explain that this may be due to several reasons. I highlight two reasons here. First, incidental moods are pervasive. Evidence shows that people are always in some kind of valenced mood state (Russell, 2003). Since moods are diffuse affective states, they are mostly likely always incidental. Moods are of course caused, but they are not about particular objects. Since they are always present, they always have the potential to influence integral emotions. Second, incidental affect has the largest impact on moderate and low intensity integral emotions, and research suggests that people have moderate to low intensity integral emotions most of the time, presumably because prolonged, high-intensity experiences would ultimately exhaust the human biological system (Clore et al., 1994).

Furthermore, affect misattribution is found in a diverse range of contexts relating to judgments and decision-making. For example, Dutton and Aron (1974) demonstrated that male participants incorrectly attribute their arousal to the attractiveness of the female experimenter rather than to the anxiety caused by crossing a high, wobbly bridge. Schwarz and Clore (1983) found that people reported more life satisfaction when in an incidental good mood than bad mood. In short, all these studies point to the fact that affect misattribution is pervasive in daily life because our underlying affective mechanism is prone to such errors.

1.3.2 The Situationist Challenge from Incidental Affect

Situationists argue that people's behavioral dispositions fail to be robust because they are easily influenced by irrelevant situational factors across different situations. Philosophical

situationists argue that this includes virtues as well because virtues are a subset of robust behavioral dispositions. A substantial portion of experiments that vindicate the situationist argument rely on the manipulation of moods. Situational factors such as giving participants a cookie or dime is used because doing so generates moods, and moods in turn influence behavior.¹³ Alfano (2014) points out that moods have systematic influences on behavior: an elevated mood tends to increase people's chance to help because positive moods make people more open to new experience and broaden their focus. By contrast, negative moods tend to narrow people's focus, thus a depressed mood may tend to make people focus more on themselves and their current tasks. What is the underlying mechanism that causes these mood effects? One possibility is that some misattribution process may be involved. For example, moods influence behaviors by way of influencing possible integral emotions that also occur with the behaviors. Another possibility is that moods directly influence behavior through changing people's style of processing information. According to Schwarz (2012), negative moods foster bottom-up processing, such as attention to details at hand and limited playfulness and creativity, whereas positive moods foster top-down processing style, such as more reliance on general knowledge, less focused attention, and higher playfulness and creativity. One thing is clear though: the systematic influences of moods reflect a more general phenomenon: there are various patterns of affective integration of the incidental and integral affect, depending on the specific valences and types. For example, a positive incidental affect and a negative integral affect can result in either more positive or more negative total affect, or an affect that cancels out their valences (Västfjäll, 2016).

¹³ There are numerous experiments that induce moods as the situational factor. Some famous examples used by philosophical situationists all involve manipulations of incidental moods, such as Isen and Levin (1972) and Isen et al., (1987), which are cited in Doris (1998) and Alfano (2014).

The empirical evidence presented above is consistent with the situationist literature but focuses specifically on integral emotions, rather than behavior. The evidence shows that people's integral emotions are easily influenced by incidental affect. Since incidental affect is an irrelevant situational variable, our susceptibility to it suggests that we rarely possess *robust dispositions to have integral emotions*. However, this does not yet show that people rarely possess *robust dispositions to have appropriate emotions*, as the psychological concept "integral emotions" and philosophical concept "appropriate emotions" are clearly not the same. Since philosophical situationists are concerned about the latter, there is still a conceptual gap that needs to be addressed.

However, a strong argument can be made in favor of the situationists: being integral is necessary for an emotion to be appropriate in the sense required by neo-Aristotelian virtue, and thus the evidence concerning integral emotions supports that people rarely possess robust dispositions to have appropriate emotions. The "integral" versus "incidental" distinction concerns whether the affective source of one's judgment-making is correct. If the formation of a judgment is based on an irrelevant source, then the source is deemed as incorrect. An appropriate emotion, as required by neo-Aristotelian virtue, involves feeling for the right reasons. If the appropriate emotion is not integral, then such emotion cannot be said to be felt for the right reasons. This is because part of what it means to "feel for the right reasons" involves correctly attributing one's feelings to what caused them. If I feel compassion for senior citizens in need but my compassion is actually caused by the weather being nice, then I cannot be said to be feeling for the right reasons, even if the emotion itself happens to fit the situation.

On the other hand, being integral is not sufficient for an emotion to be appropriate. The idea of appropriate emotion also concerns whether an emotion fits a situation in a way that is

proper to virtue. For example, feeling funny upon seeing someone in distress is not the right kind of emotion that is proper to virtue, but it nevertheless may be integral to one's judgment about that situation. In other words, "feeling for the right reasons" requires more than knowing what caused one's emotions.

If I'm right that being integral is necessary for an emotion to be appropriate, then the fact that people rarely possess robust dispositions to have integral emotions implies that people rarely possess robust dispositions to have appropriate emotions. Barring the cases in which integral emotions not appropriate, we can still claim that, for all integral emotions that are appropriate, given that they are easily influenced by incidental affect, they count as cases in which appropriate emotions are easily influenced by incidental affect. Thus, empirical evidence that shows the lack of robustness of integral emotional dispositions also shows the lack of robustness of appropriate emotional dispositions.

1.3.3 A Threat to the Development of Dispositions to Have Appropriate Emotions

So far, we have considered an argument that people rarely possess robust dispositions to have appropriate emotions.¹⁴ That does not entail that people cannot develop such dispositions. Despite this, situationists have strong reasons to think that their conclusion implies the latter. For although it's true that the situationist's evidence does not directly concern whether development is possible, it has indicated strongly that it is difficult for people to develop robust dispositions to have appropriate emotions. Specifically, it suggests that easy susceptibility to incidental affect might be a feature of the human affective mechanism. In other words, the evidence we have

¹⁴ It should be noted that there are other ways by which one can fail to fulfill the appropriate emotion requirement. For example, some people may lack the ability to feel the right kinds of emotions for certain situations, such as not being able to feel compassion when seeing a person in need. Or, some people may have the wrong kinds of emotional dispositions, such as feeling hatred towards a certain race. However, the situationist challenge is not concerned with these issues.

considered seems to suggest that our affective mechanism works in a way that does not allow much control over susceptibility to misattribution errors.

This matters, because many neo-Aristotelian virtue theorists think that robust dispositions to have appropriate emotions *can* be developed. For example, both Hursthouse (1999) and Sherman (2003) have suggested that virtuous emotions can be trained by reason. On their view, emotions have cognitive content, are responsive to reason, and thus can be shaped by reason. This is consistent with the idea that the virtuous person must have appropriate emotions not as mere affective reactions but for the right reasons. Hursthouse (1999) even argues that feeling emotions appropriately would not be possible without the influence of reason (p. 84). Since virtuous emotions can be trained by reason, it could be that feeling for the right reasons is also what enables a person to have robust dispositions to have appropriate emotions. For example, consider how a virtuous person would be disposed to feel in Sophie or Adam's scenarios. The virtuous person might come to have appropriate worry or compassion by recognizing that the right reason to feel has been the same in these situations, and thereby not being affected by the situational influences.

However, given the situationist challenge, virtue theorists need to provide evidence to support the empirical thesis that robust dispositions to have appropriate emotions can be developed. Further evidence is thus needed to strengthen the empirical grounding of this component of virtue development.

1.4 Developing Dispositions to Have Appropriate Emotions

In this section, I argue that it is possible for people to get better at resisting the influence from incidental affect by developing two emotion-related abilities: emotion differentiation and

emotional clarity.¹⁵ The development of these two abilities is in line with the idea of “feeling for the right reasons”. I will also suggest that emotion differentiation may be even more helpful than emotional clarity in counteracting incidental affect. In what follows, I will first explain how emotion differentiation and emotional clarity can help counteract incidental affect and then briefly discuss how people can develop these abilities.

Several psychologists argue that affect misattribution occurs because of low source awareness (e.g., Lerner et al., 2015; Clore & Huntsinger, 2009).¹⁶ That is, when we are unaware of what caused our affective states, we tend to make misattribution errors. Consistent with this explanation, it is found that increasing source awareness through experimental manipulations significantly decreases the likelihood of making misattribution errors. A typical way of manipulation is giving participants instructions about how relevant a given affective state is to a judgmental target. It has been shown that, when an attribution manipulation makes a cause of an incidental mood salient, the mood is no longer perceived as relevant to the judgment at hand, and misattribution errors are thereby eliminated or reduced.¹⁷ This effect has been replicated by many studies using mood inductions and various manipulations of source awareness (e.g., Gasper & Clore, 1998; Gasper & Clore, 2000; Keltner et al., 1993; Schwarz & Clore, 1983; Schwarz, 2012; Keltner et al., 1993). It has also been widely found in experiments on various types of judgments, such as moral judgments (Cameron et al., 2013), judgments of well-being (Schwarz & Clore, 1983), and financial decisions involving risk-evaluation (Loewenstein & Lerner, 2003).

¹⁵ “Emotional clarity” may be akin to or sometimes referred to as “type clarity”.

¹⁶ “Source awareness” may be akin to or sometimes referred to as “source clarity”.

¹⁷ It should be noted that different moods may respond differently to source awareness manipulations. For example, Schwarz and Clore (1983) showed that the reduction effect of misattribution is greater for negative than positive moods, suggesting that different valenced moods may respond differentially to source awareness manipulations. However, this should not mean that increasing source awareness is not effective for incidental good mood. For example, other studies such as McFarland, White, & Newth (2003)’s showed that increasing source awareness is effective for both positive and negative moods.

However, although increasing source awareness is key to misattribution reduction, the experimental manipulation is not a realistic method to use in a daily context. For one thing, in the experimental setting, the effects are usually induced by giving participants instructions *prior to* the presentation of judgmental targets. In a daily context, it seems impossible to manipulate source awareness in this way since it is impossible to know when someone is going to be influenced by incidental affect. For another, the effect of such external interventions is likely short-lived, and thus it does not help developing a cross-situationally consistent resistance to misattributions. As soon as the intervention is over, people may go back to the old state of being easily influenced by incidental affect again. The question, then, is whether there are ways for people to increase source awareness without the aid of external manipulation.

A more promising approach is to investigate why some people are consistently better at detecting the sources of their emotions than others are. If individual differences in source awareness exist, then at least some people are better at guarding against susceptibility to incidental affect. What contribute to such individual differences? Studies have shown that two emotion-related abilities – emotion differentiation and emotional clarity – are related to the individual differences in source awareness.

The first is *emotion differentiation*, which refers to the skill of parsing emotional experience in a discrete, differentiated fashion, particularly by using emotion-word labels to construct and represent experience with a high degree of specificity (Barrett et al., 2001, 2006; Lindquist & Barrett, 2008; Kashdan et al., 2015). Emotion differentiation requires having highly activated discrete emotion knowledge that involves the abstract cause of an experience, its relational context, and possible courses of action (Barrett et al., 2001). Greater levels of emotion differentiation are correlated with greater resistance to misattributions errors. For example,

Cameron et al. (2013) found that individual differences in emotion differentiation moderated the influence of incidental disgust on moral judgment: for participants low on emotion differentiation, incidental disgust increased the strength of moral judgments, suggesting that their incidental disgust influenced them; by contrast, participants high on emotion differentiation did not show such influence. Furthermore, emotion differentiation and resistance to misattribution seem to be causally connected. Cameron et al. (2013) found that participants who received emotion differentiation training ended up showing no influence of incidental disgust on their moral judgments, as opposed to the control group. Their proposed explanation is that emotion differentiation reduces misattribution errors because after identifying affect as a specific emotion, people access knowledge about that emotion's typical causes, appraisal structures, and consequences, which can clarify what is causing the emotion in the current situation; by contrast, having diffuse and undifferentiated affective states tend to increase the susceptibility to misattribution because they are not tied to a specific source.

Like emotion differentiation, *emotional clarity* conceptually involves source awareness. Emotional clarity refers to the extent to which people can identify, discriminate between, and understand their feelings (Salovey & Mayer, 1990; Boden & Berenbaum, 2011; Boden et al., 2013; Wranik et al., 2007; Yip & Côté, 2013). It is also often referred to as emotion understanding in the literature, so I will take these two terms to be synonymous. Conceptually, the construct of emotional clarity involves the extent to which people know the causes of their emotions or the capacity to analyze the cause-and-effect relations between events and emotions (Boden & Berenbaum, 2011; Yip & Côté, 2013). Experimental evidence shows that greater levels of emotional clarity are correlated with greater resistance to misattributions errors. For example, Yip and Côté (2013) showed that individuals with lower levels of emotional clarity

were significantly more susceptible to incidental anxiety than those with higher levels of emotional clarity.

Although a few psychologists take emotion differentiation to be a part of emotional clarity (see, for example, Cameron et al., 2013), more argue that they should be treated as distinct constructs (Kashdan et al. 2015; Boden et al., 2013; Barrett et al., 2001, 2006). One way to see the difference is through the different ways they are measured. The construct of emotional clarity is usually assessed by trait measures such as the Trait Meta Mood Scale (Salovey et al., 1995), which ask respondents to characterize their experiences retrospectively. This means that the data collected by these measures tend to be people's memory retrievals of their past emotional experiences and thus reflect people's beliefs about their general emotional dispositions, rather than accurate representations of momentary emotional experiences. In contrast, several psychologists argue that the construct of emotion differentiation should be measured behaviorally by moment-to-moment experience sampling method or scenario-based assessments because emotion differentiation is a skill of categorizing momentary affective experiences, which means that its emphasis is not on grasping the content of emotion knowledge but *using* such knowledge to make sense of one's momentary affective experiences (Kashdan et al., 2015; Boden et al., 2013).

Emotion differentiation and emotional clarity seem to be distinct types of abilities. Emotion differentiation focuses more narrowly on the skill of representing one's momentary emotional experience with specificity, whereas emotional clarity concerns the general repertoire of emotion knowledge and typically associated with reflective processes to understand emotions. To have clarity over the concept of anger, for example, one can retrospectively think over instances of anger that one has observed in the past; however, to be able to differentiate anger

from other emotions at a given moment when one is experiencing it, one needs to make sense of incoming sensory inputs at a given moment while at the same time activating one's repertoire of emotional knowledge.

The distinctive mechanism of emotion differentiation seems to make it especially helpful for reducing misattributions when compared to emotional clarity. Several psychologists argue that people high in the skill of emotion differentiation may have a better understanding of situation-specific information and can detect more specific experiential information, which allow them to make specific predictions for contextualized action (Boden et al., 2013; Thompson et al., 2021; Kashdan et al., 2015). Emotion differentiation is thus closely tied to reducing misattribution because being good at detecting situation-specific information is crucial for disentangling incidental affect from integral emotions. It's likely that the ability to differentiate emotions requires the ability to differentiate between all sorts of situations, which includes differentiating between the situations that caused incidental affect and the situations that caused integral emotions. Thus, through the emotion differentiation mechanism, misattribution errors are effectively reduced.

Developing emotion differentiation requires a different type of practice than emotional clarity. As Boden et al. (2013) argue, emotional clarity is developed through reflection, but emotion differentiation should be trained through learning how to make sense of affective experiences on-line. However, it also seems that the development of emotion differentiation may heavily depend on the development of emotional clarity. Being able to make sense of affective experiences on-line requires that one already has a good grasp of emotion concepts, such as knowing how the concept of anger differs from the concept of disgust.

The development of emotional clarity starts as early as childhood and involves multiple processes. Children acquire conceptual knowledge about emotion through observing how adults use emotion terms to label someone's behaviors (Wranik et al., 2007). In the process, they extract information about the relevant psychological situation and interoceptive environment, behavioral responses, and regulation strategies. They also learn the causal connection between events and emotions by observing how adults respond emotionally to events (Yip & Côté, 2013). In addition, children can also develop understanding by mimicking the behaviors of their parents, or through their parents' emotional coaching. For example, when children experience anxiety, some parents provide explanations to their children about the sources of their anxiety (Saarni, 1999).

In sum, I've argued that there are ways to ameliorate situational influence from incidental affect. Most importantly, the solutions that I've argued for are agential. Instead of trying to make our environments more conducive to virtuous conduct, I've shown that there are ways to change ourselves to make us less susceptible to situational factors. Although affect misattribution is pervasive, it doesn't necessarily follow that people cannot change the degree to which they are susceptible. There is still room to exercise their agential power to gain more control of our affective experiences.

Consider Adam and Sophie again. Adam and Sophie might be strongly motivated to be morally and intellectually virtuous but bad at being aware of the correct sources of their feelings, and thus they fail to feel virtuously. But suppose Adam and Sophie start to learn to be aware of what is actually causing their current feelings, identify what kind of emotion it is, and acquire knowledge about fine-grained differences between closely related emotions. Over time, they improve their emotion-related abilities and become more readily aware of the correct causes of

their moods. While incidental moods are still unavoidable as they can be generated in any kinds of situations, as moral and epistemic agents Adam and Sophie are now better equipped psychologically to be less affected by them.

1.5 Conclusion

I argued that a distinctive form of situationist challenge from incidental affect is pressing for neo-Aristotelian virtue theories, on which virtues require robust dispositions to have appropriate emotions. If the challenge stands, it seems to imply that people cannot develop the required emotional dispositions. I then suggested solutions to the challenge. Drawing from empirical data, I argued that people can develop ameliorative abilities such as emotion differentiation and emotional clarity to counteract the situational influence. I should note that the solutions that I have argued for are by no means sufficient for developing dispositions to have appropriate emotions. However, they do seem to be necessary. A virtuous person must possess abilities such as emotion differentiation and emotional clarity, but someone who possesses these abilities may not be virtuous. To be virtuous, one still needs to learn what the appropriate integral emotions are, what the right reasons are for feeling such emotions, and so forth.

My arguments touch upon a less discussed aspect as the mainstream literature has thus far been focusing mostly on the situational challenge to robust behavioral dispositions rather than robust dispositions to have appropriate emotions. In addition, it shows that the psychological literature on integral affect, which has so far received little attention, has significant relevance to neo-Aristotelian accounts of virtue development.

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Chapter 2: How to Make Emotions Epistemically Trustworthy

2.1 Introduction

A notorious reputation emotions enjoy is that they are not so trustworthy epistemically – in particular, *less* trustworthy than epistemic faculties such as sense perceptions. Consider Zagzebski (2012)’s observation: “[F]or the most part, our sensory faculties produce consistent outputs, but many of our emotion dispositions do not, and we later judge that the emotion was a mistake” (p.84). The idea is that, in general, it seems that our emotional faculty is less reliable than our sensory faculties in that they tend to produce less “correct” states.

Consider an intuition widely shared by epistemologists that our perceptual system is reliable. If I have a perceptual experience of seeing a cat in front of me, I can rely on this experience to form the belief that there is a cat, and my belief is likely going to be true. This is because epistemologists generally assume that our sensory perceptions tend to produce correct perceptual states under normal conditions.¹⁸

By contrast, the same intuition does not hold for emotions. If I have an emotional experience of feeling angry at John, I cannot rely on this experience to form the belief that John has wronged me. The default assumption is that emotions are not so “trustworthy”. Thus, even under normal conditions, our emotional system does not seem to consistently produce “correct” emotions. Accordingly, a common advice we often hear is that we should re-examine or reflect over the anger, making sure whether it is fitting, and then decide whether it can be trusted for subsequent beliefs or judgments.

¹⁸ See, for example, Sosa (1985), Greco (2010), Goldman and Beddor (2021).

A perception is reliable if normal conditions are met. For example, the “normal conditions” for visual perceptions are conditions such as being in a well-lit room, having normal eyesight, barring ad-hoc set-ups such as being in a “fake barn” county, and so on. However, establishing normal conditions is not sufficient for emotions to be trustworthy. To draw a parallel, let’s say that the normal conditions for emotions are having a normal functioning emotional system, being in ordinary environments where people roughly share similar emotional dispositions (I do not live with the aliens who have opposite emotional dispositions with me, for example), and so on. These conditions do not by themselves make our emotions trustworthy: an episode of anger produced under these conditions can nevertheless fail to be trustworthy. We often feel angry at someone, and later realize that the anger is not fitting. Thus, what the trustworthiness conditions are for emotions are less obvious. In contrast to perceptual states, we do not have a good idea of what makes our emotions trustworthy, despite recent arguments for their positive epistemic status.¹⁹

In this chapter, I investigate the “good conditions” that, once established, make our emotions epistemically trustworthy.²⁰ Specifically, I argue that emotions are trustworthy if they are properly regulated and normal conditions are met. I’ll proceed in two steps. First, I’ll argue that emotions typically can be regulated to become trustworthy due to their distinct regulatory nature, where “regulation” refers to a kind of short-term as opposed to long-term change such as emotional learning (Section 2.3). Second, I’ll discuss what “proper regulation” should be like. I propose a new view of proper emotion regulation that is informed by contemporary psychological theories of emotion regulation and argue that it has advantages over traditional views of emotion regulation held by philosophers (Section 2.4 and 2.5). The upshots of my

¹⁹ Hookway (2003, 2008), Alfano (2017), de Sousa (2008), Brun and Kuenzle (2008).

²⁰ Or more trustworthy. I assume that trustworthiness admits of degrees.

arguments are two-fold: first, regulation for epistemic trustworthiness needs to go beyond the traditional method of reflective control; second, “proper regulation” for emotions needs to be constrained by psychological adaptivity, even if the goal is epistemic trustworthiness. My arguments imply that emotion regulation has its own uniqueness and should not be modeled after belief regulation. Before I make the arguments, I’ll first clarify what I mean by emotions being epistemically trustworthy (Section 2.2).

Throughout the chapter, my background assumptions will follow uncontroversial claims about the nature of emotions in the philosophical and psychological literature. Roughly, I take emotions to have intentional objects, provide evaluations or appraisals of their intentional objects (however, I remain neutral on whether such evaluations amount to judgments or beliefs), provide motivations for actions, and are sometimes responsive to reasons and evidence. I also take emotions to involve a subjective component (e.g., manifested in verbal reports such as “I feel angry”), a physiological component (e.g., increased heart rate), and a behavioral component (e.g., tightly pressed lip, pulled-down eyebrows), although these components may not always go together in an episode of emotion, as shown by empirical evidence.²¹

2.2 The Epistemic Trustworthiness of Emotions

In this section, I’ll clarify the sense in which I mean the epistemic trustworthiness of emotions in this chapter.

A dominant view in philosophy holds that an emotion is epistemically trustworthy if and only if it fits its object, where “object” refers to an emotion’s intentional object or what an emotion is about.²² This view is either explicitly endorsed or implied by philosophers who have

²¹ Mauss, Levenson, McCarter, Wilhelm, & Gross (2005).

²² Intentional objects are also sometimes called “particular objects”, as distinguished from “formal objects” of emotions.

described cases of untrustworthy emotions as unfitting emotions.²³ This view rests on a standard view that takes emotions to have correctness conditions.²⁴ Emotions fit their objects when they correctly represent the world, similar to the idea of a belief or a perception being correct. A classic example is fearing Fido the friendly and harmless dog. If I fear Fido, my fear is not fitting because it does not correctly represent the fact that Fido is friendly and poses no threat. There is a misalignment between my fear and the world, so to speak, a lack of fit.

However, the issue of fit for emotions is somewhat complicated. Whether an episode of emotion “fits the object” is a matter of an interplay between facts about the object and the evaluation provided by the emotion type to the object. Each emotion type represents the world or provide evaluation to objects in a certain characteristic way.²⁵ For example, fear represents objects as being dangerous or threatening, anger represents objects as being offensive, sadness represents states of affairs as a loss, and so on. Thus, if my fear for an aggressive dog is fitting, this is because the dog does in fact possess frightening features and it appears to be fearsome to me.

People differ in their emotional dispositions, which are the range of objects that a person tends to take a certain emotion to be fitting, according to Zagzebski (2012). Fear represents objects as being dangerous or threatening, but the range of objects that a person takes to be fearful can vary from person to person. For example, suppose that both I, a civilian, and a bomb disposal specialist are standing on a potential bomb that could explode if we move our feet. From my perspective, I feel terrified because this is a terrifying situation, whereas the specialist is much calmer because of her experience and training. The bomb disposal specialist and I clearly

²³ See, for example, Zagzebski (2012), Goldie (2008), Dohrn (2008). In addition, Goldie and Dohrn cite earlier philosophers such as Hume and Descartes as having this view as well.

²⁴ Deonna and Teroni (2012), Zagzebski (2012).

²⁵ Various terms have been used to describe this evaluative aspect of emotions, such as “formal object”, “evaluative property”.

have different dispositions to fear, which result in us having different emotional reactions to the same set of descriptive facts. However, that does not make my emotion more fitting than hers. On the contrary, both of our emotions should be considered as fitting the object or correct. Furthermore, this is different from saying that our emotions are epistemically justified, make sense, or are reasonable. The difference does not result from having different reasons but from having different emotional dispositions.

Thus, epistemic trustworthiness of emotions comes down to a matter of whether emotions fit their objects, where fittingness is determined by descriptive facts and an individual's emotional dispositions. That is, to say that an emotion is epistemically trustworthy is to say that it likely fits its object. This definition follows the traditional definition on the reliability of perceptions: that is, to say that a perception is reliable is to say that it is likely accurate.

However, if emotional dispositions can differ, how do we determine which instances of emotions are unfitting? Which emotions are errors that need to be corrected? If two people disagree about whether a situation is fearful, how do we determine if one of their emotions is mistaken? As Zagzebski (2012) argues, we can tell whether a particular instance of emotion is mistaken by referencing to other instances in which our emotional dispositions regularly operate. There are many ordinary instances of unfitting emotions that fall into this category. For example, I can get angry at you but later judge that my anger is not fitting. In this ordinary case, I'm taking my anger to be unfitting by referencing to situations in which I am regularly disposed to feel angry. Suppose one time I get wildly angry over some trivial dispute at you. I later judge that my anger is not fitting (more specifically, the degree of my anger is not fitting) because I'm not regularly disposed to feel wildly angry over trivial matters. Thus, from my perspective and the kind of emotional disposition I have, I realize afterwards that this instance of anger I had was

unfitting. Furthermore, in many such ordinary cases, we share similar emotional dispositions with other people, and thus can reference to each other's instances of emotions to determine whether our emotions are fit. Thus, for example, my friends are likely to agree that my anger is not fitting.

The second type of cases are recalcitrant emotions such as recalcitrant fear of flying. It might seem that recalcitrant emotions are cases in which people's emotional dispositions differ, and thus are not counted as unfitting emotions. However, when the person who fears flying references to instances in which their disposition to fear operates, they will find that things that they consider safe do not fall into the range of objects that make them afraid. Since they know that the airplane is safe, their persistent fear of flying is thus not fitting. In contrast, consider a kind of alien environment where people *are* regularly disposed to fear safe things. In that kind of environment, fearing a safe airplane would be fitting. However, recalcitrant emotions clearly are not like that.

Similarly, incessant doubt is also unfitting in this regard. I keep feeling doubtful that I have turned my stove off, but I've already checked many times and gathered sufficient evidence that it *is* off. When I reference to other instances in which my disposition to doubt operates, I find that I am not disposed to doubt what I know for certain. I know that the stove is off based on the sufficient evidence that I gathered, and thus my doubt does not fit its intentional object, which is the proposition "The stove is off".²⁶

The above two kinds of cases clearly do not exhaust all cases of "untrustworthy emotions". Sometimes we are misled by our emotions not because they are not fitting but

²⁶ Some people may think that incessant doubt is caused by not knowing that the stove is off. The kind of situation I'm describing here separates knowing the stove is off from the feeling of doubt. It seems to me that one can know that *p* but still have a feeling of doubt about *p*.

because we mistakenly take them to be relevant for a judgment.²⁷ However, in this chapter I'll only focus on these two kinds of cases. In Section 2.3 and 2.4, I'll discuss in more detail how to regulate these two kinds of "untrustworthy emotions" in the sense of how to make them fit their objects.

2.3 The Distinct Regulatory Nature of Emotions

In this section I argue that emotions typically can be regulated to become epistemically trustworthy due to their distinct regulatory nature, where "regulation" refers to a kind of short-term as opposed to long-term change such as emotional learning. Furthermore, emotions are regulated in their own distinct ways. I conclude by arguing that the conditions that make emotions epistemically trustworthy should include emotion regulation. I'll discuss in the next sections what kind of regulation is proper for making emotions epistemically trustworthy.

Let me start by saying that I'm interested in ordinary instances of emotions, just as epistemologists are interested in ordinary instances of perceptions. That said, I recognize that, clinically, the conditions of our mental health are often a continuum. The line could be vague between a healthy person with occasional recalcitrant emotions and a person whose emotions are untrustworthy because they suffer from mental disorders.²⁸ Thus, I'm going to assume that the kinds of cases that I discuss are not caused by the malfunctioning of our emotional systems or mental disorders.

²⁷ For example, citing Hume, Goldie (2008) mentions a case of misleading emotion in which a father is biased by his love for his son in judging the moral actions of his son. The fact that the Good Samaritan happens to be his son should not influence his moral judgment of his son's actions. This is a case where the emotion of love is misleading because it is mistakenly taken to be relevant for a moral judgment. I do not discuss this type of cases in this chapter.

²⁸ Likewise, one might think that our perceptions also range from trustworthy to untrustworthy depending on the individual's particular perceptual system, such as whether the person is a perceptual expert or has a sensory disability.

As I observed earlier, the intuition behind the emotion skeptic is that emotions often need to be regulated to be epistemically trustworthy, where trustworthiness here refers to their fittingness. Philosophers often talk about regulating for fittingness in terms of “re-examining” our emotions using reasons (more on this in the next section). That is, we consciously reflect over whether our emotions are fitting. However, the mere need for re-examining a mental state does not imply that the mental state can be changed through this kind of re-examination. For there are mental states that cannot be changed in this way, nonetheless we can still “examine” them by reflecting over whether they are trustworthy or not. For example, we can re-examine a perceptual experience, through which we realize that it is a perceptual illusion and thus not trustworthy, and subsequently decide not to rely on it for forming subsequent judgments. However, perceptual illusions are often resistant to change. Reflecting over why I have a certain perceptual illusion does not thereby make the illusion go away – I still experience it perceptually. In contrast, our emotional experiences often can be changed through this kind of re-examination by reflection. An episode of anger can be changed by reflecting over why I got angry, whether I have any good reasons for being angry, and so on. Specifically, “change” could involve the subjective feeling, physiological signs, or behavioral manifestations of the anger.

This intuitive contrast suggests that perceptions cannot be regulated in the same way as emotions can. In other words, emotions have their distinct ways of regulation. As I’ll argue, emotion regulation is a kind of short-term regulation that is intentional and goal-directed: people often have a certain goal in mind regarding how they want to change their emotions. Changing a mental state in accordance with a goal is consistent with the idea of agential regulation, which refers to psychological processes by which individuals voluntarily change their mental states to meet certain regulatory goals that they set for themselves over a relatively short period of time.

This idea of regulation is distinguished from long-term changes such as perceptual or emotional learning, although long-term changes may partly determine individual differences in the ability of regulation. Whether a particular instance of emotion is trustworthy in part depends on how it is regulated.

2.3.1 Emotion Regulation

Consider a typical scenario. Sally failed her final exam and feels sad. She doesn't like to keep feeling sad about it, so she tries to cheer herself up. There are myriad ways to do so. For example, she can avoid thinking about her bad scores and focus on something else, such as the fact that the summer vacation is coming up. She can also think about this experience in a positive light, such as thinking that she learned important lessons from it and could improve herself in future exams. If Sally doesn't want her sadness to be found out, she could suppress her sad expressions and try to smile, laugh, or even make jokes. Like Sally, we regulate our emotions in various ways frequently.

Emotion regulation refers to “the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998, p. 275). It's widely acknowledged that emotions are always already a product of regulation – people regulate their emotions all the time, either consciously or unconsciously, automatically or controlled, to the effect that it's hard to draw a line between the processes of emotion generation and emotion regulation empirically.²⁹

The idea of emotion regulation rests on the idea that emotions are response tendencies.³⁰ According to the latter idea, we first form emotional response tendencies based on how we

²⁹ Morris and Reilly (1987), Gross (1998a, 1998b), Gross and Feldman Barrett (2011), Campos, Frankel, and Camras (2004), Kappas (2011).

³⁰ Gross (1998a), James (1884, 1894), Buck (1994), Frijda (1986), Scherer (1984).

evaluate emotional cues (see figure 2.1). Emotional responses are then activated from these response tendencies, during which they may be modulated by attentional or cognitive resources, which then result in the final emotions we have. This emotion generation model suggests that our emotions unfold over time. An emotion is only fully unfolded or activated at the end of a temporal process.

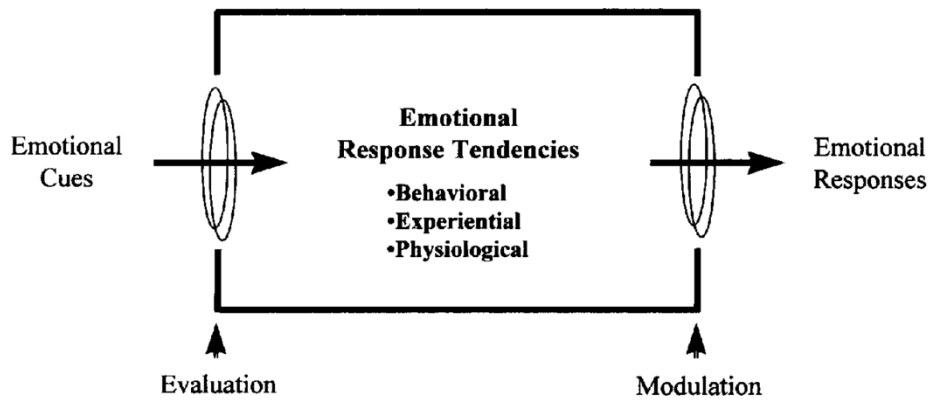


Figure 2.1: Emotions as response tendencies (Gross, 1998).

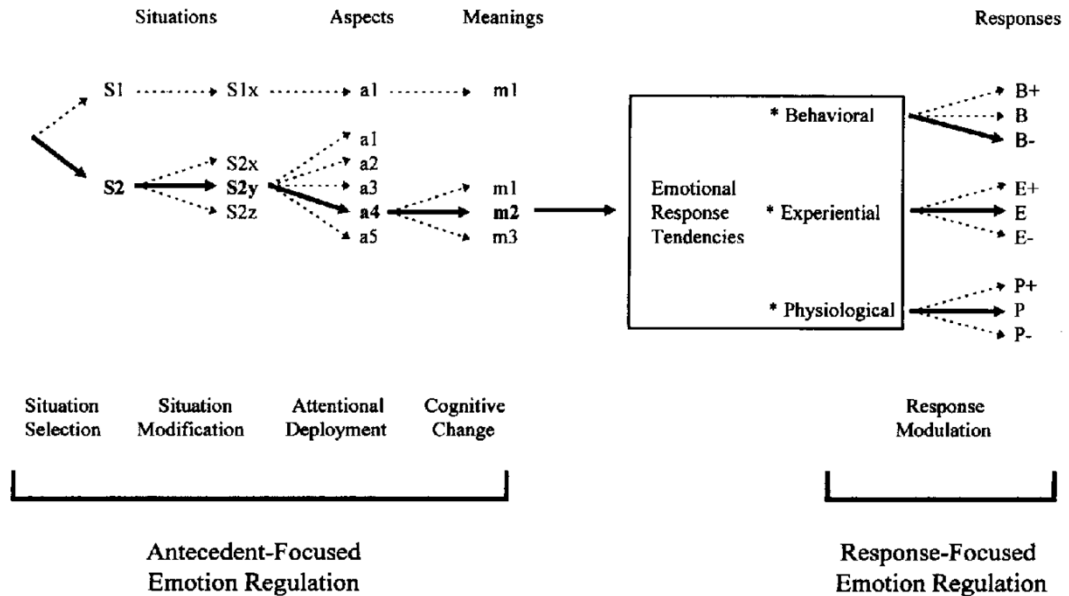


Figure 2.2: The process model of emotion regulation (Gross, 1998).

Based on this model, Gross developed the process of model of emotion regulation (figure 2.2). He argues that there are five sets of regulatory processes that can take place during the emotion generative process, from the beginning when a person first encounters a situation to the end when an emotion is fully unfolded: situation selection, situation modification, attentional deployment, cognitive change, and response modulation. I'll briefly introduce these. First, an emotional cue is broken down into three components: situations, aspects, and meanings. When an individual is about to enter a situation, he or she can sometimes choose between situations. Thus, the first set of regulatory process is situation selection. Suppose I know that I will get into an intense altercation with my friend if I meet with her and get angry, I might just choose to not meet her. Once a situation is selected, I could still try to actively change my situation to modify its emotional impact. For example, even if I have chosen to meet my friend, there may be things that I can do to defuse the tension, so that I don't get as angry as I would have been. Third, even when a situation has been modified, one could still choose which aspect of the situation to focus on. For instances, getting distracted by the decorations of the room we are in rather than focusing on the demeanors of my friend may be a way to get less angry. Fourth, even when a person ends up attending to the aspect of a situation that elicit her emotions, she could still modify the emotional impact by changing how she evaluates that aspect or re-interpret the meaning of it. Thus, this model assumes that, given the same set of descriptive facts of an aspect of a situation, there are potentially multiple ways of meaning-making (e.g., m1, m2, m3...) or cognitive change one can have. To illustrate, I might re-interpret the altercation in a different light, such as seeing it as my friend's showing her genuine care for me and not as showing hostility. By making this cognitive change, my anger is subdued. Up till this point, what I mean by "anger" or emotions would be response tendencies (as shown in figure 2.2), which is yet to be actualized as a fully

folded emotion, manifested behaviorally, experientially, and physiologically. The last kind of regulatory processes—response modulation—refers to active attempts made to influence these three aspects of an emotion when an emotion is already fully unfolded. For example, one may try to suppress angry expressions, while still feeling angry experientially.

One notable feature in the process theory of emotion regulation is that regulation always concerns the *activation of a goal* to modify the emotion-generative process (Gross, Sheppes, and Urry, 2011). Specifically, two kinds of goals can be distinguished: emotional goals and motivational goals (or motives). An emotional goal involves changing the magnitude, duration, or latency of an emotion. A motivational goal is a reason why an individual wants to activate an emotional goal. For example, someone who has a motive for promoting a focused mindset may up-regulate (i.e., increase) her negative emotions. In this case, the emotional goal would be the up-regulation of negative emotions, and the motivational goal or the motive would be the promotion of a focused mindset.

In sum, emotion regulation has the following characteristics: First, it is always voluntary and goal-directed – individuals willfully influence their emotional states; second, it is flexible to some degree – individuals can influence various aspects of emotions, such as latency, rise time, magnitude, duration, and offset of responses; third, regulatory change takes place in a relatively short time span; and finally, there are various ways of regulating an emotion.³¹

³¹ An individual might be unconsciously regulating her emotions. This may seem a little at odds with some sense of “voluntary” or “willfully” which entails conscious actions. My point here is that emotion regulations are not passive actions. Even when an emotion regulatory effort is unconscious, it is still initiated by the agent in the sense that the agent herself or himself intentionally wants to influence their emotion in a certain way.

2.3.2 Trustworthiness Conditions

Given the distinct ways emotions are regulated, it seems that mental states can be roughly classified into two kinds by their trustworthiness conditions. Consider the following two types of trustworthiness conditions:

Type 1 Trustworthiness Condition: Mental states are trustworthy if normal conditions are met.

Type 2 Trustworthiness Condition: Mental states are trustworthy if normal conditions are met and properly regulated.

Type 1 trustworthiness conditions apply to mental states that cannot be influenced by agential regulations. That is, we cannot change them over a short period of time in accordance with our goals—we cannot make them more trustworthy. Their trustworthiness can only be established by situating them in their normal conditions. For example, our perceptions are trustworthy if we are in a room with good lighting, have unimpaired vision or hearing, and so on.

Type 2 trustworthiness conditions apply to mental states that can be influenced by agential regulations, in addition to their normal conditions, and thus whether they are trustworthy or not depend partly on whether individuals properly regulate them. Both emotions and beliefs seem to fall into this category. Just as there are points at which one can intervene with regulatory efforts during the generation of an emotion, one does the same thing during the formation of a belief. Under type 2 trustworthiness conditions, whether someone can properly regulate their mental states thus becomes an important factor for whether their mental states come out as trustworthy. Thus, on this definition, whether a regulatory effort counts as “proper” is intimately connected to whether it makes a mental state trustworthy (or more trustworthy). In the context of epistemic trustworthiness, it amounts to whether it brings about epistemic goods.

In the rest of this chapter, I will employ this general distinction and explore the question of what counts as proper regulation that makes emotions epistemically trustworthy. I will first consider two traditional views. Then I will propose a new account of proper regulation and argue that it makes improvements over the traditional views.

2.4 How to Make Emotions Trustworthy: Two Traditional Views of Proper Regulation

Philosophers do not typically use the term “emotion regulation”. Yet, in the philosophical literature, there are a great many examples that would seem to count as cases of it. Because emotions are traditionally viewed as untrustworthy, various views have been proposed as to what counts as properly regulating our emotions that make them epistemically trustworthy.³² In this section, I will examine two dominant views: *Reflective Control* and *Virtuous Governance of Attention*. I argue that neither is satisfactory.

2.4.1 Reflective Control

The first view of emotion regulation is what I call the “reflective control” view. It holds that we can only properly regulate our affective states by conscious reflection. Conscious reflection allows us to come up with reasons on whether our emotions are fitting, which is a way of critically examining whether our emotions. This approach is modeled after the regulation of doxastic attitudes. How do we make our beliefs trustworthy? We critically examine them by coming up with reasons because beliefs are reasons responsive.

A strong and a weak version of the reflective control view can be identified. The strong version is argued by philosophers such as Descartes, who believes that absolute self-mastery or

³² See, for example, Alfano (2017), for more variety.

control of emotions can be achieved by reflection (Schouls, 1989, p.166).³³ The strong version seems to be plausible psychologically and therefore I will not consider it. On the other hand, the weak version of reflective control does not take reflection to have as much power of control, but under the weak version there are different opinions over why our affective states can be trustworthy beyond the control of reflection. For example, despite acknowledging that reflection is a limited capacity, Dohrn (2008) claims that, other things being equal, using reflection to make one's emotions trustworthy is still preferred over relying merely on affective states, and the affective states that are beyond the reach of reflective control should be considered as untrustworthy (p. 120). In contrast, Hookway places a much higher trust in the affective states that are beyond the reach of reflective control.³⁴ He argues that we would not have epistemic success if we only relied on conscious reflection. Since it is a fact that reflection is a limited capacity and we achieve a certain level of epistemic success, at least some affective evaluations must be worthy of our trust. Hookway concludes that "trusting these affective responses is often the only way to avoid taking on board an unreasonable burden of reflective self-questioning" (p.52). In the same vein, Zagzebski (2012) argues that we need to place a basic trust in our emotional faculty or disposition to live a normal life (p.86). Zagzebski offers an account for *when* and *why* reflection can be counted as proper regulation of our emotions. The specific form of reflective control that she proposes is "emotionally conscientious self-reflection", which is "a self-conscious attempt to make our emotions fit their objects" (p.86). The conscientious subject

³³ "There is no soul so feeble that it cannot...acquire an absolute power over its passions" (art. 50). "Each human being is capable of attaining absolute self-mastery because we can all acquire 'the forethought and diligence whereby we can correct our natural faults in exercising ourselves in separating within us the movements of the blood and spirits from the thoughts to which they are usually united' (art. 211)" (Schouls, 1989, p.166).

³⁴ To be precise, Hookway is arguing for how affective evaluations can provide immediate justifications rather than how reflection regulates our affective states. Nevertheless, he doesn't deny that reflection plays an important regulatory role in forming our beliefs appropriately. What he claims is that the role reflection plays is more limited than the strong version of reflection control attributes it to.

who exercises her self-reflective power to the best of her ability would end up having trustworthy emotions. The more she exercises self-reflection, the more trustworthy her emotions would become.

At its core, the reflective control view concerns the very intuitive and appealing idea that reflection is the proper way to regulate our affective states. After all, reflection is a powerful mental tool that we use as rational beings. I do not deny that reflection is a very important way for regulating our affective states. However, it seems to me that the power of reflection may be overstated, even on the weak version. In what follows, I argue that there are several problems with the reflective control view and these problems show that reflection is neither necessary nor sufficient for making our emotions trustworthy.

Reflection is not necessary for making our emotions trustworthy because there are clearly other regulatory mechanisms that make our emotions trustworthy. A proponent of the reflective control view may object to this by saying that even if such a mechanism exists, it may still depend on reflection. For example, one can argue that every emotion is trustworthy only if it has been regulated by reflection. That is, through prior reflective control, the subject may have established a trustworthy pattern of emotional responses to certain types of situations. Thus, even if she does not reflect over her current emotional states, which turn out to be trustworthy, the trustworthiness of such states still be the result of reflective control. But this type of objection seems to be already assuming that reflection is necessary for any kind of proper regulation, which hasn't been established.

Reflection is also not sufficient for making our emotions trustworthy. Even when the power of reflection is fully exercised, it may still fail to properly regulate emotions. Proper regulation of emotions should involve a matter of knowing when to stop and when to start

reflection (Brady, 2013). Not stopping reflection when one should stop leads to excessive reflection over an emotion, and not reflecting when one should reflect leads to insufficient reflection. Both could result in untrustworthy emotions. However, the ability to know when one should reflect is different from the ability to reflect. The latter concerns the ability to come up with reasons or to use reasons to “re-examine” one’s emotions, whereas the former concerns knowing when a proper time is to stop reflecting. Recalcitrant emotions are one kind of cases that have to do with excessive reflection (Brady, 2013, p.162). They are a type of untrustworthy emotions because they are neither fitting nor serve as an instrumental means for bringing about epistemic goods. A person with recalcitrant emotions is someone who continues to “seek out reasons that confirm her emotional construal in the face of an evaluative judgment that counts as a disconfirmation of the construal” (p.161). For example, someone with recalcitrant fear would not stop searching for reasons or evidence for why she is still feeling afraid, despite knowing that the plane is safe. This, as Brady argues, “constitute[s] a form of epistemological and practical paralysis, where the subject fails to arrive at a judgment or decision as a result of excessive checking and reflection” (p.162).

Brady’s diagnosis is that the subject experiences recalcitrant emotion because she cannot regulate her attention properly. She focuses too much attention on the recalcitrant fear, which leads to her excessive reflection. The solution he suggests, which I’ll discuss in more detail shortly, is to have virtuous governance of attention. But if that’s true, then reflection over one’s emotions is only appropriate when one properly regulates her attention, which suggests that reflection alone wouldn’t be sufficient for properly regulating one’s emotional states.

Consider Zagzebski’s idea of emotionally conscientious self-reflection. Would being emotionally conscientious help someone overcome her recalcitrant fear for flying? It seems that

recalcitrant fear may persist exactly because she makes conscientious self-reflection. If we follow Zagzebski in thinking that higher degrees of conscientiousness require considerable self-awareness and self-monitoring (2012, p. 87), then it seems likely that someone with a higher degree of self-awareness and self-monitoring may be more likely to engage in excessive reflection. She may be caught up in the epistemological paralysis, a situation in which “one is genuinely undecided or in two minds about some evaluative situation” (Brady, 2013, p.177). This could potentially be a waste of cognitive and attentional resources, and thus epistemologically and practically problematic for the subject. In short, being able to consciously reflect over one’s emotions doesn’t thereby imply that one would also know when to stop or continue reflection. In fact, one may even argue that the more conscientious someone is or the more she self-reflects, and the more she risks engaging in excessive reflection. Consequently, it seems that some other means of regulation independent of reflection would be needed, and reflection alone is not sufficient for proper regulation.

2.4.2 Virtuous Governance of Attention

The second account of proper regulation is Brady’s “virtuous governance of attention” view. The central idea of Brady’s account is that proper emotion regulation requires virtuous governance of attention. According to Brady (2013), emotions consume our attention and motivate us to seek out reasons that bear on the accuracy of our emotional construal, thereby enhancing our evaluative understanding. However, problems occur if an emotion consumes too much or too little of our attention. Too much attention would lead to excessive reflection and checking, and too little attention would lead to insufficient reflection. Therefore, only under the right kind of conditions—conditions under which our attention on emotions is properly regulated—can emotions play the positive epistemic role of enhancing evaluative understanding.

The conditions under which attention is properly regulated is just when we have virtuous governance of attention.

On Brady's account, a person who has virtuous governance of attention grasps that her epistemic goal is evaluative understanding.³⁵ This means that she is always aimed at understanding why they come to have her emotions and govern her attention according to whether understanding is reached. If she has not reached an understanding, then she would keep reflecting about her emotions until she has reached an understanding of her emotion. If she already has understanding, she would stop being reflective and attentive on the emotion. Thus, virtuous governance of attention is grounded in evaluative understanding, but evaluative understanding is also promoted by it. As a result, the virtuous person is suitably reflective about her emotional objects and events (p. 180).

Brady argues that people who have virtuous governance of attention would not have recalcitrant emotions. Those who have recalcitrant emotions are the ones who do not yet understand the evaluative structure of their situation. The better one understands her situation, such as being in a safe plane, the less likely that she will be motivated to seek out reasons to check whether her fear is fitting.

Brady's account of emotion regulation is a significant improvement on the reflective control view as it provides a plausible solution to the problem of when to reflect and when to stop reflecting, which the reflective control view fails to account for. However, it has limitations. One limitation is that having virtuous governance of attention cannot address the problem of recalcitrant emotions entirely. On Brady's account, if someone has gained evaluative

³⁵ "Virtuous" here does not refer to moral or intellectual virtues. "A virtuous person" in this context only refers to someone who has virtuous governance of her attention with respect to her emotions. Thus, the idea of "virtue" here is similar to "proper". I suppose Brady uses this term because having virtuous attention is a kind of "hitting the mean", meaning that one should not have too much or too little attention on one's emotions.

understanding, she would not have recalcitrant emotions. But there is reason to think that this is not the case. For example, someone could have an evaluative understanding of how her fear comes about and realize that she should make it go away, yet still not be able to do so. This may not be because she is making excessive reflection. She may not be searching for more reasons that bear on the accuracy of her fear—to the contrary, she now knows that her fear is *not* fitting but simply cannot make it go away. In other words, someone could understand her emotion while still failing to control it to the appropriate intensity that she wants it to be. The point is not that evaluative understanding cannot lead to proper regulation, but that sometimes simply having evaluative understanding may not be enough for proper regulation. In some cases, evaluative understanding can fail to be effective for proper regulation.

According to a frequently used scale that measures emotion regulation difficulties, “Difficulties in Emotion Regulation Scale” (DERS) (Gratz and Roemer, 2004), emotional understanding and emotional acceptance are distinct items. DERS suggests that understanding and acceptance are distinct abilities of regulation. A person could have no difficulty understanding her emotion while still having difficulty accepting it. DERS also includes items such as impulse control difficulties, limited access to emotion regulation strategies, difficulty engaging in goal-directed behavior, which are also considered as distinct from emotional understanding. If lack of emotional understanding is not the sole cause of improper regulation, then gaining understanding does not necessarily make one has virtuous governance of attention. What DERS suggests is that making our emotions epistemically trustworthy requires more than epistemic abilities.

A second limitation is that grounding an account of proper regulation entirely in evaluative understanding risks the account being reduced to yet another version of reflective

control. Since evaluative understanding is what makes virtuous governance of attention or proper regulation possible, and the primary way to achieve evaluative understanding is by reflection³⁶, it suggests that virtuous governance of attention is ultimately achieved by reflection. It's worth thinking whether there could be ways of enhancing understanding other than reflection. For example, learning about how to accept one's emotions may help one understand how one's emotions work, or how flexible one's emotional system is. Notably, these ways of regulation do not involve critically re-examine the fittingness of one's emotions. They may be called "non-epistemic" or "practical" ways of regulation.

2.5 Beyond Reflective Control: A New Account of Proper Regulation

I propose a new account of proper regulation that is informed by the process model of emotion regulation:

For any individual *S*, *S*'s emotion *E* is properly (epistemically) regulated if and only if:

- a. *S*'s aim was to achieve *E* because *S* took *E* to be a fitting emotional state (i.e., *E* is *S*'s emotional goal).
- b. *S* achieved *E* by making use of regulation strategies adaptively.³⁷

Furthermore, if the relevant normal conditions are also met, then *S*'s emotion *E* is likely to be fitting (i.e., epistemically trustworthy).

What I have proposed above is a narrow account of proper emotion regulation because it already assumes that the individual *S*'s motive is to make her emotions fit. As indicated by Criterion *a*, *S*'s emotional goal is determined by her own understanding of what the fitting

³⁶ Since Brady argues that emotions enhance understanding by motivating us to seek out reasons that bear on the accuracy of our emotional construal, it seems clear that he takes reflection as the way to achieve evaluative understanding. There is no suggestion of whether he thinks there might be other ways to achieve understanding.

³⁷ The sense of "adaptive" used here is psychological, not biological.

emotional state is. In contrast, a general account of proper emotion regulation may not assume any particular motive for regulation.

Criterion *b* concern the strategic aspect of proper regulation. As informed by the process model of emotion regulation, on my view, a regulation won't be proper unless it is successful. Criterion *b* is thus a success criterion. As I argued in the previous section, some failures to make emotions epistemically trustworthy can be practical ones, even if one's goal is epistemic (that is, making emotions fit). Even if one has grasped the evaluative understanding of an emotional situation and thereby knows what her proper emotional goal is, she may nevertheless fail to achieve that goal. Although in many cases reflective control could be an effective method to achieve one's emotional goal, it is also limited in its ability to overcome some practical difficulties because emotions are not always reasons responsive (despite being sometimes reasons responsive). For example, recalcitrant emotion can be seen as a type of cases where regulation fails because the emotions fail to be reasons responsive.³⁸ Recalcitrant emotions fail to be properly regulated not because the subjects fail to know what her proper emotional goal is. To the contrary, most people who experience recalcitrant emotions know precisely what the fitting emotion should be. A person who fears despite knowing that the plane is safe knows exactly that her fear is not fitting and needs to be decreased. Thus, it seems that recalcitrant emotions result from a practical failure to meet the emotional goals people set for themselves. They need practical solutions.

Criterion *b* does not specify what regulatory methods or strategies an individual must use to make her emotions fit. My account of proper regulation thus goes beyond reflective control and encompasses a plethora of regulatory methods. As the process model of emotion regulation

³⁸ Given how common recalcitrant emotions are, it seems reasonable to think that they belong to ordinary instances of emotions. However, it's certainly possible that some extreme versions of recalcitrant emotions, such as phobia, would belong to the category of disorders.

suggests, there are multiple kinds of regulatory strategies one can choose from to achieve their emotional goals. Reflective control is certainly one of the strategies, but it may only be effective in some contexts but not others.

However, Criterion *b* places one restriction on S's choice of strategies: S must make use of the strategies in a psychologically adaptive way. This means that S must take into account the effectiveness of strategies in different contexts. The contexts could vary by specific situations as well as the specific stage at which the emotion has unfolded. For example, reflective control can be less effective in regulating highly intensive negative emotional situations. In contrast to distraction or avoidance, which intervenes at an earlier stage of emotion generation where the emotional response has not been fully initiated, reappraisal intervenes at a stage where the subject needs to directly engage with and process their emotional experiences. This could be potentially taxing and increases the difficulty for regulation. The choice of reappraisal depends on availability of cognitive resources because reappraisal can potentially be a difficult cognitive task. On the other hand, reappraisal could be more effective when regulating low-intensity negative situations, compared to distraction, which does not involve the processing of emotional information. The key takeaway is that flexibility in emotion regulation choice is crucial for successful regulation. Studies show that emotional equilibrium breaks down under conditions of diminished flexibility in emotion regulation (Kashdan and Rottenberg, 2010).

Although developing a general account of proper regulation is beyond the scope of this chapter, it is worth noting how I see the narrow account as possibly being situated in a more general picture.

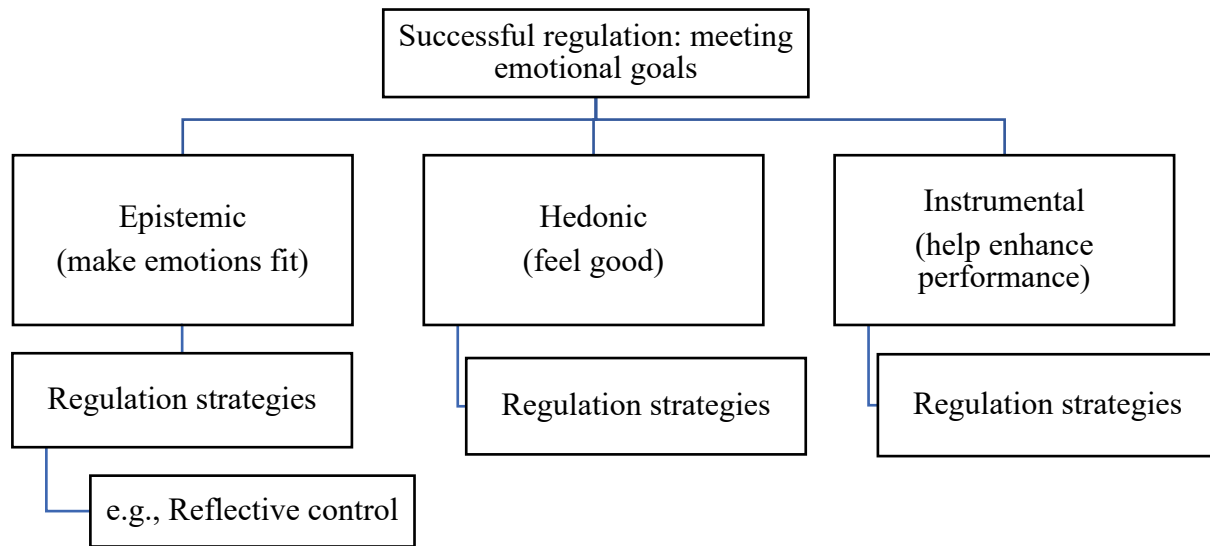


Figure 2.3: A general picture of proper emotion regulation.

In figure 2.3 I sketch a general picture of proper emotion regulation which includes different motives for regulation. On this more general picture, meeting emotional goals (Criterion *b*) is a basic principle that undergirds an idea of proper regulation. This is because, regardless of one’s motives for regulation, one must be able to achieve (most of) the emotional goals that they set for themselves for their emotional regulation system to be considered as functional. Otherwise, it seems that the emotional regulation system should be considered as dysfunctional.

Given this basic principle, one may proceed to the second level, where specific directions of regulation are determined by the specific motives, which in turn determine the choice of strategies. Whereas psychologists are mainly focused on hedonic and instrumental motives, philosophers seem to be mainly focused on epistemic motives. Importantly, the sense of “epistemic motives” for philosophers is different from that of psychologists. The philosophical

use of the term refers to making emotions fit, whereas the psychological use of the term refers to an instrumental use of emotions for acquiring knowledge about other things. Thus, for example, the psychologist Tamir (2016) classifies “epistemic motives” as one of the instrumental motives in her taxonomy of motives. In this chapter, I do not discuss “epistemic motives” as a kind of instrumental motives. I’ll exclusively refer to the philosophical use of “epistemic”, namely, making emotions fit.

Epistemic, hedonic, and instrumental motives are distinct kinds of motives, but they can very well co-occur in the same instances of emotion regulation. For example, it seems entirely possible that a person is motivated to make her emotions fit as well as make herself feel better at the same time.

There is a difficult question concerning how one should adjudicate or reconcile between different motives if they get into potential conflict. For example, should someone give up her goal of making emotions fit so as to make herself feel good in some situations? Are there any general guidelines one can follow in making such a decision? Is there one motive that is more basic than the other two? A full-fledged, general account of proper regulation may be able to give answers to these questions, but the narrow account of proper regulation cannot. However, situating the narrow account of proper regulation in this more general picture may allow us to begin exploring these questions. In what follows, I end with some final thoughts on how we might begin to answer the question of a potential conflict between different motives.

Let us first consider a neighboring case of adaptive misbeliefs. McKay and Dennett (2009) argue that some misbeliefs are systematically adaptive and are part of the normal functioning belief formation system that we have evolved to have. One example of adaptive misbeliefs they consider is “doxastic shear pins”, a kind of false beliefs that our belief formation

system generates in certain circumstances to protect other more expensive parts of the system. For example, they cited the case of a patient “B.X.,” who developed delusions about the continuing fidelity of his former romantic partner after suffering from an accident. B.X.’s delusions are a way to protect himself from the stark reality that his life, which could potentially cause extreme psychological stress.

However, McKay and Dennett are quick to note that such kind of misbeliefs may not be “adaptive” in the biological sense but are more likely to be “adaptive” in the psychological sense. In other words, B.X.’s delusional beliefs are psychologically adaptive in the sense that they bring psychological comfort or promote psychological well-being in circumstances where there could potentially be overwhelmingly negative emotions.

If misbeliefs can be adaptive psychologically, then it’s not difficult to see that unfitting emotions – emotions that don’t correctly represent the world – could be adaptive as well. More specifically, having unfitting emotions would be an adaptive emotional goal to have.

On the current view that I’ve argued for, unfitting emotions do not seem to be epistemically trustworthy at all. However, having the reverse –maladaptive, fitting emotions or beliefs—does not seem to be a proper motive to have for one’s emotion regulation. Suppose B.X. recognizes fully the stark reality he now faces, the fact that an accident has left him paralyzed and his romantic partner has left him, which led him to have intense sadness. The sadness is fitting but it could also be so overwhelming that it breaks his normal functioning emotional system. In fact, it seems that the reason why most ordinary people do not have breakdowns is because they do not let themselves have intensely negative emotions that would overwhelm their emotional system in certain circumstances. Having some sort of emotional defense mechanism against adverse events indicates that our emotional system is functioning normally. It thus seems

to be a necessary component of proper regulation. Maladaptive emotions do not seem to be reasonable emotional goals to have, even when they are fitting.

We thus might be caught up in a dilemma: on the one hand, it seems that we do not want our emotions to be unfitting, but then we would end up having maladaptive emotions; on the other hand, we do not want our emotions to be maladaptive, and we end up having unfitting emotions. Neither seems desirable.

The key to resolve this dilemma, I suggest, might be to distinguish between two kinds of adaptive, unfitting emotions. The first kind is analogous to B.X.'s delusions. They are outright false beliefs that do not respect the facts. The second kind is analogous to what Taylor (1989) calls "unrealistic optimism" or "positive illusions", which are a kind of false beliefs that are responsive to evidence. According to Taylor:

[U]nrealistic optimism is responsive to information. When people receive objective evidence about the likelihood of risks, they change their estimates accordingly. These qualities most clearly distinguish illusion from delusion. Delusions are false beliefs that persist despite the facts. Illusions accommodate them, though perhaps reluctantly (p.36).

As the advice goes, if we must err on the prudential side, then we err to a reasonable degree. The reasonable degree is a point at which we strike a balance between fitting and adaptivity. As McKay and Dennett (2009) note, "in many cases (perhaps most), beliefs will be adaptive by virtue of their veridicality" (p. 507). This seems true for emotions as well. In many situations, we need our emotions to be fitting because we need fitting emotions to provide us correct information and evaluations about the situations. In such cases, fittingness is adaptive. However, when we must compromise some degree of accuracy, we can still do it in a way that respects facts or evidence. Consider when we want to downregulate our intense anxiety for an important project that's at risk. We can either choose to disregard the reality and become not

anxious at all, pretending that the project is in good shape, or choose to downregulate anxiety to a degree that is manageable but still are responsive to evidence, facts, or reasons. It seems obvious that, other things being equal, the latter emotional goal would bring about more epistemic goods and thus is a more proper goal. Furthermore, it's also a more proper goal compared to the goal of maintaining the level of anxiety that fits the status quo of the project.

How does this idea connect to specific regulation strategies? Consider reflective control and cognitive reappraisal. Reflective control appears to be synonymous with cognitive reappraisal. However, cognitive reappraisal is a much broader concept than reflective control. Reflective control is specific about how one should “re-examine” about one’s emotions: it involves coming up with reasons that bear on the accuracy of one’s emotional construal. On the other hand, cognitive reappraisal takes many forms. One of the forms is called “detached reappraisal”, in which one tries to distance oneself from the emotional triggering situation through re-evaluation (Shiota and Levenson, 2009, p.893; Gross, 1998b, p. 227). “Detached reappraisal” instructions can involve “rethink as fake”, in which subjects are asked to adopt a detached attitude by rethinking the situation as fake.³⁹ Another is “positive reappraisal”, in which subjects reevaluate by thinking about the positive aspects of the situation (Shiota and Levenson, 2009, p. 893). Both “detached reappraisal” and “positive reappraisal” are deviations from fittingness. Nevertheless, these reappraisals could still be responsive to evidence or reasons in a way that positive illusions are.

³⁹ For example, one such experimental manipulation instructs the subjects to think in the following way to regulate their negative emotions: “If you see an image of an injured man, you could imagine that the man is not real, and that he is just a doll or CGI. Second, you could imagine that the scene is from a movie” (Milyavsky, Webber, Fernandez, Kruglanski, Goldenberg, Suri, and Gross, 2019, p. 979).

2.6 Conclusion

I argued that emotion regulation involves a distinct kind of agential regulation. I then outlined two types of trustworthiness conditions: whereas type 1 trustworthiness conditions rely mostly on external conditions, type 2 trustworthiness conditions not only rely on normal conditions but also the proper regulation by individuals themselves. I argued that emotions have type 2 trustworthiness conditions where proper regulation is sometimes needed for making emotions trustworthy. I then examined two traditional philosophical views of how to make our emotions fit their objects. I argue that neither is satisfactory. Finally, I proposed a new account of proper regulation informed by the process model of emotion regulation and argued why it makes improvements over the traditional views. My account, however, should be considered as a narrow account of proper regulation as it only takes into consideration one specific motive for regulation. I ended with some thoughts about how a general account of proper regulation might look like and the sorts of questions that it needs to address. Overall, my proposal addresses a narrow, philosophical problem of how to make emotions fit, but also paves the way for answering broader questions about proper emotion regulation.

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Chapter 3: Zetetic Norms for Emotions

3.1 Introduction

In considering how we as human epistemic agents should conduct ourselves in inquiry, beliefs are usually the main target. This is unsurprising, as beliefs occupy a central role in inquiry. Forming true or correct beliefs is not only often the aim of inquiry but also sometimes part of the process of inquiry. On the standard view, inquiry refers to a temporally extended process in which an epistemic agent goes through a series of epistemic activities to arrive at a correct answer to a question.⁴⁰ An inquiry is always goal-directed, and the result of an inquiry is often the acquisition of some beliefs that the epistemic agent takes to be true and relevant to the question. “Epistemic” activities involve collecting evidence, evaluating the strength of evidence, deciding which kind of evidence to pursue, and so on. Additionally, some might count mental acts such as forming beliefs and judgments as a kind of epistemic activities as well.

On this standard view, “inquiry” admits of a wide range of phenomena. For example, an inquiry could be as simple as finding out “how many windows are there in this building?”, where the way to figure out the answer is relatively straightforward – one just needs to count the windows and can quickly get the answer. An inquiry could also be complicated, such as the scientific inquiry of “what is the structure of DNA?”, where the way to figure out the answer is sophisticated and the process spans over years.

Beliefs are not the only kind of mental states centrally involved in inquiry. It is widely agreed that emotions also play an essential role in inquiry.⁴¹ I should note, though, that I mean to only focus on inquiries conducted by human beings. For it is a contingent fact that as human

⁴⁰ See, for example, Friedman (2020), Thorstad (2021).

⁴¹ De Sousa (1987), Elgin (2008), Hookway (2008), Candiotta (2019), Thagard (2002), Morton (2010).

beings our inquiries are motivated and affected by our emotions. However, by stipulation, an inquiry is always aimed at acquiring some beliefs. Thus, if we include other kinds of agents into the discussion, then emotions might plausibly be much less important than beliefs since we can easily imagine emotionless inquirers such as computer agents.

Emotions are hugely influential in our choice of questions as well as how far we go in an inquiry. James Watson, for example, turned to inquire into the structure of DNA because he was feeling bored of his then research project and excited about the physical structure of biological molecules such as DNA.⁴² Emotions such as excitement, curiosity, interest, anxiety, doubt, and even boredom can often determine one's direction of inquiry. Even after an epistemic agent opens an inquiry, their emotions can continue influencing whether they persist or stop the inquiry process.

However, unlike beliefs, questions about how we should conduct ourselves in inquiry with respect to our emotions is a largely uncharted territory.⁴³ Are there any norms that bind our emotions as we inquire? How do we make sense of zetetic normativity for emotions?⁴⁴ In this chapter, I'll argue that emotions are subject to zetetic norms and epistemic norms. Further, like beliefs, emotions face a parallel "conflicting verdicts" problem, namely, zetetic and epistemic norms for emotions can sometimes give conflicting verdicts on how we should conduct ourselves in inquiry. I then raise a new version of the "conflicting verdicts" problem that is different from what is currently discussed in the literature: whereas the current version concerns mental states or attitudes that are irrelevant to inquiry, the new version concerns mental states or attitudes that

⁴² Watson (1969). Also cited in Thagard (2002).

⁴³ Alfano (2017) documents a view which he calls "the austere answer" held by some twentieth-century sociologists of science. "The austere answer" proposes that emotions should be absent from scientific inquiry, because otherwise the scientific credentials of scientists' research will be called into question. "The austere answer" is too extreme and psychologically implausible to be taken seriously.

⁴⁴ Following the standard usage in the literature, I take "zetetic normativity" to be a term that's equivalent to "norms of inquiry".

are relevant to inquiry. As I'll argue, the new version seems to create a stronger normative tension. Finally, I argue that this new version of the problem is more serious for emotions than for beliefs because it poses a practical dilemma for emotions but not for beliefs.

In section 3.2, I argue that emotions are subject to zetetic norms for two reasons: first, two of their functional roles is to help make inquiry successful; second, they can be controlled by inquirers to some extent. Zetetic norms are norms concerning how we should conduct ourselves emotionally which promote successful inquiry. In section 3.3, I argue that emotions are subject to epistemic norms because they can be regulated by evidence and epistemic reasons in most typical cases. After formulating and discussing some plausible versions of zetetic and epistemic norms for emotions, I present some cases in section 3.4 which show that, not only does a parallel conflicting verdicts problem occur for emotions, but there is a new version of the problem that can be a more serious one.

3.2 Emotions Are Subject to Zetetic Norms

In this section, I argue that emotions are subject to zetetic norms given their functional roles in inquiry and controllability. An inquiry is successful when the epistemic agent arrives at a correct answer to a question.⁴⁵ This is a minimal definition of success as there could be other conditions of success, such as figuring out the answer in a timely manner or by the most efficient method (as most inquires have time or resources constraints). For the purposes of this chapter, I'll employ this minimal definition of success.

⁴⁵ "Successful inquiry" should be distinguished from "effective inquiry". For realistic agents, inquiry is always an activity constrained by time and energy. Emotions are important for inquiring effectively, given these constraints. In this chapter, I'm not concerned with effective inquiry but only successful inquiry.

3.2.1 Emotions' Functional Roles in Inquiry

Several philosophers contend that emotions play an indispensable role in helping lead to successful inquiry.⁴⁶ Specifically, Hookway (2008) argues that emotions function to motivate inquiry and generate saliences in inquiry, and these two functional roles are needed for inquiries to succeed –inquires that are conducted by human epistemic agents. Call this the “function role argument”.⁴⁷

Successful inquiry requires at least two kinds of abilities on the part of a human epistemic agent: first, attention directing – the agent must know where to direct her attention, such as which kind of evidence to focus on pursuing or evaluating, given the vast amount of information she is potentially exposed to at any given time; second, motivation – because inquiry is an activity that spans over time, the agent must be sufficiently motivated to get through the process until she reaches her goal. If the agent gives up half-way, the inquiry is not successful.⁴⁸

Hookway (2008) argues that emotions fulfill exactly these two functions. As he argues, first, emotions direct our attention by generating saliences. Second, emotions motivate our epistemic actions. Hookway concludes by saying that emotions play an indispensable role in regulating our beliefs and inquires.⁴⁹ More specifically, he claims that “the rationality of our beliefs (and our epistemic rationality) depends upon the rationality of (some of) our affective responses, [and second], the regulation of our affective responses forms an important part of the regulation of our beliefs and inquires” (p. 51).

⁴⁶ De Sousa (1987), Hookway (2008), Thagard (2002), Morton (2010).

⁴⁷ Whether non-human epistemic agents need emotions for successful inquiry is another issue that I will not consider in this chapter.

⁴⁸ This is not to say that the decision to stop or continue an inquiry is right. Sometimes, stopping an inquiry half-way may be the right decision to make, especially if the question is no longer worth pursuing. The minimal idea of “success” here is thus defined instrumentally, in terms of whether a certain epistemic goal is reached or not.

⁴⁹ I do not mean that emotions play these functions exclusively. Arguably, desires and beliefs may also sometimes fulfill these functions. But it does seem that emotions are the kind of mental states that play these functions primarily. For the sake of this chapter, I’ll leave the functional roles of desires aside and focus exclusively on emotions.

It is obvious how emotions fulfill the second function – motivating epistemic actions. We are motivated by curiosity, interest, doubt, surprise, to inquire into a question; we are unmotivated by boredom, deterred by fear, and thereby avoid getting into a question. More generally, emotions' motivational role in inquiry is an instance of its role of motivating actions in general.

But how do emotions fulfill the first function – attention directing? Following de Sousa (1987), Hookway argues that emotions direct our attention by generating saliences on certain content but not others. The salient content gets noticed by the agent, which results in the agent directing her attention to that specific content. Importantly, salience generation is a way of tracking relevance. According to Hookway, by generating saliences, emotions provide a kind of epistemic evaluation about what is relevant. Since no inquiry would be successful if we attend to the irrelevant information, tracking relevance is thus necessary for successful inquiry.

Consider doubt. Doubt is a feeling that something might not be true.⁵⁰ Doubt is motivating: doubting whether I have turned off my stove motivates me to check whether I have turned it off. Doubt also generates saliences: it presents a question or proposition as requiring my attention or consideration. When I doubt whether I have turned off my stove, my previously ignored beliefs regarding my stove now become salient to me, and they are presented to me as something that is important and cannot be ignored.

Hookway also argues that emotions' functional roles are indispensable because reason alone cannot fulfill these functions. Given that our reflective capacity is limited, reason alone cannot explain the level of epistemic success that we've achieved, and thus part of the epistemic

⁵⁰ Some philosophers might think that "the feeling of doubt" may not be an emotion because people sometimes use "feeling" without indicating a mental state that involves an affective component. Granted that there could be different uses of "feelings" in ordinary language, the sense I intend to use here is one that involves doubt as having an affective component.

success must be explained by emotions. For example, although reason can sometimes generate saliences and provide motivations as well, it alone is not sufficient for successful inquiry.

On top of Hookway's argument, it also seems that these functional roles are more frequently attributed to emotions than to beliefs because emotional experiences carry an "affectively hot" component which beliefs lack, and emotions are often considered to have action-tendencies.⁵¹ Thus, a feeling of doubt about p and a belief that p might be false could both motivate an agent to inquire and generate salience on certain content, but as humans we are more likely to be motivated by the feeling of doubt to take actions than a mere belief, other things being equal.

The functional role argument tells us something about the nature of emotions: descriptively, emotions are the sort of mental states that fulfill certain functions in inquiry. But playing these functional roles do not guarantee epistemic success. To have successful inquiry, emotions must also motivate and generate saliences in a certain way. If the epistemic agent exercises her abilities well—if she directs her attention to the right place and properly motivates herself—she is likely to succeed in her inquiry. It's natural to think that, because emotions are the sort of mental states that can help lead to successful inquiry, we can assess them in terms of whether they do their job well.

3.2.2 Emotional Controllability

I argued, in the foregoing section, that we can evaluate our emotions vis-à-vis successful inquiry because of their functional roles in inquiry. However, the fact that we can evaluate whether an emotion leads to successful inquiry does not by itself entail that we can meaningfully impose norms about how we should conduct ourselves emotionally in inquiry. In general, if a

⁵¹ E.g., Magalotti and Kriegel (2021), Nussbaum (2004).

mental state cannot be changed in accordance with an instrumental goal, then it seems that they should not be subject to instrumental norms. Since zetetic norms are a kind of instrumental norm, emotions cannot be said to be subject to zetetic norms if they cannot be changed in accordance with some instrumental goal.

Empirical evidence shows that people can choose to experience emotions that achieve their instrumental goals – more specifically, goals that are related to knowledge acquisition.⁵² In an evidence-based taxonomy of emotion regulation motives, Tamir (2016) classifies “epistemic motives” as one of the instrumental motives that people often use to regulate their emotions to achieve some instrumental goal. The sense of “epistemic motives” are distinguished from the standard philosophical use of “epistemic goal”. Philosophers speak of beliefs as having the epistemic goal of “aiming at truth” and emotions as having the epistemic goal of “aiming at fittingness” in terms of whether these mental states correctly represent features of the world.⁵³ “Epistemic motives” as used in the emotion regulation literature refers to people’s desire to know what is real about the world and about themselves. In contrast to the philosophical use of “epistemic”, the “epistemic motives” mainly refer to using emotions to acquire knowledge about the world or the self, rather than focusing on making emotions themselves fit the world correctly. Thus, a motive to inquire – such as wanting to figure out the answer to a question – could be considered as one kind of epistemic motives.⁵⁴

A related line of research is “academic emotions”. Pekrun (2016) classifies several types of emotions that frequently occur in an academic or educational setting by their intentional

⁵² Tamir (2016), Kunda (1990), Forbes (2011), Higgins (2014), Kruglanski (1980), Pekrun (2016).

⁵³ E.g., Foley (2001), Zagzebski (2012).

⁵⁴ Not all epistemic motives are the same. Tamir (2016) notes that one kind of epistemic motives concerns seeking out information or evidence to verify one’s existing beliefs. This kind of epistemic motive seems to be distinctly different from a motive to inquire. However, it’s possible that a person may be carrying this epistemic motive while inquiring and ends up committing confirmation bias.

objects or potential cause: “achievement emotions”, which are emotions about outcomes that are judged according to competence-related standards of quality; “epistemic emotions”, which are emotions that are caused by cognitive qualities of task information; and “topic emotions”, which are emotions triggered by the contents of learning materials. Students’ regulation of these emotions to achieve some learning goal is similar to the instrumental use of emotions in inquiry. Whereas a student’s shame related to failure may forbid her from making academic improvements by acquiring new knowledge, her curiosity in the contents of learning materials may have the opposite effect. Another interesting case is frustration. According to Pekrun, frustration could be partly caused by cognitive incongruity, such as not being able to find the solution to a mathematical problem, as well as caused by a student’s sense of personal failure and an inability to solve the problem. In such cases, on the one hand, the feeling of frustration tracks important epistemic properties related to an inquiry, on the other hand, it also plays a role in regulating the agent’s inquiry activities. In this kind of cases, normative conflict may arise regarding how one should regulate emotions like frustration. I’ll discuss cases like this in more detail in section 3.4.

3.2.3 Zetetic Norms for Emotions

Thus far, I’ve characterized zetetic normativity for emotions as a kind of instrumental normativity. Below I discuss a plausible version of zetetic norms for emotions.⁵⁵ This version is in line with the view held by Friedman, which proposes a narrow-scope instrumental norm. On this view, an epistemic agent already has a question to start with, and the norms are to ensure that her emotions are formed in a way that help lead to successful inquiry. This is the norm proposed by Friedman:

⁵⁵ Another version of zetetic norms could be a wide-scope ZIP such as the following: One ought to have E, if one wants to figure out Q and having E is the necessary means to figuring out Q.

Narrow-scope ZIP: If one wants to figure out Q, then one ought to take the necessary means to figuring out Q (Friedman, 2020).

The following is a corollary of Narrow-scope ZIP:

Narrow-scope ZIP (emotion): If one wants to figure out Q and having (or not having) emotion E is the necessary means to figuring out Q, then one ought to have (or not have) E.

Suppose Jack is inquiring into “How many windows are there in the empire state building?” by counting the windows, but his anxiety is interfering with his counting. Given narrow-scope ZIP (emotion), Jack ought to not have his anxiety. For example, he could decrease his anxiety to a level that does not interfere with his counting, but still motivates him to continue counting. Jack ought to decrease his anxiety because it is necessary for succeeding in his inquiry.

3.3 Emotions Are Subject to Epistemic Norms

In this section, I argue that emotions are subject to epistemic norms because they can be based on epistemic reasons and regulated by evidence in most typical cases. However, before that, I shall first introduce a third functional role of emotions in inquiry and distinguish epistemic assessability from two other kinds of assessment of emotions: assessment of relevance and assessment of correctness.

3.3.1 Emotions’ Third Functional Role in Inquiry

It is widely accepted that emotions provide information about our environment. The influential feelings-as-information theory postulates that people attend to their feelings as a source of information and, like other information, feelings can serve as a basis of judgment (Schwarz, 2012). For example, when someone is answering the question “How satisfied I am with my life?”, they often rely on their current feelings to make a judgment. Happy feelings tend

to make us answer this question positively, whereas sad feelings tend to make us answer the question negatively.

The feelings-as-information theory covers all types of feelings –moods, emotions, metacognitive feelings, and bodily sensations – and different types of feelings are considered to provide different types of information. Specifically, according to psychologists such as Frijda (1988), emotions signal states of the world that have to be responded to, or that no longer need response and action.⁵⁶ Anger, for example, is a response to a loss or lack of reward that is attributed to the causal action of another agent.⁵⁷ Cognitive feelings such as surprise, boredom, and feelings of familiarity provide information about the state of one’s knowledge, accessibility experiences, processing fluency, and so on.⁵⁸

If emotions in general are used as a source of information in our judgment-making, it’s natural to think that this applies to the context of inquiry as well. For example, doubt can provide the information that a belief might be false, anxiety can provide the information that a certain aspect of a research project might be at high stakes, excitement can provide the information that an inquiry is going in the right direction. However, it’s important to clarify how they are used as a source of information in inquiry. For example, Schwarz (2012) argues that feelings can be used as information for choosing one’s processing strategies: feelings that signal a “problematic” situation foster an analytic, bottom-up processing style, whereas feelings that signal a “benign” situation foster a more global, top-down processing style. But this kind of low-level influence is clearly not the concern of epistemologists.

Emotions can be used as a source of information in a similar way as beliefs are, and this will be the sense that I focus on in this chapter. By that I mean that the evaluative contents of

⁵⁶ See also: Ellsworth & Scherer (2003), Ortony, Clore, & Collins (1988).

⁵⁷ Schwarz (2012), Keltner, Ellsworth, & Edwards (1993).

⁵⁸ Ortony, Clore, & Collins (1988), Schwarz (1998), Winkielman, Schwarz, Fazendeiro, & Reber (2003).

emotions are used as evidence or reasons for making judgments in the process of inquiry. For example, the content of an episode of anger, “this person has wronged me”, can serve as evidence or reason for judging that “this person has wronged me”. But sometimes even valenced information that emotions convey can be used in this way. For example, in one study, Martin and colleagues (1993) gave participants a task to list birds. When asked whether they are satisfied with what they accomplished, happy participants judged that they are satisfied and terminated the task, and sad participants judged that they are not satisfied and continued the task. It’s plausible to think that in this experiment valenced information is used in a similar way as contents of beliefs are used, where an implicit inference took place when these participants made the judgment based on their feelings. For example, we can formulate the inference in the following way:

P1: I feel positive/negative about my accomplishment of listing birds.

P2: Positive/negative feelings are evidence that I am satisfied/not satisfied about my accomplishment of listing birds.

Therefore: I’m satisfied/not satisfied about my accomplishment of listing birds.

In addition to this, the experiment showed that feelings influenced participants subsequent epistemic actions as well. Happy participants not only inferred that they are satisfied but subsequently terminated the task, whereas sad participants not only inferred that they are not yet satisfied but subsequently continued the task. This pattern reversed when participants were asked a different question. When asked whether they enjoy what they are doing, happy participants inferred enjoyment and continued with the task, whereas sad participants inferred lack of enjoyment and terminated the task. Thus, when emotions are used as a source of information, the

incorporated information may also subsequently influence motivations for continuing or stopping inquiry.

This third functional role should be considered as distinct from the functional roles of providing motivation and generating saliences because it makes emotions subject to different kinds of assessment from zetetic assessment. In what follows, I'll discuss three kinds of assessment that are based on emotions' functional role of providing information.

3.3.2 Assessment of Relevance

According to feelings-as-information theory, feelings such as emotions only have informational value when they are perceived to be relevant to the judgment at hand. This means that, feeling happy only serve as a source of information for judging "Am I satisfied with my performance of listing birds?" when I attribute this happiness to be related this question. Our emotions can lead us astray when they are mistakenly attributed to a judgment that is not their source. For example, if my happiness is caused by the weather being nice, but I attribute this happiness to my performance of listing birds, then I've incorrectly attributed the relevance of my emotion. This wrong use of emotions as a source of information gives rise to incorrect inference. Specifically, premise 1 above would be false because the positive feeling would not be about the bird listing task but about the weather. Therefore, we can evaluate emotions in terms of whether our attribution of their sources is correct.

3.3.3 Assessment of Correctness

A standard view in philosophy holds that emotions have a mind-to-world direction of fit, and thus we can evaluate whether they fit their object.⁵⁹ In other words, emotions have correctness conditions, and we can evaluate whether the information emotions provide is correct

⁵⁹ Deonna and Teroni (2012), de Sousa (1987).

or not, on top of whether we correctly attribute the relevance of an emotion to a judgment. I can be correctly attributing my anger to your action, but my anger can fail to be correct. Thus, assessment of relevance is thus different from assessment of correctness.

Assessment of correctness is grounded in the third functional role of emotions but not the previous two because in order for emotions to properly motivate and generate saliences, they do not always have to provide correct information about the inquiry. When Watson was excited about “What is the structure of DNA?”, it doesn’t seem necessary that his excitement be fitting, in order for his inquiry to succeed. His level of excitement needn’t match exactly with the strength of evidence. Quite the opposite, there are cases of difficult inquiries which succeeded because the scientists had great but “incorrect” levels of passions for their projects, which did not match with the scant evidence for success they got in the beginning of their inquiries. In these cases, it seems that it is exactly the “incorrect” or “unfitting” emotions that provide the much-needed motivation and persistence for successful inquiry.⁶⁰

In contrast, although it’s possible for one to be motivated by false beliefs to engage in an inquiry, inquiry is less likely to succeed in this way because beliefs about an inquiry are more closely tied to the epistemic states of an inquiry. We need to make sure that the beliefs formed in the process of an inquiry are correct in order to make sure that we figure out the correct answer. If the inquirer relies on false beliefs in the process of inquiry, chances are they are going to be misled by them and not get to the correct answer. One exception though are evaluative judgments. Beliefs such as “I believe that this question is interesting” seems to be more like emotions. Their falsity – if there is any – does not seem to undercut their potentially motivational

⁶⁰ In fact, some may even think that excitement doesn’t have correctness conditions here: any level of excitement would make sense for Watson, simply because there could be no particular reason why people are excited about a topic.

role. Thus, assessing emotions along the line of correctness is like assessing the correctness of beliefs in this regard.

However, while I argue that in many cases motivation and salience generation do not require emotions to be correct, I do not mean that there aren't cases in which they do require it. For example, one may think that certain epistemic emotions are the exception. Epistemic emotions⁶¹ that take the evaluation of truth or falsity as the formal object function more like beliefs. For example, the feeling of doubt specifically tracks one's evaluation of truth or falsehood of a certain proposition in inquiry, and thus it is important that it is fitting, as otherwise their motivational force could easily mislead. An incorrect doubt is as misleading as an incorrect belief that *p* might not be true.

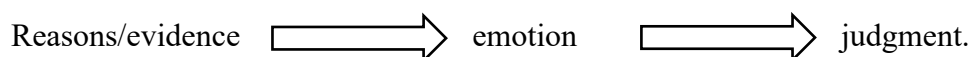
Furthermore, it seems that any of the following three situations could occur among the phenomena which we call "inquiry": an emotion could sometimes only be responsible for motivating actions and generating saliences, sometimes only be responsible for providing information, and sometimes be responsible for all these roles at the same time. An episode of anger might motivate me to look for evidence concerning whether you have really wronged me, but it might not provide any information about whether my inquiry is going in the right direction. A feeling of doubt might provide me information about whether I have correctly formed my beliefs, but it might not be motivating in any sense. Finally, anxiety might be both motivating and telling me what is at stake about my inquiry. And the information provided could be a mixture: part of my anxiety might be coming from the fact that I am correctly assessing the status of the inquiry whereas another part of my anxiety might be coming from the fact that my inquiry is of personal importance, and I just can't afford to fail. Although some emotions may

⁶¹ I use "epistemic emotions" and "cognitive feelings" roughly interchangeably.

tend to perform either role more often, I do not think that these categories are neatly divided by types of emotions. Rather, it seems to vary from case to case. For example, there may be times when we are motivated by curiosity or fascination simply because we find a question interesting; other times, we may be motivated because we've detected something epistemically important, such as the fact that pursuing some sub-question is the right direction for solving a larger question that started our inquiry.

3.3.4 Epistemic Norms

There is a long tradition that distinguishes emotions' correctness conditions from their justification conditions in a similar sense as beliefs' correctness conditions are distinguished from their justification conditions.⁶² Adam's anger towards his wife is unjustified if it is based on him thinking that she is cheating on him because he saw her wear makeup on an uneventful day. Nevertheless, it could be fitting if unbeknownst to him she is cheating on him. Thus, an emotion can be relevant to a judgment and fitting, but not epistemically justified in the sense that its formation is not based on epistemic reasons or evidence. For example, a standard view in philosophy takes perceptual experiences to be not responsive to reasons, even though perceptual experiences can be assessed in terms of whether they are relevant to a judgment or are correct (or veridical). In my opinion, the assessment of correctness and epistemic assessability occur from reasons/evidence to the formation of an emotional response (first arrow), where assessment of relevance occurs from an emotional response to a judgment that's formed based on the emotion (second arrow):



⁶² Deonna and Teroni (2012), Goldie (2004), Greenspan (1988), Mulligan (1998), Pelser (2014), Salmela (2006). Echeverri (2019).

Emotions can be based on epistemic reasons. Generally, it seems that if a mental state or attitude can be based on epistemic reasons, then it also can be responsive to them. For example, my anger can be based on the reason that I believe you stole my wallet. It can also be responsive to reasons in the sense that, if I later find out that someone else stole my wallet, I will stop being angry at you because my anger is no longer fitting. In changing my emotional response, my emotion is responsive to changes in the reasons I have. In many cases, having epistemic reasons for an emotion E seem to overlap with having evidence for E. Thus, I'll take that being responsive to epistemic reasons and evidence are roughly the same.⁶³

Obviously, emotions are not always responsive to epistemic reasons or evidence. Recalcitrant fear is a case in point. Someone can be presented with strong evidence that airplanes are safe and yet still fail to not feel afraid. Despite this, in ordinary cases, emotions are responsive to reasons and evidence. For example, anger seems to be typically responsive to reasons or evidence. Furthermore, beliefs are epistemically assessable, even though some might think that there are recalcitrant beliefs. Thus, the existence of recalcitrant emotions does not undermine the idea that emotions are epistemically assessable.

Magolotti and Kriegel (2021) offer an argument for why emotions are epistemically assessable. According to them, emotions are epistemically assessable because they are responsive to evidence and can be regulated by evidence. Specifically, they argue that emotions are epistemically assessable purely in virtue of their “affectively hot” component, and epistemic assessability does not come from their doxastic constituents. Thus, their view does not presume judgmentalism, which is a family of views that take doxastic attitudes to be constituents of emotions. As they argue, if emotions are epistemically assessable purely in virtue of their

⁶³ For debates on the differences between epistemic reasons for and evidence for an attitude, see Shroeder (2021), Kearns and Star (2009).

doxastic constituents, then their epistemic assessability would be reduced to the epistemic assessability of beliefs. However, this is not true because emotional intensity – or the strength of an emotion – cannot be explained merely by doxastic strength. How emotionally intense a person feels about X cannot be a matter of the degree of belief she has about X. Thus, Magolotti and Kriegel hold that emotional intensity is responsive to evidence in a different way from how beliefs are responsive to evidence.

Magolotti and Kriegel assume that the goal of regulation is to meet the correctness conditions of emotions. In other words, they analogize emotions to beliefs in terms of their aim: whereas beliefs are aimed at truth, emotions are aimed at correctness.⁶⁴ Furthermore, the fact that these attitudes are aimed at truth and correctness is grounded in their respective nature. This fits into the profile of what Shroeder calls “the right kind of reasons”. As Shroeder (2021) argues, “the right kind of reasons for and against an attitude must have something close to do with what makes that attitude the kind of attitude that it is” (p. 155). Thus, if fear is the sort of attitude that represents something as dangerous, then the right kind of reasons for fearing X are reasons that support X being dangerous. This means that, if I feel excited about X for the reason that feeling so would give me some sort of benefit – such as helping me succeed in my inquiry – then such reason would not be epistemic and would be “the wrong kind of reasons”. Thus, it follows that epistemic assessability is a distinct kind of normative evaluation from zetetic assessability.

There could be a variety of ways to formulate epistemic norms. Here I present one formulation of epistemic norm, “epistemic permissibility” (EP), following Magolotti and Kriegel (2021) and Friedman (2020). According to Friedman,

⁶⁴ More precisely, “emotions are aimed at their formal objects/evaluative properties” because each emotion type corresponds to a certain characteristic way of evaluating objects.

EP: If one has excellent evidence for p at t , then one is permitted to judge p at t .

In judging p , one forms a belief that p . Thus, EP is a norm for the mental act of forming beliefs. By the same token, because emotions can also be responsive to evidence, one can apply EP to emotions:

EP (emotion): If one has excellent evidence for an emotion E at t , then one is permitted to have E at t .

EP (emotion) allows for the idea that people often do not form a certain emotion even if they have excellent evidence for it. For example, I may have excellent evidence for grief (say, a close relative has died) and even evaluatively judge that a certain situation involves tragic loss, but nevertheless I may not have an affective reaction of feeling grief.

3.4 Conflicting Verdicts

In this section, I argue that the narrow-scope ZIP (emotion) and EP (emotion) can give conflicting verdicts to how we should conduct ourselves emotionally when inquiring. I also raise a new version of the “conflicting verdicts” problem that is different from what is currently discussed in the literature. As I’ll argue, the new version seems to create a stronger normative tension. Finally, I argue that this new version of the problem is more serious for emotions because it poses a practical dilemma for emotions but not for beliefs.

3.4.1 Conflicting Verdicts 1: Irrelevant Beliefs and Emotions

Epistemologists generally assume that beliefs (or the formation of beliefs) should always be subject to epistemic norms. This gives rise to the “conflicting verdicts problem”, where epistemic norms and zetetic norms give conflicting verdicts to how we should form beliefs in the context of inquiry.

More specifically, the current literature has thus far focused on one specific kind of conflicting verdicts problem, where the normative verdicts conflict with each other because successful inquiry requires that the epistemic agent ignore some evidence and fail to come to know when they are in a position to know. This is because if the agent attends to the evidence in question and forms a belief, she would fail the inquiry by being distracted by irrelevant information. The belief that needs to be ignored, so to speak, is “external” to the inquiry.

Consider *Boss*:

Boss runs a large research laboratory. Boss is rude and abusive towards her employees. As a result, Boss’s employees provide Boss with abundant evidence that they do not love her. But if Boss forms the belief that she is unloved, she will be much less productive and as a result will fail to resolve many important questions at work. To avoid this, Boss ignores evidence about her employees’ dislike and does not form the belief that she is unloved (Thorstad, 2021).

In *Boss*, the inquiry is “important questions at work”. The evidence that Boss is unloved by her employees is by stipulation irrelevant to the inquiry at hand. According to the narrow-scope ZIP, if Boss wants to figure out questions at work, then she ought to take the necessary means to figuring out Q. Since ignoring the evidence that she is unloved is necessary for her to focus on her questions, she ought to ignore it and avoid forming the belief that she is unloved. However, this goes against the verdict of EP, which says that Boss is permitted to form that belief if she has excellent evidence for it. Since Boss does have excellent evidence, she *is* permitted to form the belief. Thus, while ZIP forbids Boss to form the belief, EP permits it.

Strictly speaking, what Boss does in this case is “ignore the evidence” rather than “not form the belief”. The latter is a consequence that follows the former. EP by itself does not tell us what to do about evidence, but only what we are permitted to believe, given that we have the evidence. However, what amounts to “having” excellent evidence is ambiguous. If it means

“possessing excellent evidence” in the sense that one is already attending to it, then one might think that it’s hard not to form the belief that p if someone already possesses excellent evidence for p . For example, if Boss is reading employee reports which contain explicitly written statements like “I hate my boss”, it would seem hard to imagine how it is psychologically possible that she can avoid forming the subsequent belief that she is unloved. However, if Boss is completely unaware that the evidence exists, then it would be false to say that she “has” evidence. Thus, a more plausible interpretation seems to be that Boss is in an intermediary state where she is sort of aware of the existence of evidence, but nevertheless she is in a position where she can still choose whether to fully attend to it or not. In some sense, at any given time t , we all “possess” excellent evidence for numerous things – for example, I possess excellent evidence that there are some trees outside my apartment – but that doesn’t imply that, at t , I will attend to it and form the relevant belief. Thus, what ZIP forbids Boss to do is attending to the evidence, which subsequently leads to not forming the belief, whereas what EP allows Boss to do is forming the belief, given that she in some sense has the evidence already.

But suppose that we set aside the issue that ZIP and EP might not be directly pitted against each other. A parallel problem arises for emotions. Consider *Depressed Boss*:

Boss runs a large research laboratory. Boss is rude and abusive towards her employees. As a result, Boss’s employees provide Boss with abundant evidence that they do not love her. But if Boss becomes depressed that she is unloved, she will be much less productive and as a result will fail to resolve many important questions as work. To avoid this, Boss ignores evidence about her employees’ dislike and does not become depressed that she is unloved.

Like Boss, in *Depressed Boss*, feeling depressed about not being loved by employees is irrelevant to the inquiry and thus by the narrow-scope ZIP (emotion) Boss should ignore the evidence and not become depressed. Furthermore, it seems that depression could be even more

distracting because it seems that most people are easily affected by how their co-workers view her. Thus, on top of being irrelevant to inquiry, there is a further reason to think that Boss ought to ignore the evidence and avoid forming the distracting emotion. However, by EP (emotion), Boss is permitted to become depressed. In other words, while the narrow-scope ZIP (emotion) forbids Boss from becoming depressed, EP (emotion) permits it.

How should we conduct ourselves in inquiry? On Friedman's reading, it is a theoretical, not practical, problem. The specific kind of conflicting verdicts problem that she poses concerns how to understand the relationship between epistemic and zetetic normativity. If encountered with situations such as *Boss* or *Depressed Boss*, most epistemic agents would ignore the irrelevant information and focus on the inquiry. In practice, the priority of zetetic norms seems like a no-brainer and thus no practical problem is generated. However, irrelevant evidence is not the only type of cases that would give rise to the conflicting verdicts problem. In what follows, I present a different kind of cases that seems more threatening because they generate both a stronger normative tension and a practical dilemma.

3.4.2 Conflicting Verdicts 2: Relevant Emotions

I argue that there is a different version of the “conflicting verdicts” problem that concerns whether one should form a false mental state that is relevant to the inquiry – in other words, the new problem is “internal” to inquiry. Furthermore, I argue that this problem is more serious because the normative tension is stronger. Second, it generates a practical dilemma for emotions, but less so for beliefs.

Consider *Anxious Researcher*:

Sarah is working on her dissertation project. After having researched for a long period of time, thinking that she is going in the right direction, one day she acquired some new evidence – she found some serious errors in

her current data and method (#1), which make the answer unlikely to come out correctly at the present moment. Sarah could continue with using method #1 by going back a few steps to check where she went wrong. Alternatively, she could switch to another method (#2), but there is great uncertainty as to whether that method will work. If she fails to figure out the correct answer, she will not be able to graduate and get her degree. But if she keeps inquiring, she might still get a chance to figure out the right answer, although now it's hard to tell for certain if she will figure it out.

Sarah has abundant evidence that the status of her inquiry is at high stakes, and thus having intense anxiety seems fitting. But if Sarah becomes intensely anxious, she will be unable to continue her inquiry and as a result fail her project.

Sarah's anxiety is directly relevant to her inquiry. More specifically, her anxiety seems to be assuming a "double-duty" in this inquiry. On the one hand, Sarah's anxiety is providing information about the status of her project, particular information about the content of the inquiry, such as which method may be more promising. If anxiety signals that something important is at high stakes, it is epistemically helpful for Sarah to keep feeling anxious so that it alerts her possible errors she might be making. She needs it for an accurate evaluation of the epistemic status of her project, as well as for determining her next epistemic actions, such as deciding which method to go with. On the other hand, however, Sarah also needs to be properly motivated to keep inquiring because if she stops, she will not succeed. Having intense anxiety, however, would disable Sarah to continue inquiring, because intense anxiety paralyzes people to perform further epistemic actions such as thinking, reasoning, evaluating further evidence. That suggests Sarah needs to stop feeling anxious and remain calm and level-headed if she wants to keep inquiring.

This new conflict is "internal" to inquiry. Although the conflict is still between an epistemic norm and an instrumental norm, it may be better characterized as a conflict that arises

“within” the zetetic because in Sarah’s case following the epistemic norm might potentially help with successful inquiry. If one’s overarching goal is to succeed in inquiry, then EP (emotion) is a useful norm to follow because the emotion in question provides relevant information. Thus, on one reading, the narrow-scope ZIP (emotion) does not clearly give conflicting verdict with EP (emotion) because it is not so clear whether following EP (emotion) might be useful or not.

Theoretically, this raises a different kind of “conflicting verdicts problem” with a stronger normative tension. Whereas previously the problem concerns “whether to ignore excellent but irrelevant evidence and avoid forming a correct attitude”, the problem now concerns “whether to attend to relevant excellent evidence and actively form a false attitude against such evidence”. The difference is that, in *Boss* and *Depresses Boss*, Boss needn’t attend to the evidence that she is unloved because it is irrelevant to her inquiry. Thus, in not forming the belief that she is unloved, she is “omitting” or “suspending” judging something that is true. And we do that all the time. Because our attention is limited, at any given time, we are “omitting” judgments about a great many matters that we have excellent evidence of. However, in *Anxious Researcher*, Sarah cannot ignore her evidence because it is directly related to her inquiry. There would be no question as to whether Sarah “has” or “possesses” excellent evidence. Thus, if she wants to stop being anxious, then she would be forming an emotion that clearly goes against evidence.

This new theoretical problem—call it “the problem of relevant attitudes”—generalizes to other attitudes such as beliefs. The normative tension is stronger in this new version of the problem because forming false attitudes seems to be a more serious challenge to epistemic rationality. Whereas the previous normative conflict is between the verdicts “one is epistemically

permitted to ϕ ” and “one ought not to ϕ zetetically”, the conflict now is between the verdicts “one ought not to ϕ epistemically” and “one ought to ϕ zetetically”.

Sarah is also faced with a practical problem regarding how she should conduct herself emotionally in this inquiry. The problem can be cashed out as a dilemma: either Sarah forms the correct attitude (i.e., intense anxiety) and lose the motivation to inquire, thereby violating zetetic norms and definitely failing the inquiry, or she forms the incorrect attitude against excellent evidence and keep the motivation to inquire, thereby violating epistemic norms but having a slightly better chance of success.

Emotions can be caught in this kind of practical problem more so than beliefs because of their unique functional roles in inquiry. Other things being equal, forming the mere belief that “this project is at high stakes” does not seem as debilitating as having the intense anxiety. Compared to beliefs, there is a sense in which it’s more important for emotions to play their motivational role properly than playing their role of providing information properly. Consider when Watson gets excited about inquiring into the structure of the DNA. It seems more important that his excitement keeps him motivated than it gets right about the way he collects his evidence. Similarly, in general it seems more important for inquirers to keep curious about the question than their curiosity is correcting tracking the status of their inquiry. Compared to beliefs, emotions seem to have their uniquely important functional roles to play in inquiry, which makes the practical problem more difficult as it seems more difficult to make a choice between the two horns of the dilemma.

A further reason is that increases the difficulty of making a choice is that emotions seem less subject to the scrutiny of epistemic rationality, compared to beliefs. There is a stronger sense in which beliefs ought to be epistemically rational. Forming a false belief against excellent

evidence seems to be generally considered as a worse “crime” than forming an unfitting emotion against excellent evidence. This is analogous to the view argued by some philosophers that doxastic inconsistency seems epistemically worse than emotional inconsistency.⁶⁵ It seems clearer that forming false beliefs is not allowed because epistemic rationality has strong constraining power.

Finally, a third reason is that it seems harder to form false beliefs against excellent evidence, psychological speaking. Suppose I want to form a false belief that there is not a cat in front of me, despite clearly seeing a cat sitting less than one meter in front of me. It could seem almost impossible to form that false belief. However, emotions seem more flexible in this regard. A trained soldier can be less afraid than a civilian despite knowing that he is standing on a grenade that could explode at any time.

3.5 Conclusion

I argued that our emotions are subject to zetetic and epistemic norms. My arguments are grounded in the nature of emotions as well as their unique functional roles in inquiry. I then argued that this gives rise to a “conflicting verdicts” problem parallel to beliefs, namely, zetetic and epistemic norms for emotions can sometimes give conflicting verdicts on how we should ourselves in inquiry. However, this problem as discussed in the current literature is not as concerning as another version which concerns whether we should form false mental states or attitudes that are relevant to inquiry. As I argued, the new version creates a stronger normative tension and poses a practical dilemma for emotions but not for beliefs.

⁶⁵ See Magalotti and Kriegel (2019) for a discussion of the contrast between doxastic and emotional inconsistency.

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