COMMENTARY

ON THE DISTINCTION BETWEEN FEAR AND ANXIETY IN A (POST)PANDEMIC WORLD: A COMMENTARY ON SCHIMMENTI ET AL. (2020)

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Abstract

Taking stock of the global mental health challenges created by the global COVID-19 pandemic, Schimmenti, Billieux, and Starcevic (2020) recently provided, in this journal, a radically new theoretical framework for conceptualizing the experience of fear during the COVID-19 pandemic. In this commentary, I reflect on the implications of Schimmenti and colleagues' sole focus on fear, without taking into account the notion of anxiety. I argue that the conceptual and functional distinction between fear and anxiety may further strengthen the theoretical foundations of Schimmenti and colleagues' model. Finally, I discuss how such a distinction can ultimately help at better identifying new clinical targets not only for psychological interventions but also for policy recommendations.

Key words: fear, anxiety, coronavirus, COVID-19, global mental health, public health, pandemic

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He who fears he shall suffer already suffers what he fears. Michel de Montaigne (1580)

In just a few weeks, most of the countries across the globe have been into lockdown to curve the spread of the global COVID-19 pandemic. Scientific experts and governments are, meanwhile, starting to initiate lockdown exit strategies and post-pandemic recovery (e.g., Gilbert et al., 2020). And, as a result, the health crisis has now turned into a worldwide economic crisis.

However, the economy is not the only one that is bleeding out. Lockdown yields severe and long-lasting consequences on mental health (for a systematic review, see Brooks et al., 2020), and the early results related to the COVID-19 crisis are no exception to this statement (e.g., Xiang et al., 2020). More particularly, several recent national polls have ranked fear and worries related to the virus and its consequences (e.g., health, economical, school) among the most central mental health issues in today's pandemic world (e.g., Quiu et al., 2020; Mertens et al., 2020). Mental health experts are thus urgently calling for a better understanding of the fear related to the COVID-19 crisis to become able to rapidly deploy actionable efforts to curve this potential post-pandemic mental health crisis (for discussion, see Quiu et al., 2020; Xiang et al., 2020).

Taking stock of this global mental health issue, Schimmenti, Billieux, and Starcevic (2020) provided a timely, erudite, and much-needed theoretical framework to conceptualize the experience of fear during the COVID-19 pandemic. By doing so, they also offered the first model ever dedicated to the emotional experience vis-à-vis threat during a pandemic. According to Schimmenti et al. 's (2020) perspective, the experience of fear related to COVID-19 can be conceptualized as a multifaceted construct including four distinct but functionally related components, denoting the physiological/bodily, interpersonal, cognitive, and behavioral parts of fear, respectively. In their model, these components are, respectively, labeled (1) fear of the body/fear for the body, (2) fear of significant others/ fear for significant others, (3) fear of not knowing/ fear of knowing, and (4) fear of taking action/fear of inaction.

I congratulate Schimmenti and colleagues (2020) for envisioning such a timely characterization of the very basic features of the experience of fear during the COVID-19 pandemic. I agree with them that improving our understanding of the experience of fear related to COVID-19 may have substantial clinical and societal implications during and after the pandemic. For instance, the experience of fear in one's daily life (e.g., fear of being infected) may yield detrimental social

and sanitary consequences (e.g., adding undue burden to health care resources because of attending hospital emergency rooms in the pursuit of reassurance that their bodily sensations are not due to infection; e.g., Mertens et al., 2020). I am also particularly enthusiastic about the way the authors foresaw the potential complex dynamic interplay between the four domains of fear. What a scientific and clinically relevant solace in these dark times!

However, as passionate and sympathetic as my scientific enthusiasm is regarding the theoretical framework formulated by Schimmenti and colleagues (2020), I deprecate the sole focus on fear, without taking into account the notion of anxiety. Hereafter, I argue that endorsing the conceptual and functional distinctions between fear and anxiety may further strengthen the theoretical foundations of this novel theoretical framework. Moreover, I believe that establishing this distinction may ultimately help at better identifying new meaningful clinical targets not only for psychological interventions but also for policy recommendations.

The distinction between fear and anxiety has a long and occasionally conflicting history (for reviews, see Grillon, 2008; Öhman, 2008). Theories about the distinction between these two emotions have been debated in philosophical circles since long before the foundation of clinical psychology and psychiatry. Historically, the most common way of distinguishing fear from anxiety has been to determine whether the focus is on a clearly identifiable threat—that is, one that is present or imminent—or less identifiable and less predictable (e.g., Grillon, 2008; Öhman, 2008). From this perspective, fear is thus a present-oriented and short-lived response to an identifiable and specific threat, whereas anxiety is considered a future-oriented, long-acting response to a diffuse and less predictable threat (American Psychological Association; APA, 2015; Grillon, 2008; Öhman, 2008).

Research in both emotion science and affective neuroscience has also revealed that these two emotions may serve functionally distinct adaptive purposes, though sharing similar features (e.g., APA, 2015; Grillon, 2008). From this view, fear is as a primary emotion that is shared by many species, and that involves the activation of the "fight-or-flight" response (APA, 2015; Grillon, 2008). This latter is a pattern of physiological changes (i.e., pupil dilatation; increased heart rate, respiratory rate, and sweat gland activity; elevated blood pressure; decreased digestive activity) elicited by the action of the sympathetic nervous system in response to a threatening situation that quickly requires energy mobilization when facing a dangerous situation, such as attacking or escaping when being threatened by a predator (e.g., Grillon, 2008; Öhman, 2008). From this perspective, fear's adaptative value is thus to serve as a primitive alarm to imminent danger and, in this way, to allow us to respond accordingly rapidly—that is, in most cases, to escape from the situation (APA, 2015; Grillon, 2008; Öhman, 2008).

In contrast, anxiety is not a short-lived response (Grillon, 2008; Öhman, 2008). It is a future-oriented emotion characterized, at the cognitive level, by anticipations of a possible danger that is not present and may never occur (e.g., worry about a potential threat; a sense of being unable to predict a future danger or to control it if it occurs; e.g., Grillon, 2008; Öhman, 2008) and, at the physiological level, by physical tension and chronic over-arousal conceptualized as reflecting readiness for dealing with a future danger should it occur (APA, 2015; Grillon, 2008; Öhman, 2008). At the

behavioral level, anxiety may create a strong tendency to avoid—and not to escape from the situation whereby the threat is indeed encountered, like in the case of fear—situations wherein the danger might potentially be encountered. From this perspective, anxiety's adaptative value is thus to allow us to plan and prepare for a possible—but not imminent—threat (APA, 2015; Öhman, 2008).

In light of the literature on the functional distinctions between fear and anxiety, I thus call Schimmenti and colleagues (2020) for prudence in the use of the notion of "fear" when the concerns might be not only broadly diffuse but also future-oriented and related to a possible threat that may never occur (e.g., worry about job loss; worry about the potential risk of future resurgence). And, of course, such a distinction can easily be made for each of the four domains of the Schimmenti et al. 's (2020) model. For instance, some people may experience fear related to their physical integritythat is, the component labeled "fear of the body/fear for the body" by Schimmenti and al. (2020)—in the sense of an imminent threat to their physical integrity. In contrast, others may plan and prepare for a possible, but not imminent, threat to their physical integrity. Note that such a distinction between immediate and future consequences has been shown to be relevant when examining the predictive impact of previous outbreaks on mental health (e.g., Mihashi et al., 2009; Taylor, Agho, Steven, Raphael, 2008). For instance, worries about future social and economic consequences—and not the immediate situation—have been identified as a risk factor for psychological disorders during recovery following the SARS-2003 outbreak (e.g., Mihashi et al., 2009). Of course, one may argue that it is only a matter of anticipation and not the result of an actual distinction between fear and anxiety. Yet, although fear can, like anxiety, involve anticipation, fear's anticipation does concern if and when a present threat will cause harm. In contrast, in anxiety, the anticipation involves uncertainty about the consequences of a threat that is not present and may actually not occur (e.g., APA, 2015; Grillon, 2008; Öhman, 2008). And, early results suggest that anxiety's typical intolerance of uncertainty vis-à-vis the consequences of the situation may even foster fear experience during the lockdown (Mertens et al., 2020); highlighting the potential dynamic interplay that might be at play between fear and anxiety during the COVID-19 pandemic.

For all the reasons mentioned above, I believe that the distinction between fear and anxiety may fortify not only the theoretical foundations of the radically new framework proposed by Schimmenti and colleagues (2020) but also its capability to seize the complex, dynamic, and both present- and future-oriented nature of the threat-related emotional experience of the COVID-19 outbreak. Because one cannot exclude a possible resurgence of the COVID-19 outbreak, the capability to take into account concerns about a potential future threat that may or may never occur may add a critical new twist to the model of Schimmenti et al. (2020). Moreover, because more new epidemics are foreseen within the next decades (e.g., Jones et al., 2008), such an improvement may help mental health experts to best plan, monitor, and, if needed, deploy scalable clinical efforts during future outbreaks. Finally, I am also convinced that integrating anxiety into the Schimmenti et al. 's model (2020) renders this four-domain framework "recyclable" for other global crises that involve less predictable and more future-oriented threat. For instance, one may easily conceive how the four-domain typology suggested by

Schimmenti and his colleagues (2020) could be reused to cover the experience of both fear and anxiety vis-àvis multifaceted phenomena like climate change (e.g., Usher, Durkin, & Bhullar, 2019).

Aside from theory, another reason to emphasize the distinction between fear and anxiety pertains to the clinical and social implications. Although I wholeheartedly approve all the clinical recommendations formulated by Schimmenti and colleagues (2020) regarding the reduction of fear during the COVID-19 outbreak, the distinction between fear and anxiety may fine-grain the identification of meaningful targets for psychological and social interventions. At the psychological level, the differentiation between fear and anxiety might ease idiographic case-conceptualization and, in turn, adjust prevention and treatment accordingly. For instance, anxiety's chronic over-arousal and readiness for dealing with potential danger are often reflected through attentional biases for threat and sustained apprehension that may play a central role in exacerbating the entire cascade of anxiety feelings (e.g., Grillon, 2008; Heeren, Bernstein, & McNally, 2018). Prophylactic and therapeutic interventions targeting these processes could thus be prioritized in case of anxiety.

Finally, this distinction may also have policy implications. Because anxiety is triggered when facing an unpredictable future-oriented threat, the communication strategy of the public health officials and government representatives about not only the pandemic per se but also about the national plan to alleviate the social and financial consequences may impact on anxiety (for a discussion, see Brooks et al., 2020; Frewer, 2003; Xiang et al., 2020). Prior research has suggested that communication policies used by the leading authorities during health and economic crises may impact on the perception of unpredictability and uncontrollability of the situation and, in turn, trigger anxiety feeling (e.g., Frewer, 2003; Xiang et al., 2020). If the hypothesis of an association between the communication strategy and the perception of unpredictability and uncontrollability of the situation during this pandemic turns out to be true, all stakeholders should then vigorously take care of delivering messages that are as clear, transparent, and understandable as possible when upholding national public health conferences. Based on previous crises (e.g., Frewer, 2003), apposite communication policies about the state of knowledge, decision processes, and plan of actions regarding the crisis and its exit strategy plan may help to better prepare for the post-crisis world and, in turn, benefit the emotion regulation of futureoriented feelings, like anxiety. Note that examples and recommendations regarding mass communication in the context of previous major public health crises have been made available by the World Health Organization http://www.euro.who.int/ data/assets/pdf file/0004/329647/Vaccines-and-trust. PDF?ua=1).

Altogether, although I agree with Schimmenti and colleagues that the development of a theoretical model of the experience of fear during the COVID-19 is timely, I thus call for the integration of the notion of anxiety into their model. For all the points mentioned above, I believe that taking into account the distinction between fear and anxiety may strengthen Schimmenti et al. 's theoretical foundations and ultimately help at better identifying relevant targets not only for psychological interventions but also for policy recommendations visà-vis the challenges and constraints of both the ongoing COVID-19 crisis and its exit plan.

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