

A MODEL OF MULTIFACETED FEAR DURING THE COVID-19 PANDEMIC AND BALANCING BETWEEN OVEREMPHASISING AND NEGLECTING THE DISTINCTION BETWEEN FEAR AND ANXIETY: A REPLY TO HEEREN (2020)

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Abstract

The aim of this article is to revisit a model of multifaceted fear during the COVID-19 pandemic proposed by Schimmenti et al. (2020) in light of the distinction between fear and anxiety. Although the latter remains unresolved, the boundary between fear and anxiety is more fluid than firm and a strict dichotomy between them is not tenable. The four domains of fear during the COVID-19 pandemic have characteristics of both fear and anxiety, which manifest themselves differently within each fear domain and are experienced differently by people and at different points in time. This conceptual approach has implications for understanding COVID-19-related fears and their treatment.

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We are grateful to Heeren (2020) for his thoughtful comments about our model of fear during the COVID-19 pandemic (Schimmenti, Billieux and Starcevic, 2020a). Heeren (2020) argues that the distinction between fear and anxiety is relevant for the model and that its consideration might strengthen it, with implications for psychological interventions and policy recommendations. We agree that the model of fear during the COVID-19 pandemic might benefit from considering this distinction, although we are also cognizant of the limitations inherent to such an endeavour. The purpose of the present article is to expand the scope of our model by incorporating the key aspects of the nuances in the relationship between fear and anxiety.

Conundrums about the relationship between fear and anxiety

Both fear and anxiety denote a response to the perceived threat. Heeren (2020) outlined the main criteria for differentiating between fear and anxiety. These criteria, which are based on previous conceptualisations (e.g., Barlow, 1988), are presented in **table 1** in a somewhat modified form. Thus, the

distinction is based on the nature of threat, time orientation, onset, course, duration, physiological and behavioural response and purpose. The threat in fear is clear, specific and imminent, whereas in anxiety it is rather vague, nonspecific, uncertain and less predictable. Fear is present-oriented, abrupt, acute and short-lived; anxiety is future-oriented, with a gradual onset, chronic course and longer duration. Acute autonomic hyperarousal and a “fight or flight” response or escape characterise fear, whereas tension, chronic hyperarousal, hypervigilance and avoidance are typical of anxiety. Fear is essential for survival, while anxiety serves the purpose of preparing one for a possible threat in the future.

This distinction is appealing because of its simplicity and clarity. However, it is also deceptive, as there is much overlap between fear and anxiety. For example, fear of spiders has a clear and specific object (i.e., spiders), but the perceived threat from spiders is imminent only if the person faces a spider and, in that situation, he or she is likely to experience autonomic hyperarousal and escape. In many situations, however, there is uncertainty as to whether spiders are present, and the person is usually hypervigilant about that and avoids places where they might be encountered. The onset of the fear of spiders is more likely to be abrupt

**Table 1.** Distinction between fear and anxiety.<sup>a</sup>

	Fear	Anxiety
Appraisal (nature) of threat	Clear, specific and imminent threat	Somewhat vague, nonspecific, uncertain and less predictable threat
Time orientation	Present-oriented	Future-oriented
Physiological response	<ul style="list-style-type: none"> <li>• Acute and prominent autonomic hyperarousal</li> </ul>	<ul style="list-style-type: none"> <li>• Tension, especially muscle tension</li> <li>• Chronic and less prominent autonomic hyperarousal</li> </ul>
Behavioural response	<ul style="list-style-type: none"> <li>• Immediate and short-lived response</li> <li>• Escape</li> <li>• “Fight or flight”, freezing</li> </ul>	<ul style="list-style-type: none"> <li>• Delayed, but prolonged response</li> <li>• Hypervigilance</li> <li>• Avoidance</li> </ul>
Onset	Abrupt	Gradual
Course	Acute	Chronic
Duration	Short-lasting	Long-lasting
Purpose	Survival (alarm suggesting an imminent danger)	Preparation for a possible threat in the future

<sup>a</sup> Based on Barlow, 1988; Heeren, 2020; Starcevic, 2005

or it may seem to the person that it has “always” been there; the fear is usually chronic and tends to persist. While the fear of spiders may have a survival value if the spider is poisonous, the vast majority of spiders are not poisonous and this fear seems to prepare the person for an unpleasant, but usually not a potentially deadly encounter with a feared animal. Therefore, fear of spiders has characteristics of both fear and anxiety, but the term “fear” has been used much more frequently in this context, possibly because the object of threat is clear-cut.

In some situations, it may be difficult to even characterise the object of threat. For example, the experience of panic in many ways corresponds to the depiction of fear, with an abrupt onset, a sense of imminent threat and acute course with prominent autonomic hyperarousal, tendency to escape and short duration. But what are people in the midst of a panic attack afraid of? While some say that they fear dying or losing their mind, others state that they are not sure and that the whole experience is actually puzzling. If the object of threat is clear and specific in fear and vague and nonspecific in anxiety, perhaps some individuals experience fear during a panic attack and others experience anxiety. Would it be reasonable then to propose two types of panic attacks on those grounds – a panic with fear and a panic with anxiety? Some other objects of threat are even more difficult to characterise following the dichotomy of clear/unclear object and fear/anxiety. Death as an object of threat has various meanings for people and may be perceived as more or less clear, which may account for the frequently interchangeable use of the terms “fear of death” and “death anxiety” (e.g., Iverach, Menzies and Menzies, 2014).

A close relationship between fear and anxiety is also recognized in the field of affective neuroscience. For instance, Panksepp (2004) suggested that fear and anxiety reflected involvement of a single and unique neurocircuitry linking the amygdala and the central grey matter of the midbrain.

Indeed, the overlap between fear and anxiety has posed conceptual challenges. One approach has been to maintain the distinction between the two emotional states, despite their overlap. This view is apparently espoused by Heeren (2020). Within the realm of psychopathology, it has been argued that some

conditions are primarily characterised by pathological fear (e.g., panic disorder, agoraphobia, social anxiety disorder and specific phobia), while negative affectivity, distress or pathological anxiety is the main feature of other disorders (e.g., generalized anxiety disorder, major depressive disorder and dysthymic disorder) (Krueger, 1999; Watson, 2005). However, the proposed distinction between “fear disorders” and “distress disorders” (characterised by pathological anxiety and other negative emotional states) was not endorsed by DSM-5 (American Psychiatric Association, 2013), which has maintained anxiety disorders as a unitary nosological group, while acknowledging that fear and anxiety are related, yet different emotional experiences.

Another approach to the fear/anxiety conundrum has been the exact opposite – a suggestion that due to their substantial overlap, the two concepts can be used interchangeably. For years, this has been an informal attitude of many clinicians and researchers in the field of mental health. More recently, it was implicitly endorsed by ICD-11 (World Health Organisation, 2019), with its designation of the diagnostic grouping of “anxiety or fear-related disorders”. ICD-11 provides separate definitions for fear and anxiety, but states that they are “closely related phenomena”. The description of each disorder in this group includes “marked and excessive fear or anxiety”, except for generalized anxiety disorder (consisting of “general apprehension [i.e., ‘free-floating anxiety’] or excessive worry”) and panic disorder (consisting of panic attacks characterised as episodes of “intense fear or apprehension” and “persistent concern about the recurrence or significance of panic attacks”). Accordingly, all conditions classified among anxiety or fear-related disorders in ICD-11 are characterised by fear or anxiety, with the exception of generalized anxiety disorder where the dominant emotional state is anxiety.

The two apparently opposite approaches to the relationship between fear and anxiety may have more in common than it seems because they both acknowledge that these phenomena are somewhat different. The main difference between the two approaches is in terms of how they “handle” the overlap between fear and anxiety. Furthermore, the “overlap-overlooking” DSM-5 gives advantage to “anxiety” when it comes to naming the nosological group, whereas the “overlap-affirming” ICD-11 remains more “neutral” in this regard and allows

both terms to be used. Either directly or indirectly, generalized anxiety disorder is acknowledged in both DSM-5 and ICD-11 as different from other conditions in the group. Whether other disorders are primarily characterised by fear or anxiety or by both may be discussed or debated, but may also be irrelevant. What seems important, however, is that the diagnostic designation does not necessarily suggest fear or anxiety and that the experience of threat within the same type of disorder or same type of fear or anxiety may be different in different individuals and different even in the same individual over time. If so, the nomenclature itself may largely be a matter of convention, while the distinction between fear and anxiety should be neither overemphasised nor neglected.

### **A model of multifaceted fear during the COVID-19 pandemic and the fear/anxiety dichotomy**

In our model of fear during the COVID-19 pandemic, four domains of fear were proposed: fear of the body/fear for the body (bodily domain); fear of others/fear for others (relational/interpersonal domain); fear of knowing/fear of not knowing (cognitive domain); fear of taking action/fear of inaction (behavioural domain) (Schimmenti et al., 2020a). These domains of fear are interrelated and not organised hierarchically. Each domain has a dialectical structure, with the manifestations of fear being alike or different across time, akin to the same side of the coin always showing itself or two sides of the coin appearing alternatively. We also developed an instrument for the assessment of these domains of fear (Schimmenti, Starcevic, Giardino, Khazaal and Billieux, 2020b).

The object of the fear of the body/fear for the body is not just one's body, but also one's health and the very existence that depend on it. The body shifts from being perceived as a liability because it can "betray" its owner to a vulnerable and precious possession that needs to be protected. Relatedly, a sense of danger emanating from the body alternates with concern about its integrity. While the threat related to this fear at times seems imminent because of its existential nature, the threat is more in the background at other times, when its full extent may not be grasped completely. When fear of the body/fear for the body is in full swing, it may resemble a panic not only in terms of the perception of an imminent and vital threat, but also with regards to the presence of autonomic hyperarousal and a need to escape from the place where the fear is experienced. When this fear is not at the forefront, it is manifested via anxious, tense and uncertainty-fuelled anticipation of the "mysterious dread" and characterised by hypervigilance about one's body, avoidance of situations deemed to pose a risk to one's health or reassurance seeking about body- and health-related matters. Paradoxically, the focus on the body does not guarantee that the behavioural responses will be beneficial for one's health, as they may swing from a health-jeopardising avoidance of physicians and medical facilities to a stressful hypervigilance and excessive reassurance seeking that alienates healthcare professionals. In summary, fear of the body/fear for the body is experienced more like an acute, present-oriented and short-lasting fear when the threat is perceived as immediate, while it has characteristics of a chronic and future-oriented anxiety state when the perception of threat is not as imminent. Likewise, fear of the body/fear for the body may have a survival value, while also serving as a warning about the ultimate threat of death

at an uncertain point in the future.

The main threat in the fear of others/fear for others is about the transmission of the causative virus. The direction of the feared transmission determines whether the threat is attached to others (possibly infecting the person) or to oneself (possibly infecting others). As the virus is invisible and the direction of transmission, if any, is uncertain and largely unpredictable, there is an anxious anticipation that may or may not persist, depending on whether or not the infection is confirmed. Thus, although fear of others/fear for others clearly relates to other people, what drives this fear is intangible – an abstract notion of transmitting something invisible, whereby people are only the vectors of such transmission. With so much uncertainty, the key coping mechanism is avoidance of other people, which may lead to social isolation. In summary, fear of others/fear for others mainly resembles a chronic anxiety pertaining to something ominous (i.e., an infection) possibly happening in the future and being driven by a need to protect oneself or others against it. However, an acute fear sets in when people with a confirmed infection *have* to interact with others. In this case, the threat becomes all too real, with a sense of immediacy, hyperarousal symptoms and urge to flee from the person(s) identified as the source of infection to ensure survival. In other situations, when the person with this fear is infected, he or she may need to flee from others in order to protect them. Therefore, fear of others/fear for others can be both future- and present-oriented, albeit in different circumstances.

With uncertainty being one of the hallmarks of the pandemic, the main dilemma for many people pertains to the amount and quality of information that is deemed necessary for coping and a sense of safety. This is the context of the fear of knowing/fear of not knowing. People who believe that "knowledge is power" may be terrified by the lack of relevant and reliable information about the pandemic. People who consider knowledge potentially dangerous because of its frightening or overwhelming effects, are more likely to be concerned about information overload and negative effects of whatever information about the pandemic is available. In both scenarios, however, the threat relates to one's lack of confidence in an ability to cope with information or to find the right balance between useful and useless information and between too much and too little information. When the fear of knowing prevails, sources of information are avoided; when the fear of not knowing is predominant, information is sought frantically. However, individuals who are affected by fear of knowing one day may seek information excessively the next day and vice versa. Such quick alterations usually increase anxiety levels, make people question their actions and may have a paralysing effect. In summary, fear of knowing/fear of not knowing manifests itself as both chronic anxiety and acute fear, depending on the perception of an immediacy of threat (e.g., a threat of an imminent psychological breakdown due to information overload is likely to trigger a fear response). A sense of uncertainty permeates fear of knowing/fear of not knowing, making it akin to anxiety. Although the perceived threat (overwhelming information or paucity of information) may be somewhat abstract, the behavioural responses (running away from overwhelming information, avoidance of information or excessive information seeking) are clear-cut. The purpose of this fear is to promote survival, both in a physical and psychological sense, but due to its excessiveness, it undermines wellbeing. For example, avoidance of information as a consequence of

the fear of knowing may ease psychological pressure, but the person may miss essential, survival-promoting information. Likewise, frenetic information-seeking activity as a consequence of the fear of not knowing may foster survival by amassing pandemic-relevant information at the expense of psychological health.

Uncertainty associated with the pandemic is also “behind” the fear of taking action/fear of inaction. The threat posed by the COVID-19 infection is puzzling because the disease appears in a full range from causing death to being asymptomatic. While people have been given instructions about keeping safe and preventing infection, there are many unknowns about the specific situations and actions. Not knowing what to do or how to behave in a threatening situation is quite unsettling, and risk assessment and decision making are undermined by the ensuing fear. Thus, people who are afraid of taking action typically exaggerate the risk by believing that “nothing is safe”, and they may feel paralysed even when trying to make a simple decision to go out. Others behave in an opposite way, excessively engaging themselves in one or more activities and thereby overlooking the risk, distracting themselves from disturbing thoughts about the pandemic or striving to feel that they are in control. The same person may exhibit these extreme behavioural patterns at different points in time. In summary, fear of taking action/fear of inaction has features of both fear and anxiety, with the underlying threat being perceived as both clear and uncertain (a virus that may or may not strike in the very near future and may or may not have serious consequences). A behavioural response to this fear includes a voluntary self-isolation and being “frozen in time” when the fear of taking action predominates; when the fear of inaction takes over, a seemingly aimless hyperactivity occurs. Although these behavioural responses to the fear of taking action/fear of inaction are supposed to keep threat at bay and thereby promote survival, they do not allow adequate coping and may increase the threat via faulty risk assessment.

## Implications

We contend that domains of fear during the COVID-19 pandemic have characteristics of both fear and anxiety and agree with Heeren (2020) about the “potential dynamic interplay that might be at play between fear and anxiety during the COVID-19 pandemic”. These characteristics of fear and anxiety are manifested differently within each fear domain and they are experienced differently by different persons and at different points in time. Consequently, an idiographic approach to each individual, both cross-sectionally and longitudinally, is necessary for understanding COVID-19-related fears.

Whilst developing a multifaceted model of fear during the COVID-19 pandemic, we labelled the experience of threat as fear, largely because of its specific *initial* object – the virus and the disease and pandemic it has caused. This choice of the term does not imply that “anxiety” is not an appropriate term. In fact, both “anxiety” and “fear” have been used by other authors to denote the threat posed by the COVID-19 pandemic, e.g., “coronavirus anxiety” (Lee, Mathis, Jobe and Pappalardo, 2020) and “fear of the coronavirus (COVID-19)” (Mertens, Gerritsen, Duijndam, Salemink and Engelhard, 2020). “Coronaphobia” (Asmundson and Taylor, 2020) is another term that was proposed to refer to the same phenomenon. To the extent that uncertainty is more characteristic of anxiety than fear,

the term “anxiety” in the context of this pandemic could be justified. Nevertheless, even the threat posed by the unknown – a construct with even less clarity than uncertainty – has been labelled as “fear of the unknown” and suggested to constitute a “fundamental fear” (Carleton, 2016).

The boundary between fear and anxiety is more fluid than firm and a strict dichotomy between them is not tenable, as we have already demonstrated. We also believe that such a dichotomy is not necessary in the context of the COVID-19 pandemic. However, we agree with Heeren (2020) that there are treatment implications of ascertaining whether a particular person presents with features more consistent with fear or with features that better reflect anxiety. In practical terms, treatment approaches to behaviours such as escape, self-imposed isolation, avoidance, hypervigilance, reassurance seeking, information seeking and hyperactivity are likely to be different. What may be common to treatment of all fear domains during the COVID-19 pandemic is the management of uncertainty, i.e., use of the strategies designed to improve coping with uncertainty. Finally, we believe that formulation at an individual level is necessary for better understanding and effective treatment of these fears. Such a formulation needs to take into account the specific vulnerabilities, appraisals, experiences, behaviours, maintaining factors and consequences.

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