

Anxiety, Fear, and Political Decision Making

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Summary and Keywords

Research has shown emotions affect decision-making in ways that do not simply undermine rationality. Instead, in recent decades researchers have recognized that emotions also motivate and focus individuals and moderate how they make decisions. Initial research into emotions divided these simply into positive and negative, but this perspective has largely been displaced in political psychology by an emphasis on the impact of distinct emotions; among these, anxiety has received the most scholarly attention, rivaled only by anger. The causes of anxiety, also termed fear and unease, are diverse, but research highlights certain attributes of situational evaluation such as low self-control, low certainty, and low external agency.

Once present, anxiety has important consequences for decision-making. First, anxiety increases how much information individuals seek out, a pattern of behavior meant to reduce uncertainty. Second, anxiety decreases heuristic processing and weakens the reliance of underlying convictions in determining decisions. Instead, anxious individuals are more likely to think systematically about choices they face. Importantly, anxiety can affect choices and decisions even if they are not directly related to what caused anxiety to emerge, that is, if anxiety is incidental rather than integral.

In addition to influencing how people make decisions, anxiety may also directly influence the decisions individuals make. Thus, anxiety increases risk aversion, leading individuals to choose safer paths of action. Anxiety also makes individuals less likely to take action at all, with the most common response being withdrawal and passivity. Applied to political decision-making, anxiety may have the important consequence of decreasing political participation.

Research into the role of anxiety in decision-making is fast moving and vibrant, but to become fully established it needs to ensure rigor in measurement and research design; this will require considerable methodological research. Substantively, future research should focus on the effects of elite messages on anxiety as well as on how anxiety influences citizen attitudes and evaluations.

Keywords: affective intelligence theory, affect, anxiety, aversion, cognitive appraisal, emotions, decision making, fear, risk aversion, political decision making

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The role of emotions in decision-making was neglected for a long time. The normative ideal of the rational decision-maker was traditionally the central focus of research, with emotionality equated with a lack of rationality or with interference in rational choice (Elster, 1999, p. 284). Hence, the role of affect and emotions was barely examined in most 20th-century research on decision-making (Loewenstein & Lerner, 2003).

In recent decades, this approach has been fundamentally revised, and the study of emotions and decision-making currently represents one of the most vibrant areas of research on decision-making (Lerner, Li, Valdesolo, & Kassam, 2015). One of the central challenges in discussing the role of emotions in decision-making is that the definition of emotion itself is debated (Bandes & Blumenthal, 2012; Lerner et al., 2015; Scherer, 2005). For example, in reviewing a list of scientific definitions of emotions provided mostly in the 1970s, Kleinginna and Kleinginna (1981) identify almost 100 different entries. A workable definition that fits with the scope of this article has been provided by Nabi (1999, p. 295), who defines emotions as “internal, mental states representing evaluative, valenced reactions to events, agents, or objects that vary in intensity.” More extensively, in a review of studies in neuroscience by Phelps, Lempert, and Sokol-Hessner (2014, p. 266), the term “emotion” refers to “a discrete reaction to an internal or external event that can yield a range of synchronized responses, including physiological responses (e.g., flight or fight), facial and/or bodily expressions, subjective feelings, and action tendencies, such as approach or avoid.” Hence, there is consensus that emotions are not simply sudden moods that interfere with normal, rational modes of thought; instead, emotions are processes within the brain that are integral parts of how people appraise and react to stimuli, influencing how information is searched for and interpreted, how different objects or outcomes are valued, and how actions are chosen (Bandes & Blumenthal, 2012).

The key insight of research since the late 20th century is therefore that human decision-making cannot be conceived of without taking emotions into account (Elster, 1999), as emotional reactions are an indelible part of how people respond to events and process information (Damasio, 1994). In the context of political decision-making, “politics is about feeling” (Redlawsk, 2006, p. 1) as much as it is about thinking (Redlawsk & Pierce, 2017). The relationship between cognition and emotion is thus understood as complex and interactive (Lerner, Li, Valdesolo, & Kassam, 2015). Based on this insight, researchers have studied how emotions of different types influence and moderate how people make decisions.

This article focuses on one particular emotional reaction, anxiety, and how it influences the decisions made in the political realm. In this text, anxiety and fear are used interchangeably, in line with most research on this emotion (though, see Brader & Marcus, 2013, p. 177); related terms include “uneasiness” and “nervousness” (Brader & Marcus, 2013). Broadly, anxiety or fear is a high-arousal negative emotion that has distinct causes originating in appraisals of the situation: low certainty, low self-control, and low external agency. It also has distinct effects on decision-making, most prominently increased information seeking and lower reliance on heuristic rules. In addition, it influences the types of decisions individuals make, as it increases aversion to risk, influences attitudes and

evaluations directly, and tends to lead to withdrawal rather than engagement. The aim of this article is to provide a comprehensive review of this fast-developing field of research and highlight current gaps, conflicting findings, and promising further avenues of research.

Anxiety as a Negative Emotion

How researchers divide up and distinguish different emotions has changed over time. To simplify, the study of emotions in the social sciences has gone through roughly three stages (for more detailed accounts, see Brader & Marcus, 2013; Cassese & Weber, 2011). First, emotions were treated as if they could be located along a simple positive-negative “valence” dimension. According to this approach, increases in positive affect imply decreases in negative affect. However, researchers subsequently realized that positive and negative emotions are not mutually exclusive and can co-occur, leading them to study positively and negatively valenced emotions separately (Cacioppo, Gardner, & Berntson, 1999; Marcus, Neuman, & MacKuen, 2000). In political psychology, this approach is most closely identified with initial formulations of affective intelligence theory (Marcus et al., 2000), which ties each dimension to types of information processing and decision-making.

Most recently, the focus has shifted to distinct emotions, leading researchers to investigate the causes and effects of different emotions such as hope, enthusiasm, disgust, anger, anxiety (or fear), contempt, and sadness (e.g., Lerner & Keltner, 2000, 2001; Redlawsk, Roseman, Mattes, & Katz, 2018; Smith & Ellsworth, 1985). This recent wave of research criticizes earlier approaches for largely failing to distinguish between the distinct origins and consequence of emotions of the same valence, such as anger, anxiety, and sadness (Cassese & Weber, 2011).

One ongoing and potentially irresolvable debate concerns the number of distinct emotions and their definition. For instance, Smith and Ellsworth (1985) posit the existence of 15 emotions linked to six appraisal dimensions, whereas Roseman (1996) identifies 17 emotions. For the purposes of this article, the key insight is that there is a negative emotion that can be called anxiety or fear. This is in line with numerous studies on emotions and their effects, which consider specific emotions and appraisals (Brader & Marcus, 2013).

In general, the emotion of anxiety is distinguished from other negative emotions in both its causes and its effects. Importantly, anxiety is also a central emotion in two- or three-dimensional understandings of emotions that are prevalent in neurological studies (MacKuen, Wolak, Keele, & Marcus, 2010). According to Brader and Marcus (2013), fear or anxiety is the most studied emotion, both within political psychology and more generally. Only anger receives similar amounts of attention from researchers. There is significant evidence for considering anxiety as a particular type of negative emotion.

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Most research has tended to group anxiety and fear together, with fear as a more intensely felt reaction than anxiety. Nevertheless, it is important to point out that clinical psychologists distinguish between specific fears and broader anxiety disorders; in addition, some research has treated fear as a reaction to clear threats, and anxiety as the consequence of more ambiguous threats (see discussion in Brader & Marcus, 2013). In line with most recent work, especially in political science, fear and anxiety are treated as coterminous in this article and used interchangeably.

Finally, emotions are distinguished according to whether they are related to the task of decision-making in itself (integral emotions) or to a situation that is unrelated to the decision (incidental emotions) (Lerner et al., 2015). Integral emotions arise because of the specific characteristics or context of the decision. They are also known as anticipatory if they are based on the perceived consequences of the decision one is about to make (Rick & Loewenstein, 2008). However, emotions can also affect decision-making if they are incidental, that is, if they emerge because of events or situations that are not related to the decision at hand. For instance, if individuals are made angry because someone cut in front of them in the queue, this may affect how they make decisions once they reach the service counter (Banks, 2014). Political scientists study the effects of both integral and incidental anxiety, even if the distinction is not always made clear in the research itself.

Causes of Anxiety

Fear and anxiety are very common emotions, and most will agree that they are elicited primarily when individuals perceive the existence of a threat. Hence, research shows that images of snakes, spiders, and skulls can cause fear (Way & Masters, 1996, p. 58), as can news on viral outbreaks (Clifford & Jerit, 2018), terrorist attacks (Albertson & Gadarian, 2015; Gadarian & Albertson, 2014; Merolla & Zechmeister, 2009), or even the news that one's preferred candidate may lose (Valentino, Hutchings, Banks, & Davis, 2008). Yet, what is it about these situations and events that causes people to experience fear and anxiety?

The situations that lead to different emotional experiences are generally described based on appraisal theory, the dominant approach in research on the causes and effects of distinct emotions (Lazarus, 1991; Smith & Ellsworth, 1985). According to this theory, different emotions arise when individuals evaluate the situation or environment and how it relates to them; this evaluation and assessment is the appraisal that creates emotions, and it can be preconscious or conscious. A variety of situational appraisals exist and have been studied in the literature, for instance, certainty, pleasantness, control, anticipated effort, responsibility, and attention (see Smith & Ellsworth, 1985). The emergence of different emotions is generally linked to different appraisal dimensions, often with a particular focus on one of these dimensions (Frijda, Kuipers, & Ter Schure, 1989; Lazarus, 1991; Smith & Ellsworth, 1985).

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The three appraisals that are generally seen as the most relevant for creating fear and anxiety among individuals are certainty, control, and agency (Cassese & Weber, 2011), as described in Figure 1. First, people who see the situation and its outcome as uncertain are more likely to feel fearful or anxious (Lerner & Keltner, 2001; Todd et al., 2015; see also Tiedens & Linton, 2001). For example, an economic crisis will lead to fear, in particular if it is unclear how long the crisis will last and how deep it will go. Second, individuals are also more likely to react with fear or anxiety if they see the situation as one over which they have little control (Lazarus, 1991; Tiedens & Linton, 2001). If the threat cannot be addressed by the individual herself, she is more likely to experience fear. Third, anxiety will increase if no clear external actor can be held accountable. By contrast, blaming an external actor should make people angry rather than anxious (Lerner & Keltner, 2000; Smith & Ellsworth, 1985; Wagner, 2014). For example, a person whose car is damaged by another car will be angry; a person whose car may be damaged because of a strong storm raging outside will be more anxious. More politically, economic crises will cause anxiety if responsibility is diffuse and hard to determine (Wagner, 2014).

Although these are general appraisals, there may nevertheless still be differences between individuals in their propensity to experience certain emotions (e.g., Scherer & Brosch, 2009). Certain individuals may have a stronger disposition toward feeling anxiety (Maner et al., 2007). This could be because they are more likely to evaluate and appraise situations and decisions in a particular way. For this reason, individual differences in appraisal tendencies may lead to different emotional experiences.

The importance of situational appraisal also explains the relevance of framing in understanding the role of anxiety for decision-making. The media and political actors can portray events in different ways. For instance, Brader (2006) has shown how campaign ads may elicit fear and anxiety through elaborate imagery and threatening music often unrelated to the actual message of the ad. Similarly, in a study on references to Latino immigrants in U.S. elite debates, Brader, Valentino, and Suhay (2008) show that group cues increase anxiety about immigration. More recently, an experimental study conducted by Wirz (2018) in German-speaking countries provides evidence that when populist messages are framed as “conflicting messages”—that is, messages that blame or discredit other people—they generate fear. Through such framing effects, the nature of the discourse surrounding political policies and developments may thus influence when individuals are likely to experience anxiety (Gross, 2008; Gross & Ambrosio, 2004; Kinder & Sanders, 1990). This may subsequently greatly affect how people form opinions and make decisions (see “ANXIETY INCREASES INFORMATION SEEKING” and “ANXIETY DECREASES HEURISTIC PROCESSING”).

Importantly, emotions can have a subsequent impact on decision-making even if they are not caused by the object or situation at hand. These are incidental emotions, as described in the section “ANXIETY AS A NEGATIVE EMOTION.” For example, Banks (2014) shows that emotions induced in general ways (through visual and written stimuli) affect racial policy preferences. Such carry-over effects of emotions means that although appraisal is

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the key route to emotional reactions, this does not mean that the emotions people experience only have effects on the situations and decisions that caused these emotions.

Finally, not all work on emotions is based on such relatively detailed cognitive evaluations of situations suggested by appraisal theory. Focusing on positive and negative mood rather than distinct emotions, Lodge and Taber (2013), for example, argue for the importance of preconscious evaluations. Appraisals leading to distinct emotions may also emerge very quickly and in ways not based on cognitive engagement with the situation (Erisen, Lodge, & Taber, 2014; Feldman Barrett, 2017; Lazarus, 1991; Scherer, Schorr, & Johnstone, 2001). The role of preconscious and post-awareness appraisals is still a matter of considerable academic debate (Brader & Marcus, 2013). For the purpose of understanding the effects of anxiety and fear, however, this distinction may not be important, as distinct emotions may have a similar impact irrespective of how these emotions arise.

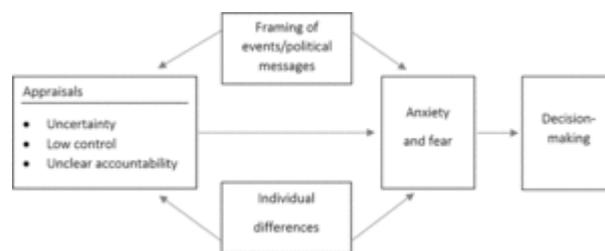


Figure 1. Appraisals and moderating factors that lead to fear and anxiety.

Measuring and Inducing Anxiety

Understanding methodological choices is very important when studying the impact of emotions (including anxiety) for political decision-making. The main distinction that needs to be made is between observational and experimental research. In observational work, researchers use surveys to study the associations between emotions, on the one hand, and decision-making, on the other. Here, emotions tend to be measured via simple survey questions, for example, by asking respondents to state how anxious, nervous, or fearful they are (Marcus et al., 2017). These questions generally include the object that elicits the emotion, such as presidential candidates or the economic situation. In its simplest form, observational research makes use of a cross-sectional survey, with the effects of anxiety tested contemporaneously (e.g., Garry, 2014; Marcus & MacKuen, 1993; Vasilopoulou & Wagner, 2017). More sophisticated observational studies make use of panel data, with individuals interviewed repeatedly at different points in time, precisely in order to be more certain that emotional reactions precede political evaluations (e.g., Wagner, 2014; Rico et al., 2017). Nevertheless, observational data always suffer from potential endogeneity concerns (Ladd & Lenz, 2008) as well as the difficulty of measuring emotions via self-stated survey responses.

Research examining the effects of anxiety increasingly makes use of experimental approaches, with a main motivation being that researchers want to be certain that emotions cause individual attitudes and behavior, instead of just being associated with them. The

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aforementioned complex interactions between cognition and emotion arguably make an experimental approach particularly relevant in this field. Another advantage of experimental research is that emotional reactions can be induced among respondents rather than relying on potentially error-prone self-reports.

As summarized by Albertson and Gadarian (2016), emotions can be experimentally induced in a variety of ways (see also Searles & Mattes, 2015). However, inducing emotional reactions is not an easy task, and “there is no perfect emotion manipulation” (Albertson & Gadarian, 2016, p. 486). A key decision for experimental researchers is whether to induce incidental or integral emotions. In this sense, the question is whether the emotions induced should relate to the political object examined or to generic, nonpolitical objects that then carry over to the evaluation of political matters.

A second decision is whether to induce emotions through a bottom-up or top-down process. In bottom-up emotion manipulations, respondents “create” their own feelings of anxiety, anger, or enthusiasm through self-reflective writing (Albertson & Gadarian, 2016; Erişen, 2013). Most commonly, respondents are asked to write a brief text or some words in response to a stimulus (e.g., Erişen, 2013; Gadarian & Albertson, 2014; Lerner & Keltner, 2001). Alternatively, participants are asked to imagine themselves in a situation that can trigger certain emotions (Searles & Mattes, 2015), or to recall a situation that made them angry, afraid, or enthusiastic (Valentino et al., 2011).

Other ways of inducing emotions are more top-down, with respondents simply presented with texts and/or images aimed to induce a specific emotion (e.g., Merolla & Zeichmeister, 2009; Mikels et al., 2005; Searles & Mattes, 2015; Suhay & Erişen, 2018). A different top-down method for inducing emotions relies on the possibility that emotional states can be activated automatically before deliberate assessment. Following recent trends in psychological research on implicit attitudes (see, e.g., Fazio & Olson, 2003), Quirin, Kazén, and Kuhl (2009) have developed the concept of “implicit affect,” which they define as “the automatic activation of cognitive representations of affective experiences” (Quirin et al., 2009, p. 501). They have proposed the Implicit Positive and Negative Affect Test (IPANAT) as an instrument to measure implicit affect. Contrary to self-reported measures of emotions, the IPANAT aims to assess positive and negative emotions indirectly by asking participants “to rate the extent to which artificial words from a putative artificial language express certain moods” (Quirin et al., 2009, p. 502). In testing the IPANAT, Quirin et al. (2009) have found that implicit negative affect correlates significantly with self-reported measure of negative states, including anxiety. The IPANAT has been subsequently validated successfully in a large cross-country study (Quirin et al., 2018) and in experimental research in the United States, showing that inducing emotions with an implicit task can succeed in differentiating specific emotions of the same valence, such as anger and anxiety (Bartoszek & Cervone, 2017).

Models of Emotions, Decision-Making, and Choice

Once emotions have been aroused among individuals, whether experimentally or not, then what are the downstream effects on decision-making? Lerner et al. (2015) summarize the importance of anxiety and other emotions for decision-making by proposing an emotion-imbued choice (EIC) model (see also Lerner & Loewenstein, 2003). They take rational models of choice as a starting point and depict emotions as adding to and moderating this basic model. In the EIC model, current emotions influence conscious and non-conscious evaluations that underlie the decisions people make. As outlined in the section “CAUSES OF ANXIETY,” these emotions stem from three sources: first, characteristics of the decision-maker; second, appraisals of the situation such as certainty or control; and third, incidental influences such as the weather or carry-over effects from prior situations. The subsequent influence of current emotions can then be direct, for instance, by affecting underlying motivations or by affecting information processing. In addition, current emotions also indirectly affect decision-making by influencing expected outcomes, which then feed back into evaluations. Lerner et al.’s (2015) model neatly summarizes how encompassing the effects of current emotions can be.

In political psychology, one of the most influential approaches to studying the impact of emotions has been affective intelligence theory (MacKuen et al., 2010; Marcus et al., 2000). This theory is based on a dual process model, building on Gray (1990), in which emotional states affect how information is sought out and processed. The first process is the disposition system: situations evaluated as safe and familiar elicit enthusiasm and lead individuals to process information less carefully, relying instead on predispositions and heuristics (MacKuen et al., 2010; Marcus et al., 2000). Like enthusiasm, anger (also termed “aversion”) is posited to activate the disposition system. By contrast, the second process, the surveillance system, is activated when individuals see the situation as threatening and uncertain. This leads to more careful, in-depth information processing and a weaker reliance on established routines. Essentially, affective intelligence theory proposes that the path toward either System 1 systematic processing or System 2 heuristic processing (Chaiken, 1980; Evans, 2008; Kahneman, 2011; Stanovich & West, 2000) is determined in part by affect and emotional states. A similar argument is made by Lodge and Taber (2013), who focus on precognitive positive and negative affect as antecedents of biases in information processing. Neurological research has also confirmed that emotions affect judgment processes (Decety & Cacioppo, 2012; Greene & Haidt, 2002). In what follows, the most important effects of anxiety on decision-making are considered in turn.

Anxiety Increases Information Seeking

Anxiety is important to decision-making because it affects how individuals seek out and process information (Marcus & MacKuen, 1993). When people are nervous or fearful because of a perceived threat, they are more likely to “interrupt their habitual routine and

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engage thought” (Marcus et al., 2000, p. 53). The main motivation in doing so is to avoid danger, reduce threat, and maintain stability. Hence, anxiety heightens information seeking in order to reduce the very source of uncertainty that triggered anxiety in the first place. The possibility that anxiety increases information seeking and decreases heuristic reasoning is one of the key reasons why recent work has dismissed earlier notions of emotions as a rival to, rather than as a moderator of, “rational” approaches to decision-making (Damasio, 1994; Marcus et al., 2000).

Evidence of heightened attention to information among anxious individuals is abundant. For example, voters look for more information about candidates that make them anxious (Parker & Isbell, 2010; Redlawsk, Civettini, & Lau, 2007), and recall and seek more information about terrorist threats than about positive, non-threatening news (Merolla & Zechmeister, 2018). After the 2015 terrorist attacks in France, fear increased information seeking, measured as following television news (Vasilopoulos, 2018). Anxiety has also been found to make citizens pay more attention to the detail of scandals (Birch, Allen, & Sarmiento-Mirwaldt, 2017), of potentially dangerous viral outbreaks (Clifford & Jerit, 2018), and of nearby wars (Erişen, 2013). There is also evidence that anxiety increases information processing and attention toward the information environment indirectly by reducing the influence of partisanship (Weeks, 2015) and motivated reasoning (Redlawsk, Civettini, & Emmerson, 2010) in rejecting inconsistent information.

However, the effects of anxiety on information seeking are perhaps more nuanced than initially thought. First, although information seeking is increased, the effect of anxiety on recall of this information is mixed. Brader (2006) finds that anxiety does have a positive effect on recall. However, Civettini and Redlawsk (2009) find that all types of emotion improve recall, with no increased effect for anxiety. Meanwhile, Huddy, Feldman, Taber, and Lahav (2005) show that anxious individuals do worse at recalling political relevant facts.

In addition, although anxiety has generally been found to increase information seeking, it is not clear what kind of information anxious individuals search for. Some authors find that anxious individuals simply look for any type of information. For instance, Brader et al. (2008) find that anxiety leads individuals to pay attention to all available arguments, irrespective of how valid they are. This could be problematic if information is unbalanced, misleading, or inaccurate (Weeks, 2015). Other authors find that certain types of information are privileged by anxious individuals. Valentino, Banks, Hutchings, and Davis (2009) paint a positive picture: anxious individuals are more likely to search for useful information (see also Brader, 2006). By contrast, Albertson and Gadarian (2014, 2015) present evidence that people pay more attention to threatening information when they are anxious. This could lead anxious individuals to weight such information too heavily when forming opinions. Meanwhile, Song (2017) finds in observational work that anxiety leads to an increased exposure to pro-attitudinal news (selective approach) in an effort to seek reassurance and to reduce fear. This finding also goes against claims that anxiety provides for balanced information seeking, but unlike in Albertson and Gadarian (2014, 2015), threatening information is avoided. However, in Song (2017), anxiety does not reduce exposure to counter-attitudinal news, unlike anger. Overall, the question of which information anx-

ious individuals seek out remains an important area of study in which answers are still unclear.

A further question relates to the effects of anxiety in the presence of other emotions. Anxiety often co-occurs with disgust or anger (Brader et al., 2008; Marcus et al., 2000; Weeks, 2015). In this case, the other emotions may have a countervailing effect on the information-seeking impact of anxiety, reducing the overall effect of this emotion. Thus, when a situation elicits anxiety as well as disgust, information seeking may not increase (Clifford & Jerit, 2018).

Anxiety Decreases Heuristic Processing

Although anxiety clearly has effects on information seeking, it may also influence how individuals process this information and how, in turn, they make decisions. Here, the prediction of affective intelligence theory is that anxious individuals should engage in more effortful processing and careful decision-making (MacKuen et al., 2010; Marcus et al., 2000). Hence, anxious individuals should rely less on their predispositions because they are more willing to think carefully about the decision at hand. Indeed, Groenendyk (2016) finds that anxiety reduces the impact of partisan bias on memory retrieval, with anxious individuals relying less on their predispositions as a result. In a similar vein, Banks and Valentino (2012) find that negative racial predispositions affect policy preferences concerning racial matters more when people are angry, not anxious. Thus, anxiety weakens the reliance of underlying convictions in determining policy preferences.

There is also evidence that anxiety increases systematic processing of information and careful reasoning in political decisions. Tiedens and Linton (2001, p. 985) find that “uncertainty-associated emotions,” including fear, promote systematic processing of information, whereas “certainty-associated emotions,” including anger, result in more heuristic processing. Hence, Valentino, Wayne, and Ocen (2018) find that, in the 2016 U.S. presidential election, fear reduced (and anger increased) the impact of sexism on preference for Donald Trump. Fear also tends to increase individuals’ use of issue-based agreement as a decision rule when deciding whom to vote for (Parker & Isbell, 2010). Similarly, Garry (2014) finds that anxiety increases issue voting as a determinant of choice in European Union (EU) referendums. Fearful individuals also have more nuanced opinions on complex topics such as European integration (Vasilopoulou & Wagner, 2017).

Because anxious individuals seek out more information, process this information more carefully, and rely less on heuristics, they are generally more open to persuasion (Marcus, Sullivan, Theiss-Morse, & Stevens, 2005; Valentino et al., 2008). The direction this persuasion will take depends on the information available (Brader et al., 2008). Similarly, Druckman and McDermott (2008) find that anxiety and distress increase the impact of framing on risky decisions, whereas anger tempers the effect of framing. In addition, Vasilopoulos, Marcus, and Foucault (2018) show that reactions to terrorist threats depend

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on emotional reactions. Those with a non-authoritarian disposition are more likely to react to such threats by becoming more authoritarian if they feel anxious and fearful.

The openness to persuasion caused by anxiety has important implications for opinion change in politics. In this regard, anxiety is very different from anger, which tends to lead to reduced information seeking and to greater reliance on heuristic processing (Bodenhausen, Sheppard, & Kramer, 1994; MacKuen et al., 2010). It is also been argued that these effects of anger arise because this emotion tends to activate the disposition system. Hence, persuasion is greater among anxious individuals but reduced among angry individuals. This is one of the core reasons why different types of negative emotions should be distinguished.

Anxiety Increases Risk Aversion

Anxiety does more than moderate how individuals seek out and process information: it also affects the kinds of decisions individuals make. Most prominently, anxiety influences risk perception, with the consequence that fearful individuals tend to make pessimistic judgments and risk-averse choices (Lerner & Keltner, 2001). The reason why anxiety leads to risk aversion stems from the fact that this emotion tends to activate the surveillance system. In Frijda's (1986) terms, emotions carry "action tendencies" within them and trigger certain responses; the central response to anxiety is to monitor the situation and avoid the threat (Lerner et al., 2015).

Although traditional approaches to decision-making under risk have predominantly taken a cognitive approach, there is evidence that emotions, and anxiety in particular, influence decisions even when outcomes are associated to known probabilities—a classic case of "risky" decisions, compared to "uncertain" decisions, in which probabilities are not known (see Volz & Gigerenzer, 2012). In particular, Loewenstein, Weber, Hsee, and Welch (2001) argue that people react to the prospect of risk both at the cognitive level and the emotional level, with emotional reactions often diverging from cognitive evaluations (Loewenstein et al., 2001). Experimental evidence shows that negative emotions have distinct impact on individual gambling decisions, because sad individuals tend to choose high-risk options, whereas anxious individuals favor low-risk options (Raghunathan & Pham, 1999). Research by Druckman and McDermott (2008) also confirms that positive and negative emotions significantly influence decision-making in substantially different directions. They conducted two experiments in which they presented the participants with two differently framed problems: the classical problem developed by Tversky and Kahneman on the outbreak of a disease (Tversky & Kahneman, 1981), and an investment problem. Their findings show that distress and anxiety lead to less risk-seeking behavior, in contrast to anger and enthusiasm, which lead to more risk-seeking behavior (Druckman & McDermott, 2008). In a similar vein, MacKuen et al. (2010) show that anxious individuals are more willing to seek out a compromise, much in contrast to angry individuals.

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The increased risk aversion arising from anxiety has been found in many areas of politics as well. One frequent area of study is the reaction to terrorist attacks (McDermott 2017). Huddy, Feldman, and Cassese (2007) found that U.S. citizens who felt anxious perceived greater risks and were less supportive of foreign intervention in the aftermath of 9/11. Similarly, Lerner, Gonzalez, Small, and Fischhoff (2003) found that experiencing fear in the period right after September 11 led to pessimistic risk estimates, whereas anger triggered more optimistic evaluations. Importantly, experimentally primed emotions also influenced public policy preferences, with fear promoting less risky, precautionary measures (Lerner et al., 2003). However, evidence from a recent study in Turkey shows that increases in risk aversion do not always follow from heightened anxiety (Erişen, 2013).

Other research on risk avoidance due to anxiety concerns the European Union. Vasilopoulou and Wagner (2017) find that anxious voters are less likely to support leaving the EU than other voters, presumably because this is the more risky option. Similarly, Garry (2014) demonstrates that anxiety increased the support for the EU's Fiscal Treaty in the 2012 referendum in Ireland, in which voting "yes" could be conceived as the risk-averse option. This is another important contrast between anxiety and anger, as the latter emotion is likely to make individuals embrace risk and try to remove its source rather than avoid risk and prevent negative consequences.

How people interpret increased risk aversion due to anxiety is of course up for debate. On the one hand, in the face of real threats, the effects of anxiety might be positive if increased information seeking and risk aversion lead to safer behavior. However, if anxiety-induced risk aversion leads to worse decisions, then the overall impact on welfare is negative. Gigerenzer (2004) cites the example of someone who chooses to drive a long distance rather than fly, even though driving is in fact more dangerous on average. This negative impact of anxiety is amplified if the source of the emotion is incidental rather than integral, that is, if it is unrelated to the actual decision the individual faces (Lerner et al., 2015).

Effects of Anxiety on Evaluations and Attitudes

In addition to shaping individuals' assessment of risk, anxiety can also shape other evaluations relating to decisions. Thus, appraisal theorists also argue that emotions have downstream effects on patterns of evaluation (Keltner, Ellsworth, & Edwards, 1993; Lerner & Keltner, 2000, 2001; Tiedens & Linton, 2001). In other words, the emotions generated due to a situational appraisal influence subsequent appraisals. In Lerner et al.'s (2015) words, "An emotion, once activated, can trigger a cognitive predisposition to assess future events in line with the central appraisal dimensions that triggered the emotions." In related work, Cassese and Weber (2011, p. 67) argue that cognition and emotion operate in a feedback loop that is mutually reinforcing. One empirical example of this is that individuals who feel anxious might not seek to blame someone for a situation (Cassese & Weber, 2011). By contrast, anger leads individuals to blame individuals rather than situational factors (Keltner et al., 1993; Lerner, Goldberg, & Tetlock, 1998; Petersen, 2010). Clear-

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ly, the link between blame and emotions is complex, as cognitive appraisals of control are also key determinants of emotional responses (Wagner, 2014). Hence, there is likely to be a mutually reinforcing link between blame attributions and individual emotions.

Affect itself may help us to evaluate objects and people. As in the affect-as-information approach (Schwarz & Clore, 1983), citizens may use the emotions they feel as the basis for their evaluations of and attitudes toward politicians, parties, and policies. This is also the assumption of the “hot cognition” approach (Lodge & Taber, 2013), which treats positive and negative emotions as heuristics in decision-making (Erisen et al., 2014). In related work, Ladd and Lenz (2008, p. 276) refer to this process as affect transfer: “positive and negative emotional reactions to political candidates directly transfer positive and negative evaluations, respectively, onto those candidates” (see also LeDoux, 1995). In related work, Banks and Bell (2013) show that racially based anger increases opposition to racial policies, particularly among racial conservatives. However, fear may have weaker effects; for instance, observational (Rico, Guinjoan, & Anduiza, 2017) and experimental (Morisi & Wagner, 2018) studies find that either measured or induced feelings of anxiety have no impact on populist attitudes, that is, on anti-elite sentiments.

Anxiety and Political Participation

The impact on anxiety and fear on participation and engagement appears to be quite variable (Brader & Marcus, 2013). On the one hand, anxiety and fear can lead to lower engagement and participation in politics. The approach-avoidance understanding of emotions argues that anger would lead individuals to attempt to remove threats (approach), whereas anxiety would privilege attempts to avoid engagement with the threat, unless the threat is easily dealt with (avoidance) (Brader & Marcus, 2013; Frijda, 1986; Marcus & MacKuen, 1993). Hence, the most common reaction to experiencing anxiety is withdrawal (Frijda et al., 1989; Smith & Ellsworth, 1985). For example, Valentino et al. (2011) find in a multifaceted study that anxiety mobilizes far less than anger. In the aftermath of the 2015 terrorist attacks in France, fear also reduced the propensity to attend a political rally, though the emotion had little effect on the inclination to turn out and vote (Vasilopoulos, 2018). However, the effects of fear are not uniform (Brader & Marcus, 2013). Hence, Rudolph et al. (2000) find that anxiety increases involvement among individuals with high internal political efficacy and has little effect on those with low internal efficacy. Like anxiety, sadness is also likely to demobilize citizens, but there is generally again a clear contrast to the mobilizing emotion of anger, which tends to consistently encourage participation and engagement.

Conclusion and Future Directions

The study of the role of anxiety in political decision-making has made important advances in the past decades. Much of this research has been motivated by the aim of establishing emotions, including anxiety, as an important influence on decision-making and choice.

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This research program has produced influential and wide-ranging findings. Thus, anxiety and fear appear to have consistent effects on how individuals seek out and process information and how they subsequently make decisions. More broadly, anxiety appears to increase individuals' aversion to risk and decrease their willingness to participate politically. These broad-brush, headline findings indicate that the importance of anxiety is empirically well established. The clarity of these results also means that, now that the importance of anxiety has been established in general terms, it is possible and even vital to add nuance to these findings.

Substantively, a lot of work remains to be done on how politicians and parties can influence anxiety and fear. The interpersonal perspective on emotion, which includes political communication, has so far been relatively neglected (Lerner et al., 2015). The effects of elite discourse are not always obvious. For example, when those high in power communicate angrily, this can elicit fear rather than anger (Lelieveld, Van Dijk, Van Beest, & Van Kleef, 2012). There has recently been an increase in work on the role of emotions in political communication (Banks & Bell, 2013; Hamelers, Bos, & DeVreese, 2017; Lecheler, Bos, & Vliegthart, 2015; Schmuck & Matthes, 2017; Song, 2017; Stolwijk, Schuck, & de Vrees, 2017; Wirz, 2018). For example, Wodak (2015) analyzes the role of fear in radical-right populist discourse. Yet there is more scope for research on how elites influence integral and incidental emotions and how these subsequently affect decision-making.

In addition, research needs to clarify the heterogeneous effects of anxiety on attitudes and behavior. For example, there is still a lack of consensus on what kind of information anxious individuals seek out. Do they look for attitude-reinforcing information (Song, 2017)? Do they privilege threatening news (Albertson & Gadarian, 2015; Gadarian & Albertson, 2014)? Further questions concern the link between emotions and other attitudes. For example, it is also not entirely clear when and how anxiety and anger affect individual attitudes such as the assignment of blame (Cassese & Weber, 2011; Wagner, 2014) or populist beliefs (Morisi & Wagner, 2018; Rico et al., 2017).

There are also important methodological challenges for future research on anxiety and decision-making. First, future research needs to increase attention to establishing causality in the effects of anxiety on decision-making. The linkages between emotion and cognition are complex and recursive. Experimental methods are a clear advance over observational work, but work still needs to be done in deciding how best to induce emotional reactions and how the induction of integral and incidental anxiety differs.

Second, the links between emotional reactions and personality need to be more closely examined. Although anxiety emerges as a result of individual situational appraisals, there are also interpersonal differences in the propensity to develop anxiety. This may be because individuals differ in how likely they are to interpret situations in ways that produce anxiety. Here, the study of emotions has clear links to work on personalities. More generally, psychological work on state versus trait anxiety (Spielberger, Gorsuch, & Lushene, 1970) could be integrated better into work in political psychology.

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Finally, a wide variety of approaches exist for measuring and inducing emotions among respondents. More work is needed to test the validity of these different approaches. A fundamental question concerns the use of self-reported measures of emotional reactions and how these relate to induced emotions as well as innovative implicit measures of affect. Research into emotions and decision-making is turning into a maturing field, but for the field to become fully established, researchers need to pay sufficient attention to valid, robust measurement and robust research designs.

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