

Effect of Anxiety to Citizens: Does Anxiety Facilitate or Deteriorate Citizens' Motivation and Capacity to Political Information and Activity?

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Introduction

The purpose of the paper is to examine the effect of anxiety over information seeking of the people. Recently, many of political psychology works focus on the effect of anxiety to citizen's democratic competency, especially to their leaning capability of political affairs. However, some studies over the effect of anxiety find seemingly contradicting effect of anxiety to the voter's information seeking and learning. Based on Affective Intelligence Theory (AIT) proposed by Marcus and his colleagues, some authors argue that anxiety shift attention of the people to novel stimuli, and consequently lead them to seek more information and learn about political phenomena that otherwise outside of their everyday life. However, the other groups of scholars suspect the implication of AIT because anxiety is basically emotional response of avoidance from the threatening stimuli. Both of the groups presented supportive evidence to their theoretical hypothesis. Why do they observe these contradicting results? In this short paper, I would like to propose the need to contextualize the effect of anxiety. To say more specially, I argue that the effect of emotional responses perceived as anxiety are contingent of the other factors, certainty of threat from the stimuli on the one hand, and perceived competence of the people to deal with the threats on the other hand. In the next section I begin this article with the brief description of the discussion between the groups of the political psychologists advocating and criticizing the Affective Intelligence Theory by Marcus and his colleagues, and try to figure out how they reached to contradicting results. Their discussion offers the important starting point to develop the theory of the effect of emotion over information behavior further.

Affective Intelligence Theory and Its Critiques

In the last decade, many political psychologists have worked on the relationships between citizens' emotional status and their democratic capability. Marcus, Neuman and MacKuen published "*Affective Intelligence and Political Judgment*" in 2000 and the book has quickly become a focus of discussion. In the book they propose Affective Intelligence Theory (AIT) that people usually reside in the dispositional system at which they can concentrate on their current tasks and let other things to their predisposition. However, if they perceive the novel and threatening stimuli, then a different brain system, the surveillance system is evoked. The surveillance system raises a cognitive function and drives people to examine their environment as to whether it is safe or not. If the system finds something abnormal it refrains from ongoing tasks and allows people to shift their attention to the threat. Anxiety is the emotional signal transmitted from the surveillance system that indicates "now is the time to look for a solution to the new and threatening circumstance." Therefore, a functioning "surveillance system," observed as heightened anxiety, facilitates people to seek information and learn rather than when they feel an enthusiasm, the emotional indicator of working of the dispositional system at which people focus on ongoing works and leave other works to their habits. Applied in a political context, Marcus and his colleagues found that anxious citizens relied less on partisan cues but more so on their policy preferences and candidates' qualities in their vote decision.¹

Many works follow AIT and have found supportive results. First, Brader (2005)

¹ Their conclusion was based upon data from ANES 1980-1996 electoral votes.

finds that cueing fear in political advertisements stimulates citizens' attentiveness, and hence increases their reliance on contemporary evaluation. Consequently, this increases their propensity to be persuaded by factors other than party identification. On the other hand, the author also finds that enthusiastic cues in political advertisements can motivate people to participate and activate their existing partisan loyalty. Crigler, Just and Belt (2006) obtained similar results with that of Brader. Crigler et al found that "anger, worry and fear about a candidate stimulate respondents to pay greater attention to the campaign media," although "positive feelings about candidates stimulate campaign involvement" (pp.154). Their work found that positive aspects of enthusiasm can facilitate a citizen's political participation. However, they also agree that the positive effects of anxiety in a democratic society can also have a substantial effect as anxiety can drive people to seek information and learn more about the political issues. Moreover, Valentino et al (unpublished) shows that even though various emotions can lead people to claim that they pay more attention to the electoral campaign, relative to those other emotions, anxiety alone can lead to more efficient information seeking.

However, other studies do not unanimously support the implications of AIT. Holbrook (2004) for instance, challenges the arguments by Marcus and his colleagues based on his experiment with fake candidates in the campaign materials. Holbrook finds that anxiety prevents on-line candidate evaluations and as a result leads to less stable candidate evaluations by the public. Moreover, anxiety detrimentally works on recalling factual information about the candidate. Therefore, anxiety can significantly damage the overall evaluation process because anxious people are neither able to rely on on-line processing nor deteriorated capacity of recalling. Similarly, Feldman and Huddy (unpublished) find from their three wave panel study in 2001-2003 that anxious

individuals could not effectively learn, even though they talk more and attempt to seek information.

From a different perspective, MacKuen and his colleagues (2005) argue the need for more detailed specifications of negative emotions beyond those discussed in the previous studies. They admit that anxiety as a reaction to uncertain and unexpected stimuli motivates people to explore new possibilities. However, the authors argue that aversion, the emotion measured with the questionnaires regarding a respondent's anger, contempt, bitterness and disgust have a significantly different impact on the citizens. Aversion, the emotional response toward familiar threats which respondents already have formulated their reaction to, leads people to seek less deliberation and accommodation.² Moreover, Steenbergen and Ellis (2006) in a similar fashion argue the necessity to differentiate between anxiety and aversion. They also define the difference between anxiety and aversion as an emotional response toward uncertain threat and perceived affront.

In summary, Critiques of AIT essentially imply the following two lines: 1) definition of anxiety and "learning" should be more specified, and; 2) the origins and mechanisms of negative emotions should be examined in more detail.

First, AIT suggests that anxiety, an emotional indicator of the surveillance system, leads people to seek more information. However, Feldman and Huddy argue that while anxious people seek information they cannot efficiently retain what they learn. Therefore, they suggest that we should be careful to differentiate between information seeking behavior and actual learning. Inconsistent results in the previous studies therefore may

² I am afraid that their findings on different effect of anxiety and aversion come from positive correlation between anxiety and aversion that they neglect in their model. The neglect causes spurious opposite effects of those two emotions, which they claim they find.

come from differing definitions and measurements schemes of political learning.

Next, the psychological mechanism against threat needs more careful examination. Anxiety is basically defined as an emotion of avoidance in psychological studies outside of AIT. Avoidance implies a conscious or unconscious deflect of attention from the source of threat. Therefore anxiety does not necessarily lead to learning about the threat, the critics of AIT argue. However, I do not think the inconsistency of positions necessarily comes from the fault of AIT. Rather, I think that the reason for the inconsistency can be derived from the different assumptions that each respective field utilizes in their studies.

In the next section, I first present the latest psychological studies over the effect of anxiety/fear to the information seeking and leaning. These latest studies are based on the experiment investigating how people shift their attention when they are given threatening stimuli. I would like to show that how emotional reaction categorized in general as anxiety lead different informational behavior, based on the level of certainty of information, i.e. before and after the stimuli turns out threat or not. Next, though still small in number, I would like to introduce the studies that focus on possible contingency of the effect of emotion, on the individual capacity dealing with the threat.

Anxiety Lead Information Seeking or Avoidance? : Experimental Studies on Anxiety, Threat and Focus of Attention

Recently, many psychological studies have found a relationship between anxiety/fear on the one hand, and information seeking and learning on the other hand,

through various experiments. One such experiment was carried out by flashing pictures with stimuli to test subjects and measuring the response. For example, Mogg et al (2004) found that high trait anxious individuals (HTA) were more attentive to high threat cues at shorter exposure durations (500ms), but shows no difference with low trait anxious individuals (LTA) at longer durations (1000-1500ms). Consequently, Mogg et al suggest that "anxiety and fear may reflect two distinct aversive motivational systems, which may be characterized by different patterns of cognitive bias." In other words, they differentiate anxiety and fear, the former as the emotional response toward novel stimuli before it turns out what it really is on the one hand, and the latter as emotional reaction when the stimuli turn out as harmful threat on the other hand. Similarly, Koster and his colleagues (2006) find that HTA individuals show stronger engagement yet impaired disengagement of their attention from highly threatening pictures relative to LTA individuals in shorter picture presentation durations (100ms). In addition, HTA individuals tend to show attention avoidance from threats at longer picture presentation durations (200 and 500ms). They conclude that these results provide evidence for differential patterns of anxiety related biases in attentive procession of threat at early versus later stages of information processing.

Moreover, Rinck, Becker and Eni (2006) conducted an eye-tracking study which utilized spiders and other such pictures with spider fearful participants and those who were not as the control group, which was based on previous studies. The experiment showed that anxious patients exhibited an early reflective attentional bias toward threat stimuli, followed by intentional avoidance of the stimuli. Rinck et al found that spider fearful groups more often fixed their eyes to a spider picture than those of the control group. But the former group quickly moved their eyes away from the spider, resulting in

shorter gaze durations than the latter group. In other words, those feeling anxiety to a spider first reflectively paid attention to a spider but the response was followed by avoidance. Calvo and Avero (2005) also obtained similar results. The authors found that high anxiety is associated with preferential attention to 1) all emotional stimuli (neutral, positive and negative) at the initial orienting, then higher probability of first fixation on the emotional picture than neutral one; 2) towards positive and negative stimuli in a subsequent stage of early engagement, and finally; 3) avoidance from negative stimuli in a later phase.

These new psychological studies offer valuable implications with respect to the arguments on anxiety and information processing. It is true that highly anxious people respond more quickly to stimuli than those with low anxiety. In other words, anxious people swiftly shift their attention to novel stimuli, and try to confirm it is threat to their well-being as AIT implies. However, once they find it is a real threat, they try to rapidly escape by reversing their attention away from the negative stimuli. Therefore, even though people may describe both emotional reactions as “anxiety”, it is still possible that these “anxieties” cause different reactions in the people based on differences with respect to the certainty of threats as is evidenced by the differing reactions between longer and shorter durations of exposure time.

In this sense, MacKuen and his colleagues, as well Steenbergen and Ellis against AIT make seemingly valid points. They argue the need for distinction between anxiety and aversion based on certainty of threat. However, it is not so clear whether the subjects can truly differentiate their emotional reaction against certain and uncertain threats. As I mentioned above, the differences in the effects of aversion and anxiety that MacKuen and his colleagues argue might be overestimated due to the possibility of positive correlation

between aversion and anxiety in their model. I suspect that there are significant levels of correlation between measured aversion and anxiety because it would be very difficult for the subjects to differentiate between the two emotions. Therefore, it is more plausible that many of the respondents feel “anxiety” regardless of the certainty of threat.

Redlawsk, Civettini and Lau (2006) imply that the combination of anxiety and different types of information, rather than the difference between aversion and anxiety corresponding to different type of threats, leads to differences in the information seeking behavior of the people. The authors examined how people change their information behavior to their favorite and rejected candidates when they received new information that was incongruent with their original preference, i.e. positive information to rejected candidates and negative one to preferred candidates. Redlawsk and his colleagues found that anxiety lead to more information seeking if the subjects received incongruent (i.e. negative) information about the preferred candidate. However, they found that anxiety does not drive information seeking if: 1) the subjects receive less incongruent information (less threat to their original evaluation), and; 2) if the subjects received more information of rejected candidates, regardless if it was negative (congruent with their original evaluation) or positive (incongruent).

Their findings might additionally offer some clues as to the psychological process of information seeking and avoidance—both of which are caused by anxiety. Persuasive incongruent information to their preferred candidates places the subjects in a very uncertain status, at which they need more information to decide whether they should revise their original decisions. The subjects have to decide whether they stick to their original preference. Therefore, anxiety works as AIT predicts, that is, subjects shift their attention to new stimuli which drives them to seek more information. On the other hand,

less incongruent information does not provide enough of a threat in order for the subjects to rethink their original preferences.

However, anxiety does not drive the subjects to seek more information to the rejected candidates regardless of how they perceive congruent or incongruent information with respect to their original preference. These different responses suggest the subjects have already decided to “avoid” the rejected candidates. Therefore, emotional response measured as “anxiety” means not only uncertainty with respect to their original decision which leads to more information seeking, but also to their avoidance which originated from their dislike of the candidates. In sum, emotional response measured as anxiety might have different implications for information behavior based on the environmental context. In other words, it might be impossible to figure out the “general” results caused by anxiety.

Engagement or Avoidance? : The Effect of Anxiety Contingent on Capacity to Deal with the Threat

In the previous section, I argue the possibility that emotional response, perceived as anxiety has opposite function in information behavior based on the certainty of threat implied by the experiment with longer and shorter exposure to the threatening stimuli. When the individual perceive novel and possibly harmful stimuli, anxiety he feels leads him to seek more information whether it is harmful or not. However, if it turns out as being harmful, then anxiety drives him to deflect his attention and avoid the threat as much as possible.

However, Avoidance is not the only reaction to stimuli which people might deem harmful. For instance, it is not difficult to imagine that when faced with potentially harmful stimuli, rather than avoid it, people might instead find that the threat is manageable, and thus attempt to engage and solve it—despite the fact that they feel anxiety owing its possible harm to their well-being. In this case then, people would only choose to flee and avoid threats they those threats are deemed unmanageable.

Recent studies, though still few in number, investigate this contingency, i.e. the effect of anxiety to individual behavior depends on her perceived capacity to deal with the threat. For instance, Monique et al (2006) showed interesting relationships between perceived risk and the ability to avoid disease on the one hand, and motivation to seek information and the capability with which to retain it on the other hand. The people who perceived the risk of disease to be high, in conjunction with their belief that they could overcome the threat, had higher levels of motivation to both learn about the threat, and retain the information once it had been learned. However, in the case where patients perceived high risk, yet had low belief in their ability to effectively combat the disease, had higher levels of motivation than those perceiving low disease risks, yet were less able to retain learned information.

The finding of Monique et al implies that the effect of anxiety to learning capability is contingent on respondent's perception deal with the threat. It is true that the subjects try to deflect their attention from the fearful stimuli in the experiment of flashing threatening pictures. However, in some of the studies the subjects have specific phobias to the stimuli (ex. Rinck, Becker and Eni). Moreover, in all of the cases the subjects did not have opportunities to engage and solve the threats. Therefore, while those experiments do in fact measure the effects of anxiety, they are doing so in the case where people only

have the option to avoid, rather than engage the threat.

In the field of political science, Valentino et al (unpublished B) also find possible contingencies between the effect of emotion and a subject's resources. Valentino and his colleagues find that the interaction of the positive effects of anger with that of resources on high cost political participation beyond voting, for instance to make a donation or participating rally. In other words, the authors find that the level of emotional influence on a subject's behavior is contingent on their (subjectively perceived) resources to cope with the problem.

Consequently, those evidences suggest that the effect of emotional reaction toward the stimuli is conditional on the resources that the individuals possess to deal with the threats. However, only a few studies were conducted over the interaction between resources that the individual possess and the effect of emotional reaction toward his intent and behavior. I would like to examine the contingency in my future works.

Conclusion

Affective Intelligence Theory, proposed by Marcus, Neuman and MacKuen, have significantly widen the perspective of political psychology. Their argument presents very persuasive theoretical perspective on the role of emotion in the information behavior of the citizens in the field of politics, especially the role of anxiety as a facilitator of information seeking and learning. However, some critic also presents convincing evidence over the role of anxiety as impediment of learning, which contradict with the predictions by AIT.

In this brief article, I tried to resolve this contradiction by presenting theoretical framework that contextualize the effect of anxiety, rather than figure out the “general” effect of anxiety based on the latest psychological studies. First, I propose the difference in the effect of anxiety based on the level of certainty of the threat. In other words, anxiety drives the individual to seek more information if it is uncertain whether the stimuli is harmful or not, but anxiety compels him to escape if the stimuli turns out to be a threat. In addition, I also propose the contingency between consequent behavior of anxiety and individual capacities to deal with the threat. To put it differently, if the individual believes that she can cope with the threat, then anxiety lead her to engage in the threat and seek more information to solve the problem as AIT predicts. However, if she feels that she cannot deal with the threat, then anxiety lead her to escape from the threat. I would like to examine those theoretical frameworks further in my future works.

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