## Life in the Future Versus Life in the Present

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Roemer and Orsillo have provided an integrative perspective for developing more effective therapies for generalized anxiety disorder, based on existing knowledge about the disorder, cognitive behavioral approaches to its treatment, and conceptualizations and treatment methods from the acceptance/mindfulness tradition. The present commentary expands upon the notion of the adaptive value of focused attention on present-moment experience and cognitive perspectives that can facilitate that process.

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Roemer and Orsillo (this issue) have provided a potentially important and definitely exciting new direction for the development of therapy methods for generalized anxiety disorder (GAD). After 16 years of concerted effort, applications of behavioral and cognitive therapy techniques for treating this anxiety disorder continue to fail to bring about 50% of our clients back to within normal degrees of anxiety. Roemer and Orsillo do a superb job of reviewing research on the nature, functions, and treatment of GAD and worry. They then move to a description of acceptancebased therapies (already being applied to substance abuse, couples distress, depression, schizophrenia, and borderline disorder), presentation of the critically important Hayes model of experiential avoidance, and elaboration of the crucial constructs and techniques of mindfulness and value-guided action. What stands out in their scholarly exposition is the fact that what is known about GAD and worry, on the one hand, and what is known within acceptance/mindfulness traditions, on the other, overlap so considerably that the possibility of an integration of their respective conceptualizations and treatment techniques is compelling and nearly seamless. They conclude by describing what an integrated therapy might contain and offer pilot results that hint at the potential impact of such

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a combined therapy, especially on broad domains of life functioning. I would like to elaborate here on some of the features of their thinking that I found particularly salient.

People suffering from generalized anxiety disorder (GAD) live in a strange world. Actually, they do not live in the world very much at all. And perhaps it is not such a strange world after all, given that where they typically live and how they live are not all that different from what you and I periodically or perhaps often experience. Basic research indicates that most of the cognitive, physiological, affective, and behavioral consequences of chronic worry or GAD can be phasically induced in nonanxious individuals by having them worry about their topic of greatest concern (see Borkovec, 1994; Borkovec, Alcaine, & Behar, in press). GAD clients just live there more of the time because they perceive more threat (Mathews & MacLeod, 1994), and they have greater difficulty controlling their worrisome process (Borkovec, Shadick, & Hopkins, 1991).

Whether I am a nonanxious person who worries at times or a client suffering from GAD, when I am worrying, I am mostly engaging in thought or talking to myself. This thinking, triggered by internal or external cues that signal danger, primarily concerns the future, and this future-oriented thinking involves the anxious anticipation of, and mental attempts to avoid, the many negative events that I think or that I imagine might happen based on the threatening meaning of the cues that initiated the worrying (Borkovec & Inz, 1990; Borkovec, Robinson, Pruzinsky, & DePree, 1983). In a worrisome state, I am detecting or interpreting threat in my environment all of the time and often outside of my awareness (Mathews & MacLeod, 1994). The consequence of any perception of threat is the activation of basic fight-orflight reactions motivating attempts to escape or avoid. Quite naturally under these circumstances, I feel compelled to figure out how to prevent these bad things from happening or how to prepare myself for the worst. Worrying is a device that I believe can function to do this (Borkovec & Roemer, 1995). I am facing problems posed by my worrying that are, however, largely insolvable. This is because, although fight-or-flight is being elicited by a large quantity of internally generated, anxious material, there is no place to run and no one to fight. The only resources left to me when I face a threatening situation that cannot be behaviorally avoided is to freeze (resulting in procrastination, increased muscle tone, sympathetic inhibition, and reduced vagal tone so characteristic of GAD; Hoehn-Saric, McLeod, & Zimmerli, 1989; Thayer, Friedman, & Borkovec, 1996) and mental attempts to figure out how to avoid the predicted danger. Worry is a default option, a cognitive avoidance response to perceived threat prompted because of the nonavailability of effective motor avoidance responses to deal with that threat (Borkovec et al., in press).

Among the variety of consequences that stem from these empirically supported characteristics of worry and GAD, one in particular stands out for closer inspection. Because I am devoting large amounts of time generating and attending to worrisome thoughts, much of my life is spent living in an illusion. This is because the things about which I am thinking and to which I am responding do not exist in reality. The events conjured up by my worrisome thinking exist only in my mind, refer to things in a possible but currently nonexistent future, and deal with feared events that turn out to be very unlikely to happen anyway (Borkovec, Hazlett-Stevens, & Diaz, 1999). Given this state of affairs, two logical and significant implications follow. First, because of the excessive occurrence of worry, I am constantly creating anxious feelings (and depressive affect as well; see Andrews & Borkovec, 1988), despite the absence of any real threat (or any real loss). The worrying, motivated by a desire to terminate unreal threats, is negatively reinforced in numerous ways (e.g., by suppression of some aspects of somatic anxious experience and by superstitious reinforcement via the frequent nonoccurrence of the feared event), and so it persists, incubates, strengthens, and generalizes (Borkovec et al., 1983; Thayer, Friedman, Borkovec, Johnsen, & Molina, 2000). Second, because I devote so much time and attentional resource to these illusory mental creations, I am not attending to the real world that does exist in front of me. I cannot therefore take advantage either of the information available from my primary emotional experience which can adaptively motivate and guide my behavior or of the information from my immediate environment from which I can learn and grow. In such a circumstance, there also can be little joy in my life. Indeed, people suffering from GAD often have comorbid mood disorders (Brown & Barlow, 1992) and have great difficulty identifying or describing their emotional experience in general (Abel, 1994; Yamas, Hazlett-Stevens, & Borkovec, 1997).

So what is a worrier like me to do if I wish to change? The traditional cognitive behavioral therapy solution has mainly suggested the use of applied relaxation techniques to reduce somatic aspects of anxiety, imaginal rehearsals of coping techniques to strengthen adaptive alternative responses, and cognitive therapy to reduce the perception of threat that triggers the worrying. But as Roemer and Orsillo (this issue) rightly point out, these cognitive behavioral methods have not as yet yielded a truly effective form of intervention for nearly half of the clients receiving this therapy. We need to expand what we are offering to our clients.

A clue comes from the way of being that children display. They live more of their experiential time in the present moment. They have not yet learned how to hide, disguise, or suppress their emotions. Their emotional reactions are usually immediate, strong, and in direct response to the present environment, and they rapidly recovery once the eliciting stimulus for a positive or negative emotion is no longer present. As soon as the environment changes, their emotions and behaviors change in synchrony with those new environmental demands. They are constantly perceiving and processing the new and exciting information contained in each moment. I suppose that it is easier for them to let go of the future and the past, because they do not have to write lectures or make money or take care of anyone else. Their way of being, however, may be part of the reason for the rapid growth and development of cortical functioning and organization of behavior in youth. Contrast this approach to life with what I as an adult do all too often. My emotional expressions (both positive and negative), and quite likely my experience of my emotions, are rarely as strong as those seen in a child. Moreover, I try to hold onto pleasant emotions well beyond the occurrence of the real events that generated those feelings, and I try to get rid of or suppress the unpleasant emotions that real or unreal events elicit. Both actions will likely mute the full experiencing of authentic emotion (emotional processing), distort the adaptive motivational and directional usefulness of the information that primary affects contain, and drag out their duration in a form that no longer relates to my immediate environment. More important, such processes will distract me from the present moment, the other emotional possibilities that exist there, and the adaptive information that the present moment holds.

Logical deductions and/or extensions from both relaxation traditions and the cognitive therapy tradition actually can lead in the direction suggested by these observations. Jacobson (1938) and Wolpe (1958) each emphasized that one cannot be both tense and anxious and relaxed at the same time. Progressive relaxation training encourages focused attention on the feelings of tension when tensing muscle groups and the feelings of relaxation when relaxing those muscles. The generation and awareness of a state of relaxation throughout the day is one of the ultimate goals of applied relaxation (Ost, 1987). All of these characteristics refer directly to experience in the present moment and to an adaptive way of being in that moment. At any moment in time, letting go of thoughts about the future and returning one's attention to the presence of relaxation eliminates anxiety in that moment because anxiety is always an anticipatory response to some possible future event. Although it is possible for adaptive fear to exist in the present moment (e.g., a car is swerving toward me), it is impossible for anxiety to exist in the present. Furthermore, the goal of relaxation techniques can be usefully expanded in the direction of the generation of a relaxed present moment from which to open up to present reality and in which to process the adaptive information contained therein. Indeed, parasympathetic tone, hypothetically created by a well-learned relaxation response, is fundamentally and significantly related to adaptive attentional deployment (Porges, 1992).

Cognitive therapy seeks to encourage a client to adopt more accurate ways of perceiving, interpreting, and predicting. It partly aims to help a client shift from inaccurate and negative expectations and the beliefs that underlay them to more accurate expectations and beliefs which routinely turn out to be less anxiety provoking. One of the potential problems sometimes associated with this approach, if improperly applied, is that no belief will ever be completely accurate (it must be open to constant revision dependent on new information), and no expectation can ever be completely predictive of what will happen in the future in all of its important and relevant details. Moreover, as cognitive psychology and social psychology researchers have shown us, existing expectations or beliefs can distort the processing of newly available information in the direction of inaccurately supporting their premises. All of this suggests that perhaps the sequence in cognitive therapy might usefully move from inaccurate expectations to more accurate expectations to no expectations at all. Like the above relaxation extensions, expectancy-free living, as the end result of cognitive therapy, can yield a life in the present moment and can maximize the adaptive

processing of new information. To paraphrase from Zorba The Greek, "I fear nothing, I hope for nothing, I believe in nothing... I am free."

It may be that simply living in the present moment and engaging in far less future-oriented thought of all types (except under strict stimulus control conditions and at times when planning and problem solving would be adaptive) would be sufficient for creating a happy, adaptive, and anxiety-free way of being. When I imagine this possibility, I get an image of myself in the present moment with this very thick door slamming in back of me on my immediate past and this swirl in front of me that represents total confusion and uncertainty about what the very next future will bring. This is happening repeatedly in every present moment. And there I am in the middle, in the present, responding as best I can to whatever is immediately being offered. Is this an adaptive way to live? I would not recommend such a lifestyle to me if I were diagnosed with antisocial personality. But for the anxious me, what kind of reality would this approach create, and, importantly, what could I believe that would allow me to live that way?

The answer to the second part of this question is quite speculative but may contain some truth. We humans have evolved several layers of sophisticated information processing systems. We are hard wired to process internal (e.g., primary emotional) and external information for use in our adaptation to our environments and in facilitation of our survival. These are exquisite systems, beautifully developed to serve those purposes. It makes sense, then, that my prime directive as a living organism is to accurately process new information as it becomes available to me. The only real information that is available is that which exists in the present moment. When I am paying attention to this information, I do not have to judge it, categorize it, memorize it, or think about how I might use it in the future. I merely need to pay attention to it; my information processing systems will handle the rest. The information will be stored in memory, and when a future event occurs in the present, I can trust that an adequate, adaptive response will be elicited, because this is precisely what these systems were designed to do. Trusting that this will be the case is not the same as knowing for sure that this will be the case. I often mess up in my daily life. That need not lessen the trust in my information processing. If I emit a maladaptive response, as long as I continue to pay attention to the present-moment reality of what is occurring, I can trust that I will process new information that indicates that I was wrong, what I did that was wrong, and perhaps even what I might try differently next time. There had better be a good reason for allowing anything to take me away from my ongoing, moment-to-moment information processing, given that such a departure from evolutionary normality would cause a disruption in this most important task that I have, a task that maximizes the likelihood of my future adaptability and survival and thus gives me a basis for having this kind of trust.

So what would reality be like, then, in a life lived in a trust that allows me to let go of the illusory future and past and to focus on the nonillusory present? At the emotional level, anxiety would be absent because the future does not exist. Depression would be absent because the past does not exist. What would remain would be strong primary emotions like fear, anger, surprise, excitement, and joy that would provide useful information for adaptive behavior in that moment, last only while relevant environmental conditions are immediately present, and recover very quickly. At the behavioral level, overt behavior would more likely be adaptive to or skillful in the situation that is being presented. There are a couple of reasons to suspect that this would be the case. First, anxiety largely interferes with performance, so fewer disruptions in previously learned adaptive behaviors are likely to occur. Second, attending to present-moment situations maximizes the likelihood of accurately processing the information needed for selecting a nice response. Social interaction provides a useful and clear example. If I am focused solely on attending to you as a human being and to what you are saying during a conversation together, I am much more likely to (a) learn new information (about you, about me, or about the content of what you are saying), and (b) say things back to you that are respectful, relevant, and adaptive to this circumstance, than if I am attending to my own inner process (what I might say next, how much anxiety I am experiencing in social situations) or if I am searching the room looking for someone else to talk to. It is not guaranteed that these outcomes of conversation will indeed happen, but it is guaranteed that further information useful for future adaptation will be available for processing, should I mess up with you.

What the above implies is that there may be an adaptive advantage to having a cognitive perspective that focuses on the process as opposed to the outcome of any moment that I am in or any activity in which I am engaging. Focus on outcome automatically contains (a) the future and (b) the possibility of failing to achieve the outcome. Once adaptive planning has occurred for the sake of goal pursuits, focus on process involves the here and now without reference to anything outside of itself. Once focused on process, there may be usefulness to generating further cognitive sets that create intrinsic (instead of extrinsic) meaning for the moment. What qualities and values that are dear to me can I bring to bear on this present moment from which I can derive satisfaction and joy? I hate washing dishes, I rush through the process, and I think all the while of the other things that I would rather being doing. Washing them with a cognitive set of doing this out of love for my family imbues the act with joyful meaning, keeps me in the present, and strengthens the cognitive/ affective/behavioral links to the people I love. Writing an NIMH grant proposal with a cognitive set of trying to get money to support my research will generate periodic anxiety (as I anticipate the possibility of future rejection) and periodic depression (as I think about the statistically low probability of actually having an NIMH grant funded and about the consequences of not getting the money). A cognitive set that focuses on the opportunity once again to thoroughly review the literature in my area of research, to discover new knowledge in that literature about which I was unaware, and to write logical, compelling, and beautiful sentences and paragraphs that build to potentially important or exciting new questions and create exquisite designs and methodologies to answer those questions will have different emotional implications during the writing process. I remain in joy as long as I remain focused on intrinsic values that give me joy, and the likelihood that I will do each of the tasks with a high degree of quality is increased, because the focus of attention is on quality in and of itself.

If a focus on the outcome and the extrinsic aspects of an activity are conducive to anxiety and depression, then the objective quality of my work, whether washing dishes or writing grant proposals, will likely be lowered, given what we know about the adverse effects of negative emotion on performance. So seeking the extrinsic outcome makes the failure to achieve that outcome more likely. A focus on the process and intrinsic qualities of an activity reduce the likelihood of anxiety and depression (thus eliminating their negative impact on performance), increase the pleasure or joy during the process, and thus increase the likelihood of achieving the extrinsic out-

come. I have to let go of the desired outcome in order to acquire it. What a paradoxical and strange way to live.

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