INTRODUCING HANDBOOK OF PERSONAL SECURITY

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This volume brings together many different researchers, each with their own unique approaches to the topic of security. Of course, although these contributions help to illuminate its properties, personal security has historically been a difficult idea to conceptualize. One of the many problems in conceptualizing security is that we have trouble accurately assessing our own level of security in daily life.

Several well-known judgment heuristics can help to illustrate this. For instance, the availability heuristic (Tversky & Kahneman, 1973) we use is relevant to this problem. People have a tendency to judge the likelihood of an event by how easily that event comes to mind. This has some tragically humorous consequences, such as when people come to think that shark attacks are more likely than slipping to one’s death in the bathtub, but also other consequences. One example of this has to do with the continued argument about and ban on small knives when flying in the U.S., stemming from the 9/11 hijackers’ use of box-cutters. Reinforced cockpit doors have greatly reduced the probability of cockpit take-overs and reduced the chances of a repeat of 9/11; the presence or absence of pen-knives does not change this.

Nevertheless, the easy availability (and subjective ease does play a role; see, e.g. Winkielman, Schwarz, & Belli, 1998) of the image of terrorists using box-cutters to bring about disaster distracts us from the reality of reinforced cockpit doors. In the meantime, no one seems concerned that food-borne illness is killing an estimated 3,000 people per year and hospitalizing 128,000 in the U.S. alone (Centers for Disease Control, 2014). The difference is that September 11, 2001, is a contemporary day of infamy, and Uncle Bob’s stomach bug just does not seem very salient compared with that.

The topic of salience is important for the availability heuristic, and also because salient objects are judged to be more important than non-salient ones. For instance, prior work has used salience as an index of the importance of different needs in defining satisfying and distressing life experiences (Carroll, Arkin, Seidel, & Morris, 2009; Sheldon, Elliot, Kim, & Kasser, 2001). In this work, the salience of missing security was the strongest predictor of negative affect evoked by distressing experiences (Carroll et al., 2009; Sheldon et al., 2001). Moreover, social cognition research shows that the more salient a person is, the more causally important people view that person to be (e.g. Taylor & Fiske, 1975). Salience can stem from sources that are explicitly divorced from reality, as in the case when people who are asked to imagine their college football team having a good season subsequently think that winning a major football title is actually more likely for their team (Carroll, 1978). This research also showed that imagining one candidate winning an election increased that candidate’s perceived odds of winning the election.
Often, people do not need to imagine things themselves to be exposed to information that increases the salience of threat. For instance, the more news media covering terrorism that people watch, the greater the perceived risk of terrorism is (Nellis & Savage, 2012). With this example in mind and considering the previous paragraph, it is worth considering the case of the official who explains how terrorists might contaminate a city’s water supply and paints a vivid picture of how terrorists could acquire poisonous substances and transport them to the reservoir for release. The vividness (Mazzocco & Brock, 2006) of this description helps to increase its salience, and water supply risks become more accessible and are seen as more likely to occur.

Among other effects, the vividness of the description for such attacks makes it easier to mentally simulate the prospect of future attack. People then come to think that such an attack is more likely than they otherwise would (Anderson & Godfrey, 1987; Kahneman & Tversky, 1982). Mental simulations can take their cues from low frequency (but high salience) realities. Consider Richard Reid, the shoe bomber who attempted to blow up an airliner with explosives hidden in his shoe (Wikipedia, 2014). Thanks to Richard, millions of people have removed their shoes for screening at airports. Compare this concern with a failed attack with the lack of concern for the approximately 90 people per day who are killed on highways in the U.S. (33,000 per year; National Highway Traffic Safety Administration, 2013).

Of course, beyond the availability heuristic, many other judgment biases can contaminate intuitive security assessment. For instance, people are not very good at working with base rates. Instead of using base-rate information, we tend to be influenced by the representativeness of stimuli (Kahneman & Tversky, 1974). The representativeness heuristic involves making a likelihood judgment based more on the perceived similarity of a target to some category than on the true probability of a given target belonging to that category. Often, this works well: when traveling, we are more likely to ask directions of someone walking a dog than of someone walking around looking lost. Dog walkers are representative of people who know the area. Confused-looking tourists are not. However, this type of approach can make life difficult as well. Single men of Middle Eastern appearance are often investigated more stringently in airports than are other people. Even so, probabilistically, the likelihood of any of these men attempting a terrorist attack is stunningly small. This is actually reminiscent of the classic “Linda” problem (Tversky & Kahneman, 1983). It reads like this: “Linda is 31 years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social justice and also participated in anti-nuclear demonstrations.”

Which is more probable?

1. Linda is a bank teller.
2. Linda is a bank teller and is active in the feminist movement.

The conjunction of Middle Eastern and terrorist cannot exceed the probability of just being a terrorist. The entire population of terrorists includes those that are Middle Eastern plus those of every other origin (e.g. Irish Republican Army, Euskadi ta Askatasuna [ETA], American “Freedom Fighters” like Timothy McVeigh). Yet because we see Middle Eastern men as representative of the terrorist category, people ignore other exemplars that might fit that category in favor of a focus on these groups. This selective threat perception does no one any favors.

We see threat where we expect it. As such, we are less likely to identify threats that do not correspond to our preconceived ideas of threat. Preconceived ideas of what threats look like, and what their causes are, can alter our perceptions. Although using our theories of how the world works can be helpful, it can also be problematic. Theories can be wrong. They can lead us to see ambiguous information in theory-consistent ways (see Kunda, 1987, 1990). These naïve theories can even lead us to completely dismiss or ignore theory-inconsistent information. For instance,
we might think that religious affiliation represents the only cause of terrorism (a false theory). We might pay special attention to a suspected terrorist’s religious habits (interpretation of ambiguous information in a theory-consistent matter). We might even dismiss information about a person’s known criminal associates in favor of an investigation of the person’s religious practices (dismiss theory-inconsistent information; cf. Nisbett & Ross, 1980).

Defining the Elusive Experience of Personal Security

So far, we have outlined many factors that interfere with accurate security assessment. The many difficulties that people face with accuracy remind us that it makes psychological sense to think of security not as an objective, measurable state of the environment but rather as a subjective assessment. Although many of the chapters offer definitions of security or insecurity, we would like to provide our own as well, one that captures the subjective quality of security. We define personal security as freedom from concern over loss. Personal insecurity we define as the experience of concern over loss.

This definition integrates the variety of loss concerns that people can have with the important condition of concern. We take concern to have the meaning supplied by the law of concern (Frijda, 1988). This law states that only events that are relevant to important goals, motives, or concerns will elicit emotions. Events rising to a level of concern thus may be accorded precedence over goals for which concerns are not registered. This has implications for the myriad ways in which security can affect unrelated goal pursuit. We return to this point below. Logically, it follows from this application of the law of concern that possible or actual losses that do not matter to us will not affect perceptions of security. In the following, we will refer to security-related emotions and thoughts with names such as “threat” or “safety”. These terms should be interpreted through the lens of our definition, where threat causes a state of concern with loss, and safety is marked in part by lack of concern.

To flesh out our definition, the state of security is marked by freedom from the pressures associated with loss appraisals. Each time one registers loss or threat of loss, coping processes are initiated to deal with it. Whether coping aims to change the world, or to change the self (cf. Rothbaum, Weisz, & Snyder, 1982), responses to loss concerns may overwhelm other active goals. Faced with a choice to either address goal-relevant loss concerns or continue as if concerns were not present, most people should opt to address their loss concerns. In fact, it is difficult to imagine otherwise.

The literature on goal shielding (Shah, Friedman, & Kruglanski, 2002) shows that active goals inhibit goals that do not serve the active ones. This shielding effect appears to be especially pronounced in the presence of anxiety (Shah et al., 2002). In other words, concerns with loss, and the anxiety that accompanies them, should move goals associated with the object of loss concern to positions of priority in the self-regulatory system. The priority accorded these goals will decrease the importance of other, previously high priority goals. If loss concerns become pre-eminent, people will re-orient themselves to address these concerns, at the expense of their other goals, as well as with negative consequences for executive function (Masicampo & Baumeister, 2010).

Loss concerns come in many forms, from threats to relationships to threatening doubts about competence, or terrorism. The chapters in this book show how, so long as these concerns are active, many different types of behavior may occur in the pursuit of reducing these concerns. Unfortunately, this panoply of effects linked to loss concerns can have several negative implications for mental health and adjustment. So long as concerns with loss drive behavior, people are so busy reactively bolstering themselves against loss that they may be relatively unable to implement new ways of thinking that transcend the existing, apparently negative interdependencies that make up their perceived social environment. Threat makes people cognitively rigid (Plessow, Fischer, Kirschbaum, & Goschke, 2011).
Consistent with Maslow’s hierarchy (1955), we believe that humans can actualize themselves according to the growth needs we all share only when loss concerns are reduced. Otherwise, they will have their actualization goals shielded and will suffer the negative cognitive consequences of unfulfilled security goals, as well as the possibility of actual loss. The lack of loss concern is therefore essential for human flourishing. Only in the absence of emotions stemming from possible loss appraisals can people fully devote themselves to proactive growth.

**Different Kinds of Security**

Security as we have defined it is a particular cognitive and emotional state. Because there are many influences on these states, it may be useful to think of two basic ways that one can experience security—that is, volitionally and incidentally.

Volitional security comprises all of the behaviors and cognitions that work to minimize our concern with loss. Examples include different kinds of insurance (e.g. for crops or homes), concrete blast barriers, water treatment plants, anti-theft devices, use of alternate test forms to reduce the chances of students copying from each other, and a note to remember one’s wedding anniversary. Some of these clearly serve the sole purpose of reducing the likelihood (e.g. concrete blast walls) or consequences (e.g. insurance) of loss. Others are more ambiguous, such as the note to remember an anniversary. A note to remember one’s wedding anniversary in order to celebrate is very different from a note to remember one’s wedding anniversary in order to avoid hurting one’s spouse’s feelings. In this latter case, forgetting the anniversary might be taken to mean dissatisfaction with the relationship. These varied ways in which we can address loss concerns are an interesting current topic of research (e.g. Scholer & Higgins, 2013), and should be noted, but it is not essential for our treatment here.

The wedding anniversary example demonstrates how important the concept of loss avoidance is. When one’s primary motivation is to prevent bad things from happening, this has far-reaching consequences, whether the avoidance motivation proximally avoids terrorists or avoids forgetting one’s anniversary. Although people may be less at risk from the losses they guard against, they will still be influenced by their avoidance motivation. Because of this, volitional security strivings may lead people who have objectively lower risk for loss to share the same mindset as people who are at objectively higher risk for loss. For example, people who are ensconced behind concrete blast barriers, powerful people who control access to database systems or other facilities, or people who openly carry weapons may all to some extent share the mindset of a refugee trying to escape civil war or of a hungry person guarding food. In spite of their differences in power, each of these people may then subjectively experience similar psychological consequences of this motivation. We return to this point below.

A second type of security, incidental security, comprises non-volitional lack of concern with loss. Incidental security refers to the state where possible loss is not even a glimmer on one’s cognitive horizon. It can be transiently activated, such as when one is immersed in gain-focused goal pursuit. It can also be a more enduring state, influenced by factors such as a secure attachment style, or absence of direct personal exposure to loss, or lack of exposure to media depicting loss.

Where volitional security is a reactive state that occurs in response to threat, incidental security can be reactive or not. In some non-reactive cases, this security is incidental to a non-threatening personal history or incidental to identified (i.e. Deci & Ryan, 2012) promotion-focused striving. In other cases, incidental security may arise from a non-volitional reaction to threat. For instance, a large body of research demonstrates that people may respond to threat outside of conscious awareness, whether by showing increased worldview defense (Arndt, Greenberg, Solomon, Pyszczynski, & Simon, 1997; Wichman, Brunner, & Weary, 2014) or by reporting increased religiosity (Wichman, 2010). These studies show that, in general, one way that people respond to threat is with zeal-type behaviors (McGregor, Prentice, & Nash, 2009; Van den Bos et al., this volume),
whereby threat triggers reactive approach motivation. Reactive incidental security includes changes in post-threat behavior following exposure to attachment figures (e.g. Mikulincer & Shaver, this volume), as well as increased relationship striving in the face of threat (e.g. Hart, this volume). As we will describe, incidental security should have different cognitive consequences than volitional security. The difference between them lies with the differential salience of loss-prevention motivations.

With these ideas in mind, this book shows how the state of security is experienced and approached across theoretical perspectives and paradigms, and it provides a look at the many complications of living a secure life. We have divided this book into four parts, each featuring a different kind of perspective on security: (1) individual level perspectives; (2) interpersonal level perspectives; (3) multi-level perspectives; and (4) inter-disciplinary perspectives.

**Part I: Personal Security in Individual Contexts**

Part I contains four chapters. The first chapter, from Van den Bos, McGregor, and Martin, describes security in the context of personal uncertainty. Personal uncertainty is in part a sense of doubt about important self-views, goals, or worldviews. Van den Bos et al. argue that personal uncertainty is likely a bigger problem in delayed than in immediate return cultures. These authors go on to define insecurity in terms of a pervasive, enduring sense of personal uncertainty. This description of insecurity as the possibility of not realizing or achieving important self-views, goals, or world-views fits well within our idea that concern with loss is the key to understanding the subjective experience of security.

The second chapter, by Briñol, Petty, and DeMarree, discusses how threat affects information processing. These authors show that under some conditions, what seem to be doubt-inducing experiences ironically can increase confidence. This can occur both when people are threatened themselves and when they threaten others. This chapter provides a sweeping overview of some ways that security and insecurity impact confidence in our attitudes and beliefs. One implication of this chapter is that we are likely to see cognitive processing impacts of security threats wherever people are affected by confidence or doubt. Although this chapter focuses on the consequences of insecurity for processes rather than what constitutes security, it nicely demonstrates that sometimes, concerns with loss can have ironic down-stream cognitive consequences.

The third chapter, by Schoel, Stahlberg, and Sedikides, illustrates how psychological threat, in particular uncertainty, drives leadership preferences and styles. Uncertainty about control, group standing, or other things all call into question the ability to maintain desired levels of resources and avoid loss. These authors show that threat does not directly drive leadership preferences—rather, it does so indirectly through the intervening variable of the security concerns it arouses. Rounding out the first part, Hart’s chapter further illustrates the importance of threat to personal security in his tripartite model of security in which fluid compensation processes offset threats to one aspect of our security system by validating another aspect (e.g. self-esteem threat is offset by validation of worldview security system). To the extent that fluid compensation is effective, it should address concerns with loss.

Tying the first part together is a commentary by Holbrook and Fessler, who provide a novel perspective on psychological security, borrowing ideas from evolutionary biology. Their commentary touches on the particular ideas in the first part’s chapters and offers a way to think about threat responses that integrates them but also celebrates their differences.

**Part II: Personal Security in Interpersonal Contexts**

In part II, we see how insecurity concerns over loss of relational support and responsiveness shape ongoing interactions with partners to resolve rather than confirm the insecurity concerns of the
target. For some people, such resolution is highly difficult, such as for the narcissists that Freis, Brown, and Arkin describe, in their varied subtypes. For other people, such resolution is more possible. Lemay’s chapter illustrates how secure partners can detect expressions of insecurity and resolve. This is done by disconfirming the target’s negative expectancies of partner responsiveness tied to chronic insecurity concerns. In so doing, they not only provide a source of immediate relational security but, in addition, in essence give a gift that keeps on giving by providing a strong social model for their initially insecure partner to become a source of relational security to others.

Although many chapters focus on the acute adverse effects of insecurity concerns, part II also features chapters that focus on the positive side of having personal security. For example, the chapters by Mikulincer and Shaver as well as Gillath and Karantzas nicely illustrate the benefits of personal security as freedom from concern over loss. Specifically, these chapters converge on the surprising point that priming secure attachment figures provides not only relief but also additional positive emotions and neural resources (e.g., glucose is increased by security primes). Moreover, both chapters converge on the startling and encouraging point that these benefits of personal security arise even when the security primes are subliminal!

Tomczyk, Yu, and Zhou discuss how security values interact with other values. In this model, security involves the imposition of control and reduction of liabilities and risks. Of course, liabilities and risks refer to actual or potential losses. Consistent with our perspective that security concerns must be addressed before self-actualizing goals can be pursued, this model lays out how security concerns inhibit the pursuit of opponent values of self-direction and creativity. These authors show how personal security is distinct from collective security values in the sense that it involves concerns over losses to self or close others. Both constitute types of security concerns; both of these are potentiated by loss concerns driving insecurity perceptions. Within Tomczyk et al.’s framework, they note that personal security concerns can sometimes trump collective security concerns. Of course, given the law of concern, one would expect that many social dilemmas in which people prioritize personal gain at the expense of collective loss could be understood given that personal losses may evoke greater security concerns than collective losses.

Wesselmann, Hales, Ren, and Williams lay out how ostracism threatens our fundamental needs for belonging, self-esteem, control, and sense of meaning. For these authors, threats to these fundamental needs constitute insecurity. Accordingly, Wesselmann et al.’s conceptualization of security is the belief that one has what it takes to act successfully in a social system. In this conceptualization, the object of concern is social inclusion. Losing this poses a fundamental threat. Their chapter provides a useful review of the many effects of and forms of ostracism as a threat to personal security. As the last chapter in this portion of the book, Clark, von Culin, and Hirsch provide an outstanding integration of this section, full of useful insights that help guide our thinking on this topic.

Part III: Personal Security in Cultural and Health Contexts

Leonardelli, Bohns, and Gu explain how concerns with preventing negative outcomes can change people’s interdependence orientation such that, instead of absolute gains, they desire relative gains. In other words, a person who might have preferred to maximize his or her own salary, even if it meant that others in the company would be paid far greater salaries, suddenly wants to have a bigger salary than co-workers do, even if that relatively larger salary is a fraction of what the maximum salary would have been. Cooperating might maximize joint gain, but prevention concerns lead to a relative gain orientation. This finding demonstrates what we think is one key consequence of insecurity—that concerns about loss fundamentally change the way we approach our interactions with others, in an egocentric way. Leonardelli et al.’s chapter demonstrates one of the many non-intuitive ways that concern with loss has far-reaching implications for behavior.
Shepherd, Kay, and Eibach explain that in spite of people’s attempts to meet their security needs by aligning themselves with powerful others and purchasing products advertised to provide safety and security, people have residual security needs that remain unmet. Political instability, terror attacks, and product failures all conspire to undermine beliefs in order and control. Lost order and control, according to Shepherd et al., constitutes a kind of insecurity. In response to residual insecurity, the authors explain how people identify with God, who arbitrarily controls and orders the world. When people feel insecure, they give up their responsibility to the prime mover. Identifying with or appealing to such a supernatural being may allow people to replace their own doubts and fears of loss with the fantastical belief that an incorruptible, infallible hand will guide them, in safety. These mental gymnastics are common. For instance, in Alcoholics Anonymous, people are encouraged to turn over their concerns to a “higher power”. This higher power is immune to addicts’ visceral states and thus serves as a stable self-standard in the face of addicts’ daily flirtations with loss of the sober self.

Finally, Shepperd and Howell as well as Andrews and Sweeny expand the conceptual gaze to include the management of anticipated threats to health security. In all cases, threat produces security concerns and initiates a cascade of defensive reactions designed to resolve those threats and to maintain personal security. Rothman, Farrell, and Auster-Gussman close out this section with a reflection on the inter-relations between the section’s chapters and their implications for both positive and negative outcomes.

**Part IV: Interdisciplinary Analyses of Personal Security**

The last part of the book includes chapters from noted scholars in political science, biology, psychology and also features a commentary by Kolditz and Lovelace that nicely integrates these different interdisciplinary approaches to personal security. Fettweis discusses how administrations can use the threat of terrorism to justify policies that otherwise would be rejected. By raising the threat of terrorism, governments can change the political playing field toward a psychology of fear, where suboptimal decision making suddenly appears rational in the face of a possible threat. Mueller and Stewart present the logic of risk and cost–benefit analysis. Although people in general are not very good at assessing risk, formal decision models exist that allow risks to be optimally addressed. These models are widespread in such areas as natural disaster planning but are nearly entirely absent in policy-makers’ responses to fears of terrorism. Mueller and Stewart explain that if we were able to apply what we know about risk and cost–benefit analysis to the problem of terrorism, we would probably come out far ahead of the current, emotionally based responses to terror threats. Schori-Eyal and Kruglanski describe how the quest for personal significance may lie at the root of terrorism-related violence. They outline a model where processes associated with symbolic and realistic threat response lead to enhanced self-categorization as an in-group member. This type of self-categorization increases endorsement of one’s in-group ideology. When this ideology prescribes violence as an acceptable response to threat, and when norms further support the use of extreme violence to respond to threat, terrorist violence is more likely to occur. Schori-Eyal and Kruglanski present an excellent application of basic principles to the applied problem of terrorism. In their view, psychological insecurity creates the motivational end of restoring personal significance. Violent–extremist ideologies provide the means to that end. The authors illustrate, perhaps better than any chapter in this volume, how the existing research in psychology can be used to understand real problems in the world.

Sagarin applies ideas from ecology and biology to understand terrorism and security. He notes how redundancies can serve beneficial functions in biological and social systems, how decentralized
observation and decision making lead to flexibility in responses, and how symbiosis is an idea that applies both biologically and socially. One of his important points has to do with our lack of exposure to selection mechanisms that distinguish between effective and ineffective threat responses. He advocates for socially engineered competitions to help us select effective strategies, for instance in the domains of business, health, and security. Sagarin closes his chapter by pointing out that security is in many ways an emergent property of many individuals engaging in redundant, decentralized observation and decision making, accompanied by selection and replication of effective security-enhancing strategies. Security is not a “top-down” phenomenon. It emerges when biological and social systems function according to certain ecological principles.

Musings on Security

Thus far in this introduction, we have laid out what we hope is an engaging description of the contributions in this volume. In the following, for interested readers, we reflect on the topic of security and some of its consequences. Security concerns theoretically should have a broad variety of diffuse consequences. One way to think about the consequences of security concerns is to consider how motivation and cognitive style are affected by threat. We know a great deal about how motivation and cognition affect behavior; to the extent that security is related to particular types of motivation and cognition, we can predict known consequences of motivation and cognition as consequences of security concerns. First, we consider how motivation can serve as a conceptualizing tool for understanding effects of security concerns. Second, we consider how cognitive style and capacities change under threat, with their consequences for behavior. We also discuss how security concerns affect factors that feed back into our perception of security. Finally, we consider that many of the processes and changes triggered by security concerns will be operational regardless whether one is actively attempting to enhance one’s security or not; people with well-developed security measures will think in many of the same ways that those who are objectively at greater risk, regardless how effective their security measures ultimately are. We show how these concepts are illustrated in several of the chapters within this volume.

Thoughts on Motivation

We suggest that Regulatory Focus Theory (Higgins, 1997) predicts some of the motivational consequences of security concerns. Regulatory Focus Theory outlines two separate motivational orientations, one of which is prevention, which is an orientation marked by vigilance regarding and avoidance of negative outcomes. Individuals in a prevention focus attempt to maintain the status quo by avoiding losses. The other motivational orientation, promotion, is an orientation marked by the eager pursuit of desired goals. Individuals in a promotion focus attempt to achieve gains above and beyond the current state. Meta-analysis indicates that prevention focus is associated with higher anxiety, negative affect, neuroticism, and a performance goal (as opposed to learning goal) orientation and is negatively associated with self-esteem (Gorman et al., 2011). Promotion focus is associated with lower anxiety and neuroticism and is positively associated with optimism, positive affect, extraversion, self-esteem, and learning goal orientation (Gorman et al., 2011).

Concerns with loss should orient people toward prevention focus and attempts to avoid undesirable outcomes, and this orientation can have far-reaching consequences (e.g. as explored in the research presented by Leonardelli et al., in this volume). The idea that prevention focus can have far-reaching consequences comes from Regulatory Focus Theory findings (e.g. Friedman & Förster, 2001) and also from other areas. For instance we know that prevention focus induced in one context readily affects behavior in other contexts. In one study, thinking about secret self-aspects whose existence one’s romantic partner would not like, such as a past experience
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of cheating on a partner or a gambling habit, made people more avoidance motivated on tasks unrelated to the romantic relationship (Cavallo, Fitzsimons, & Holmes, 2010). It appears that considering the prospect of intimacy loss with one's partner activates a broad motivational orientation that has consequences far beyond the privacy of the bedroom. Further, as another example of how a loss avoidance or prevention focus induced in one area can impact behavior in a different area, completing a maze depicting a mouse pursuing a piece of cheese (no loss concerns, and promotion focus) has different effects on creativity than completing the same maze when it depicts the mouse as attempting to escape from a presumably hungry owl (loss concerns and prevention focus; Friedman & Förster, 2001). These and other findings suggest that when people have significant loss concerns, no matter what the precise content of the concerns, their behavior will be affected.

In the real world, one might consider attitudes toward crime and immigration for examples of how these motivational states differ. On the one hand, one can arrest criminals and thereby prevent crime, but on the other hand one can promote education and job training. One can try to bar undocumented laborers from the country, or one can work to register them and enroll them for social services in order to avoid the undocumented creating a shadow society beyond the reach of conventional social norms. As a personal note, one of our fathers (Wichman's) used to complain about proposals to bar undocumented workers' children from public schools. Preventing these children's educational success essentially would encourage them to seek other ways to keep busy, such as stealing cars or engaging in other criminal activity. The consequences of motivational focus can be diffuse.

Of course, prevention focus is critical to help us avoid negative outcomes. Prevention focus, however, works against attainment of idealized values and goals. Active pursuit of valued goals is a mark of a thriving person and of a thriving society. Thriving demands striving to fulfill the full variety of human motives—whether these be competence, autonomy, and relatedness (e.g. Deci & Ryan, 2010) or the more basic motives of belongingness, understanding, control, enhancement of the self, and trust in others (e.g. Fiske, 2003). Thriving is impossible so long as our energy is spent on vigilance against threat and behavior to mitigate threat.

Ironically, because individuals in prevention focus are sensitive to losses and less sensitive to gains, any course of action that does not incur losses could be processed as a "success" or, at least, non-failure (e.g. see Scholer & Higgins, 2013). According to some theorists (e.g. Carver & Scheier, 2001), movement toward goal success that exceeds expectancies is marked by positive affect and withdrawal of effort. Lack of movement toward goals, or movement that does not keep pace with expectancies, triggers negative affect and increased goal effort. This presents a paradox.

On the one hand, prevention focus encourages the adoption of avoidance goals, where people attempt to achieve mismatch between themselves and some undesired state. Any time the undesired state is mismatched, the avoidance goal striver experiences a kind of success. Success, according to motivational theories, can lead to effort withdrawal (Carver & Scheier, 2001). Effort withdrawal may lead to complacency in the presence of unrealistically positive self-views such as those stemming from groupthink or belief in national exceptionalism.

On the other hand, avoidance goals are associated with anxiety (e.g. Dickson & MacLeod, 2004), possibly because of the many imagined ways that things can go wrong, and almost certainly because of information processing biases that heighten the impact of negative information over positive (e.g. Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). If the standard of comparison for goal progress is mismatch to some negative state, this state should loom especially large, inviting the generation of negative possible futures against which one must defend.

So, one might see complacency caused by a prevention focus, although the more likely consequence is anxiety. Neither is ideal. Considering the implications of a prevention focus for security, people who are predominantly oriented toward avoiding negative security outcomes will be vigilant toward signs of trouble. Negative outcomes are thought to be more strongly influenced by
situational factors than are positive outcomes (Reeder, Messick, & Van Avermaet, 1977). It follows
that the more one has deliberated and acted to reduce the probability of negative security out-
comes, the greater one’s awareness of possible additional pathways to these undesirable outcomes.

To use a concrete example figuratively, one might start by making sure that the bathroom
window is closed and locked, but once this was achieved, one might come to think of the need
to secure other windows, and the doors, and the front gate, and then think about the threatening
people who might drive through one’s neighborhood. Remaining strongly prevention focused
will increase consideration of possible negative outcomes; to the extent that these outstrip the
possible negative reality, unnecessary anxiety will follow. Indeed, overemphasis on a prevention
focus has been suggested to be implicated in generalized anxiety disorder (Klenk, Strauman, &
Higgins, 2011).

When security concerns put people in a prevention-focused mindset, the principle of reg-
ulatory fit applies (e.g. Higgins, 2005). This principle explains that when people work toward a
goal in a way that matches their regulatory focus, they will value the goal more. Prevention focus
should then make us more likely to value actions that help prevent negative outcomes than actions
that help us achieve a state of thriving.

This effect extends to the mere cognitive framing of an action. For instance, when people
who are chronically high in prevention focus think about what they will not lose by choosing one
object over another, they value that object more highly than if they thought about what they
would gain by choosing the one object over the other (Higgins, Idson, Freitas, Spiegel, & Molden,
2003). People value more highly things whose means of accomplishment are congruent with
their general regulatory focus. It follows that when concerns with loss are active, people will be
more supportive of a border wall to keep immigrants out (prevent them from coming in; avoid
the problem) than of efforts to integrate immigrants into society (promote good social function;
approach the desired state).

According to Serle (2014), drone attacks from the beginning of the Obama presidency to Jan-
uary 2014 killed over 2,400 people. These drone attacks are in the explicit context of preventing
threats to American interests. It is difficult to imagine drone strikes in the context of promoting a
democratic vision of America abroad.

Thoughts on Cognitive Style and Security

In addition to altering motivational states, security concerns can affect cognitive style and the
influences that it has. By cognitive style, we refer to a variety of individual difference variables, such
as authoritarianism (Altemeyer, 1988), need for structure (Schultz & Searleman, 1998), or social
dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994). Logically, concerns with loss
should be associated with anxiety and increased physiological arousal. Anxiety and arousal alone
cause a variety of processing effects, ranging from attentional biases for threat (Koster, Crombez,
Verschuere, & De Houwer, 2006) to polarization of pre-existing positions in negotiation (Brown &
Curhan, 2013).

Situations where people are concerned with loss—that is, situations where people have security
concerns—also will attract people who have pre-disposing cognitive style or personality charac-
teristics. For instance, in the Zimbardo prison study paradigm, advertising the study as having to
do with prison life attracts a reliably more authoritarian group of participants than advertising
the study in more neutral terms (McFarland & Carnahan, 2009). There are many examples of the
ways in which security concerns both alter and select for particular cognitive styles. Here we focus
mainly on the example of authoritarianism.

Authoritarianism (specifically Right Wing Authoritarianism; Altemeyer, 1996) is an individual
difference variable that encapsulates submissiveness toward authority, aggressiveness at the behest
of authorities, and support for conventional social norms, to the extent they are endorsed by authority (Altemeyer, 1994). People high in authoritarianism see the world as a dangerous place and see those who do not conform to traditional ways of doing things as particularly dangerous.

Those higher in authoritarianism are less interested in learning about new things (Heaven & Bucci, 2001) and see the world in terms of in-groups and out-groups, us and them (Altemeyer, 1998). High authoritarians are prejudiced against groups condemned by authority figures, with predictable consequences. For instance, people high in authoritarianism believed the authority-promoted myth that Saddam Hussein supported terrorism (Crowson, Debacker, & Thoma, 2006). High authoritarians have shown prejudice toward other authority-denigrated groups (e.g. gays; Whitley, 1999) but not toward groups that are not condemned by authorities (e.g. African Americans). Discrimination toward authority-denigrated group members can be elicited among high authoritarians with simple manipulations such as showing participants a memo from the company’s boss stating his opposition to candidates from certain backgrounds in a bogus personnel selection scenario (Petersen & Dietz, 2000). Low authoritarians are unmoved in their personnel selections by such memos—they make their decisions based on the candidate’s qualifications. High authoritarians, however, when they know what the boss wants, make sure he or she gets it.

People high in authoritarianism oppose dissidents and the free press (McFarland, Ageyev, & Abalakina-Paap, 1992). High authoritarians admit taking pleasure in punishing criminals and punish more severely, but if the perpetrator is a recognized authority figure or represents the conventional social order, they become lenient (Altemeyer, 1981).

To list some additional findings, high authoritarians oppose the Bill of Rights if it is framed in terms of permitting deviant behavior, they will administer stronger (simulated) electric shocks to a participant if instructed to do so by an experimenter, and they express greater willingness to act with violence against groups designated by the authorities, even if the groups are people like them (Altemeyer, 1996). Authoritarians are less likely to seek out others for negotiation (Altemeyer, 2003), and their submissiveness, conventionalism, and aggression magnify the consequences of poor decisions by leadership and exacerbate the tension between so-called traditional and non-traditional elements within society. To round things out, people higher in authoritarianism are lower in empathy (McFarland, 2010), which is one of the characteristics thought to underlie the historically low levels of violence humans are experiencing at present (Pinker, 2012).

Although an overly punitive childhood upbringing is thought to influence adult authoritarianism, perceived threat also can increase levels of this variable, as seen in archival data (Sales, 1973) and in longitudinal studies (Onraet, Dhont, & Hiel, 2014; Sibley, Wilson, & Duckitt, 2007). Experimental work also shows that threat increases authoritarianism (Duckitt & Fisher, 2003). In fact, simply imagining a future where one’s society is in crisis, with higher crime, unemployment, and terrorism, increases authoritarianism scores (Altemeyer, 1988). These studies are highly relevant in a context where terror alerts are regularly issued by the government and nearly any news site contains information about pending threats. In fact, those with high exposure to the terrorist attacks of 9/11/2001 have been shown to report greater conservatism, and letters to the editor post 9/11 showed increases in authoritarianism. Authoritarian tendencies in people concerned about security make them more supportive of civil liberty restrictions (Cohrs, Kielmann, Maes, & Moschner, 2005).

**Consequences of Security Striving for Perceptions of Threat**

Self-regulation in the presence of security concerns also has implications for perceptions of threat. The presence of concerns with loss, or security concerns, of necessity activates a prevention focus. The goal becomes to avoid the undesirable loss. As noted above, the emotional consequences of prevention focus are generally negative (Gorman et al., 2011). Prevention focus also appears to
increase the accessibility of negative information about the self (Scholer, Ozaki, & Higgins, 2014). These affectively relevant factors become input into decisions (e.g. Schwarz & Clore, 2003), in part through the influence of “stop rules” (Martin, Ward, Achee, & Wyer, 1993).

Stop rules play a role in governing how affective states influence decisions. When one has the goal of doing something to relax, feelings of tension will lead to the discontinuation of that goal. For instance, if going fishing to relax, the frustrating and tension-inducing experience of a leaky boat, biting flies, hooks through fingers, and stifling heat would work to discourage fishing. However, if one has the goal of going fishing to catch food, leaky boats and heat are certainly no inducement, but fishing ultimately will stop when either food is caught or catching food is judged to be effectively impossible. Depending on one’s goals and regulatory focus (e.g. Vaughn, Malik, Schwartz, Petkova, & Trudeau, 2006), people will stop the same task at different times. The conceptual key to understanding this research is to ask what one’s phenomenological state means if it is taken as input to the judgment process.

In early research on this phenomenon, asking participants to list objects until they felt they had done enough resulted in positive mood being associated with fewer objects listed. Being asked to list objects until one no longer enjoyed the task resulted in negative mood being associated with fewer objects listed (Martin et al., 1993). For the same task, different stop rules changed the impact of mood on the process.

Regulatory focus has implications for mood. Consider a prevention-focused mindset that should accompany security concerns. Loss concerns will trigger search for threats and the means by which losses could occur. Negative affect associated with loss concern will input into the search for threats, and the stop rule becomes “stop when I feel I no longer am at risk”. The problem in this context is that the absence of perceived threat does not indicate that threat actually is absent, and so not seeing threats, rather than exerting a calming influence, may increase anxiety. Scholer and Higgins (2013) provide an explanation of how seeking to identify threats, which is in some ways a promotion/achievement-oriented focus, can be in the service of the higher motivation to avoid losses, a prevention focus. Feelings of anxiety inform risk judgments, and the subsequently higher judgments of risk should cause increased environmental search for threat. The more one searches and fails to find threat, the more negative affect is triggered, until threat search is discontinued. However, the more negative affect, the more one is likely to think that one’s information search still needs to continue.

A related line of research with implications for how failing to find threat will increase the attention and effort devoted to attempts to identify security risks, with implications for perceived threat, comes from work on rumination (Martin & Tesser, 1989). One way to think about rumination is that it occurs when progress toward goals is blocked or is achieved at a slower than expected pace (Martin, Shripa, & Startup, 2004) and occurs as a way to try to find alternative means to achieve the higher goal. Since early in the last century, we have known that unfulfilled goals have higher cognitive accessibility than goals that have been fulfilled (Zeigarnik, 1927). If one has security concerns but cannot specify them, it is likely that one will continue to ruminate in an attempt to address these concerns (Martin et al., 2004). This will lead to even previously neutral items and experiences becoming cues for security concerns—for example, unreinforced trashcans become objects of concern as bomb receptacles; lack of reply from a loved one suggests possible social rejection (cf. Lemay, this volume); forgetting an appointment is a sign of Alzheimer’s. Rumination has the capacity to render relatively neutral events part and parcel of a threatening tableau.

Regardless of the motivational or cognitive style consequences of security threats, though, people strive to avoid loss. In the presence of threat, this often manifests as volitional security striving. Volitional security striving involves intentional attempts to mitigate loss and its consequences. Ironically, in that volitional security is driven by loss concerns, this kind of security has significant
overlap with insecurity. In both cases, concern with loss is present. In both cases, this concern drives behavior. Although volitional security striving may successfully decrease certain risks, the deliberation and action of doing so and maintaining acceptably low levels of risk make loss concerns psychologically salient. For instance, authoritarian leaders frequently remind their followers that protection from threat is a high priority. Security striving also leaves cues in the environment. Heavy locks on doors cue thoughts of breaking in; side-arms communicate danger. These things all remind perceivers of the need to be aware of threat.

One consequence of salient security cues such as authoritarian leaders, locks, or side-arms is that although volitional security increases the ability to manage threat, it also may increase threat salience by making threat coping and identification the center of one's volitional action. As discussed above, increased salience of threat makes risk seem higher, exerts upward pressure on authoritarian tendencies, and increases prevention-focused self-regulation.

It is worth considering how the processes described in some of the different chapters in this volume relate to these ideas. For instance, Schoel et al. discuss how insecurity can result in preferences for more autocratic leaders. These leaders in essence absolve followers from working through their insecurities themselves, but the trade-off is that autocratic leaders do not involve their followers in the decision-making process. Because there is less communal involvement in leadership, all the consequences of unchecked power, be they ill-founded certainty in a course of action (e.g. Brinol, Petty, Valle, Rucker, & Becerra, 2007) or reduced leader sensitivity to threat (Keltner, Gruenfeld, & Anderson, 2003), become more likely.

Leonardelli et al. discuss how security concerns change motives in negotiation, such that relative outcomes come to outweigh absolute outcomes. In this case, concern for the security implication of relative disadvantage leads people to value being better off than the other, down-weighting how objectively bad off people are as a group. It becomes possible to “win” in negotiation in a way that does not meet either party’s fundamental needs, perpetuating conflict. In both of these cases, attempts to volitionally increase security through leader selection or negotiating behavior work to maintain the salience of loss concerns. Fettweis (this volume) elaborates on this. He notes that reminders of threat, or fear appeals, can be used to shore up support for relatively autocratic leaders who initially come to power as a response to threat. These threat reminders logically do little to increase perceived security.

Incidental security may be different. When incidental security is non-reactive, it may simply reflect harmony in the environment, in which people do not feel threatened because there are no significant threats. This type of security does not increase the salience of threat concerns; it is about freedom from these concerns. Reactive incidental security may also free us from these concerns. For instance, reminders of loved ones in response to threat allow us to reduce our arousal level and get on with life (see Mikulincer and Shaver, this volume). However, reactive incidental security may sometimes create threats to actual physical security and safety.

For example, Shepperd and Howell note how attempts to manage anxiety created by anticipated threats to health security can lead people to ignore symptoms of ill health. In addition, Schori-Eyal and Kruglanski discuss how efforts to resolve psychological insecurity created by the perceived loss of significance coupled with violent-extremist ideologies can motivate violent acts that jeopardize actual physical security. In their view, this type of psychological insecurity creates the motivational end of restoring personal significance. Violent-extremist ideologies may sometimes provide the means to that end.

These examples demonstrate that even non-volitional motives may have volitional consequences and that, for any response to threat, security striving may be manifest in volitional and incidental forms. Volitional security seems highly likely to keep concerns with loss active. Incidental, non-reactive security will not involve these concerns. The question of how incidental reactive security is related to active loss concerns is an open one, however.
Probably the best source of data relevant to this question comes from work on how people inhibit thoughts of death after reminders of mortality (Arndt et al., 1997) and from work on how people inhibit thoughts of uncertainty after exposure to uncertainty inductions (Wichman, Brunner, & Weary, 2008; Wichman et al., 2014). This work shows that for both reminders of death and some uncertainty inductions, resultant death and uncertainty cognitions are first inhibited and then increase after a short period of time. The time period over which these occurs is probably immaterial; cognitive load causes both immediate death thought accessibility (Arndt et al., 1997) and also immediate worldview defense after both death reminders (Arndt et al., 1997) and uncertainty inductions (Wichman et al., 2014). Worldview defense seems to decrease the accessibility of death thoughts (Arndt et al., 1997), although this has not yet been shown to occur for uncertainty inductions.

Extrapolating from these experiments, and considering such work as that of Mikulincer and Shaver (this volume), it appears that incidental, reactive security striving may decrease the accessibility of loss concerns. However, this is an educated guess. The relative accessibility of loss concerns as an influence on feelings of security will pale next to the logical consequences of any volitional or incidental security striving that precipitates additional threat.

**Common Themes and Future Directions**

Before closing, it is worth noting that there are insights that emerged across chapters as opposed to within the chapters themselves. Although many arose, we will briefly consider one that seemed especially prominent. In particular, several of the chapters across the parts converge on the importance of the link between personal security and personal certainty. For instance, in part I, Briñol and colleagues as well as Van den Bos and colleagues emphasize the connection between personal uncertainty/certainty and personal security/insecurity. In particular, these scholars focus on the compensatory nature of the personal certainty-security link whereby threats to security undermine certainty and, in turn, compensatory conviction processes are initiated to bolster confidence and security in one’s beliefs or worldview, self-worth, and ideals. In addition, the chapter by Schoel et al. even goes so far as to suggest that the experience of personal uncertainty is the experience of insecurity.

This link resurfaces in the subsequent sections, for instance in Mikulincer and Shaver’s part II discussion of anxiety and avoidance dimensions of the attachment system. Given that the anxiety dimension seems to involve self-doubts about one’s worthiness of love, the avoidance dimension could involve doubt, or “mistrust”, in relationship partners’ intentions and good will (independent of whether the self is viewed as worthy of love). Indeed, one could even suggest that “trust” is really confidence in a relationship, whereas “mistrust” is really doubt about the relationship. This integrates both anxiety and avoidance dimensions of the attachment system in terms of certainty (doubt vs. confidence) while, at the same time, distinguishing them in terms of the object (self or relational others) of certainty (doubt vs. confidence). In part III, we see this link in the focus of Andrews and Sweeny’s chapter on managing prolonged uncertainty over potentially threatening health feedback. We hope that future research will illuminate the exact nature of this relationship. Again, although this common theme struck us as particularly prominent, it is just one of many notable themes that emerged for us and are likely to emerge for our readers as they explore the pages of this volume (e.g. the multi-level effects of security experiences on both mental and physical functioning).

Security is something we may not appreciate until we no longer have it. When we do not have it, we experience its one main symptom, that of concern with loss. Understanding the phenomenology of loss concern will go far to help us manage our insecurities, with all their consequences, in a way that promotes ideals worth striving for.
References


Aaron L. Wichman et al.


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