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SPECIAL ISSUE ARTICLE

Rebels for a Reason: How Psychological Reactance Is Goal-Directed

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This article responds to calls for more theorizing on the motivational processes that underpin reactance phenomena. We introduce goal systems theory to psychological reactance theory and demonstrate why reactance can be considered goal-directed behavior. In particular, the counterfinality principle of goal systems theory offers a unique process explanation of why eliminated or threatened choice options are more attractive. A goal systems perspective on reactance phenomena allows for the identification of psychological needs that underpin reactance. We discuss how reactance can be circumvented by addressing superordinate, autonomy-related needs—namely, by providing alternative means to desired end states.

Keywords: reactance, goal systems theory, counterfinal goal–means configuration, persuasion, autonomy

Individuals have a strong motivational inclination toward making their own choices, which provides them with a sense of autonomy and personal control (Averill, 1973; Bandura, 1977; Deci & Ryan, 1985). Ultimately, a fulfilled need for autonomy seems to be essential for a person's well-being (Langer, 1975; Langer & Rodin, 1976; Schulz, 1976; Seligman, 1975; Taylor & Brown, 1988; Zuckerman et al., 1978). In contrast, when attitudinal or behavioral freedom is threatened, individuals experience an unpleasant state of psychological reactance (J. W. Brehm, 1966).

Psychological reactance theory (PRT; J. W. Brehm, 1966) defines reactance as a motivational state directed toward the reestablishment of threatened freedom. Motivational states propel the individual to pursue goals and means that are perceived to be instrumental or useful to achieve a desired outcome. The notion that reactance is motivational largely remains a theoretical assumption: In communications research, attempts to directly measure a reactant state mainly converged on a combination of cognitive and emotion variables, such as spontaneous counterarguments and aggressive feelings (Dillard & Meijnders, 2002; Dillard & Shen, 2005; Nabi, 2002; Quick, 2012; Wicklund, 1974); issues of measurement raised questions over whether reactance is a motivational construct (e.g., Dillard & Shen, 2005). Nevertheless, responses fueled by reactance may encompass attitudes and behaviors consistent with a motivational process, including attitudinal standpoints contrary to what is promoted and increased attention to information that facilitates engaging in actions contrary to the directives of a given message (Sprengel et al., 2023). Reactance also often results in behaviors intended to restore

the threatened freedom, for instance, by deliberately contravening prescribed directives as a means of asserting independence (for an overview see Rosenberg & Siegel, 2018).

According to Brehm's seminal theorizing (J. W. Brehm, 1966; S. S. Brehm & Brehm, 1981), reactance is a motivational state. However, theorizing on the motivational processes that drive psychological reactance is incomplete and remains largely speculative. With some notable exceptions, research has largely focused on predicting reactance phenomena—their situational antecedents, boundary conditions, corresponding subjective experiences, and real-world behavioral manifestations. With regard to the potential motivational processes that drive reactance, reactance lacks a general process model to explain its occurrence.

Indeed, two independent literature reviews, covering more than 50 years of reactance research, concluded that reactance remains a puzzling phenomenon, and called for research that explains the motivational processes involved (Rosenberg & Siegel, 2018; Steindl et al., 2015). One advantage of a motivational theory is that it focuses on the psychological process rather than the phenomenon itself, which means that it has the potential to complement phenomenological research (the when, where, and what of reactance) by additionally explaining why and how reactance occurs. A complete motivational theory would be integrative and may not only help to provide a stronger prediction platform for reactance, but also facilitate novel hypothesis generation, generalization to new contexts, and the development of successful interventions.

It is worth noting that Brehm later developed a highly influential motivational theory (energization theory or motivational intensity theory; J. W. Brehm et al., 1983; Wright & Brehm, 1989). Subsequent reviews of PRT specified how reactance aligns with principles of energization (Miron & Brehm, 2006; Wright et al., 2015). In a gist, energization theory proposes that motivational arousal (energization or intensity) can be predicted from the product of the subjective importance of the goal or need and the difficulty of implementing an instrumental behavior to fulfill the need. Applied to reactance, the threat of restriction on a valued behavior can increase

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the motivational intensity to engage in the behavior due to the additional difficulty in overcoming the normative pressure to comply with the restriction on the behavior. Energization has other appealing features unique to the theory, such as the assumption of a curvilinear function of perceived difficulty, wherein energization (and thus reactance) is lowest when difficulty is either very low or so high that the behavior has become impossible. This helps to explain, for instance, research showing that reactance is stronger immediately before a restriction has been implemented than after it has taken effect (e.g., after a new policy prevents further access to the behavior; see, e.g., Laurin et al., 2012). The potential for energization theory as a candidate motivational explanation was further noted in subsequent literature reviews on PRT (Rosenberg & Siegel, 2018; Steindl et al., 2015), but mainly as an example. Rosenberg and Siegel (2018) were particularly vocal in developing and testing motivational process explanations that have not yet been considered. Indeed, a rigorous conceptual analysis requires the consideration of all plausible alternative theories that have the same level of explanatory power in order to provide for not just theory testing but also theory comparison.

Whereas energization theory relies on subjective appraisals of value and difficulty as it relates to specific goals and their means of attainment, we instead focus on the cognitive network structures that organize and connect goals and means to each other. Goal systems theory (GST; Kruglanski et al., 2002) emerged in response to the cognitive revolution; it was developed independently of reactance theory and has been successfully generalized across topics of psychology, helping to provide motivational process explanations for a range of nonnormative (or “extreme”) behavioral phenomena such as extremism (Kruglanski et al., 2009; Schumpe, Bélanger, Moyano, & Nisa, 2020), risk behaviors (C. E. Kopetz et al., 2019), and frustration–aggression (Kruglanski et al., 2023; Leander & Chartrand, 2017). We view these as conceptual cousins to reactance, in that even if they qualitatively differ in terms of their psychological contents (e.g., the specific motives and manifestations), they could all be explained by the same motivational process. In other words, reactance can be distinguished by its extraordinary motivational content, but the generic motivational process that underpins it may be seen elsewhere. We examine reactance from a goal systematic perspective, specifically as it pertains to the content domain of autonomy assertion (Leander et al., 2011, 2016; Schumpe, Bélanger, & Nisa, 2020).

Reactance as Goal-Directed Behavior: An Introduction to GST

Given that attitudes and behaviors serve important psychological goals (Katz, 1960; Kruglanski et al., 2002; Sarnoff & Katz, 1954), it is understandable that individuals feel reactance when their attitudinal or behavioral freedom is threatened. A goal-systems approach can provide structure to the process, while also being able to uniquely explain idiosyncratic reactance phenomena. For instance, GST (for an overview, see Kruglanski et al., 2015) has inspired research on how reactance could be avoided when changing attitudes and behavior (Schumpe, Bélanger, & Nisa, 2020), but also how reactance could facilitate susceptibility to peer influences when they provide opportunities to react against societal pressures (Leander et al., 2016). Moreover, goal shielding theory (J. Y. Shah et al., 2002) informed research on how reactance can shield one’s need for

autonomy by inhibiting the goals prescribed by social pressures (Leander et al., 2011).

Most importantly, GST offers a mechanism to explain why forbidden behavior is so appealing: Repeatedly, research on reactance has shown that a threatened or eliminated choice alternative becomes more attractive (e.g., J. W. Brehm & Sensenig, 1966). GST explains how and why attraction to a behavior increases in response to its potential negative consequences and thus GST has been applied to explain engagement in a wide range of risky behaviors (C. Kopetz & Starnes, 2023; C. E. Kopetz et al., 2019).

GST (Kruglanski et al., 2002) organizes goals and their respective means of attainment into associative networks (Anderson, 1983; Anderson et al., 2004). GST assumes that goals and means are cognitive constructs (Kruglanski, 1996) that are organized hierarchically in memory, meaning that lower order means (or subgoals) operate in service to higher order goals toward the fulfillment of a current want or need (J. Y. Shah & Kruglanski, 2008). Hence, it is often assumed that abstract psychological needs, such as autonomy and personal control, are positioned at the top of a goal–means hierarchy. Regarding energization theory, psychological needs imbue the goal system with value and the strength of the need may determine the amount of potential energization within the system (Laurijssen & Leander, 2023). From this perspective, if autonomy and control are superordinate needs, reactance phenomena can reflect various means to satisfy the need. In taking such a structural approach to motivation, the architecture itself—how these goals and means are interconnected—has important self-regulatory consequences for the individual.

Due to its focus on goal–means structures, GST proposes some counterintuitive ways in which a given means (i.e., a behavior) connects to one or more goals in ways that could explain reactance. This requires a nuanced look at how an associative network operates in terms of a goal–means network: The strength of the connection between a means and a goal is subjectively interpreted as the means’ instrumentality; the stronger the connection between a means and its goal, the more instrumental the means is perceived to be (Kruglanski, 1996). However, research on cognitive networks has long observed that association strength is a limited quantity and that any given association will be stronger if there are fewer connections with competing alternatives (“fan effect”; Anderson, 1983). For example, J. Shah (2003) observed that the priming of a close relationship partner’s name can also prime the goals they are associated with—that is, heighten the activation and pursuit of the goal among study participants in the lab. However, the strength and likelihood of such goal activation depends on fewer goals being associated with the relationship partner.

Hence, when additional positive goal connections are being introduced to a single means—that is, a means serves more than one goal at the same time—the association strength between the means and its goals weakens (multifinality; Zhang et al., 2007). Consequently, a means connected to two goals will be perceived as less instrumental for attaining each of the goals than if it were only connected to one goal (Zhang et al., 2007). This has downstream consequences for reducing the motivating potential of the means. Such dilution of a means’ motivating potential is based on the constant sum principle in GST (Kruglanski et al., 2002). This principle entails that the potential associative network strength is divided between the two “positive” connections, rendering every single connection less strong. Therefore, the way means and goals are interconnected in

an individual's mind bears important motivational consequences for which behavior is likely to be selected. The main takeaway is that GST posits that people select means they perceive as instrumental for attaining their goal (Kruglanski et al., 2002), but there can be a dilution of perceived instrumentality when a given means is associated with the pursuit of multiple goals.

Reactance as a Counterfinal Goal–Means Configuration

In the case of reactance, a behavior or means is negatively associated with one goal and positively associated with another goal. For example, the more detrimental chocolate chip ice cream seems to the goal of maintaining one's diet, the more it is perceived as instrumental to the goal of food enjoyment. According to GST, one implication of there being a limited total association strength between a means and a goal (referred to as the "constant sum principle") is that a negative association with another goal causes the opposite of a so-called dilution or fan effect: It can inflate the perceived instrumentality of the focal goal–means association. This can cause a (counterintuitive) concentration of perceived instrumentality toward the positive connection. Just as there can be diffusion when two "positive" connections exist, a negative association can serve to accelerate or inflate the perceived instrumentality toward the single positive connection that occurs when the means becomes associated with being detrimental or "counterfinal" to another goal (e.g., negative association with safety or normative compliance). This is where GST offers a unique process explanation for reactance that cannot be explained by other motivational theories.

According to GST, reactant behaviors can be construed as a counterfinal goal–means configuration (Schumpe, Bélanger, Dugas, et al., 2018). In a counterfinal goal–means configuration, a means is instrumental for attaining one goal, and at the same time detrimental to another goal an individual holds. For example, a man could pursue his love interest although his mother is advising him against it, or a teenager tries out illegal substances at a party to enjoy herself although it goes against her goal of abiding by the rules of her parents. In both cases, the forbidden (love, drugs) appears particularly appealing, which GST explains with its counterfinality framework. Counterfinal means can be perceived as extremely instrumental due to their negative goal connection, that is, the fact that the means is detrimental to another goal the individual holds. Based on the constant sum principle, the negative goal connection (i.e., the connection to the alternative goal that gets compromised during goal pursuit) increases the associative strength between the means and the focal goal (Kruglanski et al., 2002; Zhang et al., 2007). In the examples above, the man's love interest becomes more appealing because of the mother's advice to stay away, and the drugs become more tempting because of parental rules. Individuals engage in behaviors they deem instrumental for pursuing their goals, and counterfinal means are perceived as highly instrumental due to their special goal–means configuration. This is how GST explains the increased allure of forbidden behaviors and why individuals engage in them.

Based on their findings on how counterfinality increases the perceived instrumentality of risk-taking behavior, C. E. Kopetz et al. (2019) posit that individuals engage in risky behaviors not despite the negative consequences but because of them (C. Kopetz & Stames, 2023 for a review). Hence, the intuitive intervention strategy of pointing out the negative consequences of their behavior to an individual might backfire in a manner not unlike reactance. A pilot study lent initial support to this notion: After highlighting the negative

consequences of their harmful behavior, willingness to engage in the harmful behavior decreased for individuals who were loosely committed, but it increased for individuals who were high in goal commitment (Schumpe, 2022). Notably, research has already established that the higher the commitment to a goal, the more likely individuals are to select counterfinal means for their goal pursuit (Bélanger et al., 2016). These insights inform intervention strategies that can help people disengage from harmful behaviors.

Overall, the concept of counterfinality, within the scope of GST, increases our understanding of why and how forbidden behaviors become more appealing. For instance, age restrictions render video games more appealing to the very population they are meant to protect (Jöckel et al., 2013). Similarly, persuasive proscriptive alcohol messages rendered alcohol more appealing to those between the ages of 18 and 21 (Allen et al., 1994). Similarly, raising the legal drinking age in the United States led to an increase in alcohol consumption among the target population (Engs & Hanson, 1989). In light of the potentially fatal consequences, GST offers an argument for why it might be worthwhile—in some cases—to consider revoking the prohibition to decrease the perceived instrumentality, and hence the appeal of the very behavior one is trying to banish. Perhaps Romeo and Juliet would soon have gotten tired of each other and would have ended their relationship if it were not for their families' constant meddling against their union.

This leaves us with the question: If we cannot tell people what not to do, can GST provide a platform for a novel hypothesis on what we can do to either attenuate or channel reactance to influence individuals' attitudes and behaviors?

Providing Alternative Means to Desired End States

A key element of a successful intervention is presenting the recipient with an alternative means to attain their desired goal (Schumpe, 2023). In other words, instead of telling people to stop engaging in an unwanted behavior (which would cause reactance), it is advisable to present them with a substitute behavior that helps them attain the same goal. For instance, an attitude might serve the goal of receiving social approval. Hence, persuasive influence attempts that aim to change the undesirable attitude will be more successful when they provide an alternative means to obtain social approval. Another example can be found in the experimental work by Schumpe, Bélanger, Moyano, and Nisa (2020), who lowered sensation seekers' willingness to support political violence by providing them with a peaceful yet exciting alternative means to further their political agenda.

According to GST, this reduction in reactance is linked to perceived instrumentality. The perceived instrumentality of reactant behavior, and hence its likelihood to be selected for goal pursuit, depends on the availability of other means in the goal–means network (Bélanger et al., 2015; Kruglanski et al., 2002). Presenting an equifinal means (i.e., a substitute means that serves the same goal) lowers the perceived instrumentality of the original means and thus its likelihood of being selected for goal pursuit. Hence, reactant (like any) behavior should follow the second principle identified by GST (Fishbach et al., 2023; Kruglanski et al., 2015), that is, that a behavior's perceived instrumentality changes when other means are introduced into the goal–means network.

To demonstrate these effects, Schumpe, Bélanger, Giacomantonio, et al. (2018) randomly assigned self-identified environmental activists

to one of two experimental conditions. Participants in the control group watched a video of a violent group who protested a construction site (activists blocked the road to a construction site and engaged in a conflict with law enforcement officers). In addition to this violent video, participants in the alternative means condition were presented with a video showing an alternative way of demonstrating their activism (e.g., peaceful demonstrations, negotiating with policymakers). As a result, participants in the alternative means conditions perceived the violent group to be less instrumental, and therefore less appealing than participants in the control condition. Hence, participants provided with alternative forms of activism reported less support and liking for the violent activist group compared to participants in the control condition, and thus lower intentions to join the violent group. In conclusion, providing alternative means to attain desired end states is an effective way to shift attitudes and behavioral intentions, and this effect is mediated by perceived instrumentality (Schumpe, Bélanger, Giacomantonio, et al., 2018).

Other studies have demonstrated the effect of lack of choice on behavioral consequences. For instance, Zeinstra et al. (2010) found reduced vegetable consumption among highly reactant children when no choice options were provided. Possibly, providing choices increases intrinsic motivation or feelings of autonomy (Patall et al., 2008; Zeinstra et al., 2010). In line with earlier work on reactance, the construct itself was not measured in Schumpe, Bélanger, Giacomantonio, et al. (2018), but its presence can be concluded based on observed attitudinal outcomes. There is, however, already prior evidence that provisioning choice options is negatively associated with psychological reactance (Shen, 2015). Specifically, participants read a threatening skin cancer message and were presented with only one or two behavioral options (i.e., that sun safety can be achieved by applying sunscreen or by wearing protective clothing); they experienced less reactance when two behavioral options were presented to them compared to only one (Shen, 2015). These findings also concur with Wicklund et al. (1970), who pointed out that reactance is directly related to the number of viable alternatives. Interestingly, PRT already assumed that freedoms that can uniquely fulfill a need cause more reactance when threatened compared to situations in which other freedoms can also fulfill that need (J. W. Brehm, 1966; S. S. Brehm & Brehm, 1981).

The aforementioned reasoning addressed proscriptive persuasive messages (with the simplified answer: You should not forbid, you should provide alternative behaviors instead). Persuasive messages can broadly be classified as proscriptive or prescriptive: they tell individuals how not to act—or how to act (Miller et al., 2000). Next is the question of telling people how to act (i.e., prescriptive persuasive messages) without triggering reactance.

From Minimizing Reactance to Leveraging Its Force

Situations in which reactance often occurs are sales situations or when people are exposed to advertisements (Clee & Wicklund, 1980), as they believe advertising tries to sell them products they do not need (Calfee & Ringold, 1994). A typical way to minimize reactance is to make use of less controlling, autonomy-supportive language (Miller, 2015) or reminders at the end of a communication that recipients are free to choose for themselves (S. S. Brehm & Brehm, 1981)—so-called postscripts (e.g., “You are free to decide for yourself.”; Miller et al., 2007). Based on the logic of GST,

Schumpe, Bélanger, and Nisa (2020) developed new ways of reducing resistance to persuasion.

Providing Decoy Outlets for Reactance

Schumpe, Bélanger, and Nisa (2020) developed a technique to reduce resistance to persuasion by introducing so-called reactance decoys—alternative outlets for reactance that provide recipients of a persuasive message with the opportunity to reassert their attitudinal freedom before evaluating a target object. Across numerous experiments, Schumpe, Bélanger, and Nisa (2020) presented participants in the experimental condition with a reactance decoy object and the opportunity to express their attitude toward it, whereas participants in the control condition did not have the opportunity to express their attitude toward a decoy. Evaluating the decoy object allowed participants to “vent” their reactance—that is, reassert their attitudinal freedom and reinstate their autonomy via attitude expression (see also Richards & Larsen, 2017). Participants who could express their attitude toward the decoy reported lower reactance when subsequently presented with the target object compared to participants in the control condition (Schumpe, Bélanger, & Nisa, 2020). Consequently, the reasserted participants reported more positive attitudes toward the target product and showed the anticipated differences in behavioral-dependent measures (i.e., greater willingness to forego payment to enter a raffle for a chance to win the target product, spending more time looking at the target advertisement). The attitudinal and behavioral changes were mediated by reactance.

Furthermore, Schumpe, Bélanger, and Nisa (2020) showed that the opportunity to vent reactance and reassert attitudinal freedom is linked to a greater willingness to buy an advertised target product. Forewarning of persuasive intent is generally known to reduce persuasion (Allyn & Festinger, 1961; Benoit, 1998). As expected, a forewarning manipulation increased reactance toward the decoy—but it also increased reactance vented on the decoy object, which led to greater willingness to buy the target product (Schumpe, Bélanger, & Nisa, 2020). Hence, increasing reactance via a forewarning manipulation can ultimately heighten willingness to buy a target product. This work is one of the rare exceptions in which the force of reactance gets leveraged to the persuaders’ advantage (see also Miller et al., 2013). Although Schumpe, Bélanger, and Nisa (2020) only measured self-reported reactance and not the extent to which people felt reasserted, an underlying need to feel autonomous was assumed. The reactance decoy produced a classic pattern of goal satiation or need fulfillment, as indicated by the subsequent tendency to let one’s guard down and pursue other goals that can be inconsistent with the focal goal.

Desire for Freedom: Identifying and Fulfilling the Psychological Need That Drives Reactant Behavior

Recent literature has introduced the idea that reactance operates as part of a broader self-regulatory system focused on the ongoing pursuit of autonomy and personal control (Leander et al., 2016; see also Leander et al., 2011). Leander et al. (2011, 2016) conducted experiments to show how implicit motivational influences from peers—such as the goals implied by their behavior—sufficed to trigger responses among students as a function of their trait-level tendencies toward reactance. Findings support a self-regulatory model of reactance, in which the same psychological need that facilitates reactance against

controlling influences is also sensitive to opportunities to increase one's sense of autonomy. Individual differences in reactance predicted not just reactance against goals being pursued by a controlling peer (Leander et al., 2011; see also Chartrand et al., 2007), but also being inspired to pursue the same goals as a deviant peer who provided a means to react against societal prohibitions (Leander et al., 2016).

These developments are consistent with Brehm's seminal theorizing, who expected connections between reactance and the need to have control over one's actions (S. S. Brehm & Brehm, 1981). With regard to control loss and the desire for freedom, in research examining how U.S. gun owners respond to frustrations of personal control over outcomes, one experiment showed that experimentally induced failure on a cognitive task increased attraction to the prospect of nonnormative Second Amendment freedoms, as indicated by heightened support for more expansive gun carry and assertive gun use rights (Leander et al., 2020). As such, the freedom to make choices can be a source of control (Langer & Rodin, 1976) and lower reactance (Shen, 2015).

GST positions reactance within a broader self-regulatory system. Satisfying an individual's need for autonomy is expected to lower their reactant response and make them more open to persuasive appeals. Such a self-regulatory model is compatible with findings that self-affirmation influences responses to persuasive messages (Bélanger et al., 2021; Cohen et al., 2000; Epton & Harris, 2008) and that experimentally increasing autonomy rendered a persuasive message more effective (Pavey & Sparks, 2012). Interventions that provide a means to affirm the self can attenuate the influence of a counter-attitudinal message that threatens the self (Correll et al., 2004; Reed & Aspinwall, 1998; Schütz et al., 2013; cf. Steele, 1988). This is often the case in health communication or when persuasive messages target a person's attitude which is central to their self-concept. For instance, self-affirmation has been found to successfully influence health-promoting behaviors such as eating more fruit and vegetables (Epton & Harris, 2008) or decreasing willingness to engage in violent acts in response to a counter-message (Bélanger et al., 2021). After affirming the self, recipients of a potentially threatening message are more likely to react favorably to that message (e.g., Cohen et al., 2000). Pavey and Sparks (2012) found that experimentally increasing autonomy allowed an antidrinking message to be more effective—especially for an at-risk population—presumably because autonomy lowers the need to respond defensively to messages that could threaten the self-worth. Thus, it seems that providing individuals with a sense of autonomy can lower their reactant response and make them more open to persuasive appeals. Consistent with this, interventions can facilitate goal-directed behavior across a range of domains when they are delivered in an autonomy-supportive fashion (Deci et al., 1994; Grolnick & Ryan, 1989; Joussemet et al., 2004; Williams et al., 1999). Following a congruent line of reasoning, freedom threat manipulation used in past reactance research (explicit, high-controlling language, Miller, 2015; no choice options, Shen, 2015) falls nothing short of how one would operationalize autonomy threat or low autonomy conditions (controlling context, e.g., Radel et al., 2011; restricting choice options, e.g., Sheldon & Filak, 2008).

Independent of what the goal content is called (autonomy, control, etc.), reactant behavior is sensitive to underlying psychological needs. Manipulating these underlying needs influences the amount of reactance individuals experience. This is of theoretical relevance for the notion of reactance as goal-directed behavior (e.g., it can be

substituted with alternative means). PRT posited that the magnitude of reactance depends on the importance of freedom (J. W. Brehm, 1966). However, S. S. Brehm and Brehm (1981) and Grandpre et al. (2003) have later noted that individuals do not want to protect specific freedoms, but rather their freedom to choose to exercise those freedoms. Hence, it seems likely that the amount of reactance an individual experiences is proportional to their need for autonomy—may it be momentarily (state reactance) or generally (trait reactance).

This is in line with emerging evidence suggesting that reactance to gun control can be predicted from disempowering conditions. In an initial experiment, U.S. gun owners who reported higher levels of disempowerment in society (Leander, 2024) demonstrated greater reactance to a persuasive message advocating for gun control (in the form of heightened intentions to buy one or more firearms of different types). In the wake of the 2017 Las Vegas nightclub shooting, which led to a first-of-its-kind ban on bump stocks (an accessory of AR-15 pattern rifles), disempowerment moderated whether owners of such rifles showed higher reactance, that is, more positive attitudes toward the restricted product and stronger gun purchase intentions. In a subsequent experiment, conducted in the wake of a school shooting rampage in Uvalde, Texas, which prompted widespread discourse about gun safety risks, an experimental failure on a cognitive task led U.S. gun owners who were concerned about gun safety risks to support greater gun availability at schools. At least in the context of U.S. gun owners and the threat of gun restrictions, the motivational antecedent of disempowerment was a critical moderator of any reactant response.

PRT and GST: A Case of Complementary Theories

A key question is whether GST is necessary or desirable for the study of reactance. To put it bluntly: Do researchers need to entertain all the complexities of a general process model (GST), when the more specific and known parameters from PRT suffice to make predictions about the phenomenon? Besides, the mere introduction of a new, authoritative theory to explain past findings may trigger reactance among those who consider reactance to be a special, if not extraordinary, human phenomenon. In that case, GST will be especially threatening if it can make all the same predictions as PRT and also provide a platform for other predictions that PRT would be silent on. GST threatens to state that reactance may be a special phenomenon according to its content but not special in terms of its underlying psychological processes and mechanisms. We argue that this is not a bad thing—reactance is extraordinary, and theorists can choose to either keep adding new parameters to PRT to accommodate predictions derived from GST, or to consider the possibility that PRT and GST are mutually supportive theories because their psychological process assumptions are derived not just from the same tradition of motivational theories, but from the same cohort: When not theorizing on reactance, Jack Brehm was developing a fundamental motivation–energization theory (J. W. Brehm et al., 1983; Wright & Brehm, 1989), which was applied to reactance some decades later (Miron & Brehm, 2006) and is featured regularly alongside GST in integrative analyses of motivation (e.g., Kruglanski et al., 2012, 2014). The present article merely takes the next step of directly introducing GST to reactance. Besides, the scope of GST is not specific to reactance, and thus the more focused PRT is useful for articulating its distinct psychological contents—the underlying needs, situational instigators, and subjective

experiences, as well as any boundary conditions for reactance that may not be observed with other, closely related phenomena that follow the same underlying process.

One advantage of a motivational process theory, such as GST, is that it focuses on psychological processes and mechanisms driving the phenomenon rather than the phenomenon itself, which means that it has the potential to complement phenomenological research (the when, where, and what of reactance) by additionally explaining why and how reactance occurs. PRT advanced a motivational perspective (S. S. Brehm & Brehm, 1981), and researchers have since sought to position reactance within energization models and fundamental need theories (e.g., Leander & Chartrand, 2017; Wright & Brehm, 1989; see Rosenberg & Siegel, 2018 for a review). GST is compatible with such theories and simply embeds them within a cognitive network structure, thus affording the additional application of cognitive principles to a range of motivational phenomena. GST should not lead to contradictory predictions and GST principles can help to test a motivational perspective.

GST also opens new avenues for hypothesis generation that cannot be derived from other motivational theories. Based on its assumptions that goals and means fit into a hierarchical cognitive network, GST can be used to articulate the level at which a given restriction occurs (e.g., restriction of a means vs. a higher goal) and the breadth and totality of a restriction (the restricting of a single means vs. all possible means). GST can predict reactance versus redirection of the underlying motivation through an equivalent (“equifinal”) alternative. GST’s constant-sum principle of energization—the notion that the entire system has a finite total activation potential—suggests that merely introducing alternatives to prevent reactance may come at a cost to energization due to diffusion effects (Anderson, 1983; Zhang et al., 2007). GST can also help to parse reactance from the attractiveness of risk: The counterfinality principle suggests that part of the energization toward reactance may stem not just from energization to overcome the restriction, but also from the energizing potential of knowing that one is taking a risk (C. E. Kopetz et al., 2019). GST can raise new questions about whether reactance is defined by a specific process or its outcome. In short, the addition of a cognitive network structure provides a larger map to explore, and cognitive principles offer new mechanisms that can facilitate, attenuate, or redefine reactance.

As pointed out earlier, as a theory of resistance, PRT has mainly focused on how to avoid reactance and not on how to harness its forces. However, GST has been used to explain how unfulfilled goals and needs seek out alternative means of satisfaction. As classically demonstrated in Linville’s (1987) self-complexity theory, people who have multiple self-concepts can protect and maintain self-esteem after failure in any one domain of life. Analogously, pursuing autonomy through a single, exclusive means may necessitate reactance to restrictions on that essential behavior. GST posits that, if the superordinate goal is autonomy, an alternative strategy is to redirect the motivation: When introducing a restriction, first add alternative means to address the need and thus reduce the implications of the restriction. An advantage of focusing on the superordinate need is that it takes the focus away from suppressing reactance or circumventing resistance, and toward instrumental alternatives. A goal systems perspective on reactance phenomena has helped demonstrate the importance of understanding the focal motivation that underpins reactance and explaining how addressing the higher need for autonomy can help circumvent reactance.

Conclusion

The current article reviewed reactance literature from a goal-systemic perspective, proposed theoretical ideas such as considering reactance as goal-directed behavior, and suggested novel ways to test these ideas experimentally. More broadly, the introduction of GST to PRT helps to respond to calls for more theorizing on, and testing of, the motivational processes that underpin reactance phenomena (Rosenberg & Siegel, 2018; Steindl et al., 2015). Much like Jack Brehm’s influential energization theory (J. W. Brehm et al., 1983; Wright & Brehm, 1989), GST provides unique process explanations, has been successfully applied across content domains, and is already being used to develop novel predictions for reactance.

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