A case for directives: Strategies for enhancing clarity while mitigating reactance

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Abstract

Persuasive appeals that are direct and explicit are easier to understand than appeals that are indirect and implicit (Bessarabova et al. *Human Communication Research, 39*, 339–364, 2013; Gardner and Leshner *Health Communication, 31*, 738–751, 2016; Miller et al. *Human Communication Research, 33*, 219–240, 2007). Unfortunately, as psychological reactance theory (PRT; Brehm 1966) contends, directive messages are often met with resistance due to the likelihood of their threatening a receiver's perceived freedom and autonomy. In response, reactance researchers have undertaken the task of identifying strategies that attempt to utilize the strengths of directives (e.g., clarity) while mitigating the occurrence of reactance. In this article, we review these strategies and argue for the merits of direct and explicit language applied to pro-social and health related contexts. We conclude by examining strategies that use reactance as a persuasive tactic rather than an outcome to be avoided.

Keywords Reactance · Directives · Controlling-language · Health behavior · Persuasion

Creating effective and impactful mass communicated messages, particularly those pertaining to pro-social and health related contexts is no easy task. The primary objective of most mass communicated messages is to either persuade a targeted audience to change their attitudes, intentions, or behaviors or to motivate those who already hold the desirable attitude or intention to behave in a consistent manner. For a communication attempt to be persuasive, it must stimulate interest so that an audience will attend to the content of the underlying message, and do so in a way that the audience can easily decipher the response that is expected from them (Crano and Prislin 2006; Hovland et al. 1953).

However, the communication process of stimulating interest ultimately leading to acceptance of a message can be a difficult proposition and one met with resistance. Psychological reactance theory (PRT; Brehm 1966) is a classic psychological theory that helps explain the difficulty in achieving persuasive ends by contending that people typically value their decision-making autonomy and are not willingly open to being persuaded. PRT has guided research for more than a half century in a vast range of fields interested in overcoming resistance to persuasion including social, health, and clinical psychology (for a recent review see Rosenberg and Siegel 2018). Early research focused on identifying the antecedents and consequences of the reactance process (e.g., Brehm and Cole 1966; Brehm and Sensenig 1966). More recently, researchers have attempted to identify the composition of the construct as well as message features that influence how persuasive messages are received (e.g., Dillard and Shen 2005), with some scholars having begun to explore strategies that permit the use of directive appeals in ways that mitigate reactance or harness it to one's advantage (e.g., Gardner and Leshner 2016; Miller et al. 2007).

The main purpose of the current paper is to argue for the merits and use of directives in persuasive messages. The use of directives or highly explicit language in a persuasive message can be met with resistance; however, we argue that there are clear benefits that directives provide and if properly constructed could avoid eliciting reactance. PRT literature is rife with evidence suggesting that message designers might be better off avoiding directives, but we contend that the use of directives in mass communicated pro-social and health messages can be quite valuable. This paper serves as an attempt to provide a useful overview of research that has realized the virtues and potential of directives. We begin by briefly summarizing the basic tenets and assumptions of PRT, followed

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by an examination of the juxtaposition of directives (i.e., high-controlling language) versus non-directives (i.e., low-controlling language) used in persuasive appeals, including the costs and benefits associated with each approach. This initial examination will be followed by a survey of the recent developments researchers have undertaken in identifying strategies that utilize directives while avoiding the elicitation of reactant responses, with the crux of our argument stemming from the synthesis of such strategies. Our examination is particular to mass communicated messages, thus we believe our review is a succinct and specific look at laboratory based experimental studies testing messages developed for eventual use in such mass mediated contexts (e.g., text or audio based ads) rather than an overview of all potential communication mediums (e.g., face-to-face). Finally, the paper concludes with a discussion of the future prospects of leveraging reactance as a persuasive strategy rather than something that is avoided at all costs.

Psychological Reactance Theory Overview

The foundation of PRT follows from one simple premise: "freedom of behavior is a pervasive and important aspect of human life" (Brehm 1966, p. 1). Individuals have a basic need for self-determination, they desire autonomy, and value their capacity to make their own decisions and control their own environments. Any attempt at disrupting or restricting an individual's freedom to behave in the manner of one's choosing is likely to be met with resistance, specifically a type of resistance that Brehm identified as psychological reactance (Brehm 1966), a psychological state that motivates an individual to restore a threatened or lost freedom. To understand the reach and impact that PRT can have for the broad subject of persuasive communication, it is important to first grasp the basic tenets of the theory including the assumptions on which the theory rests, the components by which the reactance process proceeds, and the current conception of how reactance is experienced.

Assumptions

Building from the premise that freedom of behavior is essential, PRT rests on two basic assumptions. First, people have free behaviors they can engage in at the present or sometime in the future (Brehm 1966); individuals must possess both physical and psychological abilities and must be cognizant of such abilities and competences to exercise a free behavior. Second, whenever a free behavior is eliminated, threatened with elimination, or reduced in any way, the transgressed party will experience reactance and will thus be motivated to restore the freedom (Brehm 1966). Because freedom of behavior is such an intrinsically important aspect to human life,

the elimination or threat of losing a freedom will psychologically arouse and motivate the individual to reestablish the freedom.

Components

In terms of the reactance process itself, there are four identifiable components, which occur in succession (see Brehm and Brehm 1981; Quick et al. 2013; Rosenberg and Siegel 2018 for reviews).

Freedoms The first component stipulates that individuals, in most situations, possess myriad freedoms. Brehm et al. (1966) broadly defined freedoms to include not only actions but also emotions, opinions, and attitudes. According to Brehm and Brehm (1981) free behaviors are "not abstract considerations, but concrete behavioral realities" (p.12). The range of potential freedoms that people can possess is vast and the criteria for such freedoms to exist is subjective, thus knowledge of and confidence in one's ability to possess the freedom is considered sufficient for the freedom to exist (Brehm and Brehm 1981).

Elimination or Threat to Freedom A freedom is eliminated when it is considered irrevocably lost (e.g., an individual sentenced to life in prison has had the freedom to travel to world eliminated), whereas a freedom is threatened when a freedom is made more difficult to engage in or there has been suggestion of future elimination (e.g., a city ordinance that restricts the purchase of alcohol to three days a week would threaten people's freedom to buy and enjoy alcoholic beverages according to their typical schedule). Persuasive communications are often of the mass mediated variety, where recommendations or suggestions provided in such contexts are generally considered threats to rather than an elimination of freedoms.

Reactance The third component is the experience of reactance and the motivation to rectify any transgression, which is influenced by a number of factors presenting along a continuum, including the a) importance of the free behavior, b) the proportion of free behaviors threatened, and the c) magnitude of the threat. In terms of importance, a freedom is considered important when it is perceived as the only avenue for satisfying a need and thus more likely to generate stronger reactance when threatened or eliminated (e.g., smoking is the only way to satisfy one's nicotine craving), relative to freedoms with many perceived avenues for satisfaction (e.g., drinking coke, sprite, water, lemonade, or Gatorade are multiple ways to quench one's thirst). As for the proportion of freedoms threatened, the strength of reactance will be greater as the proportion of behaviors that are threatened or eliminated increases. Given the options of coke, sprite, water, lemonade, or Gatorade to drink and assuming all options were roughly equal in terms of

attractiveness, the elimination of coke AND sprite would generate greater reactance than if just coke were eliminated. Finally, when there is only the threat of elimination, the magnitude of threat will determine the level of reactance generated. The level of reactance can stem from a variety of variables including the source of the threat, the number of threats, and the implication of future threats. As for the source of a threat, authority figures (e.g., teachers or employers) for instance, have more power over individuals than do peers or subordinates (e.g., classmates or coworkers), thus they are more likely to garner attention and indicate a greater level of seriousness. As for the number of threats, Brehm and Brehm stated that "in any given situation there may be more than one threat to a given freedom" (p. 71). Thus if a freedom is threatened on multiple occasions, the level of reactance may increase. People might also be wary of future or implied threats. For example, an American with conservative political leanings might be vigilant of any discussion of the second amendment and any limitation on the purchasing of firearms as the American might think "what are they going to take from us next?"

Restoration The fourth and final component in the reactance process is restoration, that is, the method by which the transgression is mollified, which may manifest in a variety of ways including direct restoration (e.g., boomerang effect; Worchel and Brehm 1970), restoration by implication (Brehm 1966), and other subjective reactions such as increased attractiveness toward the forbidden behavior (e.g., Brehm et al. 1966), denying the existence of the threat (e.g., Worchel et al. 1976), and source derogation (Worchel and Brehm 1970).

Current Conception of Reactance

According to Dillard and Shen's (2005) intertwined process of cognition and affect model, reactance as experienced by an individual proceeds by first being cognizant of a freedom threat, followed by both affective (e.g., anger) and cognitive (e.g., negative evaluations) outcomes, assuming the threat is sufficiently strong. Recent research has tended to accept this conception of reactance, thus message designers are advised to avoid creating messages that generate the combination of negative affect and cognitions.

Reactance and Persuasive Messages

In Burgoon and colleagues' (2002) review of reactance, they suggested to scholars, especially communication researchers and social psychologists interested in persuasion, to take particular interest in PRT to help explain why persuasive messages might succeed or fail. At the time of their review, they argued that the bulk of research on reactance was focused on face-to-face, dyadic communication situations and that researchers who were more focused on the effects of mass mediated communications and new technologies hadn't yet paid enough attention to PRT. They further argued that "communication researchers in particular can contribute much to reactance research by moving away from questions such as "what is reactance?" and asking "what message factors facilitate or inhibit reactance?" (p. 221). These factors include the structure, features, and content of a persuasive appeal, which can impact the overall quality and reception of a message (Quick et al. 2013). This section specifically will examine language tone as a message feature, namely language referred to as high-controlling (i.e., directives) vs. low-controlling (i.e., non-directives) and how each factors into reactant outcomes, with a particular focus on non-interpersonal communications (e.g., mass media campaigns; public service announcements).

Controlling Language

There are a number of common message features that if used inappropriately run the risk of inciting reactance. Messages that use language that is highly threatening to one's autonomy or freedom to make a decision for oneself, exhibit obvious intent to persuade, or both will tend to elicit reactance. Underlying such messages is the use of high-controlling language (HCL). Conversely, there are a number of common message features that have been found to help inhibit reactance. Messages that inhibit reactance typically are not threatening, do not exhibit obvious intent to persuade, and are often characterized by the use of low-controlling language (LCL). This section describes the distinguishing features of HCL and LCL as they pertain to persuasive messages (see Table 1 for examples of how researchers have operationalized the difference between HCL and LCL within persuasive messages).

HCL Appeals that use language to exert pressure on receivers to adhere to the recommendations prescribed by the message can be characterized as controlling. Researchers have referred to this type of language by a number of labels including dogmatic (e.g., Bensley and Wu 1991), intense (e.g., Buller et al. 1998), explicit (e.g., Grandpre et al. 2003), and high-controlling (e.g., Miller et al. 2007), with Quick et al. (2013) classifying them under the umbrella of domineering. Although there may be a number of designations, what they all have in common is they can be characterized as threatening to a receiver's sense of autonomy and their intent to persuade is unambiguous. HCL is direct and forceful and often uses imperatives such as "must" and "should" (McLaughlin et al. 1980). Dillard et al. (1996) defined HCL in terms of both explicitness and dominance. A message is explicit to the extent that it easily enables understanding as to the source's intention or request, and dominant to the extent to which the source of the message attempts to limit the receiver's behavioral options.

Table 1 Examples of operationalizations of HCL and LCL

Reference	High-Controlling	Low-Controlling
Bensley and Wu (1991)	"Conclusive evidence" "Make it obvious" "Any reasonable person must acknowledge these conclusions"	"Good evidence" "You may wish to carefully consider" "We believe that these conclusions are reasonable"
Bessarabova et al. (2013), Bessarabova et al. (2017)	"The information about the importance of and benefits of recycling that you must know"	"Below is some important information about the benefits of recycling that we would like you to consider"
Dillard and Shen (2005)	"So if you floss already, don't stop even for a day. And, if you haven't been flossing, right now is the time to start. Today. Do it because you have to. Floss every single day."	"So if you floss already, keep up the good work. And if you haven't been flossing, now might be a good time to start. In fact, you may want to try it today."
Miller et al. 2007	"Because you can burn up to 440 cal an hour by exercising, you should do so to manage a more healthy weight… Therefore, you really must exercise to both burn calories and reduce your risk of breaking bones during falls."	"Because you can burn up to 440 cal an hour by exercising, you may want to consider more physical activity as a way of managing a more healthy weight… Therefore, why not exercise to both burn and reduce your risk of breaking bones during falls?"
Quick and Considine (2008)	Weightlifting: You Have To Do It" "So if you are not already participating in an individual weightlifting exercise program, you must start right now. You simply have to do it.	"Consider Weightlifting" "So if you are not already participating in an individual weightlifting exercise program, why not give it a try?"
Quick et al. (2011)	"Organ donation is an important issue facing a growing number of citizens living in the United States. As evidenced in the paragraph above, the organ shortage is a major societal problem facing the United States. Stop the denial! Given the need for organ donors, a reasonable person would consent to be an organ donor. Becoming an organ donor is something you simply have to do. For additional information, contact the United Network for Organ Sharing at http://www.unos.org."	"The decision to be (or not to be) an organ donor is a highly personal decision. You are the only one that can decide if becoming an organ donor is right for you. We hope this message has provided you with information about the growing need for organ donors in the United States. For additional information, contact the United Network for Organ Sharing at http://www.unos.org. Deciding which organs to donate and whether to be a donor is your choice."

Table 1 provides a brief list of examples for how researchers have operationalized HCL vs. LCL. HCL tends to be reactance inducing as they are marked by the use of directive language and imperatives such as "should" and "must" that provide clear and unambiguous instructions regrading how receivers are expected to act. LCL tends to avoid reactance and is marked by the use of suggestive (rather than directive) language and qualifiers such as "perhaps" and "maybe," which may leave the receiver less clear about how they are expected to act

Typically, HCL messages are well intentioned; however, because they lack subtlety and are likely to be direct rather than suggestive, they often trigger reactance. These messages also tend to be proscriptive and restricting, they are often perceived as manipulative, and tend to elicit strong negative emotions such as anger or resentment (Shen and Coles 2015). The aim of these types of messages is to motivate action toward positive behaviors or spurn negative behaviors and whereas the intensity and tone of these messages will often draw sufficient attention, they often fail to make the intended impact. Health (e.g., exercise; Miller et al. 2007) and pro-social (e.g., recycling; Bessarabova et al. 2013) messages in particular, often pose as directives, which make them especially prone to reactant responses from an intended audience.

Although HCL messages often are met with resistance, they may prove their worth under the right conditions. It is important to note that mass communicated messages are not afforded the latitude of being misunderstood the way an interpersonal communication might be afforded. For instance, one can easily clarify one's position in a face to face interpersonal setting by simply restating or rephrasing the message if there

is confusion, whereas clarifying one's position stemming from a mass media campaign is not so simple; thus the need to be clear, direct, and urgent is essential for mass communicated messages, as you may only get one opportunity to get your point across. The potential utility of HCL messages will be discussed in due time, but first we examine LCL, the contraposition of HCL.

LCL. Where HCL is explicit, direct, and forceful, LCL is implicit, indirect, and polite (Grice 1975). A major distinction between HCL and LCL is that the former uses imperatives such as "must" and "should," whereas the latter uses qualifiers such as "perhaps consider" and "maybe," which are used to make suggestions in a manner that is non-abrasive and cognizant of the freedom of the receiver to make one's own choices. Because LCL is a non-directive communication approach, threat and persuasive intent are unlikely to be detected and thus less likely to arouse reactance (Miller et al. 2007).

We would be remiss if this discussion failed to highlight the distinction that should be made between "low controlling" and an "autonomy supportive" language, which have been used interchangeably in past research (e.g., Miller et al. 2007). LCL

can be used in autonomy supportive messages; however, it is in our view that an autonomy supportive message, one that emphasizes self-initiation and choice (Vansteenkiste et al. 2006), is not synonymous with LCL. One can envision a message that is autonomy supportive, by way of featuring a highly motivating reminder of one's autonomy and freedom, yet also quite direct and explicit (e.g., "When it comes to your health, you're ultimately responsible; however, you really should quit smoking, there is really no reason for you to continue doing so"). Further research could benefit from examining the differential effectiveness of autonomy supportive messages that use LCL versus HCL.

Finally, it should be noted that there are costs and benefits associated with both HCL and LCL approaches. The next section will explicate these costs and benefits, as well as introduce message strategies that have identified the utility of and argued for the expediency of HCL in mass communicated messages.

HCL: A Case for Directives?

Although it was stated that using HCL in a persuasive appeal is likely to induce reactance, whereas LCL is the wiser approach for avoiding reactance, the simple dichotomy between HCL and LCL does not paint the entire picture when it comes to overall message effectiveness. It is true that if the only mission of the message designer is to avoid inducing reactance, then certainly one could avoid using HCL altogether. However, when the ultimate goal is to effectively communicate an important message in an efficient and clear manner, one must decipher if and under which conditions HCL is preferable to LCL.

Pros and Cons of LCL and HCL

The primary benefit of using LCL is that receivers are less likely to feel threatened and thus less likely to react unfavorably toward a message and its source (e.g., Burgoon et al. 2002). A LCL approach may in fact prove effective for a message targeted at a particularly reactant population such as adolescents and teens (e.g., Miller and Quick 2010). LCL, being non-directive by nature, may help conceal the persuasive intent of a given message. However, the use of qualifiers can obfuscate the main points of a persuasive message, leading receivers to perceive the appeals as vague, ambiguous, and imprecise; further, LCL messages may leave room for alternative interpretations as to the source's intent (Grice 1975). A lack of clarity could prove to be costly when the topic of the message is an important health related behavior such as adherence to a diabetes maintenance routine. Given that many persuasion attempts occur in mediated contexts or between participants lacking a close relationship to the source of the message, the need for clarity and efficiency is often urgent (Shen 2015). Finally, LCL is less effective than HCL at

increasing arousal in receivers, thus making LCL less likely to motivate action compared to HCL (Buller et al. 1998).

HCL, on the other hand, is direct and straightforward. It is unambiguous and easy to comprehend. HCL can stimulate behavior change (Buller et al. 2000), enhance persuasion (Burgoon et al. 1975), and promote information seeking behavior (Leshner et al. 2008), all of which can make for a more impactful message. In fact, research has shown that in some cases, direct and aggressive messages are preferable; especially in clinical settings where they can help lead to increased patient compliance (e.g., Dowd et al. 1992).

Unfortunately, the risk of using HCL language is the increased likelihood of impinging on receivers' perceived autonomy and ability to make their own decisions (Burgoon et al. 2002). When autonomy is compromised, receivers may perceive their sense of freedom as threatened, which could result in reactance and message rejection. If using a HCL approach, one must consider strategies to increase the chances that reactance is mitigated.

Capitalizing on HCL

Although the use of HCL is not without risk, researchers have undertaken the task of developing strategies designed to maximize the virtues of HCL (e.g., clarity) while simultaneously mitigating the negative aspects of its use (i.e., perceived threat) in a focused and systematic way. The impetus for the review of these strategies was based on Burgoon and colleagues' (2002) call for researchers interested in mass mediated communications need to pay attention to reactance. Our examination began with a PsycINFO search of PRT literature reviews (e.g., Quick et al. 2013; Rosenberg and Siegel 2018), after which we narrowed our focus to message features that have been found to mitigate reactance. The criteria for inclusion in this particular section of the review was based on the following: a) the studies utilized a mass communicated form of messaging (e.g., text based advertisements [in laboratory based experimental settings]), and b) the studies utilized strategies designed to mitigate the reactance stemming from HCL; the selected strategies either explicitly stated the positive aspects of HCL and aim to develop a technique or feature to minimize reactance or the strategy seamlessly lends itself to incorporating directives within an appeal to positive effect. Here we review these strategies which include restoration postscripts, narratives, other-referencing, overheard communication, and inoculation (see Table 2 for examples, descriptions, rationale, operationalizations, and outcomes for each strategy).

Restoration Postscripts Miller et al. (2007) examined the effectiveness of short postscripts provided at the end of promotional exercise messages reminding receivers of their freedom to make their own choices (e.g., "Obviously, you can make your own decisions. The choice is yours") as a device to

Table 2   Summary of reactance reducing strategies

Strategy Description and Rationale	Example of Operationalization	Outcomes
Restoration Postscripts Short "tag line" statements presented after a persuasive appeal designed to remind the receiver that they are ultimately free to decide how to act or not act. By presenting receivers with an alternative to restoring their threatened freedom, they are less likely to use other less productive means of restoration such as direct restoration (i.e., engaging in the threatened behavior) or source derogation	*Text based ad:* You've probably heard a lot of messages telling you to exercise for good health. You've probably even heard messages similar to this one telling you how important physical activity is. Of course, you don't have to listen to any of these messages. You know what is best for yourself. Some people decide to exercise. Some people decide not to exercise. Everybody is different. We all make our own decisions and act as we choose to act. Obviously, you make your own decisions too. The choice is yours. You're free to decide for yourself. (Miller et al. 2007)	Compared to a control (filler postscript), restoration postscripts presented after a persuasive appeal have been found to reduce perceived threat and other indicators of reactance (Bessarabova et al. 2013; Bessarabova et al. 2017; Miller et al. 2007)
Narratives "Key components of narratives include cause and effect, sequential unfolding of events, connectivity among story elements, and the presence of one or more characters" (Gardner and Leshner 2016, p. 739; Green and Brock 2000) Involvement with characters and immersing in the story line helps conceal the persuasive intent of an appeal	*Text based ad:* "Diabetes may keep me from some things, but missing her wedding day was out of the question. Anna, my daughter, told me, 'You simply don't have a choice. You have to be more active and eat better so that you can be there to walk me down the aisle…'" (Gardner and Leshner 2016)	Dramatic television narratives, compared to non-narratives, have been found to reduce reactance Moyer-Gusé and Nabi 2010) Attachment of explicit epilogues following presentation of a dramatic television program helped clarify the main points of the message without inciting reactance (Moyer-Guse et al. 2012) Narratives (compared to non-narratives) led to lower perceived threat, less reactance, and greater intentions to comply (Gardner and Leshner 2016)
Inoculation Messages that forewarn receivers of the potential of their experiencing reactance toward a subsequent persuasive appeal. By warning receivers that they may experience reactance and that they actually have no need to feel that way, inoculation prevents reactance from clouding the receivers' evaluation of subsequent appeals.	*Text based ad:* "You are about to read information from the [name of university] Health Center that has to do with alcohol use among college students. After reading through the information, you might feel that your freedom to choose how you will consume alcohol is being threatened. However, the facts about binge drinking that are reported are pretty powerful when you think about them, and the suggestions that are proposed about drinking responsibly actually make a lot of sense in light of what is known about alcohol consumption among college students." (Richards and Banas 2015)	Inoculation messages compared to a filler non-inoculative message, were found to reduce perceived threat and reactance toward subsequent messages (Richards and Banas 2015) Richards et al. (2017) failed to replicate their 2015 finding and found that successful inoculation may depend on the level of threat in the forewarning (e.g., limited versus elaborated inoculation.)
Other-Referencing Messages that emphasize how an individual's choices and actions impact others, especially close others (e.g., friends and family) Other-referencing shifts the attention from the self onto others, helping conceal persuasive intent and avoid triggering of threat.	*Text based ad:* "Any reasonable person would agree that getting regular exercise is a smart idea–not just for you, but for your family…" (Gardner and Leshner 2016)	Other-referencing, compared to self-referencing was found to reduce threat and reactance (Gardner and Leshner 2016)
Overheard Communication Messages that on the surface address one audience, but are really targeted at a different audience who may be listening By indirectly addressing an intended audience (e.g., at risk youths) by ostensibly targeting another audience (e.g., parents), persuasive intent is less obvious as the message is "overheard," ultimately decreasing resistance and increasing persuasion	*Video ad:* "Parents, do you have a young teen at home?... (indirect message) compared to "Are you a 6th, 7th, or 8th grader?..." (direct message target) (Crano et al. 2007)	Participants classified as inhalant users and vulnerable non-users, evaluated indirect messages (aimed at parents) more favorably than direct messages (aimed at the participants; Crano et al. 2007)

Brief descriptions of each reactance reducing strategy along with the rationale or justifications for their effectiveness are provided. If the selected study included examples of their strategy, an example of their operationalization is also provided. Finally, the major outcomes of each study are noted

restore any lost sense of autonomy or self-determination felt by receivers. Their rationale behind the use of restoration postscripts was based on the notion that once reactance is experienced, restoration of freedom will manifest in one way or another; thus rather than allowing it to occur in an ill-fated capacity (e.g., direct or boomerang, source derogation), perhaps freedom could be restored through a more productive mechanism, that being the simple suggestion that the choice to act ultimately lies with the message target. Their findings supported their hypotheses such that the postscripts were successful at attenuating perceived threat as well as other indicators of reactance (e.g., anger). Miller et al.'s (2007) findings were later supported by Bessarabova and colleagues (Bessarabova et al. 2013; Bessarabova et al. 2017) in that postscripts were again effective at alleviating reactance, increasing positive attitudes, and increasing behavioral intentions after exposure to pro-recycling messages.

Narratives The use of narratives to deliver important prosocial messages is another technique that has exhibited positive outcomes in the quest to reduce resistance to persuasion (see Quick et al. 2013). Moyer-Gusé (2008) argued that the narrative structure of entertainment-education storylines engages viewers and allows them to become involved with the characters in the story through the process of transportation. Transportation has been defined as "a convergent process, where all mental systems and capacities become focused on events occurring in the narrative" (Green and Brock 2000, p. 701). Involvement with the characters, perceived similarity with the characters, and liking of the characters are other processes that enhance the effectiveness of a narrative (Moyer-Gusé 2008). Essentially, entertainment-education, specifically the narrative structure of the underlying message, is a subtler form of persuasion compared to other overt types of persuasive messages, thus the narrative structure works to obfuscate persuasive intent and may in turn mitigate the likelihood of reactance from occurring.

Perhaps the greatest benefit to using narratives is that they conceal persuasive intent. However, given the lack of a direct line of communication to the receiver in narratives, there is the chance that the underlying message is overlooked or misinterpreted. Researchers have identified strategies to bolster the effects of narratives and ensure that messages are not misunderstood. Moyer-Guse and colleagues investigated the use of explicit persuasive appeals (epilogues) following a dramatic television program stressing the dangers of drinking and driving (Moyer-Guse et al. 2012). On the one hand, epilogues could undermine the subtle approach of the narrative and thus highlight the presence of the persuasive intent, on the other hand the inclusion of the epilogue could also help overcome any limitation of the narrative by clarifying the underlying message. Ultimately, the epilogues did not increase perceptions of persuasive intent nor reactance, and helped bolster the effectiveness of the narrative.

Similarly, Gardner and Leshner (2016) investigated the positive impact that forceful directives can have on health based messages, as they are clearer and easier to understand than non-directive messages, and found support for the idea that forceful directives can be combined with narratives to work on two levels—the directive language makes the message clear, while the narrative works to mitigate any negative outcomes stemming from reactance, as the line of communication is not directly from source to receiver, rather the communication is mediated through a story. To date, research supports the notion that narratives can be a useful tool for communicating persuasive messages without eliciting reactance.

Other-Referencing Rather than directly addressing shortcomings or transgressions on the part of the intended target with a persuasive appeal (e.g., failure to exercise), another approach could be to emphasize how one's action can impact close others. For instance, rather than focusing on how neglecting one's own health could have negative consequences for oneself, the focus is on how neglecting one's health could impact a family member (e.g., "when your kids, grandchildren or friends watch your food choices, what lesson are they learning"; Gardner and Leshner 2016). Other-referencing has been effective in contexts including high school students taking school seriously by reducing guilt (Bessarabova et al. 2015) and diabetes self-care by reducing reactance (Gardner and Leshner 2016). The rationale and effectiveness behind this strategy is that other-referencing makes the persuasive appeal less obvious by shifting the focus away from oneself and onto close others. With the focus off oneself, the target is less likely to feel threatened, less likely to resist, and more likely to adhere to the content of a message aided by the benefit of increased clarity stemming from the use of HCL.

Overheard Communication Another approach to obfuscating persuasive intent is to utilize a modified take on the classic overheard communication research conducted by Walster and Festinger (1962). Crano et al. (2007) used such an approach to appeal to the target of a persuasive message (anti-inhalant use to middle school students) by ostensibly addressing parents rather than the students directly (e.g., "parents, do you have a young teen at home?"), which resulted in more favorable message evaluations. Similar to other-referencing, when the target of a message perceives that the focus of the appeal is shifted to others, persuasive intent is less obvious and the likelihood of perceived threat is in turn, reduced. This should result in a situation, where the intended target is more likely to listen to a message with one's guard down so to speak, allowing the information to get through unencumbered.

Inoculation Recent research has begun to explore the use of inoculation as a strategy to prevent the occurrence of reactance (Richards and Banas 2015; Richards et al. 2017). Richards and

Banas ([2015]) attempted to turn the inoculation paradigm on its head so to speak, as researchers typically employ inoculation to *decrease* the effect of any subsequent persuasive appeal (McGuire and Papageorgis [1961]), whereas Richards and Banas attempted to use inoculation to *increase* the persuasiveness of a subsequent appeal. Inoculation messages were created to forewarn the audience of their potential experience of reactance with the goal of reducing the likelihood that they would generate cognitions that would otherwise lead to negative outcomes. Thus the strategy was to provide participants with a reactance-inoculating pre-message so it would be less likely that evaluations of a subsequent message would be clouded by their own reactance.

The two requites for successful inoculation are to first forewarn the audience about the threat of their own self-generated reactance rather than the threat from the subsequent message itself; and second, audience members must receive refutational preemption suggesting they have no reason to succumb to any feelings related to reactance (e.g., "after reading through the information, you might feel that your freedom to choose how you will consume alcohol is being threatened. However, the facts… are pretty powerful when you think about them"). Richards and Banas' notion about the positive effects of inoculation proved successful as participants exposed to an inoculation message were less likely to experience reactance after reading a message aimed at reducing excessive alcohol use compared to participants who received a non-inoculating control. They concluded that inoculation could possibly be superior to freedom-restoring strategies (e.g., post-scripts) as the latter strategy requires a freedom to first be threatened for it to be restored, whereas inoculation could prevent the occurrence of reactance altogether.

Later findings by Richards et al. ([2017]) extended the basis of their inoculation approach by highlighting a potential boundary condition. In one study, they found that an elaborated inoculation message increased reactant responses to a subsequent excessive alcohol use message compared to a control group. In a second related study, they found that a limited inoculation strategy (less detailed) reduced reactant responses to a subsequent message aimed at reducing soft-drink consumption compared to a control; however, only when the message used LCL language. Essentially, their findings suggest that inoculation against reactance to persuasive messages is dependent on the level of threat expressed in the inoculating forewarning; in other words, the more detailed and extensive the level of threat communicated in an inoculation forewarning, the less effective it may actually be at reducing reactance to a subsequent appeal. Thus it appears that less detailed or limited inoculation forewarnings might offer better results at successfully mitigating reactance compared to more detailed and elaborated ones. Given the early stages of this research, more studies are needed to determine the extent to which inoculation offers a viable reactance mitigating strategy.

Summary of Strategies Using HCL

Each strategy discussed in this section has on some level attempted to benefit from the use of HCL while simultaneously avoiding reactance. There is some evidence that these strategies can be effective, yet these strategies are not without their own respective shortcomings. One could argue against the practicality of, or need for, restoration postscripts, given that one must first elicit reactance before it can be mollified. Narratives and other-referencing show promise as strategies to negate reactance; however, they are by nature indirect forms of communication, and although HCL can be used in a narrative, ultimately the communication is not streamlined to the receiver, which could result in miscommunication. The use of epilogues was found to alleviate such concerns (Moyer-Guse et al. [2012]); however, one could question whether the use of epilogues neutralizes some of the persuasive impact the narrative could have. Inoculation appears to be in its infancy phase as a reactance reducing strategy and much is yet to be discovered regarding the efficacy of such an approach. At this stage, researchers have recognized the positive function that HCL has to offer and have commenced developing strategies that utilize its strengths while placating its deficiencies, which is promising.

Leveraging Reactance

Finally, our discussion turns to the idea that the power of reactance potentially can be utilized to one's advantage. Since the inception of PRT, reactance, with good reason, has been consistently cast in a negative light as something to be avoided. Communication and social influence researchers have been preoccupied with discovering factors that induce reactance and developing strategies to negate its occurrence. However, reactance may yield significant power for message designers if leveraged correctly. In fact, tobacco companies appear to have figured out how to weaponize people's own reactance against themselves. For instance, Phillip Morris' "Think. Don't Smoke" campaign, which was on the surface aimed at abating tobacco use among teens, has actually rendered favorable attitudes toward the tobacco industry and promoted greater intentions of smoking uptake (Farrelly et al. [2002]). By using ostensibly controlling directives in their "anti-tobacco" campaigns (paradoxically against themselves), and omitting any mention of actual reasons to avoid smoking (e.g., causes cancer), tobacco companies such as Phillip Morris and Lorillard (e.g., "tobacco is whacko, if you're a teen" campaign) have fooled adolescents into embracing the idea of tobacco use.

To assess how adolescents respond to anti-smoking prevention ads, Henrickson and colleagues designed a randomly controlled experiment in which participants were exposed to

either smoking prevention ads sponsored by the tobacco industry, smoking prevention ads sponsored by a non-profit organization (the American Legacy Foundation), or ads about preventing drunk driving (control) and asked to report on their perceptions of ad effectiveness, intentions to smoke, and attitudes toward tobacco companies. They found that the tobacco company sponsored ads were rated as less effective at curbing smoking than the other ads (which ironically is what the tobacco funded ads would want) and engendered more sympathy toward tobacco companies (e.g., "cigarette companies get too much blame for young people smoking"; Henriksen et al. 2006). The tobacco companies were successful on two fronts: They produced ads that elicited reactance against "anti-smoking" sentiment due to their restrictive and authoritative (i.e., threatening) content, while simultaneously engendered sympathy from the audience; as reactance (e.g., unfavorable attitudes toward anti-smoking ads) also manifested in positive attribution of those who hold "pro-smoking" attitudes. In other words, by purposefully getting the audience to reject the command to avoid smoking, smoking became more appealing, and in turn attitudes toward tobacco companies (i.e., those who provide the product) became more favorable.

Given the success of tobacco companies at utilizing reactance to their advantage, there have been anti-tobacco campaigns that have successfully used reactance for good use, including the "truth" campaign whose strategy was to expose the manipulative intent and deceptive nature of the tobacco industry, rather than informing adolescents of the reasons they shouldn't smoke (Bauer et al. 2000). Essentially the "truth" campaign played on the notion that adolescents are unlikely to passively accept being manipulated, thus exposing the tobacco industry's true motives was a novel and effective way to market anti-tobacco ads. In a similar vein, Quick and colleagues posited that arousing anger (an element of reactance) by emphasizing how second hand smoke presents a violation to the right to breathable air, people could be motivated to support clean air initiatives (Quick et al. 2009).

Media literacy interventions that highlight the strategies used by advertising agents to attract consumers could prove effective in a variety of both health and non-health related contexts (Friestad and Wright 1994). One such intervention structured an anti-alcohol program aimed at developing strategies for coping techniques used in alcohol advertisements that make drinking look cool and more pervasive than it actually is; the intervention was designed to encourage reactance among students by teaching them the tricks that advertisers use to restrict their freedom to choose whether or not to drink (Goldberg et al. 2006). Students in the intervention program reported greater understanding of the persuasive techniques used by the advertisers, developed more critical attitudes toward the ads and the companies funding them, and reported greater intentions to avoid drinking than students in a control condition.

Reactance also may contribute as an additive resistance booster when used in conjunction with forewarning messages. Extensive research has demonstrated that when people are forewarned of their exposure to a counter-attitudinal persuasive communication, they are likely to boost their cognitive defenses to combat the impending information (Wood and Quinn 2003). However, adding a little edge to forewarning messages by bolstering them with more freedom threatening language could enhance their effect. Miller and colleagues exposed participants to counter-attitudinal messages based on their positions on one of four topics (legalization of marijuana, government restriction of violent television programming, government ban of fire arms, or legalization of gambling) and found that compared to a "classic inoculation condition" and a "control condition," a "forewarning message bolstered by reactance" including phrases that emphasized the impending message's attempt to restrict freedom (e.g., "the message *may threaten your very freedom to hold…*") enhanced key resistance outcomes such as negative cognitions, negative affect, and source derogation (Miller et al. 2013). This type of forewarning could potentially be incorporated into advertisements similar to the aforementioned truth campaign that highlights manipulative intent or into media literacy interventions. Ultimately, social influence researchers interested in promoting pro-social and healthy behaviors could benefit immensely from leveraging reactance in their favor by highlighting the manipulative intent of less scrupulous and manipulative agencies (e.g., the tobacco industry).

Conclusion

PRT (Brehm 1966) has been around for the better part of a half century. The theory has helped guide persuasion research in a variety of fields and disciplines interested in why messages are rejected and ultimately fail. While early research was more focused on face-to-face, dyadic forms of communications, Burgoon and colleagues (2002) called for researchers to pay closer attention to mass mediated forms of communication as well as the structure and features of persuasive messages that either facilitate or inhibit reactance. Since then, researchers have identified various factors that affect how receivers attend to persuasive messages. A major point of emphasis in this review has surrounded the costs and benefits of using LCL and HCL. LCL is less likely to elicit reactance, but also less likely to garner attention and generate impact, whereas HCL is likely to work in the opposite fashion; however, researchers have recognized the utility of HCL and have thus begun developing strategies to harness its powers (e.g., efficiency) while negating its deficiencies (e.g., threatening). Future research should continue down this line of inquiry, as impersonal, mass mediated forms of communication represents a difficult challenge for getting important messages across. The

ability to use directives that cut through the clutter and straight to a clear point without inducing reactance could prove invaluable to social influence and persuasion scholars.

With continued emphasis on the virtues of directives and the development of strategies to cover for their weaknesses (e.g., reactance), scholars can eventually influence wide reaching, real world media campaigns that extend beyond the laboratory. The ultimate objective of persuasive communication is to have a targeted audience accept a message. Understanding how reactance operates and figuring out how it can be controlled (i.e., reactance reducing strategies) or manipulated for benefit (i.e., leveraging) should help influence agents maximize their ability to construct more effective messages.

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