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# Syllabus Sanctions: Controlling Language and Fairness as Antecedents to Students' Psychological Reactance and Intent to Comply

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## ABSTRACT



Psychological reactance theory (PRT) has helped explain students' resistant behavior. Additionally, several studies have explored resistant student behaviors as a product of an instructor's syllabus policies. To build upon this line of research, a 2 × 2 experiment was conducted manipulating controlling language (low, high) and fairness (fair, unfair) within a syllabus policy. To increase external validity, the page on which the policy was located was drawn from an actual communication course. Controlling language and fairness had an interactive effect on perceived threat to freedom, reactance, and intent to comply. Specifically, freedom threat and reactance were lower and intent to comply was greater when the policy was fair and used low controlling language than when the policy was unfair and/or used high controlling language. The effect of freedom threat on intent to comply was mediated by reactance.

## KEYWORDS

Syllabus; psychological reactance; fairness; resistance; controlling language; compliance

As a communicative document (Thompson, 2007), the syllabus welcomes students (Parkes & Harris, 2002), provides initial impressions about the instructor (Smith & Razzouk, 1993), and specifies information about the course (Habaneck, 2005). Singham (2005) argued that the syllabus signifies an agreement between instructors and students that adds rules to the classroom. Consequently, researchers have explored effects of syllabus policies that persuade students to comply with instructors' expectations (Finn & Ledbetter, 2013, 2014; Lancaster, 2018; Lancaster & Goodboy, 2015; Moore & Richards, 2019; Tatum et al., 2018).

However, many instructors would agree that some students have a difficult time following classroom rules; communication researchers have investigated this claim under guises such as student misbehaviors (Johnson et al., 2019), instructional dissent (Goodboy, 2011), and resistance (Burroughs, 2007). This work collectively suggests that attempts to gain compliance may fail, and students react accordingly. Students may feel that controlling or discouraging policies threaten their autonomy, an idea supported by psychological reactance theory (PRT; Brehm, 1966; Brehm & Brehm, 1981). PRT posits that when receivers perceive a persuasive message to threaten their autonomy, they experience a reactive state (i.e., reactance), which then drives them to restore that autonomy. Thus, PRT may be an

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appropriate theory for understanding students' confusing, spirited resistance to instructors' compliance-inducing syllabus policies.

Several studies have investigated factors inciting reactance and students' ensuing compliance (e.g., Miller et al., 2007), yet little research has framed this process through an instructor's specific syllabus policies. When an instructor sets rules for students in a syllabus, students are confined to those expectations for the length of the course with possible consequences if they are not met. It may be that students' reactance and compliance with such policies are related to a) the way the instructor presents policies and b) their justification for the policy (Brehm, 1966; Zhang & Sapp, 2013). In other words, the type of language used, along with students' perception of the policy's fairness (e.g., whether the justification for the policy is appropriate or inappropriate; Sittenthaler et al., 2015), could serve as factors motivating reactance and freedom restoration behavior. Language has been extensively examined within PRT literature (see Rosenberg & Siegel, 2018), and perceptions of fairness are commonly included within instructional communication research (Chory & Goodboy, 2010), yet neither concept has received extensive attention as a feature of an instructor's syllabus.

This study (1) explores students' perceptions of classroom syllabus policies and (2) applies PRT in the instructional context to better understand student resistance to those policies. Specifically, the study investigates the influence of controlling language and fairness on students' perceived threat to freedom, psychological reactance, and intent to comply.

## Psychological Reactance Theory

Psychological Reactance Theory (Brehm, 1966; Brehm & Brehm, 1981) helps explain why persuasive messages sometimes fail. Essentially, individuals value the ability to choose freely among alternatives (Quick & Kim, 2009). When a persuasive message advocates for specific attitudes or behaviors, one's ability to explore alternatives becomes threatened (Burgoon et al., 2002). When receivers perceive their freedom to be threatened, they experience reactance, defined as "the motivational state that is hypothesized to occur when a freedom is eliminated or threatened with elimination" (Brehm & Brehm, 1981, p. 37). Although the nature of reactance and its measurement have remained the subject of debate (see Ratcliff, 2019), reactance in the communication discipline is generally operationalized as a combination of anger and negative cognitions (Dillard & Shen, 2005; Quick, 2012; Quick & Stephenson, 2007; Rains, 2013). Reactance motivates individuals to reestablish threatened or eliminated freedoms. This occurs through direct or indirect freedom restoration behaviors (Brehm, 1966). Direct restoration includes strategies like the outright rejection of a message, adoption of a restricted behavior, or the formation of attitudes in opposition to the advocated message (i.e., boomerang effect; Heller et al., 1973). Indirect restoration includes acting hostile toward the message source (Burgoon et al., 2002), engaging in behavior like the one that was threatened (Miller et al., 2007), or having another person enact the threatened behavior. Despite a body of evidence supporting PRT in an instructional setting, researchers can enhance the generalizability of this research by evaluating student adherence to an instructor's request when it is outlined in an actual syllabus policy.

The instructional communication work concerning PRT has thus far concentrated on requests requiring extra effort by students outside the classroom (e.g., completing an extra assignment: Ball & Goodboy, 2014; presenting evidence for the legitimacy of an excused absence: Zhang & Sapp, 2013). Tatum et al. (2018) specifically explored students' reactive responses and behavioral intentions stemming from recollections of syllabus policies, yet they acknowledge that PRT research could benefit from manipulations of instructor messages in more ecologically valid contexts. For example, PRT researchers across other contexts routinely use manipulated messages to assess participants' responses in more naturalistic conditions (for examples, see Clayton et al., 2019; Reynolds-Tylus et al., 2019; Youn & Kim, 2019). Furthermore, this line of research is subsumed within a larger trend by communication researchers to examine the specific message features that elicit psychological reactance (Quick & Stephenson, 2008). This has resulted in work focusing on various antecedents to PRT, including color cues (Armstrong et al., 2019), controlling language (Quick & Kim, 2009), and the extent to which recipients have input (i.e., voice) over regulatory conditions (Olison & Roloff, 2012).

With this in mind, it becomes clear that there is a gap in knowledge concerning how the message characteristics of classroom syllabi influence students' responses and subsequent behavior. This study attempts to partially fill this void by focusing on two potential antecedents to reactance in the classroom: *controlling language* and *fairness*. Although instructor message framing through control and fairness has been linked to compliance elsewhere (Chory-Assad & Paulsel, 2004), this research seeks to add to the understanding of reactance and subsequent outcomes in a classroom setting by experimentally manipulating the two message features.

## Controlling Language

As stated, communication researchers have identified a host of reactance-inducing message characteristics. Notably, much of the attention surrounding message features and PRT has focused on controlling language. As articulated by Quick and Kim (2009), controlling language "is characterized by forceful language that explicitly pressures or attempts to control audiences into message conformity" (p. 767). High controlling language is explicit, direct, and powerful ("should," "must," "required"; Miller et al., 2007). In contrast, low-controlling language – often labeled autonomy-supportive language (Rosenberg & Siegel, 2018) – tends to indicate choice, indirectness, or increased politeness ("consider," "try," "perhaps"; Miller et al., 2007). Results across several studies and contexts support the claim that controlling language stimulates greater perceptions of threat to freedom, stronger reactance, and decreased likelihood of adopting an advocated behavior (Bensley & Wu, 1991; Crano et al., 2017; Dillard & Shen, 2005; Grandpre et al., 2003; Zemack-Rugar et al., 2017).

Several studies have examined controlling language in an instructional setting. For instance, Zhang and Sapp (2013) manipulated politeness and teacher-student relationship distance in a request for a student to suspend extracurricular activities to focus primarily on academics. The politeness manipulation mirrored existing PRT approaches by using direct imperatives (high-controlling language) and indirect questions (low-controlling language) as part of the instructor's request. Results revealed that high-controlling messages were perceived as threatening to freedom and induced

greater reactance. In this context, they concluded that “direct, forceful, and illegitimate requests trigger reactance and resistance” (p. 19). Furthermore, Ball and Goodboy (2014) assessed the extent that controlling language influenced perceived threat in response to an instructor requesting a student complete extra work not outlined in the syllabus. As expected, they found that more forceful (i.e., controlling) language led students to report greater perceived threat to freedom. In fact, these researchers encouraged instructors to avoid using controlling language altogether when making requests in the classroom. In light of these studies, as well as the wealth of research examining the role of controlling language in the reactance process, the following hypotheses were forwarded:

**H1a-c:** Instructor syllabus policies with greater controlling language will produce a) increased threat to freedom, b) increased reactance, and c) decreased intent to comply than syllabus policies with less controlling language.

## Fairness

In addition to controlling language, research reveals that students’ cognitive, emotional, and behavioral responses to persuasive messages are influenced by their perceptions of the message’s fairness (Horan et al., 2012). Fairness has been studied in PRT research under various lenses, such as legitimacy and justification (e.g., Sittenthaler et al., 2015), and is foundational to research concerning classroom justice (Chory-Assad, 2002; Chory-Assad & Paulsel, 2004). Within the justice framework, fairness largely depends on an individual’s comparison of the rewards they receive for their contributions to some other standard (e.g., “their own or others’ expectations, needs, or societal norms” Chory-Assad, 2002, p. 59).

Concerns about fairness are salient across three different dimensions: distributive justice, procedural justice, and interactional justice (Chory-Assad, 2002). *Distributive* justice involves fairness perceptions of outcomes or allotments (i.e., grades), whereas *procedural* justice stems from the fairness perceptions of the processes determining those outcomes or allotments. *Interactional* justice relates to fairness regarding the relational treatment a student receives from the instructor, peers, or the whole class.

Notably, reactions to syllabus policies may be primarily a function of procedural and distributive justice. As the syllabus aids in understanding classroom rules and regulations (Singham, 2005), procedural and distributive justice principally deal with processes used to assign or allocate outcomes (e.g., grading procedures) and the value of those outcomes (e.g., actual grade or punishment for lack of compliance; Chory et al., 2017), respectively. Interactional justice might reasonably be influenced through policies if students feel the instructor is being offensive or treating individual students differently, yet the standardized language used across many university syllabi suggest this may be more reflective of the instructor’s enforcement of a policy rather than the actual policy language.

Despite limited research explicitly examining the influence of fairness on PRT processes, students should experience greater reactance when faced with an unfair policy compared to a fair policy. For example, Miller et al. (2007) reported that perceptions of message fairness were strongly, inversely related to perceptions of perceived threat. Zhang and Sapp (2013) also concluded that legitimate requests (i.e., *just*) from instructors

resulted in less psychological reactance than illegitimate (i.e., *unjust*; see Tyler, 2006) requests. Additional evidence for this claim comes from research in classroom settings, where fairness has already been linked to students' cognitive and emotional reactions. Students have reported feeling angry (Horan et al., 2010), hurt, and displeased (Chory et al., 2014) following violations of classroom fairness. Instructor messages are clearly related to student emotional reactions, and students might also experience a variety of emotional responses following messages communicated in the syllabus (Horan et al., 2012). Beyond affective responses, unfair messages can lead to increased negative cognitions in the form derogation of the message source (i.e., the instructor) (Chory, 2007; Tata, 1999). Thus, it seems clear that students will react negatively to unfair policies in the classroom.

Indeed, much of the extant justice research is concerned with the relationship between fairness and resistance behavior. Chory and Goodboy (2010) argued that “perceptions of classroom justice also seem to dictate student resistance” (p. 190).

Research suggests that decreases in procedural and distributive justice lead to increased intent to resist instructors through aggression, deception, or hostility (Chory-Assad, 2002; Chory-Assad & Paulsel, 2004; Horan et al., 2013). Unfair policies and grading practices can also trigger instructional dissent, a tactic students use to restore lost freedoms (Ball & Goodboy, 2014; Tatum et al., 2018). Collectively, the PRT and classroom literature implies that unfair policies will lead to heightened threat to freedom, increased reactance, and a stronger desire to reestablish autonomy through freedom restoration behavior. To evaluate this claim, the following hypotheses are proposed:

**H2a-c:** Instructor syllabus policies perceived as unfair will produce a) increased threat to freedom, b) increased reactance, and c) decreased intent to comply than syllabus policies perceived as fair.

### **Reactance as a Mediator**

Implicit in the above rationale is the notion that reactance mediates the effect of freedom threat on intent to comply within a classroom context. That is, increases in perceived threat – due to unfairness, controlling language, or both – should increase reactance which, in turn, should motivate people to attempt to restore their threatened freedom, resulting in lower intentions to comply with the message. Several studies within the instructional literature support this claim. Ball and Goodboy (2014) and Zhang and Sapp (2013) found that psychological reactance mediated the relationship between perceived threat and dissent, challenge behavior, and resistance. Mirick (2016) reiterated this idea by citing the possibility for decreased intent to comply following reactance, arguing that “instructor communication around assignments, class policies, or requirements may trigger reactance and therefore, classroom incivility, dissent, or resistance” (p. 222). Moreover, Tatum et al. (2018) also found that messages framed to discourage the use of technology indirectly influenced intent to comply and instructional dissent through both perceived threat and reactance. These studies present clear empirical evidence for the function of reactance as a mediator between freedom threat

and student compliance in a classroom setting. Expecting to replicate these findings, we predicted that:

**H3:** Psychological reactance will mediate the relationship between perceived freedom threat and students' intended compliance with a syllabus policy.

## Method

### *Participants*

Participants ( $N = 301$ )<sup>1</sup> included undergraduate students enrolled in communication courses at a large, Southeastern university (129 men, 42.9%; 171 women, 56.8%; 1 identified as non-binary; 0.03%). The participants' ages ranged from 18 to 44 ( $M = 18.58$ ,  $SD = 1.82$ ). Students were first-year (83.7%), sophomores (11.0%), juniors (4.70%), seniors (0.30%), and nontraditional (0.30%). They reported their ethnicity as White/Caucasian (85.0%), African-American (5.0%), Asian (4.3%), Hispanic (2.0%), Native American (0.3%), and other (3.3%).

### *Procedures and Experimental Materials*

The IRB-approved experiment used a 2 (controlling language: low, high) x 2 (fairness: fair, unfair) factorial design. Students were recruited through a research participation system and incentivized to complete an online questionnaire through a small amount of extra credit. They were randomly assigned to read one of four manipulated syllabi which contained variations in controlling language and fairness. The policy in each condition outlined the instructor's expectations for using cell phones, laptops, and tablets in class (all policy manipulations are available to view in the online appendix: <https://osf.io/pe7vm/>). To increase external validity, the manipulated policy was placed within a sample syllabus used in a communication course at the institution from which students were recruited. The policy was written into an electronic copy of the syllabus, printed, and scanned to resemble a traditional paper syllabus. Only the page of the syllabus containing the manipulated policy was included in the survey. The survey instructed participants to read the syllabus policy, which was highlighted in yellow to focus attention. The policy was surrounded by three university-standardized policies related to excused absences, accommodations due to disabilities, and resources for military members and veterans. Considering these steps, participants were likely familiar with the format of the syllabus.

### *Controlling Language Manipulation*

Controlling language was manipulated following strategies in previous research (e.g., Ball & Goodboy, 2014; Dillard & Shen, 2005; Miller et al., 2007). The high-controlling language condition included phrases such as "you are strictly prohibited" and "you absolutely must," and the low-controlling language condition included phrases like "you should try to avoid" and "you should try your best" to emphasize choice.

### **Fairness Manipulation**

Horan et al. (2010) reasoned that manipulations of fairness “should address unfair grading practices or make-up/late work policies” (p. 471). Thus, the fairness manipulation included elements of procedural (i.e., the grading practice) and distributive (i.e., tangible punishment for failure to follow policy) justice. The fair condition allowed students to use technology in class for *educational* purposes (i.e., encouraging policy, Finn & Ledbetter, 2013) and punished students with a 1% deduction from the final course grade for each violation. In the unfair condition, the policy did not allow technology to be used for *any* purpose (i.e., for educational or social reasons; discouraging policy, Finn & Ledbetter, 2013), threatened to remove the student from class if an inappropriate device was used, and punished students with a 10% deduction from the final course grade for each violation.

### **Measures**

#### **Threat to Freedom**

Perceived threat to freedom was assessed using items adapted from Jenkins and Dragojevic (2013). Items were created according to previous operationalizations of the construct in PRT literature (e.g., “the instructor who wrote this policy talked to me as if I have no choice”). The instrument consists of eight items ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). The items were averaged to form the freedom threat scale, with higher values indicating higher perceived freedom threat ( $M = 3.26$ ;  $SD = 1.11$ ;  $\alpha = .96$ ).

#### **Psychological Reactance**

Consistent with Dillard and Shen (2005) intertwined model of reactance and previous research (e.g., Ratcliff, 2019), reactance was operationalized as a composite of anger and negative cognitions. Anger was measured using seven items adapted from McPherson et al. (2003). Specifically, students were asked to report the extent to which they felt *angry*, *annoyed*, *irritated*, *frustrated*, *distressed*, *aggravated*, and *upset* while reading the technology policy using a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). These seven items were averaged to form the anger scale, with higher values indicating more anger ( $M = 3.73$ ;  $SD = 1.59$ ;  $\alpha = .96$ ).

Negative cognitions were measured using items adapted from Tatum et al. (2018). Students were asked to indicate their agreement with four statements using a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*): “I agree with the given policy,” “I do not like the given policy,” “I think the given policy is too extreme,” and “I feel good about the given policy.” The four items were recoded such that higher values corresponded to more negative cognitions and were averaged to form the negative cognition scale ( $M = 3.30$ ;  $SD = 1.18$ ;  $\alpha = .91$ ).

Unsurprisingly, the anger and negative cognition scales were highly correlated,  $r = .75$ ,  $p < .001$ . Because the two scales used different metrics, each participant’s score on the two scales was first converted to a z-score. Then, each participant’s z-score on the two scales was summed to create a composite measure of reactance (for similar procedures, see Ball & Goodboy, 2014; Zhang & Sapp, 2013).



### Intent to Comply

Intent to comply with the policy was operationalized using an adapted version of the instrument developed by Tatum et al. (2018). This instrument has four items, with responses assessed on a 7-point Likert-type scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (7). The four items, two of which were reverse-coded, were: “I would plan to break the given policy during class,” “I would expect to abide by the given policy during class,” “I would intend to follow the given policy during class,” and “I would not try to follow the given technology policy during class.” These four items were averaged to form the intent scale, with higher values indicating higher intent to comply with the policy ( $M = 4.83$ ;  $SD = 1.37$ ;  $\alpha = .87$ ).

### Manipulation Checks

To test the effectiveness of the manipulations, participants responded to two brief instruments to ensure the independent variables were manipulated effectively. Perceptions of controlling language were assessed using Ball and Goodboy (2014) one item measure of forceful/controlling language (“this teacher uses forceful (i.e., controlling) language in his/her syllabus”) ( $M = 4.52$ ,  $SD = 1.89$ ). Responses were collected using a 7-point Likert scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (7). Fairness was operationalized using 10 items developed for this study<sup>2</sup>. Responses were collected using a 5-point Likert scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). A principal components analysis with promax rotation revealed that the new fairness measure was unidimensional and accounted for 60.48% of the total variance ( $M = 2.89$ ;  $SD = 0.87$ ;  $\alpha = .93$ ).

## Results

### Manipulation Checks

Students in the high controlling language condition perceived greater controlling language ( $M = 4.91$ ,  $SD = 1.88$ ) than students in the low controlling language condition ( $M = 4.14$ ,  $SD = 1.83$ ),  $t(299) = -3.62$ ,  $p < .001$ ,  $d = 0.42$ . Also, students in the fair condition perceived the policy as fairer ( $M = 3.29$ ,  $SD = 0.74$ ) than students in the unfair condition ( $M = 2.51$ ,  $SD = 0.82$ ),  $t(299) = 8.68$ ,  $p < .001$ ,  $d = 1.00$ . Thus, both manipulations were successful<sup>3</sup>.

**Table 1.** Effects of controlling language and fairness on dependent measures.

Variable	Controlling Language	Fairness		Significant Effects
		Fair	Unfair	
Threat to freedom	Low	2.49 (0.95)	3.56 (0.94)	L*
	High	3.27 (1.11)	3.71 (1.04)	F*
Reactance	Low	-1.53 (1.49)	.96 (1.43)	LF*
	High	-.37 (1.69)	.86 (1.70)	L*
Intent to comply	Low	5.27 (1.19)	4.83 (1.44)	F*
	High	4.55 (1.27)	4.67 (1.48)	LF**

L = main effect for controlling language, F = main effect for fairness, LF = two-way interaction; \*\*  $p < .10$ , \*  $p < .05$ .

## Focal Analyses

To test H1 and H2, data were subjected to a series of 2 (controlling language) x 2 (fairness) analyses of variance (ANOVA)s. Cell means and standard deviations appear in [Table 1](#).

### Threat to Freedom

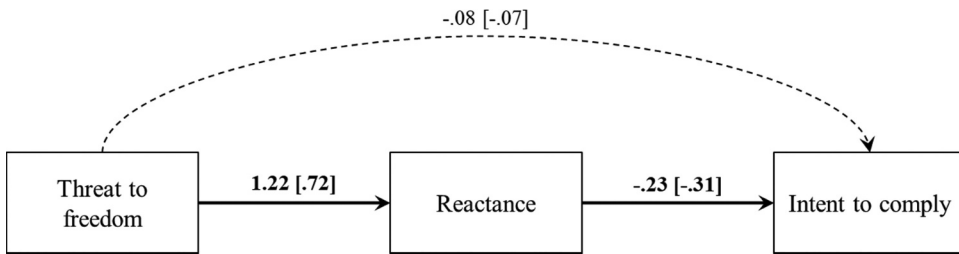
H1a predicted that policies with more controlling language would induce more threat to freedom than policies with low controlling language; H2a predicted that unfair policies would produce more freedom threat than fair policies. The analysis revealed significant main effects of controlling language,  $F(1, 301) = 16.16, p < .001, \eta_p^2 = .05$ , and fairness,  $F(1, 301) = 41.66, p < .001, \eta_p^2 = .12$ , as well as a significant interaction,  $F(1, 301) = 7.41, p < .01, \eta_p^2 = .02$ . H1a was partially supported: High controlling language produced significantly more freedom threat than low controlling language when the policy was fair, ( $M_{\text{high control}} = 3.27, SD = 1.11; M_{\text{low control}} = 2.49, SD = 0.95$ ),  $p < .001$ , but not when it was unfair, ( $M_{\text{high control}} = 3.71, SD = 1.04; M_{\text{low control}} = 3.56, SD = 0.94$ ),  $p = .35$ . H2a was fully supported: the unfair policy produced significantly more freedom threat than the fair policy in both the low controlling language condition,  $p < .001$ , and the high controlling language condition,  $p < .01$ . In sum, threat to freedom was lower in the fair/low controlling language condition than in all the other conditions ([Table 1](#)).

### Reactance

H1b predicted that policies with greater controlling language would lead to more reactance than policies with low controlling language; H2b predicted that unfair policies would produce more reactance than fair policies. The analysis revealed significant main effects of controlling language,  $F(1, 301) = 8.60, p < .01, \eta_p^2 = .03$ , and fairness,  $F(1, 301) = 104.26, p < .001, \eta_p^2 = .26$ , as well as a significant interaction,  $F(1, 301) = 11.91, p < .001, \eta_p^2 = .04$ . H1b was partially supported: High controlling language produced significantly more reactance than low controlling language when the policy was fair, ( $M_{\text{high control}} = -0.37, SD = 1.69; M_{\text{low control}} = -1.53, SD = 1.49$ ),  $p < .001$ , but not when it was unfair, ( $M_{\text{high control}} = 0.86, SD = 1.70; M_{\text{low control}} = 0.96, SD = 1.43$ ),  $p = .71$ . H2b was fully supported: The unfair policy produced significantly more reactance than the fair policy in both the low controlling language condition,  $p < .001$ , and the high controlling language condition,  $p < .001$ . In sum – and mirroring results pertaining to threat – reactance was lower in the fair/low controlling language condition than in all the other conditions ([Table 1](#)).

### Intent to Comply

H1c predicted that policies with greater controlling language would result in less intent to comply than policies with low controlling language; H2c predicted that unfair policies would result in less intent to comply than fair policies. The analysis revealed a significant main effect of controlling language,  $F(1, 301) = 8.03, p < .01, \eta_p^2 = .03$ , and a marginally significant interaction,  $F(1, 301) = 3.22, p = .07, \eta_p^2 = .01$ ; the fairness main effect was not significant,  $F(1, 301) = 1.01, p = .32, \eta_p^2 = .00$ . H1c was partially supported: High controlling language produced significantly less intent to comply than low controlling language when the policy was fair, ( $M_{\text{high control}} = 4.55, SD = 1.27; M_{\text{low control}} = 5.27, SD = 1.19$ ),  $p < .001$ , but not when it was unfair, ( $M_{\text{high control}} = 4.67, SD = 1.48; M_{\text{low control}} = 4.83, SD = 1.44$ ),  $p = .46$ . H2c was also partially supported. The unfair policy produced significantly less



**Figure 1.** Simple mediation model depicting the indirect effect of threat to freedom on intent to comply via reactance.

intent to comply than the fair policy in the low controlling language condition,  $p < .05$ , but not in the high controlling language condition,  $p = .58$ . In sum, intent to comply was higher in the fair/low controlling language condition than in all other conditions (Table 1).

### Mediation

Mediation (H3) was tested using Hayes (2018) PROCESS macro (Model 4). Perceived freedom threat was entered as the independent variable, the composite reactance measure as the mediator, and intent as the dependent variable. The analysis used 10,000 bootstrap resamples. In line with Hayes' recommendations, the indirect effect was considered significant if its 95% confidence interval (CI) did not contain 0. The resulting path model with corresponding path coefficients is displayed in Figure 1. Freedom threat predicted reactance,  $B = 1.22$ ,  $p < .001$ , which in turn predicted intent,  $B = -.23$ ,  $p < .001$ ; the direct effect of freedom threat on intent was rendered nonsignificant,  $B = -.08$ ,  $p = .38$ . Consistent with H3, the indirect effect of freedom threat on intent via reactance was significant,  $B = -.28$ , 95% CI =  $-.43, -.14$ .

Note. Significant paths are denoted by solid lines and bolded coefficients; nonsignificant paths are denoted by dotted lines. Unstandardized path coefficients are listed first, followed by standardized coefficients in brackets.

### Discussion

PRT has emerged as a useful theory for assessing resistance to persuasion. The present study builds upon this literature by examining the utility of PRT in explaining students' resistance to syllabus policies. Controlling language and fairness were examined as potential antecedents of perceived freedom threat, reactance, and intended compliance in the context of a syllabus policy about classroom technology use (for similar theoretical applications, see Lee & Cameron, 2017; Miller et al., 2007). Participants read an excerpt of a technology policy which was either fair (can use technology solely for educational purposes; 1% grade deduction for violation) or unfair (technology use in class for any reason is forbidden; 10% grade deduction for violation; possibility of removal from class) and which included either low controlling ("you should try to avoid") or high controlling ("you are strictly prohibited") language.

Message fairness and controlling language interacted to influence perceived threat to freedom. Compared to the fair policy, the unfair policy increased perceived threat to

freedom *regardless* of whether the message contained low or high controlling language, though the effect was less pronounced in the latter condition. Said differently, controlling language elevated perceived freedom threat; however, this occurred only when the policy was fair and relatively non-threatening. When the policy was unfair and already posed a threat to recipients' freedom, the addition of controlling language had no appreciable effect. One possible explanation for this unexpected finding is that our manipulation of controlling language may have been relatively weaker than our manipulation of fairness. In other words, had the controlling language manipulation been stronger (e.g., contained more extreme and/or more forceful linguistic elements), perhaps the inclusion of controlling language would have elevated threat even when the policy was unfair.

Message fairness and controlling language also interacted to influence reactance. Consistent with PRT – which posits that reactance is a function of perceived freedom threat – the pattern of results mirrored that of threat described above. Namely, reactance was higher when the policy contained high rather than low controlling language, but only if the policy was fair. If the policy was unfair, the addition of controlling language had no appreciable effects on reactance, just as it had no appreciable effects on perceived threat. Stated differently, and in line with PRT, high controlling language likely did not increase reactance in the unfair condition *because* it did not elevate perceived threat in that condition; our results pertaining to mediation (described below) support this conclusion. Collectively, it seems that the perceived fairness of regulatory syllabus policies can be added to the increasing list of strategies found to diminish reactance, while perceived unfairness appears to induce it (Quick et al., 2013; Rosenberg & Siegel, 2018).

A similar pattern emerged for intent to comply with the message. Compared to the fair policy, the unfair policy reduced intent to comply, but only when the policy contained low controlling language. High controlling language reduced intent to comply compared to low controlling language, but only when the policy was fair. In other words, the inclusion of controlling language, unfairness, or both reduced compliance to a similar extent, relative to the fair and low controlling policy. Notably, intent to comply in the fair/high controlling and unfair/high controlling conditions was equally low, even though the latter condition elicited more freedom threat and reactance than the former. This raises the possibility that, once a certain threshold level of reactance is reached (e.g., in the fair/high controlling condition), people may be sufficiently motivated to reassert their freedom (in the form of reduced intent) and that further increases in reactance (e.g., in the unfair/high controlling condition) may have little marked effect on freedom restoration behavior. However, this remains a possibility without further research that builds upon this initial evidence and to explore the conditions under which individuals' behavioral responses to freedom threat and reactance may change (Bessarabova & Massey, 2020). Indeed, the relatively small effect sizes observed in this study warrant some temperance to the conclusions offered, and additional studies may lead to new understanding of the context that aids in their interpretation and substantiality (Funder & Ozer, 2019).

It is also important to note that, despite significant differences between conditions, intent to comply was still relatively high. Past research – albeit not PRT specific – hints that an instructor's influence over students' academic progress can potentially mute freedom restoration behavior (Horan et al., 2012). Classrooms are defined by an inherent difference in subject-matter knowledge and influence (Hosek & Soliz, 2016). As Chory-Assad and

Paulsel (2004) noted, “instructors who are the sole teachers of required courses are likely to be perceived as extremely powerful because students depend on them for graduation” (p. 270); students understand they are expected to follow the syllabus to ensure progression through the academic system. In other contexts, outcomes associated with noncompliance may not be enforced by a relevant third-party. For instance, in responding to messages about exercise, the individual performing the action controls the likelihood of consequences (e.g., gaining weight), rather than leaving enforcement of consequences to someone else (e.g., an instructor removing points). Essentially, increases in boomerang or related effects (i.e., directly restoring threatened freedom) stemming from reactance may not be as likely in instructional contexts where outcomes are imposed outside the individual; students may simply comply out of an immediate need for academic survival. Horan et al. (2012) articulated this idea: “despite the fact that the student may feel inclined to engage in avoidance behaviors, he/she may continue to approach out of survival . . . the link between emotional responses and behavior may be more pronounced in other contexts” (p. 224). Thus, although students are clearly experiencing reactance and its subsequent effects, perhaps indirect freedom restoration behavior like commiseration, expressive dissent (Ball & Goodboy, 2014), or avoiding interactions with the instructor in the future are more likely courses of action than direct methods.

The results may also point toward the possibility of additional, contextual conditions surrounding PRT. To illustrate, Sittenthaler et al. (2015) did not identify differences in reported reactance between legitimate and illegitimate restrictions, yet they did uncover differences in *physiological* levels of arousal following exposure to each form of behavior. They rationalized this finding through the affective and cognitive processes that define the intertwined model of reactance (Dillard & Shen, 2005). The authors speculated that illegitimate restrictions – in which there is no justification for behavior – may immediately invoke arousal, whereas legitimate restrictions – in which there is justification for behavior – may require individuals to reflect on the reason for a restriction. That is, individuals may need time to cognitively process the justification and form counterarguments. Perhaps in the context of the classroom, students’ experience and familiarity with syllabus policies across multiple years of study have led to an expectation that syllabi are always justified; students do not need time to form counterarguments because they understand that syllabi are a permanent staple of the academic environment. This could potentially explain why the results run counter to Sittenthaler et al. (2015). Future research may expand this idea by including the thought-listing measure of negative cognition (see Dillard & Shen, 2005) or examining longitudinal data that can more accurately model sequential effects.

Finally, and consistent with PRT, we provide additional evidence that reactance mediates the effect of freedom threat on intent to comply (Dillard & Shen, 2005). That is, increased threat to freedom elevated reactance, which, in turn, reduced intent to comply with the syllabus policy. Specific to this research, the manipulation contained a policy embedded within a syllabus format familiar to the participants. The increase in methodological validity builds on existing research linking syllabus policies, reactance, and compliance and adds to the body of theoretical replication work within PRT (Rosenberg & Siegel, 2018) and instructional (Kaufmann & Tatum, 2017) literature.

## **Practical Implications**

Although it may not be possible to eliminate reactance, it could be mitigated through proactive or empathetic instructor behaviors (Shen, 2010). There are several ways that instructors may enact such behaviors. One way is to develop appropriate technology policies. Policies that decrease psychological distance with the instructor, include fair punishments, or avoid loss-framed punishment may lead to less reactance over time (Moore & Richards, 2019). For example, Finn and Ledbetter (2014) stated that *pro-educational* policies, which demonstrate an instructor's understanding of students' desire for technology by allowing students to use technology for educational purposes, were associated with positive perceptions of the instructor and of their own learning. Moreover, Stowell et al. (2018) proposed that this type of policy also preserved students' rapport with their instructors. Thus, when instructors utilize reasonable, supportive, and clear policies, student reactance levels may decrease, which may lead to greater compliance with the policy and increased student-approach behaviors.

Another way instructors may reduce reactance is to ensure that their decision-making processes regarding policies and procedures are transparent (Mirick, 2016). If an instructor is concerned that a policy may be perceived as unfair, he or she may consider taking the time to explain why the policy is being implemented either within the actual policy or as a supplement. Instructors could also discuss policies by allowing students to help create or evaluate them. Ultimately, fairness is a perception that may vary among students. Giving students a voice in the creation of the policy may result in more holistic representations of fairness based on input from the entire class (Olison & Roloff, 2012). Consequently, students may feel that the policy is fair and that the instructor is concerned about their needs. Based on the current findings, less reactance may then be expected, which may lead to more students complying with the policy.

## **Limitations**

This study should be interpreted considering several limitations. First, we did not measure actual behavior or compliance, but rather intention to comply. Although intent and actual behavior tend to be strongly related (e.g., Ajzen, 1991), future research should replicate these findings using actual behavioral data. Second, although the controlling language manipulation was successful, it is worth noting that the mean score for controlling language in the low-controlling condition was still relatively high ( $M = 4.14$ ). One reason for this may stem from the fact that this condition included some words (i.e., *should*) considered forceful in PRT literature. Our decision to include words such as *should* rather than *might* or *consider* in the low-controlling condition was motivated by a desire to maintain external validity of the experimental stimuli. A policy giving students full autonomy to do as they wish would not be reflective of the academic environment, as policies provide rules that must be followed in order to ensure survival in a university context. Indeed, had the language in the low-controlling condition been even less controlling – arguably at the expense of external validity – perhaps the rest of the observed effects would have been stronger. Finally, our sample consisted primarily of first-year university students. Although PRT research has relied on a similar subset of students, it is important to acknowledge that experiences with

reactance can change with age (see Woller et al., 2007). Thus, future studies might examine how students' expectations for syllabi and instructor behavior change as they progress through college.

## Conclusion

Syllabus policies will remain an important feature of the higher-education classroom. Students may understand the risk involved in breaking these mandates, yet the language and severity of the policy does appear to have a psychological impact on students. To truly provide students with the best opportunities for learning and engagement at our institutions, we should continue to think about the ways we can reshape and refine our syllabus policies to be both fair and persuasive.

- (1) The original sample consisted of 302 participants. However, one participant identified as a univariate outlier ( $z > 3.29$ ) was excluded from all analyses; no multivariate outliers were detected (Tabachnick & Fidell, 2007).
- (2) The 10 items were developed by consulting existing measures of fairness (e.g., Miller et al., 2007) and drawing from similar constructs frequently referenced within the PRT literature (e.g., justice). A small focus group affirmed the content and face validity of the measure before implementation into the current research. The items are available from the first author by request.
- (3) As one reviewer pointed out, the controlling language manipulation also has the potential to influence perceptions of fairness (see also Miller et al., 2007). To explore this possibility, we also conducted an ANOVA, which revealed significant main effects of controlling language,  $F(1, 301) = 6.71, p < .001, \eta_p^2 = .02$ , and fairness,  $F(1, 301) = 77.94, p < .001, \eta_p^2 = .21$ , as well as a significant interaction,  $F(1, 301) = 7.27, p < .01, \eta_p^2 = .02$ , on perceptions of fairness. The fair condition was perceived as fairer than the unfair condition when the policy contained both high controlling language ( $M_{\text{fair}} = 3.05, SD = 0.79; M_{\text{unfair}} = 2.51, SD = 0.88$ ),  $p < .001$ , and low controlling language ( $M_{\text{fair}} = 3.52, SD = 0.62; M_{\text{unfair}} = 2.50, SD = 0.75$ ),  $p < .001$ ), but this effect was more pronounced in the latter condition.

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