Classroom Culture When Students are Reluctant to Learn Online: Student Dissent Behaviors Explained by Their Self-Efficacy, Control of Learning, and Intrinsic Motivation

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Student beliefs about classroom culture, instructor behaviors, and their own abilities to learn significantly influence their academic engagement. COVID-19 has drastically altered the classroom environment, forcing many students into a virtual learning platform they may not have preferred or felt comfortable with. Whether it is the fault of the instructor or the environment, students who are dissatisfied engage in instructional dissent. This study examined the influence of instructor clarity, instructor relevance, self-efficacy, intrinsic motivation, distributive justice, procedural justice, and interactional justice on student dissent. The data supported six modified models, indicating a significant difference between students' expressive, rhetorical, and vengeful dissent behaviors based on whether or not they were enrolled in their preferred learning platform.

Keywords: student dissent, control of learning beliefs, Self-efficacy, perceived immediacy, intrinsic motivation, instructional beliefs model

INTRODUCTION

The onslaught of COVID-19 in early 2020 drastically altered the academic landscape and left no university untouched (Floyd, 2021). As COVID-19 pushed many universities fully online, students who did not enjoy online courses or did not believe they are capable of succeeding in them were forced into an environment in which their self-efficacy, intrinsic motivation, and control of learning beliefs are lowered. Students engage in dissent behaviors when they are unsatisfied with a class and when they experience low affective learning (Goodboy, 2011a; Goodboy, 2011b). Previous research established instructor misbehaviors as a primary influencer of student dissent (Goodboy and Myers, 2012). However, student characteristics can also contribute to dissent (Goodboy and Myers, 2012; Goke et al., 2020; Johnson and Kelly, 2020). Specifically, students have been found to engage in vengeful dissent when they have low self-efficacy and believe their efforts have no effect on their academic success (Goke et al., 2020). With the pandemic came high levels of uncertainty and an increased dependency on virtual technologies (Stephens et al., 2020), as well as an opportunity to reevaluate teaching pedagogy and practices (Horse and Nakagawa, 2020). As students and instructors adjust to new technology and classroom dynamics during COVID, instructor behaviors and student characteristics are both likely to influence student dissent in new ways.

In 2011, Weber et al. proposed the Instructional Beliefs Model (IBM) as a theoretical framework to explain how students' perceptions of instructor behaviors, classroom characteristics, and their own characteristics influence their academic outcomes. This framework purports that any instructor behavior, student characteristic, or classroom characteristic could be examined as a first-order variable and any student belief could be inserted as a second-order variable. These, in turn, influence the third order variables: academic outcomes. Following this framework, communication from instructors has been found to increase student perceptions of academic self-efficacy and their propensity to approach the instructor when they feel an injustice has occurred (LaBelle et al., 2013). In addition to academic outcomes such as dissent, the framework of the IBM has worked while examining the effect of instructor misbehaviors on math anxiety in students, mediated by their perception of immediacy (Kelly et al., 2020). This expands Weber et al.'s framework to include students' psychological response to instructor behaviors as a student belief. Kelly et al. (2020) found that regardless of how instructors intend for their behaviors to be interpreted, students responded to their perception of those behaviors rather than the behaviors themselves.

The present study uses the IBM to examine how perceptions of classroom justice, the relevance and clarity of the instructor, student self-efficacy, and intrinsic motivation influence dissent in the classroom. Previous works have supported and expanded the way the IBM views classroom interactions. However, what has not been extensively studied is how student preferences in learning platforms influence the model. Because COVID-19 has forced students into learning environments they may not prefer or feel comfortable with, it is important to explore these effects.

LIT REVIEW

Self-Efficacy

Self-efficacy is the belief one holds about their ability to successfully achieve an established goal or perform a specific task (Schunk, 1991; Badura, 1997) and is shaped through social comparisons, education, culture, and family (Wentzel and Miele, 2016). These perceptions, in turn, influence the amount of effort and perseverance employed when undertaking a specific task (Schunk and Pajares, 2012). Rather than a general disposition, self-efficacy is a belief relative to a particular domain or context (Bandura, 2006). Meaning, it is possible to have high levels of self-efficacy for one task and not another based on past experiences and skill in that area.

Academic self-efficacy identifies the level of success a student believes they are capable of achieving on an academic task (Bandura, 1993; McKeachie et al., 1996). One way students gauge their ability is by comparing themselves to their classmates, which may positively influence their self-efficacy if accompanied by the motivation to catch up or have a negative influence if they believe their efforts will make no difference (Kesici and Erdogan, 2010; Schwarzer, 2014). Therefore, it is possible for a student with high levels of self-efficacy to also possess enough motivation and self-regulation to successfully

persevere through a difficult task (Solheim, 2011). However, students with low levels of self-efficacy are less likely to participate (Høigaard et al., 2015).

Intrinsic Motivation

Intrinsic motivation can be defined as the enjoyment of and interest in an activity for the sake of engaging in that activity (Cury et al., 2006). Intrinsically motivated individuals will embrace tasks willingly, as they expect their involvement to lead to more enjoyment (Radel et al., 2016). Intrinsic motivation has been found to influence an individual's behavior and self-determination (Ng, 2018), often resulting in students exerting more effort (Ali et al., 2010). Students with high levels of intrinsic motivation perform much better academically than those who get their motivation from external sources (Afzal et al., 2010). They also tend to exert more effort (Ali et al., 2010; Gillard et al., 2015) and have higher levels of engagement (Corpus and Wormington, 2014; Wigfield et al., 2015; Weidinger et al., 2017).

A teacher's behavior may influence the goals students set, their emotional state, and persistence, which can all influence intrinsic motivation (Maulana et al., 2013, 2014; You et al., 2016). When teachers offer personal reassurance to students, there is an increase in the students' willingness to take chances and feel comfortable with new approaches to learning (Shin and Zhou, 2003; Gu et al., 2017). Care and autonomy support from the instructor have been shown to be positively correlated with intrinsic motivation (Bieg et al., 2011). Granting autonomy and providing support encourages students to engage in an environment where they can align their personal interests with the goals of the instructor, increasing students' intrinsic motivation through their self-determination and personal initiative (Yidong and Xinxin, 2013).

Instructor Clarity

Providing students with clear instruction improves their ability to learn (Titsworth et al., 2015; Bolkan, 2017). Instructor clarity has been defined as behavior that effectively shows instructors' ability to present information and course content to students through the use of appropriate verbal and nonverbal messages (Chesebro and McCroskey, 1998; Bolkan et al., 2017). Clarity is multidimensional in nature and can be understood at various levels because it is both a behavior and an impression. Titsworth and Mazer (2011) state that instructors may engage in different behaviors to make the lesson clearer for students, but the effectiveness of those chosen behaviors relies on whether or not the students recognize those behaviors.

Both students and instructors must be engaged with one another in order to secure clarity in the classroom (Titsworth and Mazer, 2011). Previous research has found that the ability of an instructor to teach clearly provides the necessary conditions for students to properly engage in their learning objectives and process content more effectively (Seidel et al., 2005; Bolkan et al., 2016; Bolkan, 2017). Further, Bolkan (2017) found that instructor clarity helps students' learning abilities, because it helps them create organized models of their learning and allows them to organize information in ways that help then retain information (Lorch and Lorch, 1995; 1996). Conversely, students are more

likely to be distracted by things like texting when instructors are unclear in their communication (Johnson, 2013).

Instructor Relevance

Keller (1983) has defined relevance as whether a student considers the course instruction as pertinent to their own personal or career needs and goals. These considerations are often based in part on students' prior knowledge and experiences in the classroom (Frymier and Shulman, 1995). Students who believe instructors relate the content to them are more motivated and successful (Weber et al., 2011; Mansson, 2016) and tend to have more favorable views of those instructors, rating them as more competent, trustworthy, and caring (Schrodt, 2013; Mansson, 2016). Students also perceive instructors as more credible when relevant examples and exercises are used that tie the course content to students' personal and professional goals (Schrodt, 2013).

Classroom Justice

Classroom justice is the perception of fairness in processes or outcomes by students in the instructional environment and contains three dimensions: distributive, procedural, and interactional justice (Chory-Assad and Paulsel, 2004b). *Distributive justice* is the perception that there is fairness in the outcome of transactions (Deutsch, 1985), determined through the comparison of one interaction to another (Adams, 1965; Austin, 1997; Cropanzano and Greenber, 1997). Distributive justice in the classroom is not determined by the outcome (such as a grade) itself, but rather the fairness of that outcome in comparison to what was expected, what the student believed they deserved, or its relation to the outcome of a classmate (Chory-Assad and Paulsel, 2004b). *Procedural justice* is the perception of fairness in the process to reach a given outcome (Byrne and Cropanzano, 2001). For example, the process through which an instructor decides which policies should be implemented or how a student is evaluated would be considered procedural justice. *Interactional justice* refers to the perception of fairness in the treatment of students by the instructor when communicating with them and implementing policies (Chory-Assad and Paulsel, 2004a).

Despite being correlated with one another, distributive, procedural, and interactional justice are distinct constructs that interact differently with other variables and should be measured individually (Chory-Assad, 2002; Chory-Assad and Paulsel, 2004b; Paulsel et al., 2005; Chory, 2007). When these three are lacking in the classroom, students experience negative emotions about the environment (Horan et al., 2010) and are more likely to engage in indirect aggression toward instructors (Chory-Assad and Paulsel, 2004a; 2004b). Similarly, perceptions of procedural justice were found to influence student motivation and affective learning (Chory-Assad, 2002), while interactional and procedural justice have been found to influence state motivation and cognitive learning (Horan et al., 2012). While each type of perceived fairness influences student outcomes, procedural justice has been found to play a more significant predictive role (Chory-Assad, 2002; Chory-Assad and Paulsel, 2004b). When instructors are clear, provide good feedback, and

justify the reason a student received a particular grade, students have a more favorable perception of procedural fairness (Chesebro et al., 2004; Seidel and Tanner, 2013).

Control of Learning Beliefs

Control of learning beliefs (COLB) are the degree to which a student believes that it is their own efforts that determine their academic outcome rather than external factors (Pintrich et al., 1991). However, the belief that their actions directly influence their success or failure must also be accompanied by appropriate learning strategies for students to be successful (Rotgans and Schmidt, 2012). For example, Muwonge et al. (2019) found that students with greater COLB also had higher GPA scores and that the favorable outcome was most significantly mediated by critical thinking and organization. Meaning, the students who believed their efforts would determine their success employed the necessary critical thinking and organizational strategies to retain the material. Their finding was consistent with past research which indicates that students with higher COLB are more likely to study strategically and effectively (Khatib, 2010; Sen and Yilmaz, 2016; Muwonge, 2017) and are more likely to engage in necessary learning strategies such as effort regulation, rehearsal, and elaboration (Sungur and Tekkaya, 2006).

Perceived Immediacy

Perceived immediacy refers to the level of perceived psychological closeness a message receiver feels in response to the sum of communicative behaviors displayed by the message sender (Kelly, 2012; Kelly et al., 2015). Kelly and Westerman's (2016) review of immediacy literature indicated that the instructor behaviors of smiling, using vocal inflection, and giving students eye contact (Zhang and Witt, 2016) normally increase students' perceived immediacy toward their instructor. Using inclusive language and soliciting students' viewpoints has also been shown to increase these perceptions (Violanti et al., 2018). In the online setting, Vareberg et al. (2020), Vareberg and Westerman (2020) found that student perceptions of immediacy increased when instructors referred to students by name or were mindful of message response times while using technology.

When face-to-face, numerous studies have found that perceived immediacy mediates the relationship between instructor immediate (or non-immediate) behaviors and student learning variables. For example, instructor misbehaviors of lecturing and antagonism have been found to increase student math anxiety through the mediation of perceived immediacy (Kelly et al., 2020) while professor clarity and immediate behaviors negatively influenced writing apprehension through perceived immediacy (Kelly and Gaytan, 2020). Professors who take extra time to manage perceived immediacy with students through formal perception checks can expect to achieve more positive communicative outcomes in the classrooms than those who do not (Johnson and Kelly, 2020).

Participation

Participation is defined as the questions or comments raised by students during class (Fassinger, 1995) and is influenced by

instructor and student characteristics, as well as instructor behaviors. Students with higher levels of self-efficacy are more likely to participate in the classroom (Mahyuddin et al., 2006) and students that are engaged with the material have higher recall of course content (Petress, 2006). Subsequently, participation has been associated with higher performance on exams and in courses (Christle and Schuster, 2003; Kelly, 2008; Steger-Jager et al., 2012).

Students are more likely to participate in an environment they consider to be safe (Rocca, 2010), which is why instructor behaviors such as support and reinforcement have been found to influence student participation (Goodboy and Bolkan, 2009; Siti et al., 2010). Conversely, when students feel that there are low levels of distributive, procedural, and interactional justice in the classroom they may choose to not participate (Horan et al., 2010), and when they become dissatisfied with the environment they may engage in dissent behaviors (Holmgren and Bolkan, 2014). However, if students fear that a lack of participation may negatively impact their success in the course they may continue to participate and not allow their displeasure to be seen by their instructor (Holmgren and Bolkan, 2014).

Instructional Dissent

Instructional dissent is the process through which students voice their disagreements about class related issues (Goodboy, 2011a; Goodboy and Myers, 2012) and is suggestive of the absence of positive results in the classroom such as satisfaction and learning (Goodboy, 2011b). Dissent is known to be present in a classroom setting alongside perceived justice (Horan et al., 2010; Goodboy, 2011a, 2011b; Bolkan and Goodboy, 2013; Holmgren and Bolkan, 2014) and is often caused by multiple factors, including stipulations around grading, policies in the classroom, teaching style, abusing the syllabus, and unreasonable testing (Goodboy, 2011a). Three types of dissent have been identified by Goodboy (2011a); expressive, rhetorical, and vengeful.

Expressive dissent is often an attempt to vent negative feelings in order to feel better and receive wanted support and care over discouragement in the classroom (Goodboy, 2011a; Goodboy and Myers, 2012). Although expressive dissent is usually directed toward other classmates or support systems, it can have a negative impact on the environment of the classroom if the frustrations are overheard by the instructor (Hasting and Bham, 2003; Frisby et al., 2015).

Rhetorical dissent is an attempt to persuade the instructor to correct a perceived wrong, such as changing a grade (Goodboy, 2011a; Goodboy and Meyers, 2012). Rhetorical dissent is the only form of dissent that involves direct communication with the instructor (Goodboy, 2011a) and has been found to slightly increase the learning process in students (Goodboy, 2011b).

Vengeful dissent is often used in an attempt to ruin or harm an instructor's reputation. It can also be used as a form of revenge for students who wish to steer future students away from the class or instructor by talking poorly of their teaching ability and class (Goodboy, 2011a; Goodboy and Meyers, 2012). Vengeful dissent has been found to be positively related to student academic entitlement and low levels of academic self-efficacy (Goodboy et al., 2014).

Rationale

Because level of perceived psychological closeness felt by students with their instructor is influenced by the behaviors displayed by instructors (Zhang and Witt, 2016), and students tend to view relevant instructors more favorably (Schrodt, 2013; Mansson, 2016), the following are hypothesized:

H1: Instructor relevance and perceived immediacy will be positively correlated
H2: Instructor clarity and perceived immediacy will be positively correlated
H3: Self-efficacy and perceived immediacy will be positively correlated
H4: Intrinsic motivation and perceived immediacy will be positively correlated

Students are affected by their perception of instructor behaviors, regardless of the instructor's intentions (Kelly and Westerman, 2016), which means that it does not matter how fair the instructor intends to be, students will respond to how fair they perceive the instructor is being. Therefore, the following are hypothesized:

H5: Procedural justice and perceived immediacy will be positively correlated
H6: Distributive justice and perceived immediacy will be positively correlated
H7: Interactional justice and perceived immediacy will be positively correlated

When instructors make the content relevant to students, they are more likely to be motivated to learn (Frymier and Shulman, 1995; Weber et al., 2011; Mansson, 2016), which means that the way instructors relate information should also have a direct effect on students' beliefs about their ability to employ the necessary learning tactics to be successful. Therefore, the following are hypothesized:

H8: Instructor relevance and COLB will be positively correlated
H9: Instructor clarity and COLB will be positively correlated

Students' COLB have been found to influence their perception about their ability to succeed (Bandura, 1986; Bandura, 1997) and significantly predict their level of self-efficacy (Partin et al., 2011). Therefore, the following is hypothesized:

H10: Self-efficacy and COLB will be positively correlated

Additionally, when instructors offer encouragement to students, they increase the students' willingness to take risks (Shin and Zhou, 2003; Gu et al., 2017). Therefore, the following is hypothesized:

H11: Intrinsic motivation and COLB will be positively correlated

Perceptions of classroom justice influence students' emotions about the environment (Horan, 2010) and can affect students' motivation and affective learning (Chory-Assad, 2002). Therefore, the following are hypothesized:

H12: Procedural justice and COLB will be positively correlated
H13: Distributive justice and COLB will be positively correlated
H14: Interactional justice and COLB will be positively correlated

Because instructor traits such as friendliness, openness, professionalism, and investing in students increase student likelihood to participate (Abdullah et al., 2012), and a dissatisfaction of instructor behaviors such as instructor misbehaviors can reduce student participation (Goodboy and Bolkan, 2009), the following are hypothesized:

H15: Instructor relevance and participation will be positively correlated
H16: Instructor clarity and participation will be positively correlated

Students who have high levels of self-efficacy are more likely to engage in the course (Hoigaard et al., 2015), while intrinsically motivated students have greater interest in the material and willingness to embrace the task (Cury et al., 2006; Radel et al., 2016). Therefore, the following are hypothesized.

H17: Self-efficacy and participation will be positively correlated
H18: Intrinsic motivation and participation will be positively correlated

Students may choose to not participate when instructors are viewed as unfair or misbehaving (Goodboy and Bolkan, 2009). Because procedural, distributive, and interactional justice encompass the perceived fairness of treatment, process of assessment, and outcome in the classroom, the following are hypothesized:

H19: Procedural justice and participation will be positively correlated
H20: Distributive justice and participation will be positively correlated
H21: Interactional justice and participation will be positively correlated

Students who have high levels of perceive immediacy are also more likely to view their instructor favorably (Kelly et al., 2018b), and when students dislike their instructor, they are more likely to engage in dissent behaviors (Goodboy, 2011b). Therefore, the following are hypothesized:

H22: Perceived immediacy and expressive dissent will be negatively correlated

H23: Perceived immediacy and vengeful dissent negatively correlated
H24: Perceived immediacy and rhetorical dissent will be positively correlated

Students' COLB influence the sense of control they feel over their academic success and the subsequent effort they exert (Pintrich et al., 1991; Khatib, 2010). Dissent is also related to grade orientation, academic entitlement, and a lack of academic self-efficacy (Goodboy et al., 2014). Therefore, the following are proposed:

H25: COLB and expressive dissent will be negatively correlated
H26: COLB and vengeful dissent will be negatively correlated
H27: COLB and rhetorical dissent will be positively correlated

Student dissent is also influenced by how students choose to participate in the classroom in response to instructor behaviors (Goodboy, 2011b; Goodboy et al., 2014). Therefore, the following are proposed:

H28: Participation and expressive dissent will be negatively correlated
H29: Participation and rhetorical dissent will be positively correlated
H30: Participation and vengeful dissent will be positively correlated

These hypotheses combine to form a model that explains student dissent through the structure of the Instructional Beliefs Model proposed by Weber et al. (2011). The proposed model can be found in **Figure 1**. The model functions as a framework in which students' psychological response to their instructors, the learning environment, and their own characteristics influence their learning outcomes.

Additionally, it is likely that student beliefs and behaviors will be significantly influenced by whether they are able to enroll in the type of class they feel most comfortable. Because of COVID-19, many university classes have transitioned online. While not inherently problematic, it could be a significant factor in how interested they are or capable they feel in the course. For example, if a student was unable to enroll in their preferred class platform because it was only offered online, or if the instructor changed to an online environment without consulting the students, it could change their academic beliefs and feelings toward both the class and instructor. Therefore, the following research question is posed:

RQ1: Will students who were able to enroll in their preferred learning environment respond differently than those who were not?

METHOD

Participants

In total, $n = 600$ students participated in this study, completing a full questionnaire. Of those participants, 224 students were in a course format they preferred, and 376 students were forced into a

TABLE 1 | Demographic characteristics.

		Preferred	Not preferred	All participants
N		224	376	600
Sex (n)	Male	79	153	232
	Female	145	223	368
Class rank (n)	Freshman	100	190	290
	Sophomore	47	84	131
	Junior	30	42	72
	Senior	33	37	70
	Graduate student	14	23	37
Ethnicity (n)	Asian/Pacific Islander	10	12	22
	Black/African American	7	4	11
	Hispanic/Latino	5	6	11
	Native American/American Indian	4	4	8
	White/Caucasian	198	350	548
Age		$M = 20.42$ ($SD = 4.36$)	$M = 19.94$ ($SD = 3.97$)	$M = 20.15$ ($SD = 4.12$)
Format (n)				
	Online, synchronous	45	155	200
	Online, asynchronous	26	29	55
	Face-to-Face	10	5	15
	HYFLEX	137	152	289
	Combination	6	35	41

TABLE 2 | Fit statistics.

	GFI	CFI	RMSEA	SRMR	χ^2
Intrinsic motivation	0.99	0.98	0.12	0.03	χ^2 (2, $N = 600$) = 19.00, $p < 0.001$
Self-efficacy	0.83	0.92	0.18	0.05	χ^2 (20, $N = 600$) = 404.60, $p < 0.001$
Self-efficacy modified	0.97	0.98	0.10	0.02	χ^2 (9, $N = 600$) = 67.44, $p < 0.001$
Control of learning beliefs	0.94	0.94	0.25	0.04	χ^2 (2, $N = 600$) = 76.89, $p < 0.001$
Expressive dissent	0.81	0.89	0.17	0.05	χ^2 (35, $N = 600$) = 655.52, $p < 0.001$
Expressive dissent modified	0.90	0.94	0.16	0.04	χ^2 (14, $N = 600$) = 225.00, $p < 0.001$
Vengeful dissent	0.93	0.98	0.16	0.01	χ^2 (9, $N = 600$) = 153.53, $p < 0.001$
Rhetorical dissent	0.98	0.99	0.08	0.02	χ^2 (9, $N = 600$) = 41.93, $p < 0.001$
Instructor clarity	0.86	0.90	0.13	0.07	χ^2 (35, $N = 600$) = 384.03, $p < 0.001$
Instructor clarity modified	0.97	0.98	0.07	0.03	χ^2 (20, $N = 600$) = 72.82, $p < 0.001$
Instructor relevance	0.80	0.87	0.15	0.05	χ^2 (54, $N = 600$) = 782.43, $p < 0.001$
Instructor relevance modified	0.94	0.95	0.10	0.03	χ^2 (27, $N = 600$) = 186.55, $p < 0.001$
Distributive justice	0.77	0.87	0.16	0.06	χ^2 (54, $N = 600$) = 873.78, $p < 0.001$
Distributive justice modified	0.92	0.95	0.15	0.04	χ^2 (14, $N = 600$) = 193.80, $p < 0.001$
Procedural justice	0.78	0.87	0.13	0.05	χ^2 (90, $N = 600$) = 1022.36, $p < 0.001$
Procedural justice modified	0.92	0.95	0.09	0.04	χ^2 (44, $N = 600$) = 272.31, $p < 0.001$
Interactional justice	0.94	0.98	0.12	0.02	χ^2 (14, $N = 600$) = 127.68, $p < 0.001$
Perceived immediacy	0.96	0.98	0.08	0.02	χ^2 (27, $N = 600$) = 117.96, $p < 0.001$
Participation	0.10	0.10	0.05	0.01	χ^2 (2, $N = 600$) = 4.60, $p < 0.001$

format they did not prefer due to the restructuring of COVID-19. **Table 1** shows a breakdown of participant demographics for each group.

Procedure

Data were collected from a midwestern university and an eastern university through volunteer sampling. Potential participants were presented with a link leading to the informed consent of an online questionnaire. For the midwestern university, an email with a link directing them to the study was sent to all students across campus using a research listserv. For the eastern university, an email containing the study link was randomly sent to individuals in a research pool consisting of students from

various classes across campus. Students from the midwestern university were offered no incentive unless their class offered credit for research participation. The pool of students from the eastern university were offered extra credit for participating in research presented to the pool. Before moving on to rest of the questionnaire, students were instructed to thinking of the last course they attended or logged into (depending upon whether they were enrolled in synchronous or asynchronous courses).

Instrumentation

The questionnaire also included 13 continuous measures plus demographic items. Before hypothesis testing, all measures were subjected to confirmatory factor analysis (CFA). The fit statistics

TABLE 3 | Descriptive statistics.

	Mean	SD	Min-max	Skewness	Kurtosis	α
Intrinsic motivation	4.99	1.14	1.00–7.00	−0.78	1.10	0.82
Self-efficacy	5.25	1.27	1.00–7.00	−1.06	0.88	0.94
Control of learning beliefs	5.39	1.21	1.00–7.00	−0.91	0.68	0.86
Expressive dissent	3.93	1.84	1.14–8.00	0.27	−0.81	0.94
Vengeful dissent	1.55	1.18	1.00–7.00	2.77	7.68	0.98
Rhetorical dissent	3.42	1.42	1.00–7.00	0.17	−0.57	0.91
Instructor clarity	5.28	1.18	1.13–7.00	−0.85	0.51	0.89
Instructor relevance	4.86	1.35	1.00–7.00	−0.648	−0.07	0.93
Distributive justice	5.40	1.17	1.14–7.00	−0.92	0.58	0.94
Procedural justice	5.49	1.11	1.27–7.00	−1.10	0.99	0.94
Interactional justice	5.69	1.31	1.00–7.00	−1.31	1.47	0.97
Perceived immediacy	5.37	1.28	1.00–7.00	−0.88	0.46	0.95
Participation	4.61	1.51	1.00–7.00	−0.47	−0.38	0.92

for the original and modified measures can be found in **Table 2** and the descriptive statistics for the measures utilized in hypothesis testing can be found in **Table 3**.

Format

To determine the format of the class they were considering throughout the questionnaire, participants were asked to identify if the class was: online, synchronous (meets in real time through zoom or some other platform, lectures are scheduled), online, asynchronous (there are no lectures or lectures are not scheduled for a specific time, e.g., they are uploaded), face-to-face (lectures are held physically, in person), HYFLEX (Lectures are held physically, but students may choose to attend in person or virtually), or a combination (sometimes the class meets virtually and sometimes it meets face-to-face). The same descriptors were used when asking which format they wished the class was offered in. These two items were used to identify whether students were enrolled in their preferred course format.

Intrinsic Motivation

Intrinsic motivation was assessed through the intrinsic motivation submeasure Pintrich et al.'s (1991) Motivated Strategies for Learning Questionnaire. It consisted of four Likert-type items with a 7-point response scale ranging from *Strongly Disagree* to *Strongly Agree*. Artino (2005) reported that it had good face and convergent validity.

Self-Efficacy

Self-efficacy was also assessed through a Pintrich et al.'s (1991) submeasure. The self-efficacy submeasure consisted of eight Likert-type items with a 7-point response scale ranging from *Strongly Disagree* to *Strongly Agree*. Artino (2005) reported that it had good face and convergent validity.

Control of Learning Beliefs

Control of learning beliefs was assessed through Pintrich et al.'s (1991) submeasure, consisting of four Likert-type items. Items had a 7-point response scale ranging from *Strongly Disagree* to *Strongly Agree*. Artino (2005) reported that it had good face and convergent validity.

Instructor Clarity

Instructor clarity was measured using Chesebro and McCroskey's (1998) teacher clarity short inventory (TCSI). The measure was made up of 10 Likert-type items. Items were measured on a 7-point scale ranging from *Strongly Disagree* to *Strongly Agree*.

Instructor Relevance

Instructor relevance was measured using Frymier and Shulman's (1995) teacher relevance measure. The measure was made up of 12 Likert-type items. Items were measured on a 7-point scale ranging from *Strongly Disagree* to *Strongly Agree*. Frymier and Shulman (1995) reported strong criterion validity.

Distributive and Procedural Justice

Both distributive and procedural justice were measuring using Chory-Assad and Paulsel's (2004b) distributive and procedural justice measure. Distributive justice consists of 12 Likert-type items on a 7-point scale ranging from *Strongly Disagree* to *Strongly Agree*. Procedural justice consists of 15 Likert-type items on a 7-point scale ranging from *Strongly Disagree* to *Strongly Agree*. Chory-Assad and Paulsel (2004b) state that the collinearity between distributive and procedural variables were not problematic.

Interactional Justice

Interactional justice was measuring using Chory's (2007) revised interactional justice scale consisting of seven items. Items were measured on a 7-point scale ranging from *Extremely unfair* to *Extremely fair*. Chory (2007) reported evidence of content validity.

Perceived Immediacy

Perceived immediacy was measured using Kelly et al. (2015) measure. The assessment included nine semantic differential-type items. Items were measured using a 7-point response scale. Kelly et al. (2015) reported that the measure showed evidence of both content and convergent validity.

Participation

Participation was measured using Fassinger (2000) student participation scale. The scale included five Likert-type items that with a 7-point scale ranging from *Strongly Disagree* to *Strongly Agree*.

TABLE 4 | Correlation matrix.

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Intrinsic motivation													
2	Self-efficacy	0.47[a]												
3	Control of learning beliefs	0.41[a]	0.64[a]											
4	Expressive dissent	−0.12[a]	−0.29[a]	−0.29[a]										
5	Vengeful dissent	−0.03	−0.06	−0.11[a]	0.42[a]									
6	Rhetorical dissent	0.25[a]	0.15[a]	0.13[a]	0.17[a]	0.35[a]								
7	Instructor clarity	0.36[a]	0.58[a]	0.55[a]	−0.44[a]	−0.20[a]	0.75							
8	Instructor relevance	0.44[a]	0.58[a]	0.51[a]	−0.33[a]	−0.06	0.18[a]	0.73[a]						
9	Distributive justice	0.35[a]	0.75[a]	0.60[a]	−0.34[a]	−0.14[a]	0.07	0.61[a]	0.55[a]					
10	Procedural justice	0.42[a]	0.66[a]	0.61[a]	−0.40[a]	−0.19[a]	0.09[b]	0.74[a]	0.70[a]	0.72[a]				
11	Interactional justice	0.34[a]	0.54[a]	0.50[a]	−0.39[a]	−0.18[a]	0.05	0.70[a]	0.70[a]	0.61[a]	0.80[a]			
12	Perceived immediacy	0.33[a]	0.51[a]	0.48[a]	−0.44[a]	−0.21[a]	0.12[b]	0.70[a]	0.72[a]	0.52[a]	0.72[a]	0.80[a]		
13	Participation	0.36[a]	0.24[a]	0.10[b]	−0.00	0.09[b]	0.39[a]	0.09[b]	0.22[a]	0.12[a]	0.12[a]	0.05	0.13[a]	

[a]Correlation is significant at the 0.01 level (2-tailed).
[b]Correlation is significant at the 0.05 level (2-tailed).

Instructional Dissent

Dissent was measuring using Goodboy (2011a) assessments. The measures includes 23 Likert-type items: 10 expressive dissent, six rhetorical dissent, and six vengeful dissent. Each item was measured on a 7-point scale ranging from *Strongly Disagree* to *Strongly Agree*. Goodboy (2011b) reported the measured showed evidence for strong content validity. Notably, Goodboy (2011a) cautions that these measures should not be used in the same model as they are not theoretically correlated constructs.

RESULTS

Unidimensional Measurement Models

The AMOS Maximum Likelihood Parameter Estimation Algorithm was used to conduct the unidimensional measurement model tests via CFA. Bryne's (2016) standards of fit were applied, which stated that good fit was indicated by goodness of fit index (GFI) ≥ 0.90, comparative fit index (CFI) ≥ 0.90, standard root mean residual (SRMR) ≤ 0.08, and root mean square error approximation (RMSEA) ≤ 0.06. Bryne (2016) also indicated that RMSEA 0.06 ≤ 0.08 is acceptable, and RMSEA ≤0.1 was mediocre. Applying these standards, perceived immediacy, participation, and rhetorical dissent had evidence of good fit statistics.

All fit statistics for COLB, interactive justice, intrinsic motivation, and vengeful dissent had good GFI, CFI, and SRMR, but had an elevated RMSEA score for each measure. The standard residual covariance matrix was examined to see if any items were causing a significant amount of residual error on items, however no problematic items were found. Therefore, the measures were used with an elevated RMSEA score.

Distributive justice, procedural justice, instructor relevance, instructor clarity, self-efficacy, and expressive dissent all had an acceptable SRMR score, but an elevated RMSEA score and low GFI and CFI scores. When the standard residual covariance matrix was reviewed, several items were found to cause significant residual error upon other items in the measure. Therefore, these items were removed one at a time, starting with the most problematic item and respecifying the measurement model after each removal. Five items were removed from distributive justice: "The grade you expected to receive on the exam," "the effort you put into studying for the exam," "the grade most other students at this university would have received on the exam," "the grades other students in the course will probably receive," and "the grade(s) you've received in similar courses." Procedural justice had four items removed: "How the instructor conducts class discussions," "the amount of work required to get a good grade in this course," "the number of questions on exams," and "the level of difficulty of the course content." Three items were removed from expressive dissent: "I complain to others to express my frustrations with this course," "I express my disappointment about this course to other people because it helps me feel better," and "I talk to other students so we can discuss the problems we have in class." Instructor relevance had three items were removed: "Provides explanations that make the content relevant to me," "uses exercises or explanations that demonstrate the importance of the content," and "gives assignments that involve the application of the content to my career interest." Two items were dropped from self-efficacy: "I'm certain I can understand the most difficult material presented in the readings for this course", and "I'm confident I can understand the most complex material presented by the instructor in this course". Instructor clarity lost two items: "Projects assigned for this class have unclear guidelines," and "my teacher is not clear when defining guidelines for out of class assignments."

Hypothesis and Research Question Testing

All hypotheses were tested through Pearson correlations. The data were consistent with all hypotheses except for hypothesis 21, which predicted a positive relationship between participation and interactional justice ($r = 0.05$, $p = 0.19$), and hypotheses 28, which predicted a negative relationship between participation and expressive dissent ($r = −0.00$, $p = 0.97$). The correlation matrix is displayed in **Table 4**.

To test our research question, an independent samples t-test was run on each of the measures to see whether there was a significant difference between students who received the format

TABLE 5 | Independent Samples t-Test.

	t	M (preferred)	M (not preferred)
Intrinsic motivation	t (598) = 3.22, p < 0.01	5.19	4.88
Self-efficacy	t (598) = 3.04, p < 0.01	5.46	5.13
Control of learning beliefs	t (598) = 2.93, p < 0.01	5.58	5.28
Expressive dissent	t (598) = -2.72, p < 0.01	3.66	4.08
Vengeful dissent	t (598) = 0.00, p = 1.0	1.55	1.55
Rhetorical dissent	t (598) = 0.69, p =0 .50	3.47	3.39
Instructor clarity	t (598) = 3.09, p < 0.01	5.47	5.17
Instructor relevance	t (598) = 4.25, p < 0.01	5.15	4.68
Distributive justice	t (598) = 2.73, p < 0.01	5.57	5.30
Procedural justice	t (598) = 2.67, p < 0.01	5.65	5.44
Interactional justice	t (598) = 1.95, p =0 .05	5.83	5.61
Perceived immediacy	t (598) = 3.10, p < 0.01	5.58	5.25
Participation	t (598) = 1.22, p =0 .22	4.71	4.56
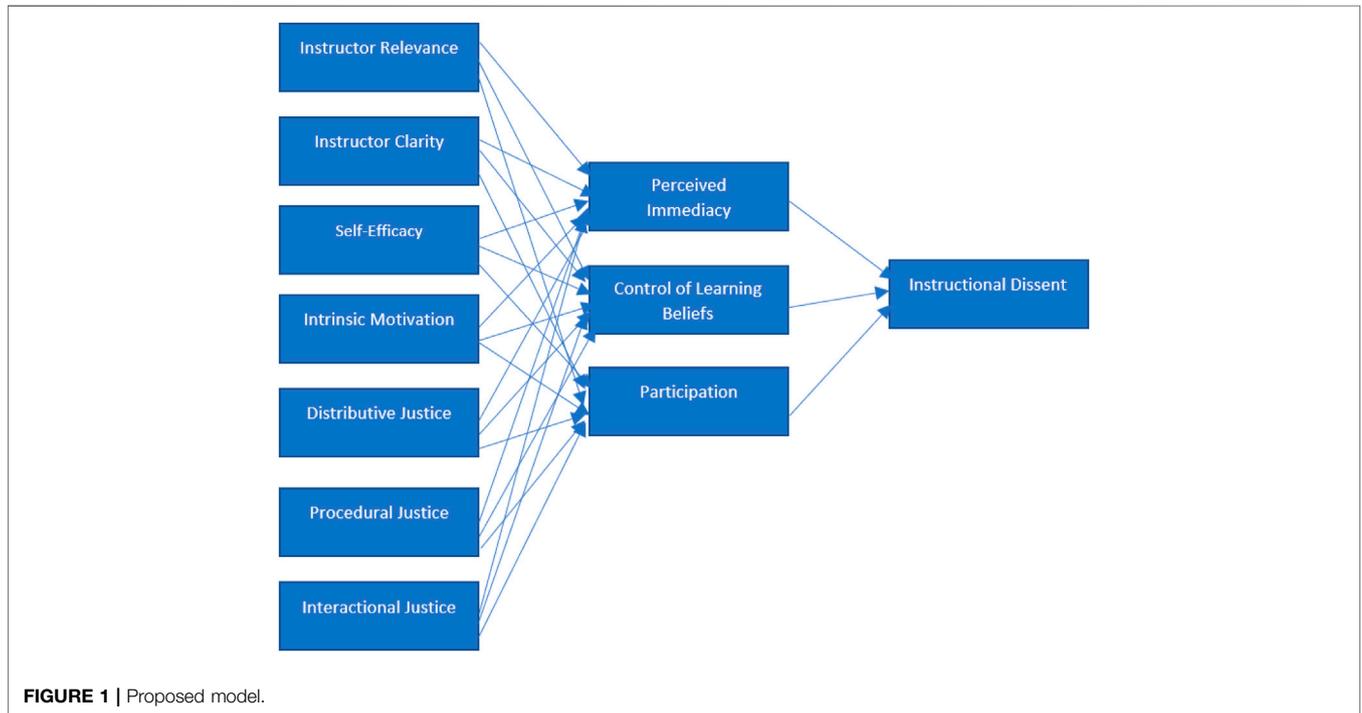
FIGURE 1 | Proposed model.

they preferred for a class and those who did not. A statistically significant difference was found between groups in all measures except for vengeful dissent, rhetorical dissent, participation, and interactional justice. The full results are displayed in **Table 5**.

Model Testing

The AMOS Maximum Likelihood Parameter Estimation Algorithm was employed again for structural equation modeling (SEM). Mean differences between the variables in accordance with whether students were in their preferred format indicate that the models will be moderated. Therefore, each of the proposed dissent models will be tested separately within each sample, resulting in six separate models.

First, the expressive dissent model was tested for the group of participants in their preferred format. Fit statistics for the model were as follows: GFI = 0.99, CFI = 0.99, RMSEA = 0.07,

SRMR = 0.02. Therefore, the global fit statistics support the hypothesized model. Indirect effects were then tested using bootstrapping with subsamples of 200 participants and a 95% confidence interval. The indirect paths from interactional justice ($-0.33 < \rho < -0.08$), instructor relevance ($-0.19 < \rho < -0.01$), and instructor clarity ($-0.29 < \rho < -0.06$) to expressive dissent were statistically significant. However, the indirect paths from self-efficacy ($-0.25 < \rho < 0.07$), intrinsic motivation ($-0.02 < \rho < 0.17$), procedural justice ($-0.25 < \rho < 0.01$), and distributive justice ($-0.12 < \rho < 0.10$) were not. Therefore, these paths were removed from the model. Fit statistics for the modified model were as follows: GFI = 0.98, CFI = 0.99, RMSEA = 0.07, SRMR = 0.02. Thus, the data support the modified expressive dissent model which is displayed in **Figure 2**.

Second, the expressive dissent model was tested for the group of participants whose class was not in the format they preferred.
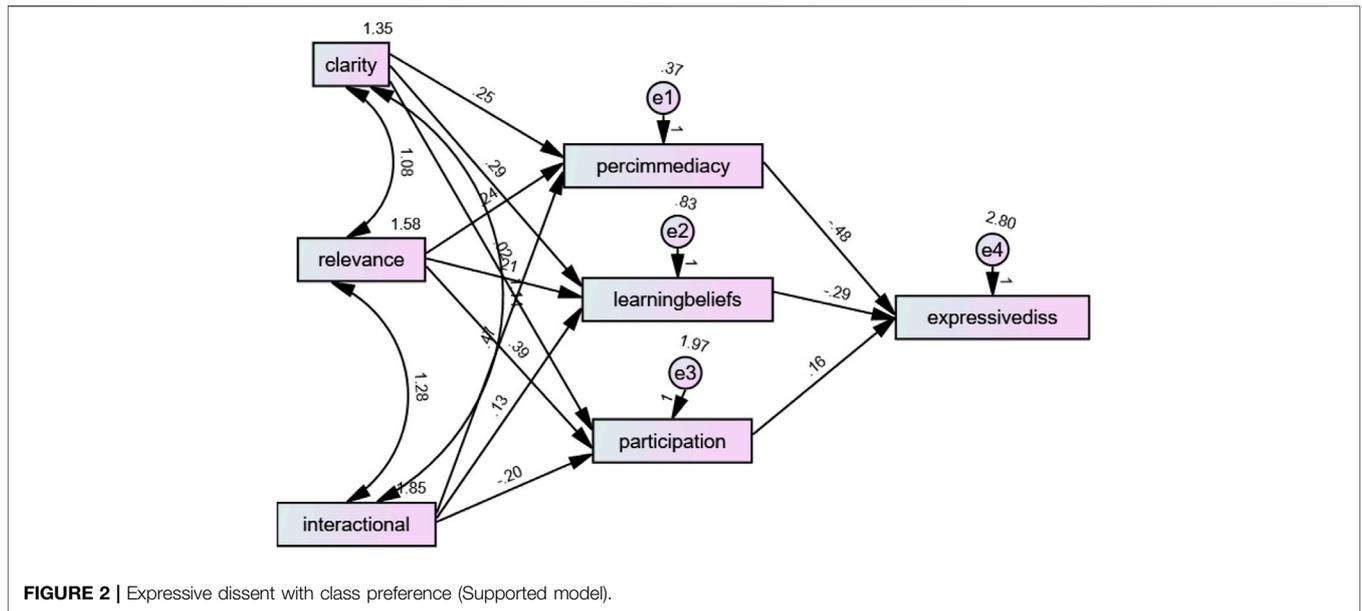
FIGURE 2 | Expressive dissent with class preference (Supported model).
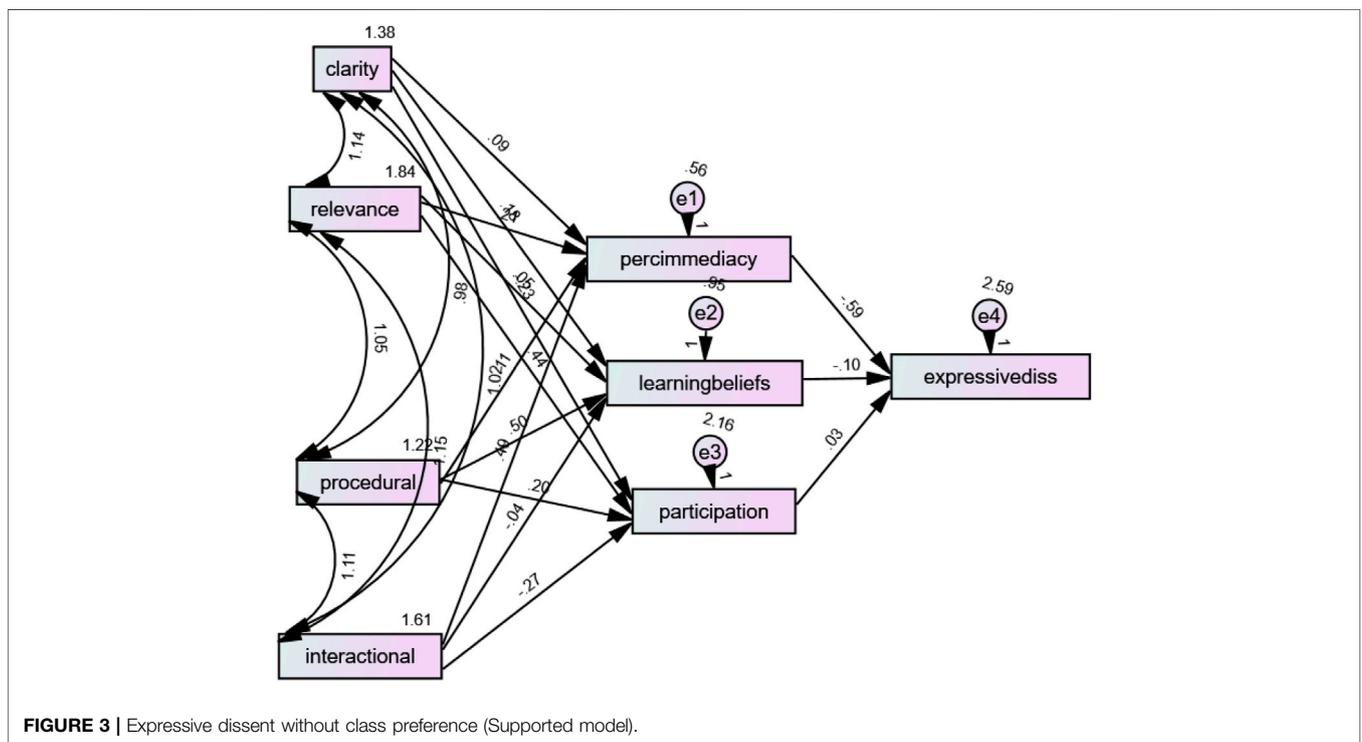
FIGURE 3 | Expressive dissent without class preference (Supported model).

Fit statistics for the model were as follows: GFI = 0.99, CFI = 0.99, RMSEA = 0.07, SRMR = 0.02. Therefore, the global fit statistics support the hypothesized model. Indirect effects were tested using bootstrapping with subsamples of 200 participants and a 95% confidence interval. The indirect paths from interactional justice ($-0.42 < \rho < -0.20$), procedural justice ($-0.25 < \rho < -0.00$), and clarity ($-0.20 < \rho < -0.01$) to expressive dissent were significant. However, the indirect paths from self-efficacy ($-0.12 < \rho < 0.04$), intrinsic motivation ($-0.08 < \rho < 0.12$), distributive justice

($-0.03 < \rho < 0.17$), instructor relevance ($-0.19 < \rho < 0.04$) were not. Therefore, those paths were removed from the model. Fit statistics for the modified model were as follows: GFI = 0.99, CFI = 0.99, RMSEA = 0.07, SRMR = 0.02. Thus, the data support the modified expressive dissent model which is displayed in **Figure 3**.

Third, the rhetorical dissent model was tested for the group whose class was in the format they preferred. Fit statistics for the model were as follows: GFI = 0.99, CFI = 1.0, RMSEA = 0.03,
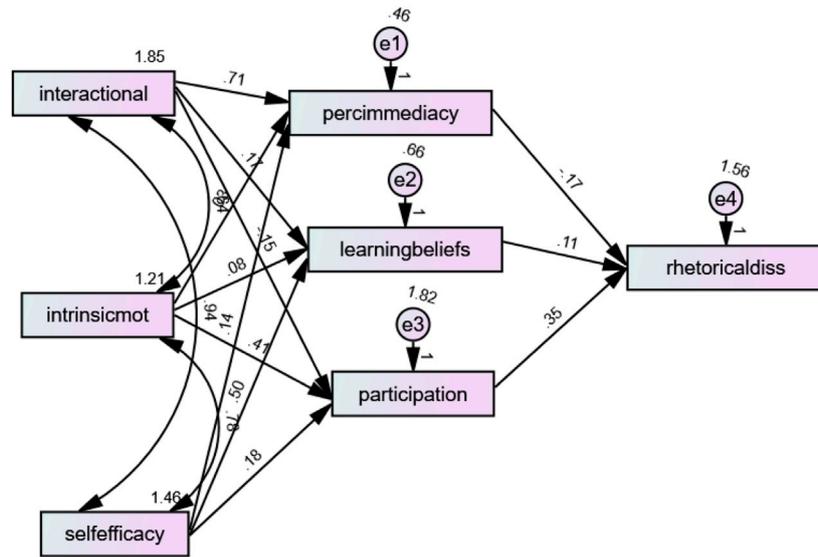
FIGURE 4 | Rhetorical dissent with class preference (Supported model).

SRMR = 0.02. Therefore, the global fit statistics support the hypothesized model. Indirect effects were tested using bootstrapping with subsamples of 200 participants and a 95% confidence interval. The indirect paths from self-efficacy (0.01< ρ < 0.26), intrinsic motivation (0.06 < ρ < 0.25), and interactional justice (−0.29 < ρ < −0.03) to rhetorical dissent were significant. However, the indirect paths from procedural justice (−0.11 < ρ < 0.16), distributive justice (−0.18 < ρ < 0.03), instructor relevance (−0.07 < ρ < 0.18), and instructor clarity (−0.16 < ρ < 0.08) to rhetorical dissent were not. Therefore, these paths were removed from the model. Fit statistics for the modified model were as follows: GFI = 0.99, CFI = 1.0, RMSEA = 0.04, SRMR = 0.02. Thus, the data support the modified rhetorical dissent model which is displayed in **Figure 4**.

Fourth, the rhetorical dissent model was tested for the group whose class was not in the format they preferred. Fit statistics for the model were as follows: GFI = 0.99, CFI = 1.0, RMSEA = 0.06, SRMR = 0.02. Therefore, the global fit statistics support the hypothesized model. Indirect effects were tested using bootstrapping with subsamples of 200 participants and a 95% confidence interval. The indirect paths from intrinsic motivation (0.08 < ρ < 0.25) and instructor relevance (0.07 < ρ < 0.24) to rhetorical dissent were significant. However, the indirect paths from self-efficacy (-0.04 < ρ < 0.17), interactional justice (−0.13 < ρ < 0.07), procedural justice (-0.07 < ρ < 0.17), distributive justice (-0.08 < ρ < 0.10), and instructor clarity (−0.17 < ρ < 0.02) were not. Therefore, they were removed from the model. Fit statistics for the modified model were as follows: GFI = 0.98, CFI = 0.97, RMSEA = 0.10, SRMR = 0.04. Thus, the data support the modified rhetorical dissent model which is displayed in **Figure 5**.

Fifth, the vengeful dissent model was tested for the group whose class was in the format they preferred. Fit statistics for the model were as follows: GFI = 0.98, CFI = 0.99,

RMSEA = 0.09, SRMR = 0.02. Therefore, the global fit statistics support the hypothesized model. Indirect effects were tested using bootstrapping with subsamples of 200 participants and a 95% confidence interval. The indirect paths from interactional justice (−0.24 < ρ < −0.04), and instructor clarity (−0.13 < ρ < −0.02) to vengeful dissent were statistically significant. However, the indirect paths from self-efficacy (−0.07 < ρ < 0.14), intrinsic motivation (−0.00 < ρ < 0.12), procedural justice (−0.08 < ρ < 0.07), distributive justice (−0.08 < ρ < 0.03), and instructor relevance (−0.12 < ρ < 0.03), to vengeful dissent were not. Therefore, these paths were removed from the model. Fit statistics for the modified model were as follows: GFI = 0.99, CFI = 1.0, RMSEA = 0.01, SRMR = 0.02. Thus, the data support the modified vengeful dissent model which is displayed in **Figure 6**.

Finally, the vengeful dissent model was tested for the group whose class was not in the format they preferred. Fit statistics for the model were as follows: GFI = 0.99, CFI = 0.99, RMSEA = 0.06, SRMR = 0.02. Therefore, the global fit statistics support the hypothesized model. Indirect effects were tested using bootstrapping with subsamples of 200 participants and a 95% confidence interval. The indirect paths from interactional justice (−0.17 < ρ < −0.03) and instructor clarity (−0.09 < ρ < −0.01) to vengeful dissent were significant. However, the indirect paths from self-efficacy (−0.06 < ρ < 0.05), intrinsic motivation (−0.02 < ρ < 0.10), procedural justice (−0.09 < ρ < 0.01), distributive justice (−0.02 < ρ < 0.07), and instructor relevance (−0.05 < ρ < 0.03) to vengeful dissent were not, and clarity (−0.09 < ρ < −0.01). Therefore, those paths were dropped from the model. Fit statistics for the modified model were as follows: GFI = 0.99, CFI = 0.99, RMSEA = 0.07, SRMR = 0.03. Thus, the data support the modified vengeful dissent model which is displayed in **Figure 7**.
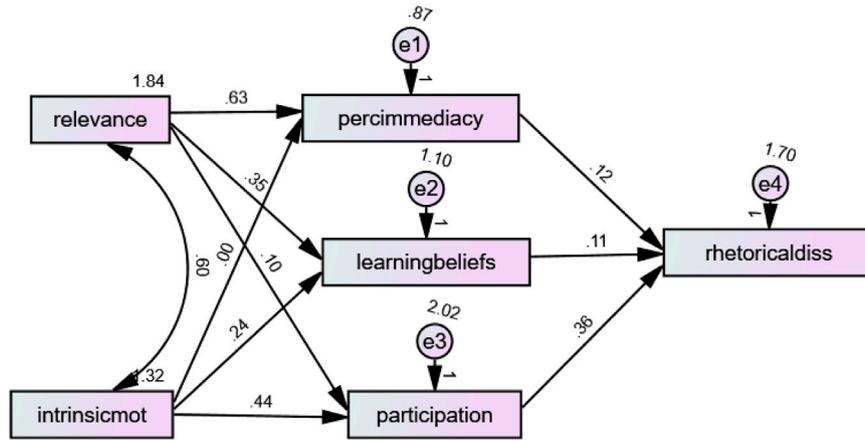
FIGURE 5 | Rhetorical dissent without class preference (Supported model).
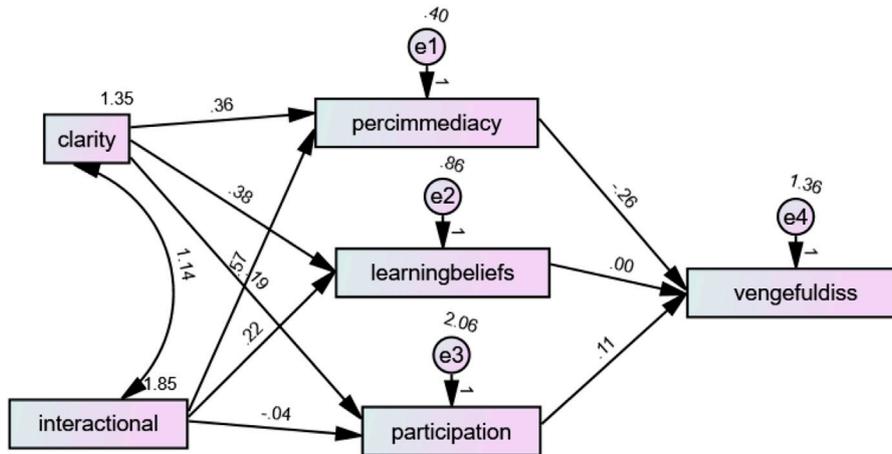
FIGURE 6 | Vengeful dissent with class preference (Supported model).
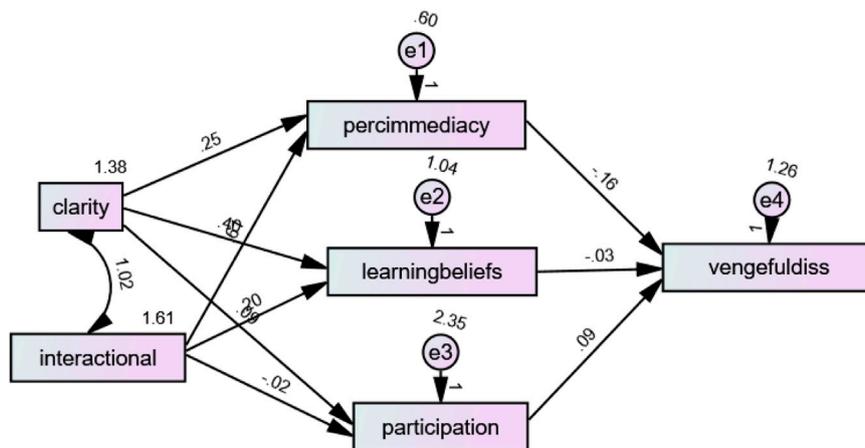
FIGURE 7 | Vengeful dissent without class preference (Supported model).

DISCUSSION

Guided by the IBM (Weber et al., 2011), this study sought to better understand student dissent in the COVID-19 classroom structure. In total, 31 hypotheses were proposed, forming models that predicted that dissent was explained by teacher behaviors, student characteristics, and classroom characteristics through the mediation of student beliefs.

The first seven hypotheses indicate the relationships between the first order variables and perceived immediacy. Hypothesis 1 predicted a positive relationship between relevance and perceived immediacy. The data were consistent with this hypothesis, indicating that students experienced higher levels of perceived immediacy when the instructor presented the content in such a way that it seemed relevant to their career or personal goals. Hypothesis 2 predicted a positive relationship between instructor clarity and perceived immediacy. The data were consistent with this hypothesis, indicating that instructors that were clear were also perceived as more immediate by students. The third hypothesis predicted a positive relationship between self-efficacy and perceived immediacy. The data were consistent with this hypothesis, indicating that when students believe they are capable of succeeding they are also more likely to perceive their instructor as immediate. Hypothesis 4 predicted a positive relationship between intrinsic motivation and perceived immediacy. The data were consistent with this hypothesis, indicating that intrinsically motivated students were more likely to report higher perceptions of immediacy with their instructor. Hypotheses 5, 6, and 7 predicted a positive relationship between procedural, distributive, and interactional justice and perceived immediacy. The data were consistent with these predictions. This indicates that when students believe the process through which their grades and classroom policies are determined is fair, each student is treated fairly in relation to one another, and that the interactions between the instructor and all students are equally fair, they will report higher levels of perceived immediacy with their instructor.

Hypotheses 8 through 14 deal with the relationships between the first order variables and students' COLB. Instructor relevance and instructor clarity were predicted to have a positive relationship with COLB in hypotheses 8 and 9. The data were consistent with both hypotheses, indicating that students are more likely to believe that their efforts, rather than extenuating factors, directly contribute to their academic success when the instructor is clear and when they relate the material to the goals of the student. Hypothesis 10 predicted a positive relationship between self-efficacy and COLB. The data were consistent with this hypothesis, indicating that students who believe they are capable of succeeding are more likely to believe that success is a direct result of their own efforts. Students' intrinsic motivation and COLB were predicted to have a positive relationship in hypothesis 11. The data were consistent with this hypothesis, indicating that as internally driven students focused on their work, they were more likely to believe their efforts would result in success. Hypotheses 12, 13, and 14 predicted that procedural, distributive, and interactional

justice would be positively correlated with students' COLB. The data were consistent with these predictions. This indicates that when students believe the instructor fairly evaluates them, each student is treated fairly in relation to one another, and that the interactions between the instructor and all students are equally fair, they are more likely to believe that their efforts can result in success because they are uninhibited by unfair classroom procedures or grading practices.

Hypotheses 15 through 21 predict the relationship between the first-order variables and student participation. Instructor relevance and instructor clarity were predicted to have a positive relationship with participation in hypotheses 15 and 16, both of which were supported by the data. This indicates that students are more likely to participate when the instructor clearly presents information and establishes its relevance to the student's goals. Hypothesis 17 predicted a positive relationship between self-efficacy and participation. The data were consistent with this finding, indicating that when students believe they are capable of succeeding they are more likely to engage the material and participate. Hypothesis 18 predicted a positive relationship between intrinsic motivation and student participation. The data were consistent with this hypothesis, indicating that students who engage in a task because they enjoy it are more likely to participate. The prediction that procedural justice and distributive justice would be positively related to student participation (hypotheses 19 and 20) was supported, but interactional justice did not have a significant effect on student participation (hypotheses 21). These findings suggest that students are more likely to participate when they believe the instructor will evaluate them through a fair, objective process and that they will be treated equally in relation to one another. However, the degree to which an instructor fairly treats students while communicating with them and implementing policies did not have a significant effect on their participation.

Each of the proposed models predicted a relationship between the second-order student belief variables and a type of student dissent. Hypotheses 22 through 30 predict the relationship between the second-order variables and third-order student learning outcomes. Expressive and vengeful dissent were predicted to have a negative relationship with perceived immediacy (hypothesis 22 and 23) and were both supported. The results indicate that students were less likely to vent about the class or the instructor and were less likely to engage in vengeful acts of retaliation when the instructor was perceived as more immediate. Hypothesis 24 predicted a positive relationship between rhetorical dissent and perceived immediacy. The data were consisted with this, indicating that students who felt psychologically closer to their instructor were also more likely to engage the instructor directly when attempting to resolve an issue.

Expressive and vengeful dissent were predicted to have a negative relationship with students' COLB (hypotheses 25 and 26), both of which were supported. These results indicate that students who believe their efforts do not significantly contribute to the academic success, or that they will do poorly regardless of effort are more likely to vent their emotions to others who are incapable of changing their situation or go after the instructor's

reputation. Hypothesis 27 predicted that rhetorical dissent and students' COLB would be positively correlated. The data were consistent with this, indicating that students are more likely to engage the instructor directly to resolve an injustice or perceived wrong in the classroom when they also believe that their actions are what influences their academic outcomes.

Hypothesis 28 predicted a negative relationship between participation and expressive dissent but was not supported. Finally, participation was predicted to have a positive relationship with both rhetorical and vengeful dissent (hypotheses 29 and 30). The data were consistent with both of these, indicating that students who actively participate in the classroom are more likely to engage the instructor directly when they believe an injustice has occurred, but they are also more likely to engage in malicious attacks against the instructor.

While none of the proposed models were supported, a modified version of each were supported by the data. Because COVID-19 has created uncertain times and less-than-ideal learning circumstances, often throwing students and instructors into situations they would not have chosen, it is important for the models to reflect that many students were unable to enroll in their preferred learning platform. This is significant because a student is likely to choose the class and platform they are most comfortable with when given the option. Whether a student is comfortable with the physical or virtual classroom environment could influence their perceptions of self-efficacy, intrinsic motivation, level of participation, and so forth (as indicated by the independent t-tests). Therefore, in addition to testing student dissent models with only one dissent variable at a time as recommended by LaBelle et al. (2013), we construct two models for each path to dissent. This resulted in one model for the group of students who were able to enroll in their preferred platform and one for those who were not, resulting in a total of six models. The separation provides a comparison between the factors that influence both groups of students in their decision to employ expressive, rhetorical, and vengeful dissenting behaviors.

It is notable that the supported models for expressive dissent are different between the students who were able to enroll in their preferred class and those who were not. Support for the model in which students were enrolled in their preference indicates that instructor clarity, instructor relevance, and interactional justice indirectly influence expressive dissent through perceived immediacy, COLB, and participation. On the other hand, the model for students who were not enrolled in their preferred class indicates that instructor clarity, instructor relevance, interactional justice *and* procedural justice indirectly influence expressive dissent through perceived immediacy, COLB, and participation. The lack of procedural justice in the supported model for students in a class they preferred suggests that the process of how their grade is determined or how the instructor evaluates them is less important to these students.

Prior research has not been able to explain expressive dissent through student characteristics (Goke et al., 2020) or instructor behaviors (LaBelle et al., 2013), though they have been able to explain vengeful and rhetorical dissent respectively. Thus, Goke et al. (2020) suggested that future research look to classroom

characteristics to explain expressive dissent. This paper is a response to that call. The modified expressive dissent models in the present study indicate that the classroom characteristic of interactional justice influenced students' expressive dissent through the mediation of participation, COLB, and perceived immediacy in both groups of students. Further, the classroom characteristic of procedural justice influenced expressive dissent for students who were not in their preferred platform. Meaning, how fairly students believed they were treated by the instructor in communication and implementation of policies influenced their propensity to vent to each other or others, regardless of whether their class preference was met. However, the inclusion of procedural justice in the model for students without their preferences met suggests that when students are not attending class in their preferred platform, how fair they believe the process of evaluation is in that class is also important to them when determining whether they will engage in expressive dissent.

Like the expressive dissent models, the modified rhetorical dissent models differed between the groups of students. For students who were enrolled in their preferred platform, interactional justice, intrinsic motivation, and self-efficacy indirectly influence rhetorical dissent through perceived immediacy, COLB, and participation. For students who were not enrolled in their preferred platform, instructor relevance and intrinsic motivation indirectly influence rhetorical dissent through perceived immediacy, COLB, and participation. While both models support intrinsic motivation, the differences between them suggest that when the class is taught in the student's preferred platform, they are more likely to engage the instructor directly when they feel the instructor is fair in communication and when they have higher beliefs in their ability to succeed. Conversely, when the class is not in their preferred format, students will weigh how relevant the instructor makes the material in their decision to rhetorically dissent.

The supported vengeful dissent models were the same regardless of whether students were enrolled in their preferred platform. In both groups, clarity and interactional justice indirectly influence vengeful dissent through perceived immediacy, COLB, and participation. A closer examination of the beta weights reveals that interactional justice most significantly influences perceived immediacy while instructor clarity most significantly influences students' COLB. Meaning, whether a student perceives their instructor as immediate is most significantly influenced by how fairly they believe the instructor treats them when communicating with students or enacting course policies. Consistent with previous research, perceived immediacy was negatively related to vengeful dissent (Johnson and Kelly, 2020), indicating that students who perceive their instructor as cold, distant, or aloof in their communication or implementation of course policies are more likely to go after the instructor's career or reputation in retaliation. Similarly, the degree to which students believe it is their own efforts that determine their success in the course is most significantly influenced by how clear the instructor is when presenting information. Since COLB is negatively related to vengeful

dissent and positively related to instructor clarity, students who believe their efforts are futile because their instructor is unclear are more likely to engage in vengeful acts in retaliation.

Although the correlations between distributive justice and the second-order variables were all supported, distributive justice was not a significant contributor to any of the supported models in this study. Since students primarily base this perception on their performance in comparison to others (Chory-Assad and Paulsel, 2004a), it is possible that social distancing and the transition to online learning limited communication between students, reduced their ability to compare grades, and subsequently reduced the importance of distributive justice when determining perceived fairness in the classroom culture. Alternatively, students might simply have placed a higher value on interactional and procedural justice in the current academic climate.

Support for clarity and interactional justice in the Instructional Beliefs Model as indirect influencers of vengeful dissent is a novel finding since LaBelle et al. (2013) did not find support for their vengeful dissent model with instructor clarity as an indirect predictor, and Goke et al.'s (2020) supported vengeful dissent model was indirectly influenced by self-efficacy and COLB. However, these results are not surprising as past research has established that students expect their instructors to be verbally and nonverbally immediate, engaging, and clear communicators (Frymier and Weser, 2001; Strage, 2008). A violation of these expectations could be considered instructor misbehaviors (Kearney et al., 1991) or unfair teaching practices (Horan et al., 2010), which have been shown to influence student dissent (Goodboy, 2013; Horan et al., 2010). Therefore, our findings are consistent with past research, despite supporting a unique model that explored students' perceptions of immediacy and participation as moderating variables between instructor clarity, interactional justice, and vengeful dissent.

IMPLICATIONS

COVID-19 has significantly altered the face of higher education, posing new challenges for instructors as they attempt to establish a strong culture in their virtual environments. Engendering perceptions of immediacy with students and encouraging them to participate in an online or HYFLEX platform can be challenging. As demonstrated in this study, students value different aspects of the classroom culture depending on whether or not they are enrolled in their preferred learning platform. While instructors might not always be aware of student preferences, they can still take steps to increase student participation, self-efficacy, intrinsic motivation, and perceptions of justice in the classroom.

To increase perceptions of immediacy with students and decrease expressive and vengeful dissent, instructors should be clear in their communication. It is especially important that instructors be mindful of the delay in message response time that occurs in an online setting (Varberg et al., 2020; Varberg and Westerman, 2020). If the interactions are asynchronous, such as through email, instructors should be mindful of the length of time

between responses since perceptions of immediacy are engendered through timely responses. Even in a synchronous lecture, instructors must allow time for their students to be finished asking a question or speaking before responding and must allow time for their message to go through before expecting a response from their students. Technology-mediated conversations come with a delay that can cause frustration if participants talk over one another or cut each other off.

Past research has established that a lack of clarity contributes to student distractions such as texting (Johnson, 2013). Students are already more likely to get distracted when learning virtually since they are using technology and it is hard for instructors to monitor how it is being used. Clear communication reduces the contribution that the instructor has to these distractions and decreases the likelihood that students will engage in expressive or vengeful dissent. Clarity has also been demonstrated to determine whether the necessary conditions are present for students to confidently engage the materials (Bolkan et al., 2016; Bolkan, 2017), highlighting its importance for those enrolled in a platform in which they feel less capable. In a virtual environment where it is much easier for students to get distracted, clear and engaging communication is more important than ever.

Fairness in communication and the implementation of policies, as well as a fair grading process were significant predictors of student dissent. Both interactional and procedural justice influence whether students will participate, feel psychologically close to the instructor, or believe their efforts significantly contribute to their academic success. This seems to be particularly true for students who are not enrolled in their preferred platform, which aligns with previous findings that a sense of interactional or procedural injustice negatively influences student psychological engagement and participation (Berti et al., 2010; Horan et al., 2010). Meaning, if students believe they are not being treated fairly by the instructor during interactions or grading, they will be more likely to avoid participating or engaging the material. Lower participation has been shown to decrease student success (Christle and Schuster, 2003; Kelly, 2008; Steger-Jager et al., 2012), which in turn is likely to cultivate dissatisfaction and increase dissent. The importance of getting students to participate highlights the necessity for instructors to be transparent in their grading policies and treat their students equally. Instructors must clearly indicate how students will be assessed and ensure they are treated fairly in all interactions. One way for instructors to increase perceptions of fairness is by confirming student questions and effectively responding to them (Young et al., 2013).

Finally, students' levels of self-efficacy and intrinsic motivation contributed to their desire to participate and their propensity to engage in rhetorical dissent. Rhetorical dissent is considered to be more constructive since it involves the attempt to persuade the instructor to change a perceived injustice (Goodboy, 2011a). Instructors who increase students' self-efficacy and intrinsic motivation will also increase participation (Mahyuddin et al., 2006). To establish a strong classroom climate, instructors should focus on increasing student engagement and rhetorical dissent. This might include inviting constructive criticisms to help shape the classroom culture, admitting when a mistake has been made

and correcting it, making clear connections between the goals and interests of the students and the classroom material, and providing small, low-stakes tasks throughout the semester that help build students' confidence in their mastery of the material.

Limitations

There were a few notable limitations in this study. First, the measures for interactional justice, intrinsic motivation, and vengeful dissent had elevated RMSEA. However, Chen et al. (2008) question whether a universal cutoff is even valuable for RMSEA since its sensitivity to minor misfit causes elevation to happen quite frequently. Second, the two groups into which students were divided (preferred class, not preferred class) were not proportional. There were significantly more students not enrolled in their preferred course for online, synchronous and combination classes. Additionally, between the groups, most students were enrolled in HYFLEX. Therefore, it is possible that the direct comparisons between our supported models are somewhat limited.

Future Directions

The IBM predicts how student beliefs, student characteristics, classroom characteristics, and instructor behaviors influence academic outcomes. What is not considered in this model is the effect that inequalities outside of the classroom have on student-teacher interactions, students' views of themselves, and access to education and technology. Since COVID-19 exacerbated existing disparities (Stephens et al., 2020) it is important that these effects be explored in future projects to better understand the new classroom dynamics post-pandemic.

Previous works indicate that differences in racial and socioeconomic backgrounds influence experiences in the classroom (Howard, 2018; Thomas, 2019; Horse and Nakagawa, 2020), as does curriculum (MacDonald, 2019; Small, 2020). Future research should examine how these factors influence classroom culture and student perceptions of their ability to succeed. Closely allied to these works on social inequalities in the classroom, has been the student characteristic of self-esteem, (Bernard and Lowe, 2019; Lui and Quezada, 2019; Yep and Lescure, 2019), which could serve as a connection between the pedagogical social justice and IBM research.

Finally, COVID-19 further emphasized the digital divide in our society. Student participation could be influenced by their access to technology, something that was not measured in this study. Future works should investigate the effects the digital divide might have on student participation, motivation, and self-efficacy to further understand student dissent and classroom culture in a post-pandemic climate.

CONCLUSION

Overall, this study highlights the importance of classroom culture in predicting student dissent through interactional and procedural justice, as well as the clarity and relevance of the instructor. As indicated by Johnson and Kelly (2020) and supported in this study, student perceptions play a significant role in their beliefs about their own academic capabilities. The findings of the present study further this understanding and suggest that student perceptions about themselves in relation to the class platform, as well as their perceptions of the classroom environment and teacher behaviors, influence their academic engagement. Whether or not students enroll in their preferred academic platform influences their perceptions of justice, clarity, relevance, self-efficacy, and intrinsic motivation, and affects how they respond to injustice in the classroom. Instructors should ensure their classroom environment enhances student perceptions of their own ability to succeed and encourages participation.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Kristy Shirley North Dakota State University IRB. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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