

## Are Choice-Making Opportunities Needed in the Classroom? Using Self-Determination Theory to Consider Student Motivation and Learner Empowerment

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Self-determination theory (SDT) underpins research on learner empowerment, but it is rarely discussed in empowerment-related literature. In addition, a motivational measure stemming from SDT has received little visibility in communication research. To address these concerns, this study focuses on motivational theory and measurement in an attempt to tease out the relationship between motivation and learner empowerment as well as how these constructs are related to students' choice-making opportunities in the classroom. In essence, this study aims to offer a strong synthesis of the literature related to these constructs, and also to make methodological and practical advancements in understanding student motivation, learner empowerment, and how freedom in the college classroom shapes students' enthusiasm for learning.

Student motivation is an important precursor to learning, and therefore, is a meaningful aspect of any successful classroom experience (Pintrich & Schunk, 2002). Building on motivational research, learner empowerment also has been found to be integral to the learning process (Frymier, Shulman, & Houser, 1996; Houser & Frymier, 2009). Studies on both motivation and empowerment have examined a variety of related factors such as self-efficacy, values, goals, interests, and – most directly related to the current study – opportunities for self-determination in educational contexts (Wigfield & Eccles, 2002b). Self-determination, or students' autonomous choice-making abilities, can be considered a distinct feature of higher education, one that differentiates it from elementary levels of schooling. As students move from high school into college classrooms, that is, they often experience a shift away from mandatory activities and toward those that are more voluntary or student-controlled. Choice-making opportunities for students are, in part, communicated to students through a syllabus that can speak of an individual's options related to course activities, e.g., choosing to submit a book report instead of taking a quiz or selecting the dates on which work is turned in. Students in college courses also have differing degrees of freedom to choose whether or not to attend class, depending on a teacher's attendance policy. This study's focus on choice as a fundamental aspect of motivation, then, includes an examination of students' self-determination related to both course assignments and attendance. Such an examination can provide clarity for both researchers as well as practitioners, and especially instructors in the classroom as they attempt to tap into the positive outcomes associated with students' motivational tendencies (e.g., feelings of control, perceptions of self-efficacy).

While ultimately exploring the matter of student choice in order to draw some very practical conclusions for instructors in their classrooms, this project began by attempting to tease out the relationship between

motivation and learner empowerment, and by making comparisons across two scales measuring motivation. Motivation and empowerment are overlapping constructs that, to some degree, share history. So, in addition to offering practical advice for teachers, this manuscript offers clarity for researchers on the theoretical and methodological relatedness between these two constructs. The purpose of this project was, thus, three fold: 1) to explore the interconnections between student motivation and learner empowerment, 2) to bridge two fields of inquiry – educational scholarship and communication research – on the topic of student motivation measurement, and 3) to investigate the impact of student choice on motivation and empowerment in the classroom. In essence, this study aims to offer a strong synthesis of the literature related to these constructs, and also to make methodological and practical advancements in understanding student motivation, learner empowerment, and the ways that freedom in the college classroom shapes students' enthusiasm for learning.

### **Motivation**

Building on Heider's (1958) work on personal and impersonal causality, and also working from deCharms' (1968) differentiation between behaviors stemming from one's own volition and those that do not, Deci and Ryan (2002) have inspired roughly thirty years of self-determination research. Their scholarship has explored feelings of autonomy (self-controlled behavior) and motivation in schools, in organizations, in health contexts, on the athletic field, and beyond (e.g., Deci, Connell, & Ryan, 1989; Deci & Ryan, 1995; Deci, Schwartz, Sheinman, & Ryan, 1981; Deci, Vallerand, Pelletier, & Ryan, 1991; Ryan & Deci, 2000; Ryan & Grolnick, 1986; Ryan, Plant, & O'Malley, 1995; Ryan & Stiller, 1991). In educational settings specifically, students' autonomy has been linked to intrinsic motivation (Deci et al., 1981; Ryan & Grolnick, 1986);

and, in turn, intrinsic motivation corresponds to a great number of positive outcomes such as decreased anxiety (Gottfried, 1982), daily well-being (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000), and enhanced academic performance (Deci & Ryan, 1985; Grolnick & Ryan, 1987).

According to self-determination theory (SDT), people are intrinsically motivated when they are self-determined (Reeve, Deci, & Ryan, 2004, p. 33). At the root of self-determination is a personal sense of control; when people are self-determined, they see themselves as initiators of their own activities and as having opportunity to make their own choices (Deci & Ryan, 1985). Moving beyond concerns with external rewards and punishments (Bandura, 1977), and differing from Rotter's (1954) notion of locus of control, "self-determination is not concerned with control over outcomes, but rather with the initiation and regulation of behavior" (Grolnick, Gurland, Jacob, & Decourcey, 2002, p. 149). To be self-determined means being self-propelled to act and thus having agency in one's own performances.

In addition to pointing to the very basic human need for autonomy, or that need for an individual sense of control and personal agency, SDT posits that people are more motivated when their needs for competence and relatedness are met. The need to feel competent refers to perceived opportunities for having influence in a given situation, feeling effective, and having a sense of "confidence and effectance in action" (Deci & Ryan, 2002, p. 7). The need to feel related stems from one's desire to care for others and to be cared for by others – to be socially connected.

This short list of innate human needs, i.e., autonomy, competence, and relatedness, as has been posited by SDT, provides a way to think about both human tendencies and social environments. As Deci and Ryan (2002) argue, they are expected across settings, domains, cultures, and developmental periods. "Although they may have different expressions or different vehicles through which they are satisfied, their core character is unchanging" (Deci & Ryan, 2002, p. 7). That is, "the healthy human psyche ongoingly strives for these nutrients and, when possible, gravitates toward situations that provide them" (Deci & Ryan, 2002, p. 7). In educational contexts, then, considering the basic needs in terms of classrooms as either need-supportive or need-obstructive environments, as well as how teacher-communicated expectations may impact student behavior, is in line with the context-related supposition of SDT.

SDT suggests that motivation can be examined across contexts by way of its differing types on a continuum: amotivation (not feeling compelled to act), intrinsic motivation (acting to gain a sense of personal satisfaction or enjoyment), and extrinsic motivation

(acting to gain approval from others or for some external outcome). Though "self-determination is manifested most vividly and purely in intrinsically motivated behavior" (Grolnick et al., 2002, p. 149), there are variations on both intrinsic and extrinsic motivation. Ryan and Deci (2000) provide an extensive discussion of the self-determination continuum and the many types of motivation. On the left/non-self-determined side of the continuum lies amotivation (being without intention to act), and on the right/self-determined end of the continuum lies intrinsic motivation (having the intention to act for its own sake, for enjoyment, and not because of external pressure). Between these two polar ends lie four varieties of motivation, and, from left to right, they appear in this order: external regulation (acting for external reward or to avoid punishment), introjected regulation (acting to avoid bad feelings such as guilt or to attain good feelings like pride), identified regulation (acting because of the value tied to the behavior or outcome), and integrated regulation – the level of motivation most closely aligned with intrinsic motivation (acting because of the value tied to the behavior or outcome, but also because of the integration of those behaviors into a broader schema of values, needs, and behaviors). All of this is to say that there are multiple types of motivation, and not simply two (e.g., trait/state) or three (e.g., intrinsic/extrinsic/amotivation).

In communication research, scholars often conceptualize motivation as either trait-like or state-related, a practice that stems from Brophy's (1983, 1987a, 1987b) research on students in classrooms. Whereas state motivation refers to students' desires to participate, study, and learn in a specific context, trait motivation is the broader orientation or enduring predisposition toward learning more generally (Brophy, 1987b; Christophel, 1990). Students' state motivation is flexible, and teachers are "capable of stimulating the development of student motivation toward learning" (Christophel, 1990, p. 324). Certainly, differentiating trait from state human tendencies is important, and it has served its purposes across an array of communication research studies. However, for some studies, a bifurcated notion of motivation may oversimplify the complexities at work relative to individuals' internal drive and impetus toward action.

Also common in communication scholarship is the use of unidimensional instruments to measure students' "trait" or "state" motivation toward learning (e.g., Beatty, Forst, & Stewart, 1986; Christophel, 1990; Richmond, 1990). A Google Scholar (<http://scholar.google.com/>) search yielded Christophel's (1990) work as having been cited in 202 subsequent articles and, similarly, Richmond's (1990) work as having been cited 100 times since its publication.

Indeed many researchers continue to measure students' motivation in a unidimensional fashion and report their work across the spectrum of communication journals (e.g., Comadena, Hunt, & Simonds, 2007; Jones, 2008; Myers & Zhong, 2004). Although single-factor instruments have shed light on students' motivation toward learning, investigating this construct with a multidimensional measure might better illuminate the complexities of this phenomenon. In this paper, we argue that a means for measuring state or trait motivation that also takes into account the subtle differences across types of motivation is needed in the discipline of communication studies. We make this argument in light of the decades of motivational research conducted by those working with SDT and given the well-researched self-determination continuum delineating varying categories of motivation. Certain research projects may indeed benefit from a more nuanced understanding of motivation as a construct.

Further, given the multidimensional nature of motivation and the similarities of those dimensions to empowerment facets, untangling the moments of overlap across motivation and empowerment constructs is paramount to the further advancement of related empowerment research. Indeed, scholars differ on how empowerment relates to motivation. For example, Frymier, Shulman, and Houser (1996) assert that empowerment is a broadened version of motivation, but Weber and Patterson (2000) contend that empowerment is a "conceptually ambiguous construct" (p. 23) and "abstractly defined" (p. 23). The following section, then, focuses on empowerment as a construct closely related to motivation, and examines areas of conceptual overlap between and across the two.

### **Empowerment**

Empowerment is connected to motivation in a number of ways. Most directly, it has been conceptualized as a set of motivational processes that increase personal initiation, persistence to complete a task, and feelings of self-efficacy (Conger & Kanungo, 1988). These processes are energizing and related to intrinsic task motivation (Thomas & Velthouse, 1990), and scholars have pointed to the importance of goal alignment between the empowering and the empowered (Luechauer & Shulman, 1993). Empowerment has been considered an "expanded and more inclusive conceptualization of motivation" (Frymier et al., 1996, p. 184), and indeed many of its aspects, e.g., feelings of having impact or competence, overlap with motivational constructs. Feelings of control, while tied to both empowerment and motivation, are what distinguish learner empowerment from other related concepts (Schrodt et al., 2008). Similar to motivation, empowerment can be experienced at the trait and state

level (Thomas & Velthouse, 1990) and can be influenced by interactional partners, e.g., teachers or supervisors (Frymier et al., 1996). While the study of empowerment has its origins in organizational research on manager-employee relationships (Block, 1987), learner empowerment in the classroom has been the focus of a small body of research (Frymier et al., 1996; Glasser, 1990; Houser & Frymier, 2009; Schrodt et al., 2008).

Thomas and Velthouse (1990) are among the earliest empowerment scholars, and they utilize a variety of theorists' work including that of Deci and Ryan (1985) in their cognitive model of empowerment portraying four related dimensions: meaningfulness, competence, impact, and choice. These four dimensions function as task assessments, or judgments people make when facing a task, that serve as intrinsic reinforcements as people carry out their day-to-day activities (Thomas & Velthouse, 1990). The construct of empowerment is built upon SDT principals, but because choice is central to SDT, Thomas and Velthouse (1990) use the word choice as the fourth dimension instead of "the more abstract or philosophical term, self-determination" (p. 673).

The four primary empowerment factors overlay quite neatly with the basic human needs as delineated by Deci and Ryan (2002). For example, meaningfulness (based on self beliefs, ideals, and values) as well as choice address the human need for autonomy/self-determination, and impact (based on beliefs relative to making a difference/having an influence) sounds very similar to the basic human need for competence. Table 1 illustrates how the four dimensions of empowerment – meaningfulness, competence, impact, and choice – as presented by Thomas and Velthouse (1990) are similar to the basic human needs as delineated by Deci and Ryan (1985, 2002); the purpose of this table is to simply point to the areas of similarity, and not "sameness," across constructs. The brief history of empowerment research clearly is entrenched in areas of overlap with related constructs. We have attempted to offer, therefore, a brief history of empowerment-related research and to consider its motivational underpinnings. The next section focuses on choice as autonomous, self-determined action and as a salient factor working across both the motivation and empowerment literatures.

### **Choice**

Motivation is at once an individual's sentiment and a response created given a certain set of social/contextual/communication-based cues. Because motivation is in part a "result of the home and school environmental contexts individuals encounter"

Table 1  
Similarities Across Human Needs and Empowerment Dimensions

Human Needs Deci and Ryan (1985; 2002)	Empowerment Dimensions Thomas and Velthouse (1990)
Autonomy (control, personal agency)	Choice (self-determination) Meaningfulness (self-beliefs, values)
Competence (confidence, influence)	Competence (confidence) Impact (influence)
Relatedness	

(Wigfield & Eccles, 2002a, p. 5), offering students choices in a classroom may enhance their feelings of self-determination and intrinsic motivation to participate in class activities. As Ryan and Deci (2000) suggest, “SDT is concerned not only with the specific nature of positive developmental tendencies, but it also examines social environments that are antagonistic toward these tendencies” (p. 69). One could argue, then, that some of the more traditional classroom approaches whereby the teacher controls students’ movements and work are “antagonistic,” potentially “zapping” students of their motivational tendencies. Indeed, research supports the idea that teachers are influential in students’ motivational processes (e.g., Richmond, 1990), and studies have illuminated some of the social and communication-based precursors to academic motivation in the classroom (e.g., Kerssen-Griep, Hess, & Trees, 2003). In fact, some have offered “practical recommendations on how to support students’ autonomous motivation” (Reeve et al., 2004, 32). Teachers, then, are centrally involved in students’ motivations to perform well in their classes and can work to support students’ needs – to include students’ need for autonomy – in ways that are aligned with SDT.

One way to support students’ autonomy in the college classroom may be to communicate possibilities for student control – to delineate choice-making opportunities – in the course syllabus. Indeed, a precursor of student motivation in the college classroom may very well be the language utilized in the course syllabus given its status as a primary means for introducing and guiding course activities throughout any given term. Through the syllabus, an instructor’s approach and an entire course experience are in fact “framed” in particular ways (for discussion, see Thompson, 2007). Language utilized to describe an attendance policy, the learning assignments, as well as other teacher-controlled expectations, e.g., seating charts, mandatory or voluntary office consultations, study groups/learning communities, are all communicated through a course syllabus, and these explanations offer insight into how self-determined students will be allowed to be in any given class. This

study examines two primary forms of student choice: choice-making opportunities relative to assignment completion and class attendance.

### The Current Study

Though previous research suggests that college student perceptions of empowerment are positively associated to state learning motivation (Frymier et al., 1996), the relationship between motivation and empowerment remains ambiguous. As described previously, the four primary factors of empowerment (Thomas & Velthouse, 1990) overlay and build on those delineated by SDT (Deci & Ryan, 1985), but little is known about the relationship between intrinsic motivation and learning empowerment. That is, SDT clarifies the human needs of autonomy/choice, competency, and relatedness, and Thomas and Velthouse (1990) offer a cognitive model of empowerment with four related dimensions (meaningfulness, competence, impact, and choice). Subsequently, the measure of learner empowerment (Frymier et al., 1996) was developed, building on the work of Thomas and Velthouse (1990), but oddly not mentioning Deci and Ryan’s (1985) SDT. It is reasonable to assume that the dimensions of intrinsic motivation, underpinned by SDT principles, will be strongly associated with measures of learner empowerment. The first mission of the current study, then, is to tease out the relationship between motivation, as measured on the multidimensional Situational Motivation Scale (SIMS) (Guay, Vallerand, & Blanchard, 2000) and learner empowerment. Given the need to sort out these relationships methodologically, and given the overlapping theoretical work underpinning these two constructs, the following hypotheses are posed:

H 1: Levels of intrinsic motivation as measured on the SIMS will be highly and positively correlated with learner empowerment dimensions.

H 2: Levels of extrinsic motivation and amotivation as measured on the SIMS will be

highly and negatively correlated with learner empowerment dimensions.

Because most communication research relies on a unidimensional measure of state motivation, the State Motivation Scale (SMS) (Christophel, 1990; Richmond, 1990), it is important to investigate its performance in comparison to the multidimensional SIMS (Guay et al., 2000), a scale commonly employed in other disciplines, e.g., psychology, education, business. A means for measuring motivation and its fine gradations may enhance future research efforts in the communication discipline, for as Guay, Vallerand, and Blanchard (2000) explain, “without a multidimensional measure of situational intrinsic and extrinsic motivation, we are limiting our possibility to address important theoretical issues” (p. 210). Exploring relationships across measures is critical, then, as communication scholars move forward with examinations of motivation across contexts. To address this need, the first research question is raised:

RQ 1: How does a unidimensional measure of state motivation relate to a multidimensional measure of situational motivation?

Autonomy, or the ability for individuals to have a sense of personal agency, has been found to be associated with increased intrinsic motivation as well as with greater satisfaction among students (Ryan & Grolnick, 1986). Because teachers can effect students’ state motivations toward learning (Christophel, 1990; Ellis, 2004), the potential for an instructor’s course design, requirements, and policies as they are communicated in a course syllabus to effect student perceptions is reasonable to assume. Especially when opportunities for students to initiate their own learning activities are presented in a college course syllabus, students would presumably feel more self-determined, and thus more intrinsically motivated to participate in the class. Students in college classrooms, though, have been found and theorized to be lacking in perceived choice-making opportunities (Frymier et al., 1996). Frymier, Shulman, and Houser (1996) developed a measure of learner empowerment utilizing the four factors of meaningfulness, competence, impact, and choice. In their first iteration, “choice” did not load as a factor. Though the authors theorized that “choice” may not be a part of the classroom experience, they also alluded to the degree to which “choice” may be subsumed under their “impact” factor with its emphasis on self-agency and self-control. The possibility for student choice-making opportunities in college classrooms and the influence those opportunities have on related factors remains undetermined. A more practical aim of the current study, then, is to investigate the potential of college classrooms to be non-controlling, autonomy-supporting

environments that permit some degree of choice, and to assess the impact that students’ choice-making opportunities have on their intrinsic motivation to participate in that class. For the current study, we consider opportunities for “choice making” by students in college classrooms to be possible by way of assignments in the course or via an attendance policy for the class. These two avenues for student choice making will be explored in relation to motivation with the next research question.

RQ 2: Is student “choice” on assignments and on attendance associated with student motivation?

Because learner empowerment has been conceptualized as a motivation-based construct that has comparable dimensions to intrinsic motivation (Frymier et al., 1996; Thomas & Velthouse, 1990), student choice-making opportunities may also influence learner empowerment. Similar to the second research question, then, student choice making will be explored in relation to learner empowerment with this third research question.

RQ 3: Is student “choice” on assignments and on attendance associated with student empowerment?

## Method

### Participants

Four hundred nineteen students (295 females, 122 males, 2 declined to report) on a large U.S. campus who were enrolled in courses spanning a variety of disciplines participated in this study. Individuals ranged in age from 17 to 46 ( $M = 20.32$ ,  $SD = 3.20$ ). One hundred sixty-nine participants were Caucasian, 99 were Asian-American, 88 were Latino, 27 were African American, and 3 were Native American; thirty-three individuals did not fall within the predetermined ethnicity categories or declined to report ethnic background. These demographics reflect those of the broader university student body from which these data were drawn. Individuals came from all class levels, including freshmen ( $n = 163$ ), sophomores ( $n = 102$ ), juniors ( $n = 76$ ), and seniors ( $n = 69$ ); eight participants did not indicate their class standing. Participants were drawn from both lower-division and upper-division courses and from both small-sized and large lecture-hall type classrooms.

### Procedure

Students completed the questionnaires in classrooms on campus during regularly scheduled class time. Surveys were distributed in eight different classrooms, four in which students were not offered any choice-making opportunities in terms of assignments to

complete for the course. In the other four courses in which surveys were distributed, students were offered several avenues to make choices about which assignments to complete. These choices included a small menu of assignments from which students could select those they wished to complete, or at the very least, the choice of turning in a paper or taking a final exam at the end of the semester. The first author targeted the four “choice” courses purposely, then matched those four courses with “non-choice” partners of similar level (lower or upper division), size (small class or large lecture), and type (general/basic education course or major course). The eight courses were chosen from across five academic departments housed in a college of liberal arts. The second author coded all syllabi for “assignment choice” as a way to check the purposeful sampling of the first author; they achieved 100% inter-coder reliability. Two hundred and fifty-one students completed questionnaires in courses categorized as having choice on assignments; 168 students filled out surveys in the “non-choice” courses.

Attendance policies were analyzed separately following data collection. Both authors coded the course syllabi for “choice on attendance” based on the instructors’ stated attendance policy, resulting in 100% inter-coder reliability. Two hundred and seven students filled out questionnaires in courses where attendance was optional; 212 students completed surveys in courses where attendance was mandatory.

### Instruments

To assess students’ situational motivation the multidimensional Situational Motivation Scale (SIMS) (Guay et al., 2000) was utilized. The SIMS consists of 16 items, each measured on a 7-point Likert-type scale (1 = not at all to 7 = extremely). These items address a single overarching question that was slightly modified for this study, from “Why are you engaged in this activity?” to “Why are you doing the work for this class?” The items are designed to measure the four subscales of intrinsic motivation, e.g., “Because I think that this activity is interesting”; identified regulation, e.g., “Because I am doing it for my own good”; external regulation, e.g., “Because I am supposed to do it”; and amotivation, e.g., “There may be good reasons to do this activity, but personally I don’t see any.” Items for each of the four sub-scales were summed to provide composite scores for each type of motivation: intrinsic motivation ( $M = 3.61$ ,  $SD = 1.49$ ,  $\alpha = .893$ ), identified regulation ( $M = 4.46$ ,  $SD = 1.39$ ,  $\alpha = .807$ ), external regulation ( $M = 4.98$ ,  $SD = 1.42$ ,  $\alpha = .799$ ), and amotivation ( $M = 2.84$ ,  $SD = 1.39$ ,  $\alpha = .841$ ).

Learner empowerment was measured using Frymier, Shulman, and Houser’s (1996) Learner

Empowerment Scale (LES). This measure is comprised of 35, 7-point Likert-type scale (1 = never to 7 = always) items. The LES assesses three dimensions of empowerment: impact ( $M = 4.02$ ,  $SD = 1.01$ ,  $\alpha = .862$ ), meaningfulness ( $M = 4.68$ ,  $SD = 1.19$ ,  $\alpha = .916$ ), and competence ( $M = 5.22$ ,  $SD = .98$ ,  $\alpha = .889$ ). To measure these three dimensions of learner empowerment, the LES includes such items as “My participation is important to the success of this class” (impact), “The information in this class is useful” (meaningfulness), and “I have the qualifications to succeed in this class” (competence). Items for each of the three sub-scales were summed to provide composite scores for each type of empowerment.

State motivation was measured by the State Motivation Scale (SMS) (Christophel, 1990; Richmond, 1990). The SMS consists of 16 sets of 7-point semantic differential items, e.g., excited/not excited, involved/uninvolved, motivation/unmotivated. Students were asked to report their feelings about the specific class they were in, and they were instructed not to report about their feelings on learning more generally. Once 9 items were reverse-coded, all 16 items were summed to provide an overall state motivation score for each student; scores ranged from 1.31 to 7.00 ( $M = 4.66$ ,  $SD = 1.10$ ). This measure had an alpha reliability of .925.

### Results

The two hypotheses focused on the relationship between the situational intrinsic motivation measure (SIMS) and the learner empowerment scale (LES). By examining the dimensions on both measures, important theoretical clarity relative to the two constructs, motivation and learner empowerment, can be gleaned. Specifically it was predicted that levels of intrinsic motivation as measured on the SIMS will be highly and positively correlated with learner empowerment dimensions (H 1) and that levels of extrinsic motivation and amotivation as measured on the SIMS will be highly and negatively correlated with learner empowerment dimensions (H 2). Intercorrelations between the two measures reveal that all dimensions were significantly correlated to all dimensions of the empowerment measure in the direction anticipated. That is, both hypotheses were supported (See table 2).

The first research question explored the relationship between the unidimensional measure of state motivation (SMS) and the multidimensional measure of situational motivation (SIMS). Results revealed that the SMS was significantly correlated with all dimensions of the SIMS. Specifically, SMS was positively associated with SIMS dimensions of intrinsic motivation,  $r(403) = .679$ ,  $p < .001$ , and identified regulation,  $r(404) = .579$ ,  $p < .001$ . The SMS was negatively related to external regulation,

Table 2  
Intercorrelations between SIMS and LES

	Impact Empowerment	Meaningfulness Empowerment	Competency Empowerment
Intrinsic Motivation	.574**	.747**	.310**
Identified Regulation	-.476**	.685**	.342**
External Regulation	-.334**	-.354**	-.175**
Amotivation	-.335**	-.583**	-.314**

\*\*  $p < .001$

Table 3  
Interaction Results of Student Choice on Assignments and  
Attendance on their Levels of Motivation and Empowerment

	No Choice on Assignments	Choice on Assignments
Intrinsic Motivations	No Choice on Attendance Choice on Attendance	High ---
Identified Regulation Motivation	No Choice on Attendance Choice on Attendance	High ---
External Regulation Motivation	No Choice on Attendance Choice on Attendance	Low High
Amotivation	No Choice on Attendance Choice on Attendance	Low High
Impact Empowerment	No Choice on Attendance Choice on Attendance	High ---
Meaningfulness Empowerment	No Choice on Attendance Choice on Attendance	High Low
Competency Empowerment	No Choice on Attendance Choice on Attendance	High ---

$r(403) = -.284$ ,  $p < .001$ , and amotivation,  $r(402) = -.467$ ,  $p < .001$ , on the SIMS measure.

The second and third research questions investigated the relationships between student choice-making possibilities in a class and students' levels of motivation (RQ 2) and empowerment (RQ 3). Table 3 provides a chart of the findings. To examine if students who have choice in selecting their assignments and in attending class have greater levels of motivation than students who do not (RQ 2), a 2 (choice on assignments vs. no choice) x 2 (attendance optional vs. attendance mandatory) MANOVA was computed. When using the unidimensional measure of state motivation (SMS), no significant results emerged. However, when using the multidimensional measure of situational motivation (SIMS), results of the factorial MANOVA uncovered a significant multivariate interaction effect of choice of assignments by choice of attendance on students' levels of motivation, Wilk's  $\lambda = .755$ ,  $F(4, 407) = 32.961$ ,  $\eta^2 =$

$.245$ ,  $p < .001$ , as well as significant multivariate main effects for both assignment choice, Wilk's  $\lambda = .933$ ,  $F(4, 407) = 7.356$ ,  $\eta^2 = .067$ ,  $p < .001$ , and attendance choice, Wilk's  $\lambda = .960$ ,  $F(4, 407) = 4.208$ ,  $\eta^2 = .040$ ,  $p < .005$ .

Students who had little to no choice on assignments and whose attendance in class was mandatory (intrinsic motivation:  $M = 5.46$ ,  $SD = .210$ ; identified regulation motivation:  $M = 5.57$ ,  $SD = .211$ ) reported higher levels of intrinsic motivation,  $F(1, 413) = 96.301$ ,  $\eta^2 = .190$ ,  $p < .001$ , and higher levels of identified regulation motivation,  $F(1, 413) = 36.279$ ,  $\eta^2 = .081$ ,  $p < .001$ , than students who had quite a bit of latitude in assignment choice but had required attendance (intrinsic motivation:  $M = 3.17$ ,  $SD = .102$ ; identified regulation motivation:  $M = 4.17$ ,  $SD = .102$ ).

Students who had a great deal of choice on assignments but whose attendance in class was mandatory (amotivation:  $M = 3.21$ ,  $SD = .110$ ; external regulation motivation:  $M = 5.34$ ,  $SD = .101$ ) reported

higher levels of amotivation,  $F(1, 413) = 51.445, \eta^2 = .111, p < .001$ , and higher levels of external regulation motivation,  $F(1, 413) = 64.338, \eta^2 = .136, p < .001$ , than students who had little to no assignment choice and had required attendance (amotivation:  $M = 1.72, SD = .228$ ; external regulation motivation:  $M = 3.78, SD = .209$ ). In general, the findings of *RQ 2* suggest that students find a consistent message with choice on assignment and choice on attendance to be more motivating than when there is a mis-match between the two.

To explore if students who have choice in selecting their assignments and in attending class have greater levels of empowerment than students who do not have that freedom (*RQ 3*), a 2 (choice on assignments vs. no choice)  $\times$  2 (attendance optional vs. attendance mandatory) MANOVA was computed. Results of the factorial MANOVA uncovered a significant multivariate interaction effect of choice of assignments by choice of attendance on students' levels of empowerment, Wilk's  $\lambda = .769, F(3, 385) = 38.448, \eta^2 = .231, p < .001$ , as well as significant multivariate main effects for both assignment choice, Wilk's  $\lambda = .935, F(3, 385) = 8.954, \eta^2 = .065, p < .001$ , and attendance choice, Wilk's  $\lambda = .913, F(3, 385) = 12.295, \eta^2 = .087, p < .001$ .

Students who had little to no choice on assignments and whose attendance in class was mandatory (impact empowerment:  $M = 5.26, SD = .145$ ; meaningful empowerment:  $M = 5.91, SD = .169$ ; competency empowerment:  $M = 5.67, SD = .150$ ) reported higher levels of impact empowerment,  $F(1, 391) = 74.739, \eta^2 = .162, p < .001$ , higher levels of meaningful empowerment,  $F(1, 391) = 103.080, \eta^2 = .210, p < .001$ , and higher levels of competency empowerment,  $F(1, 391) = 13.345, \eta^2 = .037, p < .001$ , than students who had little to no assignment choice but had optional attendance (impact empowerment:  $M = 3.76, SD = .085$ ; meaningful empowerment:  $M = 4.20, SD = .099$ ; competency empowerment:  $M = 4.95, SD = .075$ ). Thus, the findings of *RQ 3* suggest that when teachers make attending class optional, this strategy actually may serve as a disempowering factor for students.

## Discussion

The central aims of this study were to clarify how motivation and learner empowerment are related, to examine the performance of and draw comparisons across two motivational measures, and to investigate how student choice-making opportunities may be related to student motivation and learner empowerment. We argue that an analysis of how learner empowerment, given its relatively new and small body of literature, relates to the broader and more established literature on motivation is desperately needed. We also contend that an understanding of how the two motivational scales – one less familiar to communication scholars than the other –

are related can only enhance motivational studies in the discipline. While both of these efforts are driven by a robust need for theoretical and methodological clarity, the practical importance of understanding this notion of choice, or student self-determination in a classroom, is equally strong.

The SIMS (Guay et al., 2000), with its four types of motivation, was found to be highly correlated with the LES (Frymier et al., 1996), indicating that there is indeed strong overlap across these motivation and empowerment measures. These findings reinforce the notion that intrinsic motivation is positively associated with learner empowerment, as well as that extrinsic motivation and amotivation are negatively linked to learner empowerment dimensions. Theoretically and methodologically, the two bodies of research related to these constructs intersect in varying ways across differing literatures. This study works to bring these bodies of research together, attempting to explain the motivational underpinnings of empowerment and to uncover the ways in which these relevant measures are interconnected. That empowerment is highly and positively correlated with intrinsic motivation, and that it is highly and negatively correlated with extrinsic motivation and amotivation reinforces the strong motivational origins upon which empowerment is based. These results support earlier notions that empowerment is a broad version of motivation (Frymier, Shulman, & Houser, 1996), and they make a step toward clarifying the ambiguity that continues to exist for communication scholars who assert that empowerment is a “conceptually ambiguous construct” (Weber & Patterson, 2000, p. 23).

To further flesh out the similarities and distinctions across instructional measures, this study compared the unidimensional SMS (Christophel, 1990; Richmond, 1990) with the multidimensional SIMS (Guay et al., 2000) student motivation indices. As predicted, the SMS (Christophel, 1990; Richmond, 1990) was positively correlated with the two types of intrinsic motivation as measured on the SIMS (Guay et al., 2000) and negatively correlated with external motivation and amotivation as measured on the SIMS; these results firmly situate the SMS as a measure of intrinsic motivation and not extrinsic motivation or amotivation. These findings thus affirm the utility of the SIMS for measuring three different types of motivation and not just one, as is the case with the SMS. Especially in light of the decades of self-determination research, the credibility afforded to SDT (Deci & Ryan, 2002), and its contribution with regard to the various types of motivation, gleaned more detailed information from study participants about their subtle motivational differences is clearly advantageous. These results suggest that the SIMS measures up to – and for some purposes surpasses – the utility of the

SMS, which currently functions as a “gold standard” in the communication discipline.

One of our primary goals with this research study was to highlight the utility of the SIMS (Guay et al., 2000), a measure that has received little visibility among communication researchers when compared to the SMS (Christophel, 1990; Richmond, 1990). While the SIMS yielded powerful findings with regard to our primary and “applied” question about students’ choice-making opportunities in the classroom, the unidimensional SMS uncovered little by way of these relationships. We argue, then, that a more nuanced measure of motivation – one that measures differing motivational types as posited by SDT (Deci & Ryan, 2002) – is needed in communication research when studies seek to measure the subtle shifts in motivation types, e.g., when attempting to uncover differences between intrinsic motivation and identified regulation. The SIMS, too, offers an alternative to the SMS in that it focuses on a particular task or activity (with its series of items directed toward a named activity) more so than the SMS. Certainly the SMS has strong footing in communication research, is an important measure when needing to tease out trait and state motivations, and can be adapted to measure an individual’s feelings about engaging in a particular task. However, as a bipolar and unidimensional measure comprised of general terms, the SMS is limited in its use for accessing the differing types of motivation that warrant exploration in some lines of communication scholarship.

Furthermore, this study offers unique insight into how something as mundane as a teacher’s assignment structure or attendance policy may influence a student’s intrinsic motivation. Among students whose attendance was mandatory, intrinsic motivation (measured as intrinsic motivation and identified regulation) was higher among those offered little to no choice on assignments than for those offered latitude on assignments. Also among students whose attendance was mandatory, extrinsic motivation (external regulation) and amotivation were reportedly higher among students offered latitude on assignments than for those offered little to no choice on assignments. This project shows that students are intrinsically motivated, i.e., internally driven to act, and report identified regulation, i.e., perceiving outcome value, in a class when a teacher communicates similarly across course elements.

Given that our results show choice on assignments and attendance ought to be aligned if intrinsic motivation among students is desired, we infer that students feel more self-directed when they understand their teacher as providing either a student-driven experience, e.g., voluntary attendance and assignment choices, or a teacher-directed experience, e.g., mandatory attendance and no assignment choices, and not a mix of the two.

Students may, to some degree, sense that they know what to expect from their teacher, they may see a predictable pattern among any teacher who conveys consistency, and they may, therefore, see themselves as in control – a central tenet of SDT (Deci & Ryan, 1985). These findings indicate that teachers who communicate a mix of policy styles may be obstructing individual initiations to participate in the class, i.e., autonomy, intrinsic motivation, and impeding positive views of value toward the class (identified regulation) among students.

Our results relative to learner empowerment indicate a strong link between a teacher’s attendance policy and a student’s sense of impact, meaningfulness, and competency-related empowerment. While both assignment choice and attendance policy influenced learner empowerment, mandatory attendance brought about an enhanced sense of learner empowerment among students offered little to no choices on assignments. Ironically, then, teachers who communicate a voluntary attendance policy, those who may be trying to allow students to rely on personal initiation, may in fact be impeding the motivational processes underlying student empowerment. Teachers with voluntary attendance policies may be perceived as caring less than those who take a regular “roll call,” or perhaps the students themselves feel more involved overall when their teacher checks for daily attendance. In any case, future research ought to clarify how a voluntary attendance policy may create a context that is antagonistic (Ryan & Deci, 2000) to students’ empowerment and its motivational underpinnings.

Of interest for researchers and practitioners are these unexpected findings relative to student choice in a classroom. Intuitively, one would imagine that freedom is a positive phenomenon in any context. Additionally, there is a wide selection of literature asserting the merits of choice-making opportunities (see for review, Iyengar & Lepper, 2000). However, under certain conditions, Iyengar and Lepper (2000) found that too much choice, in fact, can lead to negative consequences. Our findings suggest, similarly, that students’ choice-making opportunities in a classroom are not necessarily going to bring about constructive effects and that, under certain conditions, some freedoms might be disempowering or demotivating for students.

Based on the findings in the present project, to maximize student motivation, educators should ensure that they are consistent in the choice-making opportunities that they offer students. If students are permitted to select or choose particular assignments, then they also should have the same freedom to elect to attend class meetings or not. In contrast, if students are expected to complete particular assignments, without the option of choosing their course activities, then students also should have equally structured

expectations regarding their class attendance. Although this study examined assignment selection and classroom attendance only, teachers can infer that the advice gleaned from these results – to maintain consistency in order to bring about positive outcomes – can be applicable to other aspects of the educational context. Opportunities for consistency in the classroom might be tied to such mandated or optional course activities as group projects, class participation, lecture notes/class journals, and out-of class experiences, e.g., special lectures or volunteer experiences. Drawing from the findings of our current study, we argue that students benefit from an ongoing sense of continuity.

Although this project makes some meaningful theoretical, methodological, and practical contributions, several limitations should be noted. First, participants were purposefully drawn from lower-division and upper-division courses and from both small-sized and large lecture-hall type classrooms to tap into the breadth of classroom experiences college students encounter. However, it is possible that students in differing class levels and diverse course sizes may have different expectations as to the level of freedom or micro-management that they anticipate from their instructor. As Biddle and Berliner (2002) have suggested, both the size of the class and the academic level of student can influence learning outcomes. Thus, it is possible that these factors could have shaped students' perceived levels of motivation and empowerment. Future scholarship, then, may wish to isolate these class-specific issues in order to uncover additional precursors to intrinsic motivation and empowerment.

Secondly, the classroom dynamic and the relationships developed within it can also influence students' feelings of empowerment and motivation to learn. Although the course syllabus communicates a great deal about a teacher's instructional style (Thompson, 2007), it is only part of the picture. Students may be given choices in smaller ways, through volunteering for in-class activities, participating in optional discussions, and the like, that may not be reflected on a course syllabus but may work to influence students' levels of motivation and empowerment. Students may also be offered autonomy and choice while being quizzed regularly or pressured in other more indirect ways than through formal syllabus-based communication. Linking information gleaned from syllabi with instructor-relevant variables, examining whole-class interactions through in-class observations, or attempting to study the same instructor offering different kinds or degrees of choice would build on our findings and offer a fuller glimpse of how intrinsic motivation and learner empowerment may be influenced by syllabus-related communication in the classroom.

Finally, the results uncovered in this project may be reflective of the shift in learning styles for today's students. Some scholars, e.g., Tschirhart & Wise, 2002; Waldeck, 2006, have noted that giving students options on assignments can confuse them and may actually be viewed as a teacher misbehavior. Tapping into the type of adult oversight these individuals encountered as younger students, e.g., that of a parent, a teacher, or a coach, and considering students' proclivities for particular environments or management styles may each provide greater insight into some of our unexpected findings.

Overall, this project makes important contributions to the understanding of SDT (Deci & Ryan, 2002) and how student motivation and empowerment in the college classroom can be best understood by first reviewing the theoretical underpinnings of these constructs. By combining scholarship from multiple fields of inquiry, we were able to offer a comparison of widely used student motivation measures to pinpoint similarities and note differences between the conceptualization and measurement of motivation as a meaningful construct. Likewise, by uncovering the interconnections between student motivation and learner empowerment, we have clarified the strong degree to which these constructs overlap. Finally, in unveiling some counter-intuitive findings regarding student choice in the college classroom and their influence on motivation and empowerment, we have offered important and practical ideas for teachers to consider in their practice. In short, this study highlights and reinforces the consequences tied to choice-making – the choices that scholars make when studying motivation and related areas, the choices that teachers make when constructing their syllabi, as well as the effects of choice-making opportunities on students – and the significance these choices have relative to research and practice.

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