

Student Self-determination and the First Year Seminar

Abstract

Consistent research has shown positive relationships between self-determination and student persistence and achievement. University 101 has been designed to promote self-determination by creating environments that foster autonomy, competence, and relatedness. The purpose of this study was to compare levels of self-determination between FYS participants and nonparticipants using an adapted scale. Our expected findings is those students enrolled in University 101 will have higher levels of self-determination, higher GPA's, and lower attrition rates.

Introduction

Self-determination theory has been a widely researched system of thought in the field of motivation and psychology in the past three decades (Deci & Ryan, 2002) and may be an important noncognitive predictor of college success. There has been substantial research conducted that shows a consistent, positive link between self-determination and increases in intrinsic motivation, internalization, persistence, and achievement. As such, SDT has provided a powerful theoretical framework to help explain many of the processes affecting behavior in a wide range of contexts including educational and work settings. A synthesis of noncognitive variables, self-determination theory (SDT) has evolved to reflect the contributions of related foundational theories that all involve the concept of basic psychological needs. Deci and Ryan theorized that self-determination is formed by an interaction of three constructs, autonomy, competence, and relatedness, and stated that all three must be manifested for an individual to function optimally and feel self-determined.

This University 101 course as a first year seminar has been designed to promote self-determination in freshmen students through creating an environment that fosters these constructs. For autonomy, students are encouraged to take responsibility for their learning, to understand there are opportunities to adapt their behaviors when given only one option, and to consciously make decisions in accordance with their own wants, needs, and goals. For competence, the seminar provides continuous opportunities to develop proficiencies and skills in areas that will help them be successful in college. For relatedness, the seminar promotes close friendships and meaningful relationships and connections with faculty and other university staff.

There has been substantial self-determination research showing its relationship with student success as well as consistent studies showing a relationship with First Year Experience (FYE) courses and student success; however, there has been very little that examines the relationship of self-determination with these FYE courses.

Method

Participants

Participants are freshmen students enrolled at a medium-sized (N = 12,000) western region research university. There were 2,138 freshman enrolled in classes in Fall 2011. Of the 2,138, 373 students were enrolled in the University 101 program. Survey participants included 114 UNIV 101 students, and 111 program nonparticipants.

Measures

Participants were given The Basic Need Satisfaction at Work scale (Deci et al. 2001; Ilardi, Leone, Kasser & Ryan, 1993) which was adapted in a previous study to measure self-determination of first year college students. The original 21-item scale which included three subscales measuring autonomy, competence, and relatedness was adapted to apply directly to the undergraduate context and experience and resulted in a 16-item scale (The Basic Need Satisfaction in College Scale BNS-C). The reliability of the scale produced a Cronbach's Alpha of 0.897 in the pilot study, and a 0.832 in the current study (see Appendix).

Procedures

UNIV 101 participants were asked to complete the survey online during the last three weeks of the semester. Nonparticipants were sampled and contacted three times by email to complete the online survey. Student enrollment and performance data were collected from university datasets.

Analysis

A one-way ANOVA was used to assess differences in perceived levels of self-determination between program participants and nonparticipants. Additionally, multiple regression models controlling for student characteristics (e.g., index scores) was used to assess the relationship of perceived self-determination with performance in UNIV 101 and the relationship of self-determination with student achievement (i.e., term GPA) and fall to spring persistence.

Results

This study found no significant difference in perceived feelings of self-determination between UNIV 101 participants and nonparticipants. This finding could be the result of several factors. The BNS-C was distributed through email to both participants and nonparticipants at the end of the Fall semester. It is likely that more highly motivated students will complete voluntary studies over students with lower motivation, therefore creating a response bias. In comparing GPA, persistence, academic standing, and index scores between participants, nonparticipants, and students who did not participate in the study, there was a clear difference in overall achievement with those who participated in the study, and those who did not. Furthermore, there was only one category (academic standing) with a statistical difference between UNIV 101 participants and nonparticipants who completed the study (see Table 1).

Table 1
Mean Comparisons of SD Survey Participants as Compared to Entering First-Semester Freshmen

	Survey Participants		All Freshmen n = 2138
	UNIV 101 Participants n = 114	UNIV 101 Nonparticipants n = 111	
Fall 2011 GPA	2.94	2.78	2.32
Fall 2011 to Spring 2012 Persistence	93%	90%	83%
Good Academic Standing (GPA \geq 2.0)	92%	78%	67%
Entering Index Score	106	108	103

Note. The only significant difference ($p < .01$) between participants and nonparticipants occurred in the indicator Good Academic Standing.

The relationship between participant performance in UNIV 101 and self-determination was also examined. Within UNIV 101 participants, there was a significant positive relationship ($p < .05$) between perceived feelings of self-determination and student performance in UNIV 101. There was also a significant positive relationship ($p < .05$) between perceived feelings of self-determination and first semester GPA above and beyond index score (a composite score of high school achievement scores and college entrance exams). In other words, higher feelings of self-determination were related to higher student performance in both instances. The final analysis examining student persistence was not particularly valid as only eight students in the entire sample (program participants and nonparticipants) did not persist. This also reflects that the study participants were higher achieving and possibly more motivated and not necessarily representative of the overall entering freshmen class. This will be an important consideration for studies conducted in the future.

Discussion

Although undergraduate student persistence and performance has been researched extensively from a variety of perspectives, the level of undergraduate student attrition has varied very little since 1983 (Braxton, Brier, & Steele, 2007). The unfortunate reality is that many university efforts, although well-intentioned, have not translated into, “substantial gains in student persistence and graduation” (Tinto, 2006, p. 5). Self-determination theory provides another possible lens with which to examine student behaviors and provide additional opportunities to promote environments that support student persistence, intrinsic motivation, and achievement. Because there has been consistent research showing positive links between student self-determination and achievement and persistence, faculty, staff, and administrators can and should support students’ perceived feelings of self-determination within educational contexts (Deci & Ryan, 2002). Over the last several decades, SDT research has also strongly supported that it is possible to incorporate supportive strategies to promote student self-determination and as a result, student success (Deci & Ryan, 1985; Reeve, 2002). Example of support strategies include providing resources and information, providing informational feedback rather than evaluative feedback, providing opportunities to demonstrate competence, encouraging cooperation, not competition in class, acknowledging feelings, and having daily one-on-one interactions (Reeve, 2002; Vaughan, 2005).

References

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Appendix
Basic Need Satisfaction in College Scale (BNS-C)

Construct	Item #	Item
Autonomy	6	I am free to express my ideas and opinions at school
	12	I feel like I can pretty much be myself at school
	15	I understand the purpose of my classroom requirements
	16	I am encouraged by my professors at [university] to participate in my classes
Competence	2	I do not feel very competent with school work
	3	People at [university] tell me I am good at what I do in school
	8	I have been able to learn interesting new skills in college
	9	Most days I feel a sense of accomplishment from attending class and studying
	10	At school, I do not get much of a chance to show how capable I am
	14	When I am studying I often do not feel very capable
Relatedness	1	I really like the people I go to school with
	4	I get along with people at [university]
	5	I pretty much keep to myself when I am at school
	7	I consider the people I attend [university] with to be my friends
	11	There are not many people at [university] that I am close to
	13	The people I go to school with do not seem to like me much

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