

Iowa State University
Dean of Students Office
Supplemental Instruction-Academic Success Center

**Motivation to Attend Supplemental Instruction
2008-2009**

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Abstract

Supplemental Instruction (SI) sessions are scheduled based on surveys distributed and collected during the first week of the semester. One question on the survey asks students to identify their level of interest in SI. This survey question and students' total number of SI sessions attended for the semester are used as predictors of motivation to show that motivation to attend contributes to higher final course grades.

Executive Summary

Purpose

The purpose of this assessment is to determine whether two variables serve as suitable measure of motivation and how these variables contribute to students' final grades.

Methodology

During the first week of classes for the semester, SI Leaders coordinate the distribution and collection of a scheduling survey. One question asks students to "Please indicate your interest in attending SI for this course." Responses are recorded based on a scale of 1 to 5 (where 1=Not Interested; 5=Very Interested).

Some faculty/staff have stated that SI tends to attract the students who have stronger academic ability, believing that this group of students has a higher level of inherent motivation. Hence, we controlled for academic ability in a multiple regression model to predict students' final grades based on their total attendance and level of interest, while controlling for academic predictors (high school rank and ACT score).

Findings

First, all of the variables in the regression model correlated to final grade (dependent variable) as follows:

- ◆ There is a relatively negligible, negative correlation ($r=-.028$, $n=7147$, $p<.01$) between students' level of interest in SI and their final grade.
- ◆ There is a small, positive correlation ($r=.152$, $n=7147$, $p<.001$) between students' total attendance in SI sessions and final grade.
- ◆ There is a medium, positive correlation ($r=.392$, $n=7147$, $p<.001$) between students' high school rank and final grade.
- ◆ There is a medium, positive correlation ($r=.313$, $n=7147$, $p<.001$) between students' ACT score and final grade.

Of the two potential variables that predict students' motivation, these correlations shows that total attendance is a stronger predictor for motivation than their self-reported level of interest in SI. Note that there is a small, positive correlation ($r=.213$ $n=7147$, $p<.001$) between students' level of interest in SI and their total attendance.

These correlations also show that academic ability likely predicts final grades, justifying the need to control for academic ability in the regression model.

Second, the multiple regression model shows that students' level of interest and total attendance are strong predictors of students final grades. Based on the adjusted R^2 value, the combination of students' total attendance and their level of interest in SI explains 20.2% of the variance in final grades.

Discussion and Recommendations

These findings show that students' level of interest in SI at the start of the semester modestly serves as a measure of students' motivation to participate in SI. The negative correlation between level of interest and

final grade shows that higher *motivation as intent to participate* does not equate directly into a higher final grade. The finding modestly validates our prior practice to schedule SI sessions based on students with a higher level of interest in SI; however, the predicted variance in the regression model suggests there are many other factors that impact final grade. Hence, we may best serve students by make SI available to the most students possible, not just those with the higher level of interest.

Students' total attendance in SI sessions is a stronger measure of motivation. The positive correlation between total attendance and final grade shows that higher *motivation as actual participation* does equate directly into a higher final grade. Hence, this assessment may also contribute to promotion of SI by showing that level of attendance is a stronger contributor to final grade than motivation to attend. SI Leaders can use this knowledge to encourage on-going attendance at and participation in SI sessions.