

Scholarly journals are often referred to as **peer-reviewed*** journals, academic journals, or research journals.

*A peer reviewed journal article is one that experts in that field have read and approved for publication.

Purpose	Subject Matter	Language
The purpose of scholarly journals is to educate and share information and research between scholars in particular academic disciplines.	The subject matter of scholarly journals is highly specific, specialized, and presented in lengthy, in-depth articles.	The language used in scholarly journals is appropriate for academic discussions. Articles contain complex terminology, jargon, and sometimes mathematical formulas.

Research in Higher Education, Vol. 46, No. 6, September 2005 (© 2005)
DOI: 10.1007/s11162-004-4139-z

SELF-EFFICACY, STRESS, AND ACADEMIC SUCCESS IN COLLEGE

Anna Zajacova,* Scott M. Lynch,** and Thomas J. Espenshade†,‡

.....

This paper investigates the joint effects of academic self-efficacy and stress on the academic performance of 107 nontraditional, largely immigrant and minority college freshmen at a large urban commuter institution. We developed a survey instrument to measure the level of academic self-efficacy and perceived stress associated with 27 college-related tasks. Both scales have high reliability, and they are moderately negatively correlated. We estimated structural equation models to assess the relative importance of stress and self-efficacy in predicting three academic performance outcomes: first-year college GPA, the number of accumulated credits, and college retention after the first year. The results suggest that academic self-efficacy is a more robust and consistent predictor than stress of academic success.

.....

KEY WORDS: self-efficacy; stress; academic; nontraditional; college; immigrant; minority; retention; performance.

The article title is often a brief synopsis of the article's contents.

An abstract (or brief summary) of the article is provided. Keywords are also sometimes offered.

INTRODUCTION

Despite steadily rising enrollment rates in U.S. postsecondary institutions, weak academic performance and high dropout rates remain persistent problems among undergraduates (Lloyd, Tienda, and Zajacova, 2001; Tinto, 1994). For academic institutions, high attrition rates complicate enrollment planning and place added burdens on

*Fifth-Year Graduate Student, Office of Population Research and Department of Sociology, Princeton University.

**Assistant Professor of Sociology and Faculty Associate, Office of Population Research, Princeton University.

†Professor of Sociology and Faculty Associate, Office of Population Research, Princeton University.

‡Address correspondence to: Thomas J. Espenshade, Office of Population Research, 249 Wallace Hall, Princeton University, Princeton, NJ 08544-2091. E-mail: tje@princeton.edu

677

0361-0365/05/0900-0677/0 © 2005 Springer Science+Business Media, Inc.

Research in Higher Education, Vol. 46, No. 6, September 2005 (© 2005)
DOI: 10.1007/s11162-004-4139-z

The article starts with an introduction to the research being presented. This may help determine the usefulness of the article for your research.

Credentials and contact info help establish the credibility of the authors.

Publishers of scholarly journals are usually educational institutions, nonprofits and professional organizations.

A **literature review** describes previous research that has been published on the topic. Note the references to other researchers in this example. The section may or may not have the heading Literature Review.

efficacy, where academic self-efficacy refers to students' confidence in their ability to carry out such academic tasks as preparing for exams and writing term papers. A large meta-analysis of studies of self-efficacy in academic environments concluded that the most specific academic self-efficacy indices had the strongest effect on academic outcomes, while the more generalized measures were less closely associated (Multon, Brown, and Lent, 1991). General self-efficacy measures were not found to be predictive of any college outcomes (Ferrari and Parker, 1992; Lindley and Borgen, 2002), while academic self-efficacy has been consistently shown to predict grades and persistence in college.

An extensive body of research has shown that academic self-efficacy is positively associated with grades in college (Bong, 2001; Brown, Lent, and Larkin, 1989; Hackett, Betz, Casas, and Rocha-Singh, 1992; Lent, Brown, and Larkin, 1984; Multon, Brown, and Lent, 1991) as well as with persistence (Lent et al., 1984, 1986, 1987; Zhang and RiCharde, 1998). Bandura (1993) posits that self-efficacy beliefs affect college outcomes by increasing students' motivation and persistence to master challenging academic tasks and by fostering the efficient use of acquired knowledge and skills. Torres and Solberg (2001) found a positive association between academic self-efficacy and the number of hours students spent studying.

Procedures

All 209 entering students were expected to register for a one-semester Freshman Orientation Seminar that met one hour each week on a noncredit basis. Permission was obtained from the freshman seminar coordinator and from all except one seminar instructor to distribute questionnaires in 11 of the 12 sections of the course offered that

METHODS

The analyses were conducted in two parts. First, we examined the data via both exploratory and confirmatory factor analysis to determine (1) whether the stress and self-efficacy items in the questionnaire could be reduced to a smaller subset of indexes capturing different dimensions of each, and (2) whether stress and self-efficacy could be considered distinct constructs, given the approach to measuring them in the survey. In the second part of the analysis, we used structural equation modeling to examine the effect of stress and self-efficacy as latent constructs on each of the three outcomes: college GPA at the end of the first year,

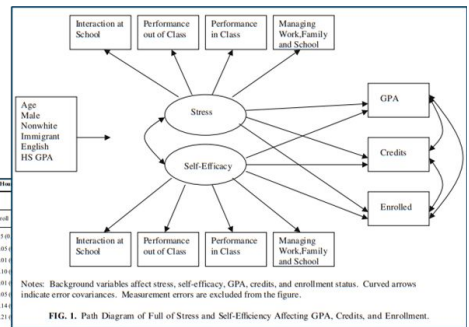
The **procedures (or methods)** used to conduct the research will be described in the **methodology** section. This is a very comprehensive portion of the article.

Scholarly articles often contain tables, charts, graphs and other **statistical data**.

TABLE 4. Results of Structural Equation Models of the Effects of Stress and Self-Efficacy on Cumulative Enrollment, Credit Hours

Path	Model 1 (Stress Only)			Model 2 (Self-Efficacy Only)		
	Estimate	SE	z	Estimate	SE	z
Stress → GPA	0.14 (0.08)	0.27 (0.15)	-0.27 (0.16)	0.02 (0.03)	1.26 (0.43)*	0.25 (0.07)**
Self-Efficacy → GPA	-0.01 (0.01)	-0.20 (0.23)	0.04 (0.02)	-0.01 (0.01)	-0.24 (0.22)	0.02 (0.02)
Stress → Credits	0.06 (0.03)	1.31 (0.19)	-0.29 (0.28)	0.02 (0.03)	1.02 (0.32)	-0.10 (0.10)
Self-Efficacy → Credits	-0.02 (0.01)	-1.61 (0.16)**	-0.32 (0.19)	0.01 (0.01)	-1.01 (0.31)**	-0.23 (0.10)
Stress → Enrollment	0.05 (0.11)	0.18 (2.17)	0.40 (0.22)	-0.06 (0.10)	-0.31 (1.30)	0.43 (0.30)*
Self-Efficacy → Enrollment	-0.14 (0.09)	0.05 (1.76)	0.01 (0.16)	-0.36 (0.09)**	-0.01 (1.73)	0.02 (0.17)
Stress → Error	-0.21 (0.15)	3.24 (2.12)	0.40 (0.22)	-0.21 (0.15)	3.39 (2.08)	0.43 (0.30)*

Abbreviations used include: Stress (Stress), Self-Efficacy (SE), Enrollment status (EN), Credits (CR), and Grade Point Average (GPA). Note: Measurement portion of the model and covariance effects on stress and self-efficacy are excluded from this table due to space constraints. These results can be found in Appendix Table C. Standard errors are in parentheses.



RESULTS

Factor Analysis

Exploratory and confirmatory factor analyses are not discrete approaches to analyzing attitudinal data. Instead, they can be viewed along a continuum with exploratory analyses and confirmatory analyses on opposite ends of the continuum (see Bollen, 1989). factor analysis allows the data to “cluster” into factors certain constraints on the model, including consideration method of rotation and the number of factors allowed. In exploratory factor analysis, a factor structure is proposed and the data are tested against the model to “confirm” the model. In confirmatory factor analysis, adjustments are generally made on the basis of the preliminary results, thereby mixing notions of exploratory and confirmatory factor analysis.

We approached the factor analyses of the stress and self-efficacy items in several ways. We first conducted exploratory factor analyses, using several methods of rotation, restrictions on numbers of factors, and the

Data that was collected as a result of the research is presented. Often the tables, charts and graphs are part of the **results** section.

DISCUSSION

The main research questions in this paper concern the relationship between academic self-efficacy and perceived college stress and their joint effect on academic success for immigrant and minority students. In order to closely examine the relative influence of these factors, we developed a new survey instrument that measures perceived stress with respect to 27 identical college-related tasks. This allows us to explore in detail the effect of these two constructs on nontraditional students' grades, accumulation of credits, and persistence in college.

The internal reliability of both scales is high. Academic self-efficacy and stress are negatively correlated, as expected, with correlations between the pairs of tasks from each scale ranging from .30 to .50. This moderately high inverse association confirms findings from previous studies (Hackett et al., 1992; Torres and Solari, 1993). Analyses were performed independently on each scale.

A **discussion/conclusion** section presents a summary of the results, what the results may indicate, how the research addresses the original hypothesis, any weaknesses of the study, and recommendations for further research on the topic. **This section may be one of the most useful for locating information to support your own research.**

REFERENCES

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychology Review* 84(2): 191–215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist* 37(2): 122–147.
- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*, Prentice-Hall Inc, Englewood Cliffs, NJ.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist* 28(2): 117–149.

At the end of every scholarly article, you will find the list of **references**. Each reference corresponds to a source cited in the body of the article.

For further assistance, contact the Bryan Librarian at: library@bryanuniversity.edu or 602.838.7312.