ABSTRACT
          This study examined whether the effects of context variables
(i.e., perceptions of environmental factors) on student motivation are
mediated by personal variables. It was hypothesized that effects from context
variables are weak and would be totally mediated by personal variables in the
beginning of the first high school year. It was also hypothesized that these
effects would become stronger as the school year went by. Personal variables
would no longer function as effective mediators and context variables would
then wield significant direct effects on student motivation. Participants
were 392 freshmen from a girls' high school in Seoul, Korea who completed
surveys early in the school year and in the second semester. Results show
that effects from the context variables were already strong on student
psychology in the first few months of high school. Consistent with the
initial hypothesis, these effects became stronger during the second semester.
These relationships were tested in the context of school in general as well
as in specific subjects such as English and mathematics. Although the general
patterns hold, there were some notable differences by different levels of
analysis. (SLD)

Perceptions of School and Classroom Environments on Student Motivation

Mimi Bong
Ewha Womans University
Seoul, Korea

Abstract

Student motivation and performance are known to be most heavily influenced by personal beliefs and perceptions. These beliefs and perceptions are, in turn, influenced by the environments in which they function. This study examined whether the effects of the context variables (i.e., perceptions toward environmental factors) are mediated by personal variables as Roeser et al. (1996) reported. It was hypothesized that effects from the context variables were weak and hence would be totally mediated by personal variables in the beginning of the first high school year. It was hypothesized further that these effects would become stronger as the year went by. Personal variables would no more function as effective mediators and context variables would wield significant direct effects on student motivation. Results show that effects from the context variables were already strong on student psychology in the first few months of high school. Consistent with initial hypotheses, these effects became stronger during the second semester. These relations were tested in the contexts of school in general as well as in specific subjects such as English and math. Although the general patterns hold, there were some notable differences by the different levels of analysis.

The purpose of the present research was threefold. The first objective was to replicate previous findings on the effects of student perceptions of school psychological environments on their motivation and performance. The second objective was to see whether there is any change in relations among these variables between the beginning and middle of the school year. The last was to examine if the general patterns of relations between perceptions of contexts and student psychology observed at the school level were sustained in specific academic domains.

Perceptions of School Psychological Environments

Students do not function in isolated compartments. Their motivation and performance are most heavily influenced by personal beliefs and perceptions but these beliefs and perceptions are influenced by the environments in which they function. Recent academic motivation research demonstrates the dynamic interplay between environmental changes and student motivation, student perceptions of contexts and their impact on their motivation, and the effects of school and classroom goal structures on students' psychological and behavioral outcomes (e.g., Ames & Archer, 1988; Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan, & Mac Iver, 1993; Harter, Whitesell, & Kowalski, 1992). In particular, Roeser, Midgley, and Urdan (1996) presented evidence supporting a model relating context, process, and outcome variables. In their study, effects from school environment perceptions on student psychological outcomes were effectively mediated by process variables. Effects of perceived school goal structures and teacher-student relationships on academic self-efficacy, academic self-consciousness, and positive school affect became nonsignificant once variables of personal achievement goals and feelings of school belonging entered the equation. This mediation means that perceptions of school environments are translated into personal adoption of similar achievement goals emphasized in school and that it is these personal goals and feelings that subsequently influence important student outcomes.

The present study attempted to recast their theoretical tenets in a different time table and contexts. Whereas Roeser et al. (1996) involved 8th graders, the current study dealt with students who just entered high school. Their perceptions of school and classroom goal structures as well as other context and personal variables were assessed first in the beginning of the year and again in the middle of the year (i.e., in the beginning of the second semester). It was reasoned that effects of school-related variables might not be strong enough to affect student beliefs and perceptions in the first few months of students' first high school year. These effects were expected to become stronger in the second semester when students were believed to have built more stable perceptions regarding their class and school environments. Moreover, relations among relevant variables were examined in the specific contexts of English and math classes. The questions of interest were (1) whether the effects from classroom goal perceptions were mediated by personal goal adoptions as were the case for school-level variables and (2) whether consistent patterns of relations among hypothesized context, process, and outcome variables were observed across domains.

Method

Participants

Three-hundred and ninety-two freshmen from a girls high school in Seoul, Korea, participated. Students first responded to surveys in April 1998, approximately one and half months after their first high school semester started (T1). The same surveys were administered again in October the same year, approximately one and half months after their second semester started (T2).

Measures

The survey was divided into different sections. Its first part dealt with students' perceptions of the bigger psychological environments: The school. Items were adopted from the Patterns of Adaptive Learning Survey (Roeser et al., 1996), the Motivated Strategies for Learning Questionnaire (Pintrich & De Groot, 1990), and other published studies. Students responded to questions regarding perceived school task goal structure (e.g., "In this school, understanding the work is more important than getting the right answers"), perceived school ability goal structure (e.g., "In this school, teachers only care about the smart kids"), and perceived teacher-student relationships both at the school level (e.g., "In this school, teachers and students really trust one another") and at the classroom level (e.g., "In my classroom, teachers and students really trust one another"). Students also reported perceived parental expectation (e.g., "My parents expect me to receive good academic grades"). Various personal academic motivation was also assessed with respect to school in general. Feelings of school belonging (e.g., "I feel like I belong in this school"), school affect (e.g., "I like being at school"), academic self-efficacy (e.g., "I'm certain I can do an excellent job on the problems and tasks assigned in school"), self-efficacy for self-regulated learning (e.g., "I can study when there are other interesting things to do"), perceived value (e.g., "I think what I learn in school is important"), as well as personal task goal (e.g., "I like schoolwork that I'll learn from even if I make a lot of mistakes"), performance-approach goal (e.g., "I feel good if I am the only one who can answer the teacher's questions in class"), and performance-avoidance goal (e.g., "I worry about doing worse than other students in school") were tapped.

The second part of the survey consisted of questions framed against specific subject matters: English and math. These subjects were selected because they are considered as the two most important school subjects in high school. Students reported their perceptions of classroom task goal (e.g., "My English teacher thinks how much we learn is more important than test scores or grades") and classroom ability goal (e.g., "My English teacher treats kids who get good grades better than other kids") as well as their personal orientations of task, performance-approach, performance-avoidance, academic self-efficacy, and value, all with respect to the particular class in question. Students' final grades were obtained from school records.

Results and Discussion

Analyses were performed first with general school-level variables. To test the mediating role of "process" variables (Roeser et al., 1996) between context variables and

psychological and behavioral outcomes, sequential multiple regressions were performed. Perceived school task and ability goal structures, teacher-student relationships, and parental expectation constituted context perception variables. Personal achievement goals, self-efficacy for SRL, and school belonging were process variables that were hypothesized to mediate effects from context variables on students' academic self-efficacy, value, school affect, and later, academic achievement in the present investigation. The same models were tested with both T1 and T2 variables.

For academic self-efficacy at T1, school task goal structure (.12) and classroom teacher-student relationships (.22) were the significant positive predictors among the context variables. Their effects became nonsignificant when process variables were included. Self-efficacy for SRL (.42), personal task goal (.14), and school belonging (.24) positively predicted academic self-efficacy. For value of school learning at T1, parental expectation (.10), school task goal (.25), and teacher-student relationships in general (.23) emerged as significant predictors. The effects of context variables on personal beliefs of value were not completely mediated by process variables. School task goal (.13) and teacher-student relationship (.15) remained significant with self-efficacy for SRL (.12), personal task (.32) and performance-approach goals (.12), and school belonging (.11) as significant process variables. For school affect, teacher-student relationship both in general (.30) and in classroom (.21) appeared significant and remained significant (.15 and .11, respectively) after process variables entered the model. Self-efficacy for SRL (.12), task (.14) and approach goals (.09), and school belonging (.27) were significant positive predictors of school affect. No mediation was observed with achievement. Self-efficacy for SRL (.17), performance-approach goal (.12), and school belonging (.20) proved significant.

For T2 variables, the effects from perceived contexts as well as process variables became stronger. The report will be centered around differences between T1 and T2 results. For T2 academic self-efficacy, perceived parental expectation now became a significant predictor (.20) whose effects were not completely mediated by process variables. All process variables, self-efficacy for SRL (.40), task (.12), approach (.14), and avoidance goals (-.10), and school belonging (.21), emerged as significant predictors of T2 self-efficacy. For T2 value, both task (.22) and ability school goal structures (-.12) were now significant predictors and their effects remained significant (.12 and -.13, respectively) with process variables in the model. In predicting T2 school affect, school task goal (.20) proved significant along with teacher-student relationships. Effects of school task goal were not effectively mediated (.15) by process variables. Again, no mediation was observed with T2 achievement. Self-efficacy for SRL (.27) and approach goals (.16) were positive predictors as before. However, personal task goal now showed a significant negative relation to achievement (-.21).

Next, relations among classroom context and process variables and psychological outcomes were examined in English and math. In English, perceived teacher task goal positively predicted motivation (at both T1 and T2) and achievement (at T1 only). Perceived teacher task and ability goals were positive and negative predictors of motivation at T1, respectively, but teacher ability goal turned into a positive predictor of student motivation at T2. Effects of perceived teacher goal orientations were mostly mediated by process variables at T1. This was not the case at T2 as these variables

showed significant effects even after controlling for other variables. Perceived teacher ability goal displayed positive effects on T2 English achievement. Slightly different results were obtained in math. Perceived teacher task goal was a significant positive predictor of self-efficacy and value at both T1 and T2, whose effects were mediated by process variables. Again, perceived teacher ability goal showed positive effects on math achievement at both T1 and T2. These effects were not totally mediated by other variables. As expected, self-efficacy for SRL and personal task and approach goals demonstrated positive effects on student motivation (in both English and math) and achievement (in math only), whereas avoidance goal showed negative effects on the same variables.

Overall, it is noteworthy that effects of perceived school task and ability goal structures became stronger on student psychology from T1 to T2. Contrary to the initial hypothesis, however, effects of school environment perceptions were already in operation in the very beginning of students' first high school year. Effects from perceived school contexts on psychological outcome variables at T1 were mostly mediated by students' personal achievement goals, self-efficacy for self-regulated learning, and feelings of school belonging. Their effects were no longer mediated completely by hypothesized process variables in the second semester. At the school level, the current results confirm previous findings on school psychological environments on student motivation and performance. They further indicate that as students acknowledge more fully what is expected of them both from school and from parents, effects from perceived contexts on their psychological and behavioral functioning become more powerful. When the same sequential approach was applied to domain-specific measures, somewhat different results were observed across English and math. In English, perceived context effects were mostly mediated by adopted personal beliefs in the beginning of the year, whereas in math, they were only partly mediated by other variables even in the very beginning of their first high school year. Given that the present sample consists only of girls, these differences should be looked into more closely.

References

Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. Journal of Educational Psychology, 80, 260-267.

Eccles, J. S., Midgley, C. Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. American Psychologist, 48, 90-101.

Harter, S., Whitesell, N. R., & Kowalski, P. (1992). Individual differences in the effects of educational transitions on young adolescents' perceptions of competence and motivational orientation. American Educational Research Journal, 29, 777-807.

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. Journal of Educational Psychology, 82, 33-40.

Roeser, R. W., Midgley, C., Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. Journal of Educational Psychology, 88, 408-422.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC

REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Perceptions of School and Classroom Environments on Student Motivation

Author(s): Mimi Bong

Corporate Source:	Publication Date:

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY _____ Sample _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY _____ Sample _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY _____ Sample _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1	2A	2B
Level 1 ↑ [✓]	Level 2A ↑ [ ]	Level 2B ↑ [ ]
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here,→ please

Signature:	Printed Name/Position/Title: MIMI BONG / Associate Prof.
Organization/Address: Dept. of Educational Psychology Univ. of South Carolina Columbia, SC 29208	Telephone: (803) 777-4362 FAX: (803) 777-7141
	E-Mail Address: mimibong@sc.edu Date: 9/19/00

(over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

University of North Carolina at Greensboro
ERIC/CASS
201 Ferguson Bldg
PO Box 26171
Greensboro, NC 27402-6171

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com