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Perception of Self-efficacy, Academic Delay of Gratification, and Use of Learning Strategies among Korean College Students

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Abstract

The purpose of the present study was to examine the association between students' self-efficacy beliefs, satisfaction with their academic performance, expected grade, willingness to delay gratification, use of volitional strategies, and final course grade among Korean college students. The results support the hypothesized relationship between students' motivational beliefs, use of self-regulation, such as delay of gratification and volitional learning strategies, and final course grade. Final course grade was related to delay of gratification and expected grade. Delay of gratification was significantly related to expected grade, satisfaction with academic performance, use of volitional control, and self-efficacy beliefs. These findings serve to establish academic delay of gratification as an important self-regulatory strategy useful to protect intentions from distracting tendencies while academic goals are pressing and that delay of gratification is associated with the students' self-efficacy beliefs for learning, as well as expected grade, satisfaction with academic performance, and final course grade.

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Successful learners are those who engage in self-regulation of learning by enacting volition control and delaying gratification. They exercise behavioral control not only to choose or plan valuable academic tasks, but also to maintain motivation and intention in the light of distracting alternatives (Bembenutty & Zimmerman, 2003; Schunk & Zimmerman, 1997; Zimmerman, 1998). Self-regulation of learning is a process that required students to get proactively involved in their personal, behavioral, motivational, and cognitive learning endeavors in order to accomplish important and valuable academic goals (Zimmerman, 1998). Volition is defined as the "tendency to maintain focus and effort toward goals despite potential distractions" (Corno, 1993; Kuhl, 1985; Snow, Corno, & Jackson, 1996). Kuhl (1985) posited that volition is important to put into action established goals. In an academic setting, volitional control is associated with protecting learners' intentions and motivation to pursue academic goals (García et al., 1997). Volition plays a key role in students' academic achievement by helping learners to maintain intentions while they pursue academic goals. Volition, therefore, is related to self-regulation. Indeed, volition is a dimension of self-regulation. For instance, Mischel (1996) framed volition (willpower) from the perspective of cognitive social theory by accentuating the necessity of delay of gratification for an individual to become a successful goal achiever.

Delay of gratification refers to individuals' intentions to postpone immediate available rewards in order to obtain larger rewards temporally distant. Delay of gratification is important for self-regulation of learning because, for example, alternatives to academic goals are attractive, in part, because they offer immediate gratification, in contrast to rewards for academic goals (e.g., grades, degrees) that are temporally remote. However, successful students are those who delay gratification, engage in volitional control, and sustain high motivation.

Two important dimension of self-regulation of learning are the use of volitional learning strategies and willingness to delay gratification for American students. Volitional control encompasses the activation of motivational, cognitive, and behavioral process necessary to be certain that goals are obtainable in the present of competing tendencies (Kuhl (1985). Use of volitional strategies, such as enhancing self-efficacy beliefs, reducing stress-related tasks, activating positive rather than negative thoughts, seeking help from a friend or a teacher when tasks are too difficult, thinking about the positive and negative consequences associated with neglecting fulfilling an expected task, and engaging in some sort of relation technique, are task known to be associated with academic success (Bembenutty & Karabenick, 1998). According to Mischel (1996; Mischel, Shoda, & Peake, 1988; Michel, Shoda, & Rodriquez, 1989), individuals are able to use diverse strategies, such as delay of gratification to facilitated the implementation of intentions and goals. For example, a student who intent to study for a test may select a less distracting environment to study and exert control over their cognition.

An emergent theme in the literature is the conviction that delay of gratification plays an indispensable role in pursuing and maintaining goals (Mischel, Cantor, Fieldman, 1996). Consequently, learners must maintain their intention to learn and cognitive engagement in

actions that will insure success in the presence of distractors. Delay of gratification is associated with students' use of learning strategies such as organization, elaboration, rehearsal, critical thinking, help seeking, peer learning, as well as students' motivation for learning, such as self-efficacy, task value, and intrinsic interest. Bembenutty and Karabenick (1998) found that preference for delay options is related to students' final course grade, high self-efficacy, and intrinsic motivation. However, the relationship between students' motivation for learning, expected grade, use of volitional learning strategies, delay of gratification, and final course grade among Korean students is not fully understood.

Kim et al (2001) investigated the association between these aforentioned variables among junior high school students. The researchers found a positive relationship between the variables. However, to date, it is not know the association between these variables for in a Korean sample of college students. With an increased wave of Asian students coming to America is important to know these students' ability to engage in self-regulation in order to help them to accomplish learning tasks. Thus, the goal of the present study was to examine the relationship between Korean students' motivation for learning, expected grade, use of volitional learning strategies, delay of gratification, and final course grade.

The purpose of the present study was to examine the association between students' motivational beliefs, such as self-efficacy, satisfaction with their academic performance, and expected grade, use of self-regulatory learning strategies such as delay of gratification, and use of volitional strategies, and final course grade among Korean college students.

Method

Participants

Participants were 112 undergraduate college students enrolled in science education courses at a large urban Korean university during the Spring of 1999.

Instruments

Academic Delay of Gratification. Participants completed the Academic Delay of Gratification Scale (ADOGS; Bembenutty & Karabenick, 1998). The ADOGS, which has shown evidence of both validity and reliability (Cronbach alpha = .71 for the previous studies), presents students with four choices between options that offer more immediate gratification, such as "Go to a party the night before a test for this course" and options with relatively delayed gratification (academic) options, such as "Study first and party only if you have time." Students responded on a four point scale: *"Definitely choose A," "Probably choose A," "Probably choose B," and "Definitely choose B."* Overall, delay preference was the total for the ten items scored, so that higher values indicate greater delay preference (see Appendix A).

Self-efficacy Beliefs. To assess self-efficacy beliefs, participants answered a modified version of the Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich, Smith, García, & McKeachie, 1993). The MSLQ uses a 5-point Likert-type response format of "*Not at all true of me"* to "*Very true of me*."

Volitional Learning Strategies. To assess students' use of volitional learning strategies, the students responded to the Academic Volitional Strategy Inventory (AVSI; McCann, 1999),

which is an instrument which target college students' use of motivational regulation strategies know to support and mediate cognitive and behavioral performance. The AVSI is a scale with the response format consisting of a 7-point Likert scale (1 = "*Not at all of me*" and 7 = "*Very true of me*").

Expected Grade, Level of Satisfaction, and Course Grade. The students also indicated the lowest grade they expected in the course and the expected grade. They also indicated their expected grade in the course. In addition, the students indicated their level of satisfaction with their academic performance. Final course grades were obtained from the instructors of the courses.

Results

Correlational Analyses

A Pearson correlation coefficient was computed to assess the association between students' motivational beliefs, expected grade, willingness to delay of gratification, use of volitional strategies, and final course grade. As expected, final course grade was related to delay of gratification ($r = .25$, $p < .05$) and expected grade ($r = .37$, $p < .05$). Delay of gratification was significantly related to expected grade ($r = .40$, $p < .05$), satisfaction with academic performance ($r = .31$, $p < .05$), use of volitional control ($r = .32$, $p < .05$), and self-efficacy beliefs ($r = .27$, $p < .05$); see Table 1.

With respect to motivational variables, self-efficacy was associated with delay of gratification. In addition, expected grade was associated with satisfaction with the academic performance and delay of gratification. However, final course grade was not associated with use of volitional strategies, self-efficacy beliefs, and satisfaction with the academic performance.

Regression Analyses

Further, regression analyses were conducted to examine which variables significantly predicted final course grade. The results indicated that delay of gratification was the only variable that significantly (at the $p < .05$) predicted final course grade.

Discussion

The results support the hypothesized relationship between students' motivational beliefs, use of self-regulation, such as delay of gratification and volitional learning strategies, and final course grade. The notion that delay of gratification and volitional learning strategies should be considered when examining students' academic performance is important. From this perspective, academic delay of gratification is part of the self-regulatory learning strategies that students activate to secure academic intentions. For learners, it is important not only that they could structure tasks and could establish the intention to accomplish them, but also that they choose to postpone immediate gratification to achieve their academic goals. The results also indicate that greater delay of gratification is related to the more frequent use of volitional regulation of effort that describe behaviors dedicated to structuring and controlling conditions to maximize successful academic outcomes.

Noticeable, however, was that students' use of volitional strategies was not significantly related to final course grade. It could be possible that in the Korean educational system, higher education is highly promoted by the government and by the parents. Social structure is conducive to reward and reinforce college education. Similarly, it was surprising that's elf-efficacy was not related to final course grade. It is possible, as Bembenutty and Zimmerman (2003) has suggested, that believing that one has the competence and ability to engage in specific task it is not sufficient to guarantee high academic performance—students need to engage in delay of gratification. Thus, delay of gratification may serve as a mediator between students' motivational beliefs and their academic performance. A future path analysis may serve to clarify this hypothesis.

In sum, these results suggest quite reasonably that delay of gratification, as part of the self-regulatory system, has a solid association with students' use of volitional strategies. Further, an experimental study is needed to determine the nature of these associations. However, these results also show that students who preferred delay of gratification were also more likely to succeed in academic settings, which is consistent with previous findings (Bembenutty & Karabenick, 1998).

These findings serve to establish academic delay of gratification as an important self-regulatory strategy useful to protect intentions from distracting tendencies while academic goals are pressing and that delay of gratification is associated with the students' self-efficacy beliefs for learning, as well as expected grade, satisfaction with academic performance, and final course grade.

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Appendix A

ACADEMIC DELAY OF GRATIFICATION SCALE (ADOGS)

1. A. Go to a favorite concert, play, or sporting event and study less for this course even though it may mean getting a lower grade on an exam you will take tomorrow, **OR**
   B. Stay home and study to increase your chances of getting a higher grade.

2 A. Study a little every day for an exam in this course and spend less time with your friends, **OR**
   B. Spend more time with your friends and cram just before the test.

3. A. Miss several classes to accept an invitation for a very interesting trip, **OR**
   B. Delay going on the trip until the course is over.

4. A. Go to a party the night before a test for this course and study only if you have time, **OR**
   B. Study first and party only if you have time.

5. A. Spend most of your time studying just the interesting material in this course even though it may mean not doing so well, **OR**
   B. Study all the material that is assigned to increase your chances of doing well in the course.

6. A. Skip this class when the weather is nice and try to get the notes from somebody later, **OR**
   B. Attend class to make certain that you do not miss something even though the weather is nice outside.

7. A. Stay in the library to make certain that you finish an assignment in this course that is due the next day, **OR**
   B. Leave to have fun with your friends and try to complete it when you get home later that night.

8 A. Study for this course in a place with a lot of pleasant distractions, **OR**
   B. Study in a place where there are fewer distractions to increase the likelihood that you will learn the material.

9. A. Leave right after class to do something you like even though it means possibly no understanding that material for the exam, **OR**
   B. Stay after class to ask your instructor to clarify some material for an exam that you do not understand.

10. A. Select now an instructor for this course who is fun even though he/she does not do a good job covering the course material, **OR**
   B. Select an instructor for this course who is not as much fun but who does a good job covering the course material.

Note: . Responses are score from 1 to 4 with the higher score indicating higher delay preference:
___Definitely choose A ___Probably choose A ___Probably choose B ___Definitely choose B

Table 1.

Descriptive Statistics and Pearson Correlations among the Variables

	1	2	3	4	5
1. Self-Efficacy	----				
2. Satisfaction with Academic Progress	.10	----			
3. Delay of gratification [b]	.27	.31	----		
4. Expected Grade	.10	.44	.40	----	
5. Final Course Grade	.02	.19	.25	.37	----
Mean	5.20	6.26	2.51	6.34	8.94
Standard Deviation	.77	1.77	.46	.89	1.87

Note: Correlations greater than .17 are significant at $p < .05$, ($N = 112$).