

# A Study on the Relationship between Academic Delay of Gratification and Academic Volition in Student Teachers

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**Abstract:** The present study is an attempt to examine the relationship between academic delay of gratification and academic volition in student teachers. Sample for the study includes 40 urban student teachers of B.Ed. and M.Ed. classes of an education college in Banjara Hills, Hyderabad, Telangana, India. The data for measuring delay of gratification is collected using *Academic Delay of Gratification Scale (ADOGS)* for college students prepared by Hefer Bembenutty (1997). Academic volition of the student teachers is measured by collecting data using the *Academic Volitional Strategy Inventory (AVSI)* for college students prepared by MacCann and Garcia (2000). For data analysis, Pearson's Product-Moment Correlation coefficient is used. The significance of the test is calculated using critical value table for Pearson's Product-Moment Correlation for the level of significance  $\alpha$  at 0.05. The findings of the study reveal that the variables academic delay of gratification and academic volition are positively and moderately related in student teachers. No role of course on the variables was found in the study.

**Keywords:** Academic Delay of Gratification, Academic Volition, Prefrontal Cortex, Student Teachers, Student Teacher Educators, Ventral Striatum.

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## I. INTRODUCTION

From the background of neuroscience, the section of the brain associated with rewards is the ventral striatum (Hariri et.al 2006). The prefrontal cortex is the section of the brain that is associated with the executive functions like decision making, problem solving and motivation and willpower (Le Doux, 1996 & Goleman.D., 1995). Both these sections of the brain are in turn connected to each other (Casey,B.J. and colleagues, 2011).

When learners set temporally distinct but highly rewarding goals, they need to keep the level of motivation high and exhibit the ability to fight against emotions during the long tenure of learning process, by regulating the motivation. It is called the use of academic volitional strategy (McCann, E., & Turner, J. E., 2004).

Delay of gratification, as part of the self-regulatory system, has been proved to be strongly related to students' use of volitional strategies (Bembenutty,.H., 2004).

It is here by proposed that a self regulated learner displays academic delay of gratification in the initial stages of joining a course of long duration.

All along the duration of the course or through the learning process, the learner displays regulation of motivation levels especially during the difficult times for attainment of the temporally distinct goals which is academic volition.

This is made possible through the mentioned neural interconnectivities between ventral striatum and prefrontal cortex.

In this context, the student teachers pursuing the new two years duration B.Ed. and M.Ed. courses (as per Justice Verma Committee recommendations,2013), ideally represent the subjects of the study, who must possess academic delay of gratification and academic volition in the beginning and all along the duration of the course, respectively.

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**Academic Delay of Gratification:** Hefer Bembenutty defined academic delay of gratification as “students’ willingness to forgo an immediately available option, in favor of a delayed alternative, in order to secure temporarily distant academic rewards, goals, and intentions” (Bembenutty, 1999).

**Volition:** It is defined as the “tendency to maintain focus and effort toward goals despite potential distractions” (Corno, 1993; Kuhl, 1985; Snow, Corno, & Jackson, 1996).

## II. BODY OF ARTICLE

### STATEMENT OF THE PROBLEM:

A Study on the Relationship Between Academic Delay of Gratification and Academic Volition in Student Teachers.

### RESEARCH OBJECTIVES:

- To study the relationship between academic delay of gratification and academic volition in student teachers.
- To study the role of course in the academic delay of gratification of student teachers.
- To study the role of course in the academic volition of student teachers.

### RESEARCH HYPOTHESES:

- **H<sub>0</sub>:** There is no significant relationship between academic delay of gratification and academic volition in student teachers.
- **H<sub>0</sub>:** There is no significant relationship between B.Ed. students and M.Ed. students with respect to their academic delay of gratification.
- **H<sub>0</sub>:** There is no significant relationship between B.Ed. students and M.Ed. students with respect to their academic volition.

### POPULATION FOR THE STUDY:

The population for this study is the student teachers and student teacher educators in government or private colleges of education in the Greater Hyderabad Municipal Corporation limits of Hyderabad city.

### SAMPLE FOR THE STUDY:

Here 40 student teachers and student teacher educators from B.Ed. and M.Ed. courses of the Ghulam Ahmed College of Education, selected randomly, were taken as the sample of the study.

### TOOLS USED IN THE STUDY:

#### *Measuring Academic Delay of Gratification:*

Academic Delay of Gratification tendencies were measured using the 10 item Academic Delay of Gratification Scale (ADOGS, Bembenutty, H., 1997).

The internal consistency ADOGS, when Caucasian Americans were taken as sample, is  $\alpha = 0.70$  (Bembenutty & Karabenick, 1998). The 10 items reflect a variety of students’ academic experiences, such as meeting deadlines on assignments, use of the library, interpersonal relations with peers and instructors, and studying course materials.

The responses are obtained in a four point Likert scale ranging from “Definitely choose A,” “Probably choose A,” “Probably choose B,” and “Definitely choose B.”

#### *Measuring Academic Volition Strategy:*

The Academic Volitional Strategy Inventory (AVSI; McCann, 1999) is a self-report instrument designed to assess the management of emotion and motivation by college students during the goal-striving process.

There are 30 items. The dimensions covered by the tool are self talk, negative consequences, concentration strategies, socializing strategies, self reinforcement, self encouragement, taking breaks and relaxing music.

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The internal consistency of the tool measured using Cronbach’s alpha is 0.87 and test-retest reliability for four weeks gap is 0.72. The responses are obtained in a seven point Likert scale ranging from (1 = “Not at all of me” and 7 = “Very true of me”). The tool has content validity and construct validity.

**SAMPLING:**

Simple random sampling technique is used by the investigator while selecting a sample of 40 student teachers from an education college in Banjara Hills area.

**DATA COLLECTION:**

Formal permission to administer the tests for data collection for two consecutive days, was provided by the Principal of Ghulam Ahmed College of Education.

As the research design of the study is Explanatory Correlational Analysis design, the researchers here collected two scores from each participant as each score represents each variable being studied (Creswell, 2008).

The Academic Volitional Strategy Inventory (AVSI; McCann, 1999) was administered on the sample on the third day of the data collection to measure their academic volitional strategies.

Their academic delay of gratification was measured using the 10 items Academic Delay of Gratification Scale (ADOGS, Bembenuty,H., 1997) on the second day of data collection.

**Results:**

**TABLE: I CORRELATION STRENGTH**

Correlation Between Academic Delay of Gratification and Academic Volition				
Mean Academic Delay of Gratification	Mean Academic Volition	Pearson’s Correlation Coefficient	Product Moment	
2.923	3.461	0.346		

**Interpretation:** The average academic delay of gratification value of the sample obtained is 2.923. It is a high value as it is above the mean score. Similarly, the average academic volition score of the sample is found to be 3.461. It is also a high value as it is above the mean score. The correlation coefficient between emotional intelligence and academic delay of gratification obtained is 0.346. Since this r-value is in between 0.3 and 0.6, the strength of the measured relationship is moderate.

**TABLE: II TESTING HYPOTHESIS ONE**

Significance Test for the Correlation Between Academic Delay of Gratification and Academic Volition:				
Academic Delay of Gratification	Academic Volition			
n				40
df (n-2)				38
Pearson’s Correlation Strength ( $\gamma$ absolute)			0.346*	
$\gamma$ critical from the Critical Value Table of Pearson’s Correlation				0.312
Sig.(Two-tailed)				H <sub>0</sub> :
				Rejected

\* Correlation is significant at the 0.05 level (2-tailed)

**Interpretation:** The outcome of the data analysis shows that the calculated value or absolute value of r between delay of gratification in academics and emotional intelligence is 0.346. The critical value is 0.312 for level of significance  $\alpha = 0.05$  from the r table (Appendix D, Best, J.W., Kahn, J.V., *Research in Education*, Tenth Edition, pp 482). It can be interpreted that academic delay of gratification is positively, moderately and significantly correlated with academic volition. It is because for the level of significance  $\alpha = 0.05$ , degree of freedom (df) = 38, the calculated value of r is greater than the critical value. Higher academic volition in students leads to higher academic delay of gratification and vice versa.

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TABLE: III TESTING HYPOTHESIS TWO

Significance Test for the Academic Volition of 15 B.Ed. and 15 M.Ed. Students					
n	df	r* (absolute) from formula	r (critical) from r - table	Sig. (2 – tailed)	
15	13	0.3802	0.514	H <sub>0</sub> : Accepted	

\* Correlation is significant at the 0.05 level (2-tailed)

**Interpretation:** There is no significant difference between B.Ed. and M.Ed. students with respect to their academic volition. It is because the calculated correlation coefficient is less than the critical value of correlation coefficient for df = 13 at level of significance  $\alpha = 0.05$ .

TABLE: IV TESTING HYPOTHESIS THREE

Significance Test for the Academic delay of Gratification of 15 B.Ed. and 15 M.Ed. Students					
n	df	r* (absolute) from formula	r (critical) from r - table	Sig. (2 – tailed)	
15	13	-0.155	0.514	H <sub>0</sub> : Accepted	

\* Correlation is significant at the 0.05 level (2-tailed)

**Interpretation:** There is no significant difference between B.Ed. and M.Ed. students with respect to their academic delay of gratification. It is because the calculated correlation coefficient is less than the critical value of correlation coefficient for df = 13 at level of significance  $\alpha = 0.05$ .

III. CONCLUSION

The extension of duration of the B.Ed. and M.Ed. courses to two years, in order to raise the standard of these courses, as per the recommendations of the Justice Verma Committee 2013, is a welcome change in teacher education.

Students who are highly motivated and serious about the teaching profession can be expected to enroll for the teacher education courses now.

But, compared to their predecessors, they have to wait for longer duration of time to enjoy the fruits of their academic labor. This calls for the display of academic delay of gratification from the very first day of either of the teacher education courses by the prospective student teachers.

The present study has established that those who possess the ability to self regulate their motivation levels are in a better position to successfully complete the two years duration teacher education courses, compared to the rest.

Irrespective of the teacher education course pursued by a student, he or she would require the essential trait of academic volition to sail through the course without any obstacle.

The positive, moderately strong and significant relationship between academic volition and academic delay of gratification through this research study establishes the need for the instruction of these two constructs in teacher education courses through inclusion of Self Regulated Learning (SRL) programs in the curriculum.

Due to the practical limitations like time and cost, the study was limited to Hyderabad city limits. The study can be replicated with larger sample size in multiple contexts and others parts of the country and world. Most of the sample subjects were females. Further studies can search for the role of gender of the student teachers in these two variables.

Academic delay of gratification and academic volition are very closely related to academic achievement. A study on whether these two variables together predict academic achievement in student teachers can be taken up using multiple regression. Such a research endeavor would further strengthen the requirement for the inclusion of these two variables in teacher education curriculum.

**REFERENCES**

- [1] R. Chakraborty, and Dr. K.S. Prabhakaram, "A Study on the Relationship Between Delay of Gratification and Emotional Intelligence in Secondary School Students," iJARS International Journal of Humanities and Social Studies, Vol. 1, No. 1, Sep. 2015.
- [2] H.Bembenutty, and S.A. Karabenick, "Self-Regulation, Culture and Academic Delay of Gratification", Journal of Cognitive Education and Psychology, Vol. 12, No. 3, p 323-337(15), 2013.
- [3] M. Arabzadeh, P. Kadivar, and A. Dlavar, "The Effects of Teaching Self-Regulated Learning Strategy on Students' Academic Delay of Gratification", Interdisciplinary Journal of Contemporary Research in Business, Vol. 4, No. 2, p 580-587, 2012.
- [4] S. Subramaniam, "Ego Depletion and Delay of Gratification", Electronic Theses and Dissertation, ScholarWorks@Georgia Southern University, Spring 2011.
- [5] S.N. Haber, Neurobiology of Sensation and Reward, Chapter 11 - Neuroanatomy of Reward: A View from the Ventral Striatum, Gottfried JA, editor. Boca Raton (FL): CRC Press; 2011.
- [6] B. Figner, D. Knoch, E.J. Johnson, A.R. Krosch, S.H. Lisanby, E. Fehr, and E. U. Weber, "Lateral prefrontal cortex and self-control in intertemporal choice", Nature Neuroscience 13,538– 539,(2010).
- [7] Hariri et al., "Preference for Immediate over Delayed Rewards Is Associated with Magnitude of Ventral Striatal Activity", J Neurosci, Vol. 26, No. 51, p 13213-7, 2006.
- [8] Bembenutty,.H., "Self-Regulation of Learning and Academic Delay of Gratification: Gender and Ethnic Differences among College Students", Journal of Advanced Academics, Vol 18, No.4, pp 586- 616, 2007.
- [9] H. Bembenutty, and S.A. Karabenick, "Academic Delay of Gratification as a Volitional Strategy", Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA, April, 1998.
- [10] L. Corno, "The best - laid plans:Mordern Conceptions of volition and educational research", Educational Researcher, Vol. 22, No. 2, p 14-22, 1993.
- [11] L. Corno and R.Kanfer, The role of volition in learning and performance, Pp. 301-341 in Review of Research in Education, Vol. 19, edited by L. Darling –Hammond, Washington, DC: American Educational Research Association, 1993.
- [12] J. Kuhl, , Volitional mediators of cognition-behavior consistency: Self-regulatory processes and action versus state orientation, Pp. 101-128 in Action control: From cognition to behavior, edited by J. Kuhl & J. Beckmann. New York: Springer-Verlag, 1985.