

STUDENT MOTIVATION IN ASIAN COUNTRIES AND ITS IMPACT ON ACADEMIC SUCCESS FOR SECOND LANGUAGE UNIVERSITY STUDENTS

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ABSTRACT

Curriculum consolidation has resulted in a generic western style business degree course in multiple Asian countries. The performance of second language students on these courses varies considerably and this paper undertakes to develop an understanding of the student motivation and how this impacts on performance. Educational motivation is historically divided into performance and mastery roots; whilst this approach identifies macro motivational issues it lacks sufficient sensitivity to identify multi-layered intrinsic and extrinsic factors. Through the application of a range of well-developed motivational measurements, to students in four Asian countries, a deeper appreciation of cultural and socio economic variations indicates linkages with academic performance.

Keywords: Self control, Delay of Gratification, Academic Motivation, Academic Performance.

INTRODUCTION

Traditionally educators focus on improving teaching strategies, teaching techniques and the classroom experience, this ignores the importance of understanding the customer of the educational product. Successful businesses are built on high levels of customer insight before developing a product & service mix for the customer- presumably educators would be more successful if they first developed a deeper appreciation of their customers underlying motivations and culturally influenced learning preferences. To treat students as customers it would first be necessary to integrate commercial marketing techniques by deepening and developing the information relating to the consumer behaviour of this new global customer base. It is commonplace for educators to comment that differing student cohorts have noticeably differing studying abilities, attention spans and motivations. Extensive research in western countries has investigated these assumptions and they show that individual differences in academic motivation and self-control among students are important predictors for performance in the classroom context (Pintrich, De Groot, 1990) Wide ranging research has demonstrated close linkages between motivational measures and academic performance for western educational institutions from primary, secondary and tertiary levels (Zimmerman, 1992). To date, however, these established measures have not been applied to second language business students in an Asian tertiary level educational context. An essentially western designed curriculum is being applied to Asian students without accounting for the impact of differing educational motivations, self-control and culture of the educational customer. Global businesses typically research extensively to develop deep customer insight before introducing their products to new markets. Whilst education standardisation offers significant benefits it would appear reasonable to develop an increased appreciation of the local motivation and self-control of the student's customer base before the imposition of westernised curricula. The authors have instructed at university level in multiple Asian countries and observed wide variations in student attention, attendance, effort

and overall performance; the current research undertakes to capture and quantify these anecdotal observations and to determine if the data is correlated to existing country cultural measurements.

Educators are aware of two factors which strongly influence academic results; motivation and self-control. (Kitsantis,1997).Conceptualisation of student motivation is expressed by three components; a) an expectancy component, b) a value component c)an affective component (Zimmerman, 2009). The concept of self- control includes a wide range of educator comments which would include; application, attitude, attention span and is directly correlated with delay of gratification. (Bembenutty,1998). Student self- regulation and motivation are intrinsic components of academic performance (Baumesiter,2007).A large range of techniques have been applied to decipher student motivation and self- control in western universities, although, to date the application of these investigation techniques have not been systematically applied in Asian universities. Anecdotal evidence indicates that the stereotypical Asian student has high motivation and high self- control resulting in relatively high levels of academic achievement compared with their decadent western counterparts. The Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich 1990) and BSCS Brief Self Control (Tangney, 2004) surveys have demonstrated their efficacy in categorising student motivations and predicting long term academic performance for university students in a range of western universities(Duckworth, 2005).

Brief Self Control Survey (BSCS) original applied to estimate delay of gratification has demonstrated efficacy at predicting academic performance in a number of western universities based survey(Tangney, 2004). Several alternative self -reporting measures have been applied including Academic Delay of Gratification (ADOG) intended to quantify overall self -control (Bembenutty, 2009). A range of similar terms are used to identify delay of gratification - self -control, self- restraint, maturity – all will be referred to as self-control in this research. Meta reviews have clearly indicated that students with high self-control have superior academic performance across a wide range of western students (Mischel, 2010, Baumesiter, 2005). The BSCS delineates the extent to which the student can delay gratification for a higher reward at some future date. Students with high self- control, or high delay of gratification, have higher levels of academic achievement. (Freeney, 2009). Cultural underpinnings of this measured behaviour have not been widely studied although a direct correlation has been recorded with Hofstede's Long Term Orientation (LTO) for those countries where self-control measurements have been implemented (King, 2011). The recorded measures, impulses and consumer spending combined indicate that Asian countries have higher levels of delay of gratification – Confucian countries (China / Korea) have significantly higher LTO values in comparison to Anglo countries (UK / USA) which would indicate higher levels of delay and thereby higher scores on BSCS for similar cohorts(Minkov,2011). Thailand / Philippines have significantly lower LTO values than the Confucian countries which would predict lower levels of self-control in both general population and academic samples. The differences are sometime succinctly expressed as 'live for today' vs 'invest for the future'. International league tables of academic performance demonstrate a close link between Hofstede LTO values, delay and academic performance, the majority of the supporting data is derived from high school students (OECD PISA). As self-control increases significantly with age, these measured differences at high school level may become less pronounced with university age students (Steinberg, 2009). There are no existing results for BSCS with university level students in the Asian countries under consideration.

In addition to research on the relationship of cultural variations and student's academic performance, a second influencing factor is the impact of socio economic factors (Sirin, 2005). The MSQ identifies the sub variables within overall motivation and has demonstrated efficacy in western secondary and tertiary education surveys when related to individual socio economic factors (Kitsantas, 2008). The Philippines has a very wide income inequality gap therefore providing an opportunity to study underlying motivations from the extreme ends of the income range (Melanovic, 2012).

A substantial amount of educational research has applied MSLQ & BSCS to western students at all levels of education in Western Europe & the USA. Education globalisation has ineluctable led to Asian university students studying the same curriculum, in the same language, as their western counterparts and this research explores quantification of how differing cultures & socio economic levels interact at a cognitive educational level with these standardised programmes.

METHOD

Participants

490 students (Mage = 19.9 years, age range: years), all college business students, were recruited. Students differed in nationality; Filipino (N=179, Mage= 19.3 years, age range: 17-25 years), Chinese (Mage= 20.5 years, age range: 18-24 years), Korean (Mage= 19.6 years, age range: 17-26 years), and Thailand (Mage= 20.4 years, age range: 19-23 years). Accordingly, Filipino participants were recruited from two different schools; Pamantasan Ng Lungsod Ng Pasig (PLP) (N=102 Mage = 19.0 years, age range: 18-25 years) and De La Salle University (DLSU) (N=102 Mage = 19.5 years, age range: 17-23 years). All students were attending college in the country of their own nationality except the Korean students, who were studying in the Philippines at DLSU.

De La Salle University (DLSU), Manila, Philippines – a private Roman Catholic, Lasallian research university, founded in 1911. It is ranked number two in the Philippines. Student fees are equivalent to three times the average per capita income. Dong Bei University of Finance & Economics (DUFE) – a government university in the north east of China. Subsidised education provision for a nominal fee to qualifying Chinese nationals.

Pamantasan ng Lungsod ng Pasig (PLP) – Pasig University is a local government university. Subsidised education provision for a nominal fee to qualifying residents of Pasig city. PLP is rated number three for local government universities in the Philippines but is not rated on current global measures. Ubon Ratchathani University, Thailand (UBU) - a government university in the north east of Thailand. Originally a campus of Khon Kaen University it became independent in 1990. Subsidised education provision for a nominal fee to qualifying residents.

Country	Institution	Country rank	World rank	Hofstede LTO
Philippines	DLSU	2	1987	19
China	DUFE	324	2454	118
Philippines	PLP	n/a	n/a	19
Thailand	UBU	16	1678	56

(Ranking Web Universities. <http://www.webometrics.info/en>)

Materials

Brief Self Control Survey (BSCS) The brief self-control survey (BSCS) was used (Tangney, 2004) to estimate delay of gratification. The BSCS consists of 13 statements where participants have to answer on a 5-point Likert-scale (1 = not at all like me, to 5 = very much like me). The points given per statement are added up and the total score is used in the given study. A high score means a high delay of gratification. An example of a statement used is: 'I am good at resisting temptation'. The BSCS is a short version of the Total Self-Control Scale (TSCS), the relationship between the two scales is very strong ($r = .93$) and meta-analyses shows the BSCS taps the same range of content as the TSCS (Tangney, 2004).

Motivated Strategies for Learning Questionnaire (MSLQ) The motivated strategies for learning questionnaire (MSLQ) was used (Pintrich & De Groot, 1990) to assess academic motivation of students. The MSLQ measures five factors of academic motivation: Self efficacy, Intrinsic Value, Test Anxiety, Cognitive Strategy Use, and Self-Regulation. The MSLQ consists out of 56 statements where participants have to answer on a 7-point Likert-scale (1 = not at all true of me, to 7 = very true of me). Statements correspond to one of the five factors measured by the MSLQ. The scores of the statements are added up for each factor which gives 5 total-scores, for one factor each. The total scores per factor are used in the current study. Examples of statements used: for self-efficacy; 'I expect to do well', for intrinsic value; 'I like what I am learning', for test anxiety; 'I worry a great deal about tests', for cognitive strategy use; 'When I study I put important ideas into my own words', and for self-regulation; 'I work hard to get a good grade even when I don't like the class'. MSLQ has shown good internal consistency with all good Cronbach's alpha values among the five factors; self-efficacy ($\alpha = .89$), intrinsic value ($\alpha = .87$), test anxiety ($\alpha = .75$), cognitive strategy use ($\alpha = .83$), self-regulation ($\alpha = .74$) (Pintrich & De Groot, 1990).

Procedure

Questionnaires were admitted to students in the Philippines, Thailand, Korea, and China. Research took place during the second semester of 2014 (October). Choice for examined Universities was based upon current and previous employment of researchers. The BSCS, together with questions about demographics, was admitted in five different colleges around South-East Asia and China. The Questionnaire used was admitted with the same instructions and within the same month for each country and college. The MSQ was added to get a more in depth view of the Filipino demographic. The two Philippine universities that were examined in this study can be strongly distinguished; PLP is a public and low-cost university that attracts students from low SES families; DLSU is a private and expensive university that attracts students from high SES families.

Analyses

To analyse differences between countries on BSCS an ANOVA is reported. For differences between two local universities in the Philippines on BSCS and MSQ a MANOVA is reported. To assess the relationship between delay of gratification (BSCS) and academic performance a Pearson's r correlation is examined for all countries. Five Pearson's r correlations are also examined to assess the relationship between the factors of academic motivation (MSLQ) and academic performance within the Philippines.

Results

Results are summarized in tables 1 to 7. To give insight in collected data mean raw scores and stand deviations of the BSCS are reported. Table 1 distinguishes BSCS data between nationalities.

Table 1:
Means and Standard deviation of BSCS among different nationalities

	BSCS		
	Mean	Standard Deviation	N
Philippines	41.15	5.824	202
Korea	40.21	4.732	73
Thailand	39.54	3.161	93
China	41.79	5.925	124

To test if there is a relationship between delay of gratification and academic performance in Asian countries a correlation is reported. Results show there is no significant relationship between delay of gratification and academic performance; the correlation ($r = .050$) is non-significant ($p = .297$).

Table 2
Correlation for BSCS and GPA in Asian countries

	GPA		
	Pearson Correlation	P	N
BSCS	0.050	.297	436

A one-way ANOVA is reported, the ANOVA tests for delay of gratification differences (BSCS) among four nationalities (China, Korea, Philippines, Thailand). Delay of gratification did differ significantly across nationalities, $F(3, 488) = 3.785$, $p = .011$. These results are shown in table 3.

Table 3
Between subject test for differences in BSCS among different nationalities

	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	318.017 ^a	3	106.006	3.785	.011
Intercept	706378.704	1	706378.704	25222.035	.000
Nationality	318.017	3	106.006	3.785	.011
Error	13667.129	488	28.006		

Total 835634.000 492

Corrected

Total 13985.146 491

a. R Squared = .023 (Adjusted R Squared = .017)

A Games-Howell Post-hoc test is used to assess differences between means. Outcomes show that the Philippines ($p=.012$) and China ($p=.002$) have a higher BSCS than Thailand.

To assess differences between two Filipino schools, means and standard deviations are given for each school to give an overview of collected data. Each dependent variable is represented in table 4 for both schools.

Table 4

Means and standard deviation for the dependent variables among two Filipino schools

		Mean	Std. Deviation	N
	DLS			
	U	39.88	5.631	103
BSCS	PLP	42.46	5.756	99
	DLS			
	U	33.56	12.846	103
MSQLSE	PLP	47.24	6.115	99
	DLS			
	U	32.12	15.710	103
MSQLIN	PLP	54.88	4.438	99
	DLS			
	U	15.63	5.463	103
MSQLTA	PLP	16.69	4.012	99
	DLS			
	U	48.58	17.903	103
MSQLCS	PLP	73.15	7.646	99
U	DLS			
	U	35.12	8.440	103
MSQLSR	PLP	44.13	6.094	99

A MANOVA is examined to assess differences between the dependent variables among the two Filipino schools. Pillai's trace is examined because Levene's Test of Equality of Error Variances is significant. Pillai's trace is more robust than Wilks Lambda. The multivariate test shows a significant difference between schools $F(6, 166) = 13.146, p = .000$ and is reported in table 5.

Table 5
Multivariate test for differences between DLSU and PLP (Philippines)

	Value	Hypothesis	Error	Sig.	Partial Eta Squared
		F	df		
Pillai's Trace	.322	13.146 ^a	166.000	.000	.322

Since the multivariate test is significant, the between subject test is reported to assess specific differences among the two schools. The results show that differences are significant for BSCS: $F(1,199) = 11.233$, $p = .001$, MSLQSE: $F(1,199) = 34.700$, $p = .000$, MSLQIN: $F(1,199) = 68.920$, $p = .000$, MSLQCSU: $F(1,199) = 53.696$, $p = .000$, and MSLQSR: $F(1,199) = 21.759$, $p = .000$. The analyses further shows that there is no significant difference for the MSLQTA factor: $F(1,199) = .179$, $p = .673$.

Table 6
Between subject test for differences in DLSU and PLP (Philippines)

	Type III of SS	df	Mean Square	F	Sig.	Partial Eta Squared
BSCS	328.258	1	328.258	11.233	.001	.062
MSLQSE	3393.475	1	3393.475	34.700	.000	.169
MSLQIN	8617.630	1	8617.630	68.920	.000	.287
MSLQTA	8617.630	1	8617.630	.179	.673	.001
MSLQCSU	9275.866	1	9275.866	53.696	.000	.239
MSLQSR	1118.301	1	1118.301	21.759	.000	.113

An important objective of this research is to assess the relation between academic motivation and academic performance. Correlations were calculated to assess this relation for all MSLQ factors. The results show that there are significant negative correlations for MSLQSE ($r = -.462$, $p = .000$), MSLQIN ($r = -.566$, $p = .000$), MSLQCSU ($r = -.542$, $p = .000$), and MSLQSR ($r = -.492$, $p = .000$). MSLQTA showed no significant correlation with GPA ($r = -.088$, $p = .239$). An overview of these results can be found in table 7.

Table 7
Correlations for Academic Motivation and GPA (Philippines)

	GPA (Philippines)		
	Pearson Correlation	P	N
MSLQSE	-.462	.000	179
MSLQIN	-.566	.000	179
MSLQTA	-.088	.239	179
MSLQCSU	-.542	.000	179
MSQLSR	-.492	.000	179

DISCUSSION

The research attempts to identify how the sub components of motivation impact on academic performance utilising an established tool, MSLQ. The results provide an empirical basis for linking self-reported Asian students measurements to performance and in comparison with contemporary results from western results. Self efficacy (MSLQSE) was positively related to academic performance for all culture and socio economic variables. Students self-reported self-efficacy did influence their overall academic performance. This relationship is consistent with historical results from educational research performed in western based studies where a clear relationship is established between high self-efficacy results and performance (Robbins et al, 2004). Tentative linkages have been proposed to link cultural awareness and self-efficacy in the sphere of academic performance with early indicators of a higher individualism in Anglo cultures impacting upon self-efficacy (Bong, 2010). The relationship between self-efficacy and self-awareness is established and cultural variations have been recorded in non-academic spheres (Ryan 2000) and directly for Confucian cultures underestimation of self-efficacy (Ku 2002).

Intrinsic value (MSLQIN) was positively related to academic performance for all culture and socio economic variables tested. This indicates students with a positive motivation towards the curriculum content, students who were motivated to learn the content are more engaged in deeper level comprehension. This linkage indicates that students who are either interested in the subject material, or believe it is important to them, develop higher levels of self-control and ultimately higher performance. The finding is consistent with historical results from western tertiary level students (Kosnin, 2007).

No significant relationship was indicated for Test Anxiety (MSLQTA) and academic performance, anxious students exhibited enhanced levels of self-control and ultimately persistence in achieving mastery levels of the subject material. As for intrinsic value this result is not supported by results for western university research, rather these results demonstrate a negative relationship between test anxiety and performance (Robbins et al, 2004). A coarse interpretation would indicate that Asian university students gain incentive from test anxiety compared to their more relaxed western counterparts as indicated in previous research (Dion, Toner 2000). Cultural variations in the impact of test anxiety have been noted for Asian students in the USA but not directly in the country of origin (Zeidner, 1998). Overall two sub components of motivation – test anxiety &, intrinsic value –

are separately and in combination positively related. Higher motivation was positively related with performance in agreement with the wide range of historical data from western universities.

Self Regulation (MSLQSR) was positively related to academic performance for all culture and socio economic variables tested. Students with the ability to organise and apply meta-cognitive strategies had superior academic performance; this result is strongly supported by previous research from western universities (Bong, 2001). This self-control is clearly expressed through a longer term view of the benefit of the overall educational process. The second component of self-regulated learning – Strategy Use (MSLQSU) – was also positively related to the overall student performance. This provides clear evidence to imply that the performance of Asian University can be predicted by their individual levels of self-control. This positive relationship has been delineated across a large number of survey research in western universities (Richardson, 2012) and is now supported from these cohorts of Asian students. (Fang, 2014). However the overall levels of self-control is not related to Hofstede LTO values, no relationship can be indicated either with pre-existing cultural measures or between the current data and historical sources. To underscore the differences from previous western tertiary surveys the Asian cohorts reported no linkage between performance and self-efficacy or test anxiety. The ultimate causes underlining these recorded variations are not indicated and requiring further research.

The two separate cohorts measured within the Philippine sub set express strong variations. The higher socio economic sub set measured at DLSU have significantly lower levels of overall motivation compared to the lower socio economic cohorts generated from PLP. This relationship holds for the major sub components of self-regulation and motivation expressed within the MSLQ survey. Whilst the survey cannot identify the ultimate causes of this difference the proximate measurement is clear and it can be speculated that lower socio economic levels have a greater need or desire to achieve to improve their personal or family circumstances.

Self-control, as measured via the BSCS, displayed no relationship with academic performance across all the students' cohort respondents. Further no relationship was indicated for the different countries and therefore no correlation with Hofstede LTO values. The BSCS results are remarkably consistent for each country, with only the China and Philippine cohorts having higher BSCS values. Results indicate that the BSCS is not sensitive to variations within Asian countries whereas it has proved successful when applied to western university students (Tangney, Baumeister 2004).

RECOMMENDATIONS & LIMITATIONS

When relating found results to practical application there are certain important aspects that need to be addressed. The results show a positive relation between the following MSLQ factors and GPA: intrinsic values, test-anxiety, cognitive strategy use, and self-regulation. Teachers should be aware of the importance of these factors, so they can attend to them accordingly. Furthermore, since it is shown that high SES show lower score on these factors (except for test anxiety) educators responsible for such demographics groups are advised to take these results in greater consideration. Interventions that focus on increasing certain motivational factors within the classroom setting are not well understood as of yet. Future research should focus on identifying each of these motivational factors and how to increase them in order to optimize students' performance. Another important finding is that test

anxiety is positively correlated with academic performance. That implies that in the Philippines test anxiety is not something to be feared or something that people should try to avoid, since higher test anxiety predicts better academic performance. Since this study is of explanatory nature it is advised that this specific phenomenon is further investigated by research.

As ever, this research has its limitations. For one, this study did not use random sampling to collect data. Not collection data at random can cause group differences and other factors to influence found results, therefore results should be interpreted carefully. Since the results shows significant differences in schools in the same country one school cannot be seen as a representative for the whole country. To further expand our knowledge of the discussed concepts, more data collection is needed with a plurality of sources for each country. As discussed earlier, this is an exploratory research. It is it first of its kind and further research is needed to correctly understand and interpret the found differences and relations.

REFERENCES

- Baumeister, Vohs & Tice, 2007. The Strength Model of Self-Control. *Current Directions in Psychological Science*, Vol. 16, No. 6, 2007.
- Baumeister, R, Galliot, M (2006). Self-Regulation and Personality: How Interventions Increase Regulatory Success, and How Depletion Moderates the Effects of Traits on Behavior. *Journal of Personality* 74:6, December 2006.
- Bembenutty, H (2008) Academic delay of gratification, self-regulation of learning, gender differences, and expectancy-value. *Personality and Individual Differences* 46 (2009) 347–352.
- Bembenutty, H 2009. Teaching Effectiveness, Course Evaluation, and Academic Performance *Journal of Advanced Academics*, Vol.20, No.2 2009
- Bong, M (2001). Between- and Within-Domain Relations of Academic Motivation Among Middle and High School Students: Self-Efficacy, Task-Value, and Achievement Goals. *Journal of Educational Psychology* 2001, Vol. 93, No. 1, 23-34.
- Dion, Toner (1998). Test Anxiety and Study Behavior of Community College Students in Relation to Ethnicity, Gender and Age. *Sacramento College, ED 415 942JC 980 105*, 03 1998.
- Duckworth & Seligman, 2005. Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents. *Psychological Science*, Vol. 16, No. 12 (Dec., 2005).
- Duckworth, A et al (2010). Self-regulation strategies improve self-discipline in adolescents: benefits of mental contrasting and implementation intentions. *Educational Psychology*, 31: 1, 17 2010.
- Fang, N (2014). Correlation between students' motivated strategies for learning and academic achievement in an engineering dynamics course. *Journal of Engineering Education* Volume 16, Number 1, 2014.
- Freaney & O'Connell, 2010. Wait for it: Delay-discounting and academic performance among an Irish adolescent sample. *Learning and Individual Differences* 20 (2010) 231–236
- King, R, Du, H. (2011) All Good Things Come to Those Who Wait: Validating the Chinese Version of the Academic Delay of Gratification Scale (ADOGS). *The International Journal of Educational and Psychological Assessment*. 2011, Vol.7,1.
- Kitsantas & Winsler, Huie. 2008. Self-Regulation and Ability Predictors of Academic Success During College. *Journal of Advanced Academics*, Vol.20, 2008.
- Kosnir, A (2007). Self-regulated learning and academic achievement in Malaysian undergraduates. *International Education Journal*, 2007, 8(1), 221-228.

- Ku, N (2002). Influence of Cultural and Self-efficacy Beliefs on East Asian Students' Achievement. *Hsi Lai Journal of Humanistic Buddhism*. Vol 4, 2003.
- Meece, J Anderman, E (2006). Classroom goal structure, student motivation and academic achievement. *Annual Review Psychology* 2006. 57:487–503.
- Milanovic, B (2012). Global Income Inequality by the Numbers: in History and Now. World Bank Policy Research Working Paper No. 6259 2012.
- Mischel, Ozlem, Berman, 2010. Willpower over the life span: decomposing self-regulation. *Social Cognitive and Affective Neuroscience Advance Access published September 19, 2010*.
- Pintrich & V. De Groot, 1990. Motivational and Self-Regulated Learning Components of Classroom Academic Performance. *Journal of Educational Psychology* 1990, Vol. 82, No. 1, 33-40.
- PISA 2012. OECD, PISA 2012 Database; Tables I.2.1a, I.2.1b, I.2.3a, I.2.3b, I.4.3a, I.4.3b, I.5.3a and I.5.3
- Richardson, M, Bond, R, Abraham, C. (2012). Psychological Correlates of University Students' Academic Performance: A Systematic Review and Meta-Analysis. *Psychological Bulletin* 2012, Vol. 138, No. 2, 353–387.
- Robbins, Lauver, Le, Davis. 2004. Do Psychosocial and Study Skill Factors Predict College Outcomes? A Meta-Analysis. *Psychological Bulletin* 2004, Vol. 130, No. 2, 261–288.
- Ryan, R., Deci, E (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, Vol 55(1), Jan 2000, 68-78.
- Sirin, S (2005). Socioeconomic Status and Academic Achievement: A Meta-Analytic Review of Research. *Review of Educational Research* Fall 2005, Vol. 75, No. 3, pp. 417–453.
- Tangney & Baumeister. 2004. High Self-Control Predicts Good Adjustment, Less Pathology, Better Grades, and Interpersonal Success. *Journal of Personality* 72:2, April 2004.
- Zimmerman, B. (1990). Self regulated learning & academic achievement; An Overview. *Educational Psychologist*, 25(1), 3-17.
- Zimmerman, B (1992). Investigating self regulation and motivation historical background methodological developments and future prospects. *American Educational Research Journal*, Vol 45, No 1, 1992.
- Zimmerman, B (1992). Self motivation for academic attainment; The role of self-efficacy and personal goal setting. *American Educational Research Journal*, 1992, 29, 663 - 676.
- Zimmerman, B (2008). Investigating Self-Regulation and Motivation: Historical Background. *American Educational Research Journal*; Mar 2008.
- Zeidner, M (1998). Test Anxiety: The state of the art. ISBN 0-306-45729-6. P273-275, 1998.