

Influence of Locus of Control, Self-Esteem and Sex on Academic Stress among Adolescents

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Abstract

Received: 30 Jan 2013
Revised: 15 Feb 2013
Accepted: 17 Feb 2013

Keywords:

Locus of control, Self esteem, Academic Stress, Adolescents

Academic stress is increasing among adolescents. Different factors are influencing the way the students experience the stress. The purpose of the current study is to understand the influence of locus of control, self esteem and sex on academic stress. The positive aspect of the personality gives a better way of dealing with stress. Present study tries to understand the positive aspect of personalities that influencing the academic stress. For the purpose 300 participants were involved in the study. To know the influence 3 way ANOVA was computed. The study revealed that self esteem and sex of the students have significant influence on academic stress. The locus of control did not show any independent influence on academic stress, but shown an interaction effect with self esteem. In comparison to sex difference girls feel more academic stress than boys.

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Adolescent is a sensitive period in which persons faces different types of situation. In this period the transition from childhood to adulthood occurs. During this period person is neither considered as child nor as adult. This causes a trivial stress in them. Adolescents face changes associated with puberty, social integrity, challenges of new roles, future adulthood related stresses, conflict with peers and family. According to Lazarus and Folkman (1987), stress is defined as a relationship between the person and the environment that is appraised by the person as relevant to his or her well being and in which the person's resources are taxed or exceeded. Kearney (1999) reviews, that the onset of adolescence – the period of transition between childhood and adulthood is usually accompanied by dramatic and often difficult changes in the life of a young person.

Stress has become an unavoidable factor in a daily living, because of this without some stress we would be listless and apathetic creatures, and unavoidable because it relates to any external event, be it pleasurable or anxiety producing. Now these days competitiveness among people has become increasingly intense, as a consequence, people have become busier and, therefore, stress is a natural consequence. Even though appropriate stress is a juncture for self-growth, it is also a motivation for people to progress actively. It not only affects our thoughts and feelings but our behavioural models, as well. However, overstress causes problems and discomfort, and can have serious effects on people. Among these stressors, adolescents face academic related stresses in different stages of education.

Researchers have identified different types of stressors during academic period, as too many assignments, competitions with other students, failures and poor relationships with other students or lecturers (Fairbrother & Warn, 2003). Academic stressors include the student's perception of the extensive knowledge base required and the perception of an inadequate time to develop it (Carveth et al, 1996). Students report experiencing academic stress at predictable times each semester with the greatest sources of academic stress resulting from taking and studying for exams, grade competition, and the large amount of content to master in a small



amount of time (Abouserie, 1994). When stress is perceived negatively or becomes excessive, students experience physical and psychological impairment.

The pressure to perform well in the examination or test and time allocated makes academic environment very stressful (Erkutlu & Chafra, 2006). This is likely to affect the social relations both within the institution and outside which affects the individual person's life in terms of commitment to achieving the goals (Fairbrother & Warn, 2003). Knowing the causes of students stress will make the educational administrator know how to monitor and control the stress factors that are responsible for the students' stress?

Often, graduate students perceive that faculty exert great power over their lives and feel that they live in a state of substantial powerlessness (Altbach, 1970). Another source of stress is the difficulty of achieving social intimacy. It is difficult to find a mate or maintain a relationship with an existing one. Graduate students tend to lack the time and/or the opportunity to develop interpersonal relationships (Hartshorn, 1976). Fear of academic failure related to these tasks is a definite stressor (Kolko, 1980).

Thus, stressors affecting students can be categorized as academic, financial, time or health related, and self- imposed (Goodman, 1993). Academic stressors include the student's perception of the extensive knowledge base required and the perception of an inadequate time to develop it (Carveth et al, 1996). Students report experiencing academic stress at predictable times each semester with the greatest sources of academic stress resulting from taking and studying for exams, grade competition, and the large amount of content to master in a small amount of time (Abouserie, 1994).

College students have many obstacles to overcome in order to achieve their optimal academic performance. It takes a lot more than just studying to achieve a successful college career. Different stressors such as time management and social activities can all pose their own threat to a student's academic performance. College students confront many challenges in pursuit of their educational goals. When such experiences are perceived as negative, they can have an adverse effect on students' motivation and performance (Ames, 1992; Amirkhan, 1998; Covington, 1993; Perry, 1991; Weiner, 1979). Moreover, if prolonged and perceived as unmanageable, these experiences have been shown to elicit stress (Carver & Scheier, 1994; Folkman & Lazarus, 1985), thereby placing some students' academic futures in jeopardy.

The experience of stressor and its coping varies in relation to the influence of other Personality factors of the individual. As a personality factor, locus of control represents an individual's belief concerning his or her control over the environment (Lefcourt, 1982). Many studies are interested in the influence of locus of control on stress. High internal locus of control shows less stress and more ability to cope with the stressful situations. The concept of locus of control came from Rotter's (1966) social learning theory. People with internal locus of control believe that rewards they receive are contingent upon their own behavior, and confident that they can control their destinies. In contrast, internals believe that rewards are not dependent upon their actions and that the events that happen to them are the results of external factors such as other's influences or luck (Zimbardo, 1985).

Contemporary and long-standing evidence shows that internal locus of control is also associated with higher self motivation, superior academic performance, higher social maturity, and greater independence (Nelson & Mathia, 1995; Nowicki & Strickland, 1973). Nelson and Mathia (1995) also found that internal locus of control is positively related to academic achievement in college students. Other research has indicated that people with an internal locus of control receive higher test scores and attribute their success to internal factors rather than fate, luck, or powerful others (Haas, 1989; Kaiser, 1975). High internal locus of control will support the well functioning of adolescents (Nwankwo, Balogun, Chukwudi, & Ibeme, 2012). The individuals who thrive in stressful situations are not affected by the stress. The study in

relation to stress and locus of control shows that externality is positively correlated with stress (Evans & Coman, 1991; Jennings, 1990).

Research on the relationship between locus of control and self esteem has additionally determined that self-esteem is significantly related to locus of control on the dimensions of control ideology, system blame, and self-blame, suggesting that high self-esteem is associated with internal locus of control (Abdallah, 1989). Ickes and Layden (1978) reported similar relations between attribution for outcome and self-esteem; individuals with high self-esteem are more likely to attribute success to internal causes, whereas people with low self-esteem generally attribute positive outcomes to external causes (Abdallah, 1989).

Self-esteem is literally defined by how much value people put on themselves. It also means self-knowledge. High self-esteem refers to a highly positive evaluation of the self. Low self-esteem refers to an unfavorable definition of the self. Rosenthal and Jacobson (1968) showed that teachers' false, unfounded beliefs about their students later became objective, verifiable realities in the performance of those students. In other words, students' definitions of themselves generate as a self-fulfilling prophecy and, in the end, it becomes their reality against the World (Baumeister & Leary, 1995). Adolescence is a time when identity development is particularly important (Baumeister & Leary, 1995). Leary and Downs (1995) think self-esteem to be an internal representation of social acceptance and rejection and a psychological gauge monitoring the degree to which a person is included versus excluded by others. Disturbances in self esteem can contribute to the high prevalence of stress (Birndorf, Ryan, Auinger, & Aten, 2005; Stinson, Logel, Zanna, Holmes, Cameron, & Wood, 2008).

The literatures on stress among academic population have thrown light on the negative aspect of mental health with less concentration on the positive aspects of personality. The presence of stress shows the negative aspects of personality, but it does not show the importance of positive aspects. By seeing the positive aspects of the personality during the period of stress will facilitate improved adjustment to stress and coping. This study investigated the power of locus of control and self esteem in controlling the academic stress among adolescence. In the current study the positive categories of self esteem were considered in understanding the students during stressful situations and the effect of another personality factor locus of control on academic stress.

Method

Participants

Participants of this study were undergraduate students from different colleges in Bangalore. The students were in the age group of 18- 21. Three hundred students were participated in the study, among them 19.7% were males and 80.3% were females. The samples were from different academic disciplines like BA, BCom and Engineering and they were from first to final year. The sample also categorized on the basis of religion, mother tongue and day scholar and hosteller as the student participants were representing different regions of India.

Instruments

1. Brief Self Esteem Inventory: Brief Self Esteem Inventory originally developed by Williams (2000), and re-standardized by Uma and Manikandan (2013) in Indian population is used to measure the self Esteem of the subjects, which consists of 20 items that measures 10 areas of self esteem. Participants asked to gone through the statements and respond in given 4 options, viz, "if you feel definitely yes or almost always, if you feel probably yes or often, if you feel probably not or seldom, if you feel definitely not or almost never". The reliability coefficient Cronbach Alpha of the inventory was found to be .78.
2. Locus of Control Scale: This scale was developed by Uma and Manikandan (2013) to measure locus of control of students, which consists of 22 items indicating external and

internal locus of control. This scale was developed based on the theoretical frame work proposed by Rotter. Here the respondents were asked to make yes or no options to the given statements. Since it is based on pure theory, this scale can said to be valid and the reliability coefficient Cronbach alpha was found to be .67.

3. Academic Stress Inventory: This inventory was developed and standardized by Uma and Manikandan (2013) in Indian context to measure the stress experienced by the students in their academic endower. This inventory was based on the theoretical background by Lin and Chen (2009). The response categories are viz, strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. The higher the score, the higher is the degree of stress experienced. The reliability coefficient Cronbach alpha was found to be .89.
4. Personal Informational Schedule: To measure the personal data like sex, age, class of study, college etc., personal information schedule was used.

Procedure

Investigators directly contacted the principals of the institutions and explained about the need and significance of the study. After getting the permission investigator met the class advisors and they directed to the corresponding classes for data collection. Participants were informed about the aim and the procedure of the study prior to data collection and were asked to sign a consent form, agreeing to participate in the study. Then explained the nature of responding and clarified the queries of the students. In the end the completed data sheets were collected back. The response sheets were scored using the scoring procedure described in the manual and fed into a spread sheet for further statistical analysis.

Results and Discussion

Current study focuses on the positive aspect of personality, which affect the academic stress of the students. Through this study, it is an attempt to find out the positive factors of the personality which can help student to cope with the stressful situation. By nurturing the positive aspect of personality will facilitate better adjustment during stressful situation.

To know the influence of locus of control, self esteem and sex on the academic stress, 3 way ANOVA was computed and the results are presented in table 1. Since the variable self esteem is measured in an interval scale, using the principle $\text{Mean} \pm \frac{1}{2} \text{SD}$, self esteem was categorized in to 3 groups such as low, average and high self esteem. There were 97 (32.3%) participants belong to low group, 100 (33.3%) average and 103 (34.3%) to high self esteem group.

Table 1

Summary of ANOVA of Academic Stress by Self-Esteem, Locus of Control and Sex (3 x 2 x 2)

Source of Variance	Sum of Squares	df	Mean Square	F
Self-Esteem	63811.901	2	31905.951	490.95**
Locus of Control	73.318	1	73.318	1.128
Sex	296.246	1	296.246	4.56*
Self-esteem * Locus of Control	421.560	2	210.780	3.24*
Self-Esteem * Sex	563.894	1	563.894	8.68**
Locus of Control * Sex	23.052	1	23.052	0.355
Self-Esteem * Locus of control * Sex	55.791	1	55.791	0.858
Error	18846.497	290	64.988	
Total	3075936.000	300		

*p< .05, **p< .01

As seen in the table 1, self esteem was found to be significantly influencing the academic stress experienced by the subjects ($F=490.55, p < .01$) and the variable sex also found to be significantly influencing the academic stress of the students ($F=4.56, p < .05$). There is a significant interaction between self esteem and locus of control on academic stress among college students ($F=3.24, p < .05$). Biological sex of the students and self esteem ($F=8.68, p < .01$) have also found to be significantly influencing the academic stress of the students. But there is no three way interaction.

To have a more clarity regarding the variable academic stress across the Self Esteem groups, mean, standard deviation and sample size were found out and presented in table 2.

Table 2

Mean and SD of Academic stress by Self-Esteem

Variable	Mean	N	SD
Low Self-Esteem	77.87	97	9.151
Average Self-Esteem	99.89	100	5.035
High Self-Esteem	119.48	103	9.495
Total	99.49	300	18.852

As seen in table 2, mean score of high self esteem group showed higher ($M= 119.48, n=103$) than the mean score of average group ($M= 99.89, n=100$) and low self esteem group ($M= 77.87, n=97$). This indicates that when self esteem of individuals goes up their academic stress also increasing. Individuals with high self esteem will try to increase their performance for that they may evaluate and relate to their academic performance in time to time. This causes increase in academic stress in students with high self esteem. To keep the self esteem in high level they need to work hard which in turn causes more stress on students. Students with high self esteem will have a positive aspect related to study and will be working more towards academic achievement and higher grades (Michie, Glachan, & Bray, 2001).

From the table 1, it can be seen that the variable locus control and self Esteem is interacting each other and to know where the interaction takes place, the scores on academic stress by locus control and self esteem was plotted in a graph and the result is presented in figure 1.

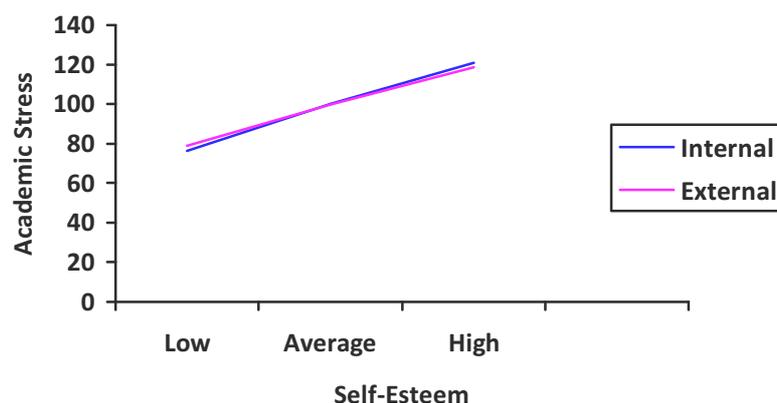


Figure 1: Interaction of Locus of control and Self-Esteem on Academic Stress

The interaction of locus of control and self esteem on academic stress of students were depicted in figure 1. In the ANOVA model locus of control did not showed significant independent influence on academic stress, but along with self esteem it showed significant

interaction ($F=3.24, p < .05$). As the self Esteem increases, the academic stress of the internals also increases. The internal and external locus of control was interacting at the point where the students have average self esteem. As the internals perceive the stress as being associated with high level of performance, they work more towards goal attainment (Snead & Harrel, 1991). Internals are also able to sustain the task performance during stressful situation and help in reward expectancies (Wolk & Bloom, 1977).

From the table 1, it can be also seen that the variable self Esteem and the sex of the participants are interacting each other on academic stress and to know where the interaction takes place, the scores on academic stress by self Esteem and the sex was plotted in a graph and the result is presented in figure 2.

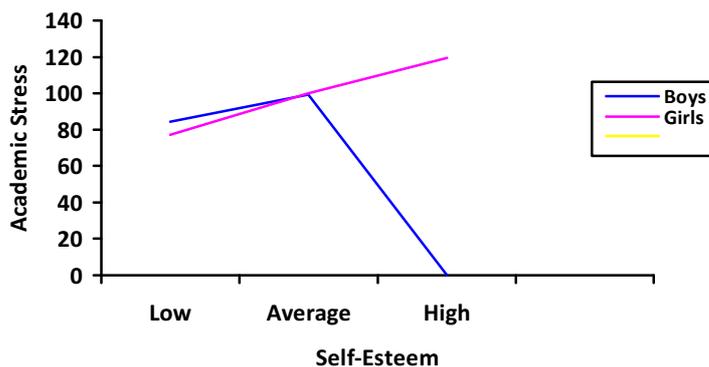


Figure 2: Interaction of Sex and Self-Esteem on Academic Stress

The interaction of sex and self esteem on academic stress among students were shown in figure 2. At high self esteem level girls experienced more stress and boys experienced lower stress. Girls perceive stress higher than males. At the high self esteem level girls give more importance to study achievements and work more towards attainment of goals. This causes perception of increased stress and in turn works more. Academic stress level of both girls and boys were interacting at the point which their self esteem is average. This is supported by the study of Schraml, Perski, Grossi, and Simonsson-Sarnecki (2011). Gender difference may be due to how girls perceive the stressors when compared with boys. Girls will give more importance to fear of failure (Ozer, Demir, & Ferrari, 2009), task achievement and attaining the goal as compared to boys. Girls want to succeed in all the areas than compared to boys (Sharma & Kaur, 2011).

Conclusion

The purpose of the study was to understand the influence of locus of control, self esteem and sex on academic stress among adolescents. The study revealed that self esteem and sex of the students have significant influence on academic stress. As the locus of control did not show any independent influence on academic stress, but shown an interaction effect with self esteem on academic stress. Internals and externals feel stressful as the self esteem is high, but for the internals stress level increases at high self esteem point compared to externals. As internals perceive more stress to achieve the goals so they can retain their high self esteem continuously during their academic period when compared to externals. There is significant interaction between self esteem and sex of the students on academic stress. The mean score of academic stress shows that the students who feel high on self esteem faces more academic stress than the low and average self esteem people. Girls feel more academic stress when their self esteem is high on the other hand boys feel lower academic stress when their self esteem is high. In comparison to sex difference girls feel more academic stress than boys.

References

- Abdallah, T. M. (1989). Self-Esteem and Loss of Control of College Men in Saudi Arabia. *Psychological Reports* 65:1323–26.
- Abouserie, R. (1994). Sources and levels of stress in relation to locus of control and self-esteem in university students. *Educational Psychology*, 14(3), 323-330.
- Ames, C. (1992). Classrooms: goals, structures, and student motivation. *Journal of Educational Psychology* 84: 261–271.
- Amirkhan, J. H. (1998). Attributions as predictors of coping and distress. *Personality and Social Psychology Bulletin* 24: 1006–1018.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Birndorf, S., Ryan, S., Auinger, P., & Aten, M. (2005). High Self Esteem among adolescents: Longitudinal trends, sex differences, and protective factors. *Journal of Adolescent Health*, 37, 194- 201.
- Carver, C. S., & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology* 66: 184–195.
- Carveth, J. A., Gesse, T., & Moss, N. (1996). Survival strategies for nurse-midwifery students. *Journal of Nurse-Midwifery*, 41(1), 50-54.
- Covington, M. V. (1993). A motivational analysis of academic life in college. In J. Smart (ed.), *Higher Education: Handbook of Theory and Research*, Vol. 9, pp. 50–93. New York: Agathon Press.
- Evans, B. J., & Coman, G. J. (1993). General Versus specific Measures of occupational Stress: An Australian Police Survey. *Stress Medicine*, 11-20.
- Fairbrother, K., & Warn, J. (2003). Workplace Dimensions, Stress and Job Satisfaction, *Journal of Managerial Psychology*. 18(1): 8-21.
- Folkman, S., & Lazarus, R. L. (1985). If it changes it must be a process: study of emotion and coping during 3 stages of a college examination. *Journal of Personality and Social Psychology* 48: 150–170.
- Haas, M. H. (1989). Relationship Between Locus of Control and Self-Efficacy in Freshman Probation and Nonprobation College Students. In L. Wang., E. Kick., & J. Frazer (1999). *Status Attainment in America : The Roles of Locus of Control and Self Esteem in Educational and Occupational Outcomes*. *Sociological Spectrum*, 19: 281–298. Retrieved from <http://jamescfraser.com>
- Ickes, W., & Layden, M. A. (1978). Attributional Styles. In L. Wang., E. Kick., & J. Frazer (1999). *Status Attainment in America : The Roles of Locus of Control and Self Esteem in Educational and Occupational Outcomes*. *Sociological Spectrum*, 19: 281–298. Retrieved from <http://jamescfraser.com>
- Jennings, B. M. (1990). Stress, Locus of Control, Social Support, and Psychological Symptoms among Head Nurses. *Research in Nursing and Health*, 393- 401.
- Kaiser, D. L. (1975). Internal-External Control and Causal Attributions of Own and Other's Performance. *Psychological Reports* 37:423–26.
- Kearney, C. A. (1999). Gender Differences and Self-esteem . *Journal of Gender Specific Medicine*, 2 (3) : 46-52..
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotion and coping. *European Journal of Personality*, 1: 141- 169. Retrieved from [http:// dx.doi.org/10.1016/j.erp.2004.05.001](http://dx.doi.org/10.1016/j.erp.2004.05.001).
- Lefcourt, H. (1982). *Locus of control: Current Trends in Theory and Research* ,(2nd ed). Lawrence Erlbaum, Hillsdale, NJ.
- Michie, F., Glachan, M., & Bray, D. (2001). An Evaluation of Factors Influencing the Academic Self-concept, Self-esteem and Academic Stress for Direct and Re-entry Students in Higher Education. *Educational Psychology*, Vol. 21, No. 4, 455-472.

- Nelson, E. S., & Mathia, K. E. (1995). The Relationships among College Students' Locus of Control, Learning Styles, and Self-Prediction of Grades. *Education Research and Perspectives* 22(2):110-17.
- Nowicki, S., & Strickland, B. R. (1973). A Locus of Control Scale for Children. *Journal of Consulting and Clinical Psychology* 40:148-54.
- Nwankwo, B. E., Balogun, S. K., Chukwudi, T. O., & Ibeme, N. E. (2012). Self Esteem and Locus of Control as Correlates of Adolescents Well Functioning. *British Journal of Arts and Social Sciences*, 9(2), 214- 228.
- Nwankwo, B. E., Balogun, S. K., Chukwudi, T. O., & Ibeme, N. E. (2012). Self Esteem and Locus of Control as Correlates of Adolescents Well Functioning. *British Journal of Arts and Social Sciences*, 9(2), 214- 228.
- Ozer, B.U., Demir, A., & Ferrari, J. R. (2009). Exploring Academic Procrastination Among Turkish Students: Possible Gender Differences in Prevalence and Reasons. *The Journal of Social Psychology*, 149, 241- 257.
- Carol, S. D. (1986). Motivational Processes Affecting Learning. *American Psychologist*, 1040-1048. Retrieved from <http://www.nisdtx.org>
- Rotter, J. B. (1966). *Generalized expectancies for Internal versus External Control of Reinforcement*. Psychological monograph, 80.
- Schraml, K., Perski, A., Grossi, G., & Simonsson, S. (2011). Stress symptoms among adolescents: the role of subjective psychosocial conditions, lifestyle, and self-esteem. *Adolescent Journal*, 34(5):987-96. doi: 10.1016/j.adolescence.2010.11.010
- Sharma, M., & Kaur, G. (2011). Gender differences in Procrastination and Academic Stress among adolescents. *Indian Journal of Social Science Researches*, 8 (1,2), 122-127.
- Snead, K., & Harrel, A. (1991). The impact of Psychological Factors on the Job Satisfaction of Senior Auditors. *Behavioral Research in Accounting*, 3, 85-96.
- Stinson, D. A., Logel, C., Zanna, M. P., Holmes, J. G., Cameron, J., Wood, J.V. (2008). The cost of lower self esteem: testing a self- and social bonds model of health. *Journal of Personality and Social Psychology*, 94(3), 412-428.
- Struthers, C. W., Perry, R. P., & Menec, V. H. (2000). An examination of the relationship among academic stress, coping, motivation and performance in college. *Research in Higher Education*, 41(5).
- Uma, K., & Manikandan, K. (2013). *Academic Stress Inventory*. Department of Psychology, University of Calicut, Kerala
- Uma, K., & Manikandan, K. (2013). *Brief Self Esteem Inventory*, Department of Psychology, University of Calicut, Kerala
- Uma, K., & Manikandan, K. (2013). *Locus of Control Scale*. Department of Psychology, University of Calicut, Kerala
- Uslu, M (2013). *Relationship between Degrees of Self- Esteem and Peer Pressure in High School Adolescents*. *Journal of Academic Research Part B*, 5(3), 117-122. doi: 10.7813/2075-4124.2013/5-3/B.19
- Weiner, B. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology* 71: 3-25.
- Wolk, S., & Bloom, D. (1977). The Interactive Effects of Locus of Control and Situational Stress upon performance accuracy and time. *Journal of Personality*, 46(2), 279- 298. DOI: 10.1111/j.1467-6494.1978.tb00180.x.
- Zimbardo, E. (1985). Achievement Motivation; Conception of ability. Subjective experience, Task choice, and Performance. *Psychological Review*, 91, 328- 346.