The Influence of Covitality and Resilience on Student Engagement among Adolescent Students

Lavanya. G and Lavanya. T

Department of Psychology, University of Madras

Education for new millennium needs to enhance an individuals' ability to assimilate, evaluate and apply the information with effective classroom management. The present study intends to investigate the relationship between factors influencing student engagement to understand whether internal and external assets and individual factors have an impact on student's academic outcome inside and beyond classroom. The current study used an Ex-post facto research design. For the purpose of this study, a sample of 131 school student's data was collected from Matriculation schools in Chennai city. The Social and Emotional Health Survey-Secondary (SEHS-S) by Furlong et al (2014), The Resilience Scale (for children and adolescents) by Sandra Prince Embusy (2007) and The Behavioral-Emotional-Cognitive School Engagement Scale (BEC-SES) Li & Lerner (2013) were the tools used to assess the variables in the study . The results were computed statistically using Pearson product moment correlation and regression. The results indicated that there existed a significant relationship among the variables used in the present study. Dimensions of covitality namely belief in self, belief in others, engaged living and in resilience, sense of mastery and emotional reactivity were found to be the predictors of student engagement.

Keywords: Covitality, Resilience, Student Engagement, School Students.

According to Lerner et al (2005) "School engagement is a foundation of achievement in the school context. School engagement has behavioral, emotional, and cognitive components. Within and across grades, school engagement is associated with better self-reported grades and lower involvement in delinquency and substance use. School engagement is predicted by adolescents' Intentional Self Regulation (ISR)".

Student engagement is defined as the amount of time and effort students put into their studies

and other educationally purposeful activities (National Survey of Student Engagement, 2011). There is ample evidence that school engagement positively covaries with academic outcomes (e.g., Finn & Rock, 1997; Marks, 2000; Whitlock, 2006). For example, Johnson, McGue, and Iacono (2006) found that behavioral school engagement was directly associated with changes in academic achievement during adolescence, above and beyond familial factors.

In addition, students' problems with behavioral engagement in the first grade were associated with lower achievement four years later and their eventual decision to drop out of high school (Alexander, Entwisle, & Horsey, 1997). On the other hand, evidence is much scarcer about the link between emotional engagement and achievement (Fredrick, Blumenfeld & Paris, 2004). Studies that allow for an examination of the unique contribution of emotional engagement, in addition to that of behavioral engagement, on academic achievement are needed.

Moreover, school engagement is also perceived mainly as a critical factor in promoting academic achievement during adolescence, its role as a protective factor in a broad spectrum of healthy youth development has also been recognized (Catalano et al., 2004). From a social control theory perspective, emotionally engaged youth are less likely to develop emotional problems, because they are protected by the supportive relationships they have formed with teachers and peers. This theory has received

support from several empirical studies (e.g., Loukas, Ripperger-Suhler, & Horton, 2009; Whitlock, 2006). For instance, a study conducted by Shochet, Dadds, Ham, and Montague (2006) found that decreased emotional engagement was predictive of subsequent increased depression among Australian adolescents.

Based on the results of the National Survey of Student Engagement (NSSE) annual report, Yazzie-Mintz (2009) suggested that engagement is the single greatest factor in Students' success in secondary, as well as post-secondary educational settings. Engagement is a part of the process of student's academic life that shapes students everyday experience in school both psychologically and socially that is high quality engagement and its reluctant learning and scholastic success leads student to feel more academically competent and connected and elicit more positive interactions and support from teachers.

Over the past several years, educational leaders and researchers have tried to find a cause for a number of issues in public education, including low academic achievement, increasing student drop-out rates and the decline of positive perceptions of schools in general (Manigault, 2014). As a result, there has been increasing research done on the level of engagement that students experience during their schooling. Much of the research has focused on how students are cognitively, socially, and emotionally engaged in school. Often, students and schools that are described as -at risk are found to have lower levels of student engagement (Yazzie-Mintz, 2009). This clearly infers that the role of parents, teachers and friends during the period of adolescence plays paramount in student's active engagement in schools.

Student engagement has become a focus in educational settings as researchers and practitioners attempt to find solutions to declines in student academic achievement. This study was conducted in order to assess whether there exists a significant relationship between covitality, resilience and student engagement. The study also assessed whether covitality and resilience influences student engagement based on the perceptions of school going adolescents.

Fredrick et. al.(2004) considered three key aspects of engagement: cognitive, behavioral, and emotional. The cognitive engagement domain assesses student motivation, learning goals and effort in their learning. Behavioral engagement is associated with positive conduct, including cooperative and autonomous participation. Emotional engagement focuses on the affective reactions of students in the learning environment or the values students are interested in.

The consequences of not engaging students in learning are reportedly dire (Prensky, 2001; Tapscott, 1998; Gilbert, 2007; Willms, 2003, p. 56; Claxton, 2007). "Some educationists consider engaging disengaged pupils to be one of the biggest challenges facing educators, as between 25% (Willms, 2003) and over66% (Cothran & Ennis, 2000) of students are considered to be disengaged" (as cited in Harris, 2008, p. 57). Therefore, educators must continue to seek to understand and apply specific, well-considered strategies that support student engagement in learning both in and beyond the classroom.

Lyons, Huebner, and Hills (2013) found positive mental health and high levels of well-being to be predictive of cognitive, behavioral, and emotional engagement in school. In upper elementary school students, high levels of well-being was associated with positive school and social outcomes (Greenspoon & Saklofske, 2001). This recurring finding implies that regardless of psychopathology level, positive mental health and high levels of well-being serve as protective factors and are associated with better life outcomes.

According to Alvord and Grados (2005), numerous definitions of resilience require conditions of an identified risk or challenge followed by some defined measure of positive outcome. However, debate remains concerning what constitutes resilient behavior and how to best measure successful adaptation to hardship. Resilience is not an one-dimensional, dichotomous attribute that an individual has or does not have. It has been suggested that a resilient individual must show positive outcomes across multiple aspects of life over a period of

time (Cicchetti & Rogosch, 1997). Moreover, resilience indicates the possession of several skills, in varying degrees, that help a person cope (Alvord & Grados, 2005). The common thread is that people have been able to lead more successful lives than expected despite being at greater risk than average for serious problems (Brooks, 2006). For the scope of this paper, resilience refers to achieving positive outcomes despite challenging or threatening circumstances (Brooks, 2006; Masten, 2001; Masten et al., 1991), coping successfully with traumatic experiences, and avoiding negative paths linked with risks (Garmezy, Masten, & Tellegen, 1984; Luthar, Cicchetti, & Becker, 2000; Werner, 1992). An essential requirement of resilience is the presence of risk and protective factors helping to promote positive outcomes or reduce negative outcomes (Fergus & Zimmerman, 2005). Resilience theory is focused on strengths as opposed to deficits; rather it focuses on understanding healthy development and good outcomes in spite of exposure to risks (Masten, 2001).

Operational Definition

Covitality is defined as total sum of scores obtained as measured by Social and Emotional Mental health Survey -Secondary [SEHS-S] by Furlong, You, Renshaw, Smith, & O'Malley (2014).

Resilience is defined as the total sum of scores obtained as measured by Resiliency Scale (for children and adolescents) developed by Sandra Prince Embusy (2007)

Student Engagement is operationally defined as the total sum of scores obtained as measured by Behavioral Emotional Cognitive School Engagement Scale [BEC-SES] developed by Li & Lerner (2013).

Objectives of the Study

- To find out the relationship between Covitality, Resilience and Student Engagement among adolescentstudents.
- To determine whether Covitality and Resilience influence on Student Engagement of adolescent students?

Hypotheses

Based on the earlier research reviews the following hypotheses were framed:

- Covitality dimensions namely belief in self, belief in others, emotional competency and engaged living would berelated to resilience (sense of mastery, sense of relatedness and emotional reactivity) (Hypothesis-1)
- Covitality dimensions namely belief in self, belief in others, emotional competency and engaged living would be related to student engagement (Hypothesis-2)
- Resilience (sense of mastery, sense of relatedness and emotional reactivity) would be related to student engagement (Hypothesis-3)
- Covitality and resilience would influence student engagement among adolescent students (Hypothesis-4)

Methodology

In the present study, an ex-post facto research design was used to collect the data from a sample of 131 adolescent student of 9th to 12th grade (age range from 13 to 16 years) of Matriculation Higher Secondary. Convenience sampling technique was used to collect data by meeting small groups in classes after getting official consent from the Matriculation school authorities and by meeting students in person. The responses were collected from students who gave their consent to participate in the research work. Pearson product moment correlation was computed to find the relationship between the variables and multiple linear regression was computed to identify the influence.

The following tools were used for the study:

- 1. Social and Emotional Health Survey-Secondary (SEHS-S) Furlong et al (2014) (to assess covitality).
- The Resiliency Scale (for children and adolescents) Sandra Prince Embusy (2007)
- 3. The Behavioral Emotional Cognitive-School Engagement Scale (BEC-SES)

Li and Lerner (2013) (to assess student engagement.).

Results and Discussion

Table: 1 Relationship between various dimensions of Covitality and dimensions of resilience.

Dimensions of Covitality	Dimensions of Resilience	Coefficient Correlation (r)
Belief in Self	Sense of Mastery	.629**
	Sense of Relatedness	.303**
	Emotional Reactivity	204*
Belief in others	Sense of Mastery	.489**
	Sense of Relatedness	.568**
	Emotional Reactivity	418**
Emotional Competency	Sense of Mastery	.595**
	Sense of Relatedness	.608**
	Emotional Reactivity	250**
Engaged Living	Sense of Mastery	.486**
	Sense of Relatedness	.575**
	Emotional Reactivity	-280**

Note: *p<0.05, **p<0.01 level

From table 1, it is evident that covitality dimensions namely belief in self, belief in others, emotional competency and engaged living were positively correlated with sense of mastery and sense of relatedness of resilience, whereas all the dimensions of covitality was negatively correlated with emotional reactivity of resilience. Therefore, Hypothesis (1) was accepted. This infers that student's awareness in terms of their own strengths and weakness, self determination, their perceived support from parents, teachers and friends and ability to understand others and regulate their own emotions, being enthusiastic in their day to day life are associated with their sense of mastery and relatedness in resilience. On the otherhand, students who are emotionally sensitive find it difficult to have high sense of selfworth, perceive less support and trust from others and understanding others and engaging effectively in their day to day life. Students who

are high in emotional reactivity would also find difficulty in their tolerance level, discomfort with others and lower perceived access to support rather than actual support based on their underlying trust.

Table:2 Relationship between dimensions of Covitality and Student Engagement

Dimensions of Covitality	Student Engagement (r)
Belief in Self	.408**
Belief in others	.615**
Emotional Competency	.539**
Engaged Living	.594**

Note: **p<0.01 level

From table 2, it can be observed that Covitality dimensions namely belief in self, belief in others, emotional competency and engaged living were positively correlated with student engagement. Therefore, hypothesis (2) was accepted. This indicates that as students sense of worth, their perceived support from family, friends and teacher, their ability to understand others emotions and regulate their emotions and ability to express their gratitude, perceive optimism in their day to day life would enhance the student engagement.

Table:3 Relationship between dimensions of Resilience and student engagement

Dimensions of Resilience	Student Engagement (r)	
Sense of Mastery	.541**	
Sense of Relatedness	.551**	
Emotional Reactivity	512**	

Note: **p<0.01 level

From table 3, it can be observed that sense of mastery and sense of relatedness were positively correlated with student engagement, whereas emotional reactivity was negatively correlated with student engagement. Therefore, hypothesis (3) was accepted. This indicates that higher the level of resilience of students in terms of being positive in self esteem, mastery in perception of control, self regulation, optimistic, ability to receive and accept gives trust, belief

	-		
Variables Student Engagement			
	Standardized coefficient (Beta)	t	Sig
		3.37	.001
Sense of Mastery	.305	3.75	.000
Sense of Relatedness	.038	0.45	.652
Emotional Reactivity	285	4.59	.000
Belief in self	.206	2.26	.026
Belief in others	.285	2.86	.005
Emotional Competency	.050	0.61	.543
Engaged Living	.231	2.74	.007
F = 23.28	P<.001	$R^2 = .634$	N = 131

Table: 4 Influence of Covitality and Resilience on Student Engagement

in self to express their difficulty in relationship better would be high in their engagement. On the other hand, students who are high in emotional reactivity would find it difficult to engage themselves effectively inside the classroom and other co-curricular activities in school.

A multiple linear regression was computed to predict student engagement based on covitality and resilience relationship. From table 4, it can be observed that sense of mastery, emotional reactivity, belief in self, belief in others and engaged living were significantly predicting the variance of student engagement at 63% level. This indicates that students with high sense of selfworth, degree of fundamental trust on others (family, friends and school), sense of emotional regulation and engaged with day to day life would be able to have high sense of mastery and sense of relatedness. In contrast, students who seem to be low in their self-worth, perceive less support from parents, teachers and friends, emotional competency and engaged living would like to high in emotional reactivity. The result was also supported by Cicchetti and Valentino (2006) that resilience is derived from both external and internal factors. It further indicates that students who tend have high sense of worth, perceive support from their parents, teachers and friends, high in emotional competency and enthusiastic in day to day life would be highly engaged inside and beyond the class environment. They would be regular to school, punctual in finishing their homework, emotionally attached to their school,

value their education in their life. This finding is also in line with the attachment theory advanced by Bowlby (1971) which states that parents' trust, support and tolerance for their children will help them develop a positive internal working model. A good support system from parents helps adolescents form high self-esteem. Thus it could be inferred that students with both internal strength and perceived support from parents, teachers and friends and their ability in sense of mastery would be play a significant role in students engagement.

Conclusion

The present study revealed that the dimensions of covitality and student engagement were positively correlated with sense of mastery and sense of relatedness of resilience dimension, whereas emotional reactivity of resilience was negatively correlated with both covitality and student engagement. The current study helped in understanding the influence of covitality dimensions namely belief in self, belief in others and engaged living along with the dimensions of resilience such as sense of mastery and emotional reactivity in predicting the student's engagement.

Implications of the study

Schools/Educational Institutions could focus on incorporating positive psychological training programs that enhance resilience and covitality skills to enhance student engagement inside and beyond classroom.

School counselors in every school could counsel and enhance student's positive strength which thereby will lead to better mental health and effective engaged behavior.

Reference

- Alexander, K. L., Entwisle, D. R., & Horsey, C. S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education*, 70, 87–107. doi:10.2307/2673158
- Alvord,M. K., & Grados, J. J. (2005). Enhancing resilience in children: A proactive approach. *Professional Psychology: Research and Practice*, 36(3), 238–245, http://dx.doi.org/10. 1037/0735-7028.36.3.238.
- Bowlby, J. (1971). Attachment and Loss. Harmondsworth: Penguin.
- Brooks, J. E. (2006). Strengthening resilience in children and youths: Maximizing opportunities in the schools. *Children and Schools*, *28*(2), 69–76.
- Catalano, R. F., Haggerty, K. P., Oesterle, S., Fleming, C. B., & Hawkins, J. D. (2004). The importance of bonding to school for healthy development:Findings from the Social Development Research Group. *Journal of School Health*, 74, 252–261. doi:10.1111/j.1746 1561.2004.tb08281.
- Cicchetti, D., & Rogosch, F. A. (1997). The role of self-organization in the promotion of resilience in maltreated children. *Development and Psychopathology*, 9, 797–815.
- Cicchetti, D., and Valentino, K. (2006). "An ecological transitional perspectiveon child maltreatment: failure of the average expectable environment andits influence upon child development," in Developmental Psychopathology, 2nd Edn, eds D. Cicchetti and D.J. Cohen (New York, NY: Wiley),129–201.
- Claxton, G. (2007). Expanding young people's capacity to learn. *British Journal of Educational Studies*. 55(2), 1-20.
- Cothran, D. J., & Ennis, C. D. (2000). Building bridges to student engagement: Communicatingrespect and care for students in urban high schools. *Journal of Research andDevelopment in Education*, 33(4), 106-117.
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, 26, 399–419, http://dx.doi.org/10.1146/annurev.public health.26.021304.144357.

- Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology, 82*, 221–234. doi:10.1037/0021-9010.82.2.221
- Fredericks, J. A., Blumenfeld, R, & Paris, A. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74, 59-109. doi: 10.3102/00346543074001059
- Furlong, M. J., You, S., Renshaw, T. L., Smith, D. C., & O'Malley, M. D. (2014). Preliminary development and validation of the Social and Emotional Health Survey for secondary students. Social Indicators Research, 117, 1011–1032. doi:10.1007/s11205-013-0373-0
- Lerner, R. M., Lerner, J. V., Almerigi, J., Theokas, C., Phelps, E., Gestsdottir, S., Naudeau, S., Jelicic, H., Alberts, A. E., Ma, L., Smith, L. M., Bobek, D. L., Richman-Raphael, D., Simpson, I., Christiansen, E. D., & von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. *Journal of Early Adolescence*, 25(1), 17-71.
- Li, Y. & Lerner, R. M. (2013). Interrelations of behavioral, emotional, and cognitive school engagement in highschool students. *Journal of Youth and Adolescence*, 42, 20-32.
- Gilbert, J. (2007). Catching the Knowledge Wave: Redefining knowledge for the post-industrialage. Education Canada, 47(3), 4-8. Canadian Education Association. www.cea-ace.ca
- Garmezy, N., Masten, A. S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development, 55*, 97–111
- Greenspoon, P. J., & Saklofske, D. H. (2001). Toward an integration of subjective wellbeing and psychopathology. *Social Indicators Research*, *54*, 81 108.
- Harris, L. R. (2008). A Phenomenographic Investigation of Teacher Conceptions of Student Engagement in Learning. The Australian Educational Researcher, 5(1), 57-79. Health: A short-term longitudinal study of school-related outcomes. *SocialIndicators Research*, 114, 549-565.
- Johnson, W., McGue, M., & Iacono, W. G. (2006). Genetic and environmental influences on academic achievement trajectories during adolescence. *Developmental Psychology*, 42, 514–532. doi:10.1037/0012-1649.42.3.514

- Loukas, A., Ripperger-Suhler, K. G., & Horton, K. D. (2009). Examining temporal associations between school connectedness and early adolescent adjustment. *Journal of Youth and Adolescence*, 38, 804–812. doi:10.1007/s10964-008-9312-9.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543–562.
- Lyons, M. D., Huebner, E. S., & Hills, K. J. (2013). The Dual-Factor Model of Mental
- Manigault, E. L.(2014). A Phenomenological Study of Student Engagement in United States History Classrooms. (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/etd/3015
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227–238.
- Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal*, 37, 153–184
- Masten, A. S., Best, K. M., & Garmezy, N. (1991). Resilience and development: Contributions from the study of children who overcome adversity. Development and Psychopathology, 2, 425–444
- National Survey of Student Engagement. (2011). About NSSE. Retrieved from http://nsse.iub.edu/.
- Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), 1–6.

- Sandra Prince Embusy (2007) "Resiliency Scale for Children and Adolescents. A Profile of Personal strength". Psychcorp- a Harcoutt assessment.
- Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a community prediction study. *Journal of Clinical Child and Adolescent Psychology*, 35, 170 –179. doi:10.1207/15374424jccp3502_1
- Tapscott, D. (1998). Growing up digital: the rise of the Net generation. New York: McGraw-Hill.
- Werner, E. E. (1992). The children of Kauai: Resiliency and recovery in adolescence and adulthood. *Journal of Adolescent Health*, 13, 262–268
- Willms, J. D. (2003). Student Engagement at School: A Sense of Belonging and Participation. Results from PISA 2000. Paris: Organization for Economic Co-operation and Development (OECD). Accessed October 2010 from http:// www.unb.ca/crisp/pdf/0306.pdf
- Whitlock, J. L. (2006). Youth perceptions of life at school: Contextual correlations of school connectedness in adolescence. *Applied Developmental Science*, *10*, 13–29. doi:10.1207/s1532480xads1001 2.
- Yazzie-Mintz, E. (2009). Voices of students on engagement: A report of the 2006 high school survey of student engagement. In HSSSE: High school survey of student engagement. Retrieved March 11, 2011, from Center for Evaluation and Education Policy, Indiana University Web site: http://ceep.indiana.edu/hssse.
- **Lavanya.G**, Ph.D Research Scholar, Department of Psychology, University of Madras, Chepauk, Chennai 600 005. Email- lavblessed@gmail.com. Mobile:9841694055.
- **Lavanya. T**, Ph.D., Associate Professor, Department of Psychology, University of Madras, Chepauk, Chennai 600 005.