

Within Child Factors Fostering Academic Resilience: A Research Review

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Abdul Gafoor K. & Neena K. Kottalil

Abstract

The concepts academic resilience (AR) and protective factors (PFs) are important in academic vulnerability literature. This review is an attempt to identify, categorize and learn further from studies that dealt with factors which facilitate AR in children. This article attempts to clarify the concepts of academic at-risk, PF and AR in educational literature; to identify the PFs of AR referred to in the select educational literature and to categorize them into different groups for better conceptual clarity. Method was Collection, categorization and interpretation of related literature. Sample were 62 articles on the topic of AR during the period 1977-2007. 46 PFs were identified, listed in 19 categories belonging to within-child category. While it takes concerted effort of the various social institutions to foster the resilience by building an environment that protect the children at-risk at personal, domestic, school and societal levels, especially within-child factors can be fostered by teachers through short-term and medium term interventions.

Heredity in interaction with the environment manifests as individual difference in human beings. Like any other human behaviour, individual's responses to adverse circumstances are evidenced with varying degrees of resilience and vulnerability. Development of children to their fullest potential is the interest of every society, but especially of the parents and teachers. But everyone knows that a host of factors prevent a sizeable part of human population from doing so. Such adverse factors are referred to by many names- vulnerability, adversity, at-risk. Recently, the interest has shifted to those children who develop adequately in spite of adversities.

Method

Collection, categorization and interpretation of related literature over a period of 30 years from 1977 to 2007.

Sample

The literature reviewed in this work includes 82 articles, obtained from Infliibnet, ERIC and google search. Initially the key terms resilience, psychological resilience, AR, PF, at-risk, adversity and successful adaptation were used. Subsequent search was done using author names frequently cited in the initially obtained literature viz; Garmezy, Waxman, Huang, Wang, Haertel, Walberg, Benard, Berliner, Gonzales, Rutter, Anthony, Masten, Luthar,

Cicchetti, Gordon, Read, and Grotberg along with the above terms. The literature survey is limited to the period 1977-2007 inclusive.

Overview of the Concepts of Resilience, Academic At-Risk, Protective Factor and Academic Resilience

The term resilience is used in a variety of disciplines viz., ecology and conditions of environment; microbiology; cellular regeneration; materials processing; engineering; business; economics and stock market; nursing and medicine; psychology ;anthropology; sociology; and psychiatry, apart from educational and child development. Literature in psychology and psychiatry is rich with the term resilience. During the past two decades, research on resilience in human beings flourished in the areas of developmental psychopathology, sociology, psychology and anthropology; primarily by qualitative approaches to unveil the resilience, especially in children.

Terms synonymous with resilience include invincible (Garmezy & Neuchterlien, 1972); invulnerability (Anthony,1974);adaptation (Felner, Aber, Primavera & Cauce, 1985); persistence (Sadberry, Winfield & Royster,1991); and positive coping (Nettles, 1991), albeit with subtle differences in the meaning .

Psychological resilience is a concept originated from the field of psychopathology during 1970s; specifically in the literature on schizophrenia. Resilience denotes successful adaptation despite adversity. It is a developmental process seen in almost all individuals, with genetic make-up and temperament determining the individual's level of resilience. But the interesting and promising aspect is that it can be fostered in human beings.

The pioneering work in the field of psychological resilience were done by Anthony (1974); Garmezy (1971, 1974); Garmezy, Masten, Nordstrom & Terrorese (1979);Garmezy & Neuchterlien (1972);Murphy & Moriarty (1976); Rutter (1978); and Werner & Smith (1982). Controversy and debate regarding how to define resilience and whether it is a trait or process is yet to be settled down. Analysis of the definitions given by various researchers and dictionaries reveal that concept of resilience include both positive and negative aspects. Words like 'successful adaptation', 'positive adaptation', and 'recover' are used to denote its desirable aspects; and the words like 'risk'; 'challenge'; 'adversity' and 'depression' denote its negative aspects. 'Adversity' is the most commonly used word as opposite to resilience. Rutter (1990) defined resilience as 'the positive pole of the ubiquitous phenomenon of individual difference in people's responses to stress and adversity'. Resilience not being a static entity, researchers cannot hang on a single universal definition of it.

Resilience: trait or process

Another controversy regarding the nature of resilience *is whether it is a trait or process?* At the time of its origin, resilience was referred to as a personality trait. From the research conducted during 1980s and 1990s by Masten & Garmezy (1985); Rutter (1993); Werner (1984); and Werner & Smith (1982), it became clear that resilience is a phenomenon having a dynamic quality. The reason behind this is that one has to face new vulnerabilities with changing life circumstances which leads to the development of new strengths. Resilience is closely related to children and adults at-risk in different culture, ethnicity and gender. From this one can infer that resilience is not a thing having static nature, it is dynamic. All these ideas and works directed to the process of redefining resilience as an innate and modifiable process than a personality trait. Later this view was supported by Luthar, Cicchetti & Becker (2000).

Resilience: noun or verb

Again there is a confusion regarding how to label the person having resilience? Commonly a person possessing intelligence is simply and aptly described as 'intelligent'. Intelligence is a personality trait and there is no misconception in using it. But there is a strong opinion arisen from the part of the researchers like Werner (1984); Masten, Best & Garmezy (1990); Richters & Weintraub (1990); Luthar (1993); Rutter (1993); Luthar & Cushing (1999) that the phrase 'resilient children' or the word 'resilient' may convey the meaning of a personality attribute, but resilience is a co-existence of two conditions i.e., presence of an adversity and successful adaptation in presence of it. So better to use is "a child possessing resilience". But Literature reveals the use of the word 'resilient' by scholars like Baldwin (1990); Gonzalez & Padilla (1997) who conceptualizes resilience as a dynamic process.

Concept of 'At-risk'

When does this dynamic process emerge in children? To answer this question, one has to be familiar with a term at-risk. At-risk is a term borrowed from the field of medicine. An individual becomes at-risk due to variety of reasons like poverty, abuse, violence, drug addiction, legal problems in family, psychological history of the family, family discord, lack of social support, lack of good personal characteristics, and school failure. In the case of a school going child, she/he becomes at-risk due to difficulties in academics caused by personal, familial and school related factors.

Concept of Academic Resilience

A school going child who is facing problems in school related aspects and manifests poor academic performance can be denoted as academically at-risk. But some children will perform better in presence of these difficulties. Such children who successfully respond to the risk conditions and demonstrate academic success can be termed as academically resilient. A most widely used definition of educational resilience is that 'the heightened likelihood of success in school and other life accomplishments despite environmental adversities brought about by early traits, conditions and experience' (Wang, Haertel & Walberg, 1994).

The term AR is emerged during 1990s. Alva (1991) used the term 'academic invulnerability' to describe 'the students who sustain high levels of achievement, motivation and performance despite the presence of stressful environments and conditions that place them at-risk of doing poorly in school and ultimately dropping out of school'. But before the emergence of the term AR, term invulnerability was replaced by the term resilience to denote the successful adaptation despite adversity. Contemporaneously Clark (1991) used the term AR to label the successful school performance in spite of adverse conditions. Metaphorically and conceptually the term AR is more apt than the term academic invulnerability. Academic resilience (Clark, 1991) and educational resilience (Wang, Haertel & Walberg, 1994) are the two terms that are used synonymously in literature. But the point emphasized here is that the prevailing literature on resilience is packed with the term AR.

In this competitive and fast moving world everyone should possess resilience to win over adversities. Though the resilience is innate in individual, many are not able to demonstrate it in the right time. So resilience should be fostered in children from the time of their early school stage. This will help them to transform into better and less anxious learners. Such children having AR exhibit some peculiar characteristics. Many resilience researchers including Garmezy (1983, 1988); Benard (1991); Berliner & Benard (1995); Masten, Best, & Garmezy (1990); Wang, Haertel & Walberg (1994) and McMillan & Reed (2002) studied about these characteristics independently and in association. Characteristics they identified in children include social competence, autonomy, sense of purpose and problem solving skills. Researchers like Rutter (1987); Werner & Smith (1982, 1992) and Garmezy (1993); studied about the infants who had born in at-risk families and discovered that many of them overcome all the adversities present in their home and became healthy adults. Characteristics present in these children themselves, in the family, in school, and in community helped them to manifest resilience. In other sense, all these protected the children from adversities.

Concept of Protective Factors

The word protection itself evokes a feeling of security in the human minds. A child receiving quality care and protection from others will be very healthy – physically, intellectually, emotionally, and socially and so on. Individual himself or herself, and members in the family, school, and community can act as a protective shield for the healthy development of an individual. These factors which help the at-risk individual to demonstrate resilience is termed as protective factors. PFs in these four systems namely child, family, school and community form a protective network. If this network is much stronger, the child shows very low or no risk. It is the depiction of high resilience. The PFs are the real sources of resilience. Mc Millan & Reed (2002) defined PF 'as a measurable characteristic in a group of individuals or their situation that predicts positive outcome in the context of adversity'. Research conducted by Dohrenwend & Dohrenwend (1981); Garmezy (1983); Cohen & Wills (1985); Wheaton (1985) ; Cohen (1987); and Plancheral & Bolognini(1995) had concentrated significantly on the personal and environmental resources which help to buffer the negative effects of prescriptive and non-prescriptive stress on health. PFs and protective mechanisms are the two phrases used frequently in the literature. PFs are the static entities (Garmezy, 1985; Rutter, 1987; Gore & Eckenrode, 1994) and protective mechanisms are the active processes (Rutter, 1987). In the life of an individual the PFs span over the personal, familial, school and community related domains. The PFs present in these domains can be written as within-child protective factors, family protective factors, school protective factors and community protective factors respectively. Various resilience researchers had conducted studies on these PFs independently and in association. They include Garmezy (1985); Cowen & Work (1988); Beardslee (1989); Rutter (1985,1990) ,Werner & Smith (1982); and Wang, Haertel & Walberg(1994) .

Major Categories of Protective Factors

126 factors were mentioned by 82 studies on resilience as protective to the academic adversity of students belonging to various age groups from early childhood to adolescence, predominantly among western populations, including marginalized and vulnerable groups. There are evident overlapping among these 126 factors as the authors use different nomenclature and differing level of specificity of the constructs. Hence these factors were grouped into 19 categories belonging to within-child protective factors (WCP factors), within-family protective factors (WFP factors), within-school protective factors (WSP factors) and within-community protective factors (WCoP factors) as given in Table 1.

Table 1

Classification of Protective Factors

Category of PF	PFs identified
WCP factor	Motivational factors, Self-beliefs, Cognitive factors, Meta-cognitive factors, Emotional relationships, Social skills
WFP factor	Parental expectations, Parental involvement, Total family environment
WSP factor	School organizational factors, School atmosphere, Teacher behaviour, Instructional factors, Peer behavior
WCoP factor	Personnel support, Community resources, Cultural support

Within-Child Protective Factors

More than one third of the PFs can be grouped in six categories belonging to within-child domain. WCP factors include a network of motivational factors, self-beliefs, cognitive factors, emotional relationships, meta-cognitive factors, and social factors. The 46 within-child factors identified from the reviewed literature are presented in Table 2 (Motivation and Self-beliefs) and Table 3(Cognitive, Meta-cognitive, Socio-emotional skills).

Table 2

WCP Factors of AR Belonging to Motivation and Self-Beliefs

	Component factors	Proponent & Year	Reference Number
Motivational Factors	Student commitment	Lee,VW.E., infield,L.F., & Wilson,T.C.(1991); Murray,C., & Greenberg,M.(2000)	9, 15
	Involvement	Waxman,H.C., & Huang,S.L.(1996);Resnick et al; (1997); Waxman,H.C.,Huang,S.L.,&Wang,M.C.(1997); Sirin,S.R.,&Rogers-sirin,L(2005)	56, 15
	Achievement motivation	Waxman,H.C., Huang,S.L., & Padron,Y.N.(1997)	56
	Motivation	Waxman,H.C.&Huang,S.L.(1996);Waxman,H.C., Huang,S.L., & Padron,Y.N.(1997); Read,L.(1999);	56
	Dispositional attributes of the individual	Werner,E.E., & Smith,R.S. (1997)	56
	Positive disposition	Borman ,G.D.,& Rachuba,L.T. (2001)	10
	Academic and individual aspiration	Gordon et al.,(2001)	30
	Task orientation	Deborah,A.O., Mary,E.S.,& Adaline,Z.M.(2002)	16
	Academic motivation	Deborah,A.O., Mary,E.S.,& Adaline,Z.M.(2002)	16
	Resourcefulness	Berliner,B., & Benard,B.(1995)	8
Self Beliefs	Self esteem	Parker et al .,(1990); Nettles,S.M., & Pleck,J.H.(1993);Cowen et al(1996); Csikszentmihalyi,M.(1997);Martinez&Dukes(1997);Padron ,Y.N.(1997);Rutter,M.(1997); Phinney,J.S.,Cantu,C.L.,&Kurtz,D.A.(1997); Michelle,D. & Marc,A.P. (1998); Masten&Coatsworth(1998);Novick(1998); Rutter (1997,1999); Read,L.(1999); Borman,G.D., & Rachuba,L.T.(2001); Buckner,J.C., Mezzacappa,E.,& Beardslee,W.R.(2003)	9, 56, 38, 45, 41,2, 15, 10
	Autonomy	Le Gall,N.S., & Jones,E.(1991);Berliner,B.,&Benard,B.(1995);Grotberg,E.(1996)	9, 8
	Self - understanding	Beardslee,W.R., & Podorefsky,D.(1983)	9
	Self - efficacy	Lee,V.E., Winfield,L.F., & Wilson,T.C.(1991); Rak,C.& Patterson,L.(1996); Novick,R.(1998); Bell,C.E.,& Suggs,H.(1998);Borman,G.D., & Rachuba,L.T.(2001); Grantham,T.(2004)	9, 15, 6, 10
	Sense of efficacy	Nettles,S.M., & Pleck,J.H.(1993)	9
	Belief in self	Sadberry,K.R.,Winfield,L.F., & Royster,D.A.(1991)	9
	Academic self concept	Waxman,H.C., & Huang,S.L.(1996);Seaton ,E.K.,& Taylor,R.D.(2003)	56, 54
	Students' belief about their total ability	Gordon,K.A.(2003)	29

Motivational factors that enhance protection against academic-risk in students that belong to within-child domain are positive coping strategies, student commitment, involvement, achievement motivation, motivation, dispositional attributes of the individual, positive disposition, academic and individual aspiration, task orientation, and academic motivation, resourcefulness, student commitment and involvement.

Self-beliefs such as self esteem, autonomy, self-understanding, self-efficacy, sense of efficacy, belief in self, academic self-concept, students' belief about their total ability are found to contribute to the development of resilience.

Table 3

WCP Factors of AR Belonging to Cognitive, Meta-Cognitive and Socio-Emotional Skills

	Component factors	Proponent & Year	Reference Number	
Cognitive skills	Cognitive skills	Garnezy,N.(1991);Grantham,T.(2004)	9, 15	
	Problem solving skills	Parker et al .,(1990); Grotberg,E.(1996); Grantham,T.(2004);	9, 15	
	Post secondary education plans	Sadberry,K.R.,Winfield,L.F., & Royster,D.A.(1991)	9	
	Problem solving strategy	Le Gall,N.S., & Jones,E.(1991)	9	
	Intelligence	Rutter,M.(1979); Garnezy,N. Masten,A.S., & Tellegen,A.(1984); Werner,E.E.(1995);Masten,A.S.& Coatsworth,J.D.(1998)	56,2	
	Above average vocabulary development	Julia,L.M., John,F., & Cicchetti,D.(2002)	33	
Meta-cognitive factors	Internal and realistic sense of control	Parker et al.,(1990)	9	
	Self regulation	Eisenberg et al.,(2001)	18	
	Internal locus of control	Werner,E.E.(1989); Masten,A.S.& Coatsworth,J.D.(1998);Gillock,K.,& Reyes,O.(1999);Borman ,G.D.,& Rachuba,L.T.(2001); Capella,E., & Weinstein,R.S. (2001); Rouse,K.(2001); Miller,C.A.,Fitch,T.,&Marshall,J.L.(2003);Juby,C.,&Rycraft,J.R. (2004)	58, 2,15, 10,2, 48, 42, 32	
		Sense of purpose	Berliner,B. & Benard,B.(1995)	8
		Positive coping strategies	Rutter,M. (1997)	56
	Reflectiveness in unfamiliar situations	Garnezy,N.(1991)	9	
	Skills	Social competence	Berliner,B. & Benard.B.(1995);Rydell,A.M.(1997)	8, 15
Positive responsiveness to others		Garnezy,N.(1991)	9	
Cohesion		Garnezy,N.(1991);Padron et al.,(2002)	9, 56	
Positive and negative social behaviours		Gordon et al., (2001)	30	
Responsibility		Grotberg,E.(1996)	9	
Communication skills		Grotberg,E.(1996)	9	
Social	Highly adaptable temperament	Julia,L.M., John,F., & Cicchetti,D.(2002)	33	
	Ability to approach new situations	Julia,L.M., John,F., & Cicchetti,D.(2002)	33	
	Loving and trusting relationships	Grotberg,E.(1996)	9	
	Behavioural skills	Nettles,S.M., & Pleck,J.H.(1993)	9	
	Emotional relationships	Deep commitment to relationships	Beardslee,W.R., & Podorefsky,D.(1988)	9
Empathy		Parker et al.,(1990); Grotberg,E.(1996)	9	
Affectional ties with family		Werner,E.E., & Smith,R.S.(1977)	56	
Satisfaction		Padron,Y.N., Waxman,H.C., & Rivera,H,H.(2002)	56	
Less friction		Padron,Y.N., Waxman,H.C., & Rivera,H,H.(2002)	56	
Love		Grotberg,E.(1996)	9	

Within-child cognitive factors including cognitive skills, problem solving skills, post secondary education plans, problem solving strategy, intelligence, and above average vocabulary development have significant impact on fostering resilience.

Within-child meta-cognitive factors including internal and realistic sense of control, self-regulation, internal locus of control, sense of purpose, positive coping strategies and, reflectiveness in unfamiliar situations are related favourably to AR.

Social skills like social competence, positive responsiveness to others, cohesion, positive and negative social behaviours, responsibility, communication skills, highly adaptable temperament and ability to approach new situations, loving and trusting relationships, behavioural skills play significant role in fostering resilience.

Being a part of the WCP factors, emotional ones like deep commitment to relationships, empathy, affectionate ties with family, satisfaction, less friction, and love proved its own influence on the promotion of resilience.

In individuals, WCP factors are present in varying degrees. Possessing all these PFs is not required to label a person as resilient. Attribute of resilience can be given to a person if he or she has excellent performance in one category and average performance in others.

Conclusion

Resilience has its own significance in academic field. Recent research on resilience shows that students at-risk can be helped to deal with the adversities effectively. Understanding the phenomenon of resilience will help the administrators, policy makers and teachers to design more effective interventions at schools and beyond. It requires the collaborative effort of parents, teachers, and community members. Here comes the role of teacher in developing resilience in children. Many of our parents have a little or no idea about the risks their wards face, the factors that help protect them. So it should be the obligation of the teacher to make aware both the children and parents about the PFs present in them and to make use of it in the right time and place. Healthy school and family connections is required to make the students academically resilient. Fostering resilience in essence is the vision of effective schools and responsibility of caring teachers.

References

1. Alva, S.A. (1991). Academic invulnerability among Mexican-American students: The importance of protective resources and appraisal. *Hispanic Journal and Behavioural Sciences*, 13, 18-34.

2. Anne, K.D. (2006). AR among Low SES High School Students. University of California, Davis.
3. Anthony EJ. (1974). Introduction: The syndrome of the psychologically vulnerable child. In: Anthony EJ, Koupernik C, (Eds.) *The child in his family: Children at Psychiatric Risk*. Vol. 3. Wiley; New York.
4. Baldwin, P. (1990). *The Politics of Social Solidarity: Class Bases of the European Welfare State*. Cambridge University Press, Cambridge.
5. Beardslee, W.R. (1989). The role of self-understanding in resilient individuals: the development of a perspective. *American Journal of Orthopsychiatry*, 9(2), 266-278.
6. Bell, C. E., & Suggs, H. (1998). Using sports to strengthen resiliency in children: Training heart. *Child & Adolescent Psychiatric Clinics of North America*, 7 (4), 859-865.
7. Benard, B. (1991). *Fostering Resiliency in Kids: PFs in the Family, School, and Community*. San Francisco, Western Centre for Drug. Free Scholars and Communities, Far West Laboratory.
8. Berliner, B.A. & Bernard, B. (1995). *More than a message of hope: A district level policymaker's guide to understanding resiliency*. Western Regional Center for Drug-Free Schools and communities. (ERIC Document Reproduction Service No. ED387946)
9. Bernard, C (1999). *Resilience Guide: A Collection of Resources on Resilience in Children and Families*.
10. Borman, G.D., & Rachuba, L.T. (2001). Academic success among poor and minority students: An analysis of competing model of school effects. (Report No:52). CRESPAR, Baltimore, M D.
11. Clark, M.L. (1991). Social identity, peer relations, and academic competence of African American adolescents. *Education and Urban society*, 24(1), 41-52.
12. Cohen, S. (1988). Psychological models of social support in the etiology of physical disease. *Health Psychology*, 7, 269-97.
13. Cohen, S., & Willis, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
14. Cowen, E.L., & Work, W.C. (1988). Resilient children, psychological wellness, and primary prevention. *American Journal of Community Psychology*, 16, 591-607.
15. Deborah, D.L. (2009). *The impact of resilience on the academic achievement of at-risk students in the upward bounce programme*. Doctoral Dissertation.

16. Deborah ,A.O., Mary,E.S., & Adaline,Z.M. (2002). Multidimensional resilience in urban children exposed to community violence. *Child Development* , 73 (4) , 1265 – 1282.
17. Dohrenwend ,B.P. , & Dohrenwend, B.S. (1981). Socio-environmental factors , stress and psychopathology. *American Journal of Community Psychology* , 9(2), 128 – 164.
18. Eisenberg et al.,(2001). The relations of regulation and emotionality to children's externalizing and internalizing problem behavior. *Child Development*,72,1112–1134.
19. Felner et al., (1985) Adaptation and vulnerability in high-risk adolescents: An examination of environmental mediators. *American Journal of community Psychology*, 13 (4), 365-379.
20. Garmezy, N. (1971) Vulnerability research and the issue of primary prevention, *Journal of Orthopsychiatry*, 41, 101 - 116.
21. Garmezy, N. (1974) The study of competence in children at risk for severe psychopathology, in: E.J. Anthony and C. Koupernik (Eds.) ,*The Child in his Family: Children at Psychiatric Risk*, International Yearbook, Vol. 3 .New York: Wiley.
22. Garmezy,N.(1983).Stressors of childhood. In N.Garmezy & M.Rutter(Eds.),*Stress. coping, and development in children*. New York:Mc Graw-Hill.
23. Garmezy, N. (1985). Stress-resistant children: The search for protective factors. In J.E. Stevenson (Ed.), *Recent research in developmental psychopathology* .Oxford: Pergamon Press.
24. Garmezy, N(1988). Stressors of Childhood. In Garmezy N, and Rutter M, (Eds.), *Stress, Coping, and Development in Children*. Baltimore: John Hopkins University Press.
25. Garmezy, N. (1993). Children in poverty: Resiliency despite risk. *Psychiatry*, 56(1), 127-136.
26. Garmezy et al., (1979) The nature of competence in normal and deviant children, in: M. W. Kent and J. E. Rolf (Eds.), *The Primary Prevention of Psychopathology*, Vol. 3 .Hanover, NH: University Press of New England.
27. Garmezy, N. and Neuchterlien, K. (1972) Invulnerable children: The facts and fiction of competence and disadvantage, *American Journal of Orthopsychiatry*, 42,328 - 329.
28. Gonzalez, R., & Padilla, A.M. (1997). The AR of Mexican-American high school students. *Hispanic Journal of Behavioural Sciences*, 19, 301-17.

29. Gordon Rouse, K.A. (2003). *The academic environment's impact on motivation in resilient and non-resilient middle schoolers*. Paper presented at the biennial meeting of the society for research in child development, Tampa, F.L.
30. Gordon, et al., (2001). Educationally Resilient Adolescents' Impact Knowledge of the Resilience Phenomenon. (ERIC Document Reproduction Service, No. ED 459393).
31. Gore, S. & Eckenrode, J. (1994). 'Context and process in research on risk and resilience', In R Haggerty (Ed.), *Stress, Risk and Resilience in Children and Adolescents: processes, mechanisms and interventions*, Cambridge University Press: New York.
32. Juby, C. & Rycraft, J.R. (2004) Family preservation strategies for families in poverty. *Families in Society*, 85, 581–587.
33. Julia, L.M., John, F., & Cicchetti, D. (2002). Profiles of social competence among low-income African-american preschool children. *Child Development*, 73(4), 1085-1100.
34. Kane, T. (2004). *The impact of after-school programs: Interpreting the results of four recent evaluations* (William T. Grant Foundation Working Paper).
35. Luthar, S.S. (1993). Annotation: Methodological and conceptual issues in the study of resilience. *Journal of Child Psychology and Psychiatry*, 34, 441–453.
36. Luthar, S.S. & Cushing G. (1999). Measurement issues in the empirical study of resilience: An overview. In M.D. Glantz & J.L. Johnson (Eds.), *Resilience and development: Positive life adaptations*. Plenum: New York.
37. Mc Millan, J.H., & Reed, D.F. (1994). At risk students and resiliency: Factors contributing to academic success. *The Clearing House*, 67, 137-40.
38. Martinez, R. O. & Dukes, R. L. (1997). The effects of ethnic identity, ethnicity, and gender on adolescent well-being. *Journal of Youth and Adolescence*, 26(5), 503-516.
39. Masten A.S., & Garmezy N. (1985). Risk, vulnerability, and PFs in developmental psychopathology. In B. Lahey & A. Kazdin (Eds.), *Advances in clinical child psychology*. Vol. 8. Plenum Press: New York.
40. Masten, A.S., Best, K.M., & Garmezy, N. (1990) Resilience and development: Contributions from the study of children to overcome adversity. *Development and Psychopathology*, 2, 425-444.
41. Michelle, D. & Marc, A.P. (1999). Resilience in adolescents: Protective role of social support, coping strategies, self-esteem, and social activities on

- experience of stress and depression. *Journal of Youth and Adolescence*, 28(3), 343-363.
42. Miller, C. A., Fitch, T., & Marshall, J. L. (2003). Locus of control and at-risk youth: A comparison of regular education high school students and students in alternative schools. *Education*, 123(3), 548–552.
43. Murphy, L.B., & Morirty, A.E. (1976). Vulnerability, coping and growth: From infancy to adolescence. New Haven, C T : Yale University Press.
44. Nettles, S. M. (1991). Community involvement and disadvantaged students: A review. *Review of Educational Research*, 61, 379-406.
45. Phinney, J.S., Cantu, C.L., & Kurtz, D.A. (1997). Ethnic and American identity as predictors of self-esteem among African American, Latino, and White adolescents. *Journal of Youth and Adolescence*, 26, 165–185.
46. Plancherel ,B.& Bolognini, .M. (1995). Coping and mental health in early adolescence. *Journal of Adolescence*, 18, 459-474.
47. Richters ,J.E.& Weintraub,S.(1990). Beyond diathesis: Toward an understanding of high-risk environments. In J. Rolf ,A.S. Masten ,D. Cicchetti,K.G. Nuechterlein,S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology*. Cambridge University Press: New York.
48. Rouse,K.(2001). Resilient students’ goals and motivation. *Journal of Adolescence*, 24(4), 461-472.
49. Rutter,M.(1978). Diagnosis and definition In M.Rutter & E.Schopler (Eds.), *Autism : A reappraisal of treatment*. New York: Plenum.
50. Rutter,M. (1985) Resilience in the face of adversity. PFs and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 598-611
51. Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57(3), 316-330.
52. Rutter, M.(1990). Psychosocial resilience and protective mechanisms. InJ. Rolf ,A.S. Masten ,D. Cicchetti ,K.H. Nuechterlein ,S. Weintraub (Eds.), *Risk and PFs in the development of psychopathology*. Cambridge; New York.
53. Rutter M.(1993). Resilience: Some conceptual considerations. *Journal of Adolescent Health*, 14,626–631.
54. Seaton, E. K., & Taylor, R. D. (2003). Exploring familial processes in urban, low-income African American families. *Journal of Family Issues*, 24, 627 – 644.
55. Wang, M.C., & Haertel, G.D., & Walberg, H.J. (1994). Educational resilience in Inner Cities. In M.C. Wang & E. W. Gordon (Eds), *Educational*

- resilience in inner-city America: Challenges and Prospects. Hillsdale, NJ: Erlbaum.
56. Waxman, H.C., Gray, J.P., & Padron, Y.N. (2003). Review of Research on Educational Resilience. Research Reports. Center for Research on Education, Diversity and Excellence, U.C. Berkeley.
 57. Werner, E.E. (1984). Resilient children. *Young Children*, 1, 68–72.
 58. Werner, E.E. (1989). High risk children in young adulthood: A longitudinal study from birth to 32 years. *American Journal of Orthopsychiatry*, 59 (1), 72-81.
 59. Werner E, Smith R. (1982). *Vulnerable but invincible: A study of resilient children*. McGraw-Hill; New York.
 60. Werner, E. S., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press.
 61. Sadberry, K.R., Winfield, L.F., & Royster, D.A. (1991). Resilience and persistence of African-American males in post-secondary enrollment. *Education and Urban Society*, 24(1), 87-102.
 62. Wheaton, B. (1985). Models for the stress-buffering functions of coping resources. *Journal of Health and Social Behavior*, 26, 352-364.