

Resilience among Adolescent Girls in India: Role of Home and School Protective Factors

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Submitted: 8\1\2012

Revised: 19\2\2012

Accepted: 7\3\2012

Resilience of school going adolescent girls has always been influenced by healthy and nurturing family and school life. Research studies reveal how extrinsic protective factors at home and school become pivotal in healthy development of adolescent girls who are known to be sensitive to the social support system they live in. The present study was therefore conducted with the purpose to examine the role of home and school environment of school going adolescent girls in a semi-urban town of India. The study more specifically explores and identifies which protective factors are responsible for higher levels of resilience in this population. Standardized measures of resilience, home environment and school environment were administered to a sample of 130 school going girls in their adolescent phase. Correlations computed and regression analyses conducted revealed positive significant relationship between resilience and home and school protective factors.

Keywords: Resilience, Adolescence, India, Home role, School role.

المرونة لدى الطالبات المراهقات في الهند: دور البيت والمدرسة في الحماية

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تتأثر المرونة لدى الطالبات المراهقات بالحياة الصحية والعائلية في البيت والمدرسة. فقد أظهرت الدراسات أنه يمكن للعوامل الواهية في البيت والمدرسة أن تكون محورية لنمو سليم للطالبات المراهقات الحساسات لنظام الدعم الاجتماعي الذي يعيشن فيه. وعليه فإن الدراسة الحالية أجريت بهدف فحص دور بيئة البيت والمدرسة. وقد أجريت الدراسة في مدينة شبه حضرية في الهند، وبشكل خاص فإن الدراسة الحالية قد حاولت استكشاف وتحديد العوامل المسؤولة عن المستوى الأعلى للمرونة. استخدمت الدراسة مقياساً مقنناً للمرونة والبيئة الأسرية والمدرسية على عينة من 130 طالبة في مرحلة المراهقة. استخدم تحليل الارتباط وتحليل الانحدار وبينت النتائج وجود علاقة جوهريّة بين المرونة وعوامل الحماية البيئية والمدرسية.

الكلمات المفتاحية: المرونة، المراهقة، الهند، دور البيت، دور المدرسة.

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INTRODUCTION

Resilience in context of adolescence, has been defined as “the capacity of an adolescent to deal effectively with stress and pressure, to cope with everyday challenges, to rebound from disappointments, mistakes, trauma, and adversity, to develop clear and realistic goals, to solve problems, to interact comfortably with others, and to treat oneself and others with respect and dignity” (Brooks, 2005, p297). Development of resilience of girls during this phase has always been a major concern globally on account of the psycho physiological changes they undergo and renewed societal expectations they face. Since they attain puberty relatively earlier than their male counterparts, they also remain vulnerable to the demands and expectations associated with this phase. Academic underachievement, household pressure and unsafe sex are the major issues that hinder the overall healthy growth of adolescent girls in recent times in India and also the rest of the world. However research also proves that if girls are provided healthy and nurturing social environments, they are capable of effectively coping with the stressors associated with this phase, in some cases better than the boys. Recent studies do reveal better mental health status and resilience levels amongst girls in comparison to boys. Survey by Sun and Stewart (2004) revealed that adolescent girls who are known to use social resources like communication, empathy, help-seeking and autonomy experience, for coping with the daily stressors, were high on resilience level in comparison to boys. The study further attributed higher level of resilience among girls to higher level of caring relations with adults and peers and social support (Sun & Stewart, 2004).

Despite being under stress, girls have been found to use resilience factors such as seeking and getting support, and hence emerge more resilient during adversity (Hampel & Petermann, 2005). Nevertheless, trend of risk behaviors in recent times among adolescent girls like involvement in premature and unsafe sex, suicide attempts and disordered eating habits have become a matter of alarming concern and reflect their inability to cope with challenges and failures. Most of recent research studies in India throw light on girls’ involvement in vulnerable behaviors (often triggered by poor support system) like using negative stress cop-

ing strategies (Dubat, Puniya & Goyal, 2007), negative body image perception leading to depression (Kaur, Singh & Javed, 2003), academic anxiety induced by parental pressure (Jain & Jain, 2007) and high suicidal ideation plus attempt (Siddharta & Jena, 2006). In an attempt to reduce the effect of such adverse circumstances and build resilience, researchers have identified an array of “protective factors” that involve both the attributes of adolescents and their environments that are seen to promote successful development (Garmezy, 1983; McClelland, 2000; Minnard, 2002; NMHWG & NCCHC, 2000). Resilience research has consistently identified two domains of external protective factors that make resilience building experiences of an adolescent, healthy and nurturing. These domains are 1) home and 2) school environments.

These environments if enriched with ‘protective factors’, have the potential to counteract possible negative outcomes in an adolescent’s life and promote the development of resilient qualities (Oswald, Johnson, & Howard, 1999). If the number of risk factors in an adolescent’s life increases, their levels of resilience can decrease significantly (Mathews, 2005). On the contrary, the more the adolescents enjoy protective factors at home and school, the more they are likely to display resilience.

Home environment and adolescent resilience

The home environment in all ages and for all cultures has been recognized as powerful socializing force in children’s lives. Criteria like family’s socioeconomic status, demographics, parental attitudes and beliefs, parental expectations, and parental behavior towards and interactions with their children have mostly been assumed as essential measures of an adolescent’s home environment. Factors like these and others have shown to have an effect on the healthy psychological development of children and adolescents. Family environment has also been recognized as one of the most important influences on psychosocial development of resilience of young people (Cairns, & Dawes, 1996; Garmezy, 1983). On the other hand, research has shown that specific home environment factors like a negative relationship between an adolescent and his/her parent(s) or caregiver(s), poor or inconsistent discipline, lack of parental supervision and monitoring, a lack of positive

support, history of criminal offending among parent(s), a lack of parental control and neglect, child maltreatment, and poverty are all related to the increases in juvenile delinquency (Arbona & Power, 2003; Gover, 2002; Huebner & Betts, 2002; Petrocelli, Calhoun, & Glaser, 2003). Research has also revealed that perceptions by adolescents of negative home environments are positively related to high depression, poor life-satisfaction, hopelessness, stress, and anxiety (Field, Diego, & Saunders, 2002), and are in proportion to behavioral problems including delinquency and violence (Gauze, Bukowski, Aquan-Assee, & Sippola, 1996; Jang & Smith, 1997).

School environment and adolescent resilience

Identification of adolescent resilience in the environment has expanded over the years into other important contexts like the school apart from the family. Schools can provide external support systems to help adolescents strengthen and reinforce their coping strategies and move towards self-defined goals. Research has discovered a strong relationship between specific aspects of an adolescent's school environment (for example, negative peer influences, lack of attachment with school personnel (i.e., teachers), poor educational attainment and achievement, and cognitive or learning difficulties) to delinquent behaviors (Acock & Demo, 1999; Liu, 2004; Taylor & Lopez, 2005). On the other hand, studies have revealed a strong relationship between poor academic achievement of adolescents and their perception of negative support by teachers, (Catterall, 1998; Dimmitt, 2003).

The protective factors of adolescent resilience

According to Benard (1991), protective processes at home and school fall into three categories, namely, caring relationships, high expectations, and meaningful participation.

Caring relationships are defined as supportive connections to others in the adolescents' life and provide foundation for healthy development and well-being (Benard, 1991). Rutter (1987) suggested that "one good parent-child relationship" substantially reduces the psychiatric risk associated with family conflict. More generally, it has been found that having a relationship with one important person (e.g., a parent or an extended family member) who

provides emotional support, affection, appropriate attention, structure, discipline, protection, and the absence of severe criticism increases the likelihood of establishing competence in an adolescent who has lived in a risky environment (Garmezy, 1985; Werner & Smith, 1982). This interaction with at least one caring adult is critical for the development of basic trust during the first stage of psychosocial development i.e. infancy (Erickson, 1963 as cited in Benard, 1991). Healthy attachments with parents foster self esteem and self efficacy among children and adolescents (Rutter, 1987).

In schools, Caring relationships provide assurance of someone being there for the youth, of trust and of unconditional support. It has been seen that when students are asked to define the qualities they want to have in their teachers, there has been a consensus for caring and supportive teachers who accept no excuses but at the same time are determined for their students' success (Wasley, 1997; Wilson & Corbett, 2001). Just as in the family arena, the level of caring and support within the school is a powerful predictor of positive outcome for youth. However limited research attention has been given to the role of caring and supportive teachers in helping the adolescents cope with adversity successfully (Werner, 1990). For example, in her research Werner found that school teachers apart from family elders are often the favorite role models among the school going adolescents in Kauai. "For the resilient youngster a special teacher was not just an instructor for academic skills, but also a confidant and positive model for personal identification" (Werner, 1990).

High expectations refer to the consistent communication of direct and indirect messages that the adolescent can and will succeed responsibly (Benard, 2004). It is the positive belief usually on the part of parents and teachers that their children and students will be successful, and that they have "what it takes" to achieve goals (Delpit, 1996). Research into why some children growing up in poverty still manage to be successful in school and in young adulthood has consistently identified positive parental expectations as the contributing factor (Clark, 1984). Families that establish positive and reasonable expectations for their children's behavior from an early age, play a role in developing resiliency in their children (Mills, 1990). When parents convey expectations in an accepting, loving, supportive man-

ner or in other terms, have healthy and realistic expectations, adolescents are often motivated to fulfill them. (Brooks & Goldstein, 2001). High expectations on the part of parents and other family caregivers for their children's school success has remained a consistent predictor of positive health and academic outcomes for youth over the years (Clark, 1984; Gandara, 1995; Herman, 1997).

Setting high expectations for students at school often lead to high rates of academic success (Brook et al, 1989; Edmonds, 1986; Levin, 1988; O'Neil, 1991; Rutter, 1979; Slavin, Karweit & Madden, 1989) and even lower drop out rate and higher school attendance (Masten, Roisman, Obradovic, Long, Tellegen, 1994; Meier, 1995). The historical review of teachers' expectations by Weinstein (2002) states "across multiple studies, teachers appear to provide those students for whom they hold high expectations, more opportunities to learn, and under more positive conditions, than for students for whom they hold low expectations" (p. 51). It has also been found that high expectations are also a common characteristics of "high performing, high poverty" schools (James, Jurich & Estes, 2001).

Meaningful participation is defined as the involvement of the adolescents in relevant, engaging and interesting activities with opportunities for responsibility and contribution (WestEd, 2002). Meaningful participation in home depends upon the parents being able to provide children with both autonomy and responsibility. Resilience research has documented that positive developmental outcomes including reductions in health-risk behaviors and improvement in academic performance are associated with adolescents being given valued responsibilities, planning and decision-making opportunities and chances to contribute and help others in their home, school and community environments. Historically such healthy involvement in familial and scholastic matters has been associated with positive developmental outcomes for adolescents (Bernard, 1991). Janice Cohen's book, *Raising Compassionate, Courageous Children in a Violent World* (1997) cites several studies documenting higher levels of well being and life satisfaction for youth who are given important responsibilities not necessarily centering around them but with family members, classmates and other community members. As-

signment of chores, domestic responsibilities (including care of siblings) and even part-time work to help support the family proved to be sources of strength and competence for resilient children (Werner & Smith, 1982).

In the school context, meaningful involvement and responsibility is as important for young people as is their participation in home. It is through these opportunities which include the freedom to voice one's opinion, to make choices, to engage in active problem solving, to express one's imagination and to work with and help others, in a physically and psychologically safe and structured environment, that youth develop characteristics of resilience like healthy development and successful learning: problem solving, social competence and autonomy (Bernard, 1991). In Rutter's research on successful schools, (1979, 1984) giving responsibilities to the youth and inviting maximum participation from them were the underlying reasons behind lesser risky behaviors like delinquency among them. Ron Edmonds in his classic study on school effectiveness, concluded that school can create a "coherent" environment, a climate, more potent than any single influence--teachers, class, family, neighbourhood--" so potent that for at least six hours a day it can override almost everything else in the lives of children" (1986).

These protective factors in the social environments play a pivotal role in resilience development of adolescent girls who perceive themselves to be a relational entity according to the 'relational theory' (Miller, 1986). Relational theory views girls as tending to explore who they are in relation with others rather than in isolation (Miller, 1986) and as seeking out mutually empathic connections in all primary relationships. This perspective assumes that positive outcomes for adolescent girls will result from these relationships, such as better communication, positive feelings about self and strong identity (Belgrave, Chase-Vaughn, Gray, Addison & Cherry, 2000; Sun & Stewart, 2004). Thus, the protective factors of home and school environments, discussed above, have been assumed to promote higher level of resilience among adolescent girls for this study as well. Recent findings by Azam and Shaikh in 2011 have established the importance of protective factors in resilience among adolescent boys but due to limited research on resilience

of Indian adolescent girls, the present study was undertaken.

Research questions:

In lieu of the research findings and gaps discussed above, the following research questions were framed and were addressed in the current study:

- Is there any significant relationship between school environment, home environment and resilience?
- Is there any significant relationship between dimensions of school environment, home environment and resilience?
- Are school and home environment predictive of resilience in adolescents girls?
- Which dimensions or protective factors of school and home environment are predictive of resilience in adolescent girls?

METHOD

Participants

The sample of this study consisted of 130 female students studying in senior secondary and high school grades in schools located in semi-urban town Aligarh. The age range of the respondents was 14 years to 18 years (Mean= 16.26 years; SD= 0.95). 77.7% of the respondents were from nuclear families while 22.30% lived in extended or joint family set-up. 15.4% cases reportedly had both parents working and financially supporting the family while 84.6% of sample reported only fathers to be the earning member of the family. 56.2% of the sample participants belonged to the lower socio-economic stratum (SES) followed by 27.7% who belonged to the high SES category. Only 16.1% cases were from the middle SES category.

Instruments

Resilience scale:

Wagnild and Young's Resilience Scale (1993) was chosen to assess resilience levels in the

adolescent participants. It consists of 25 items measures five dimensions namely: Equanimity, Perseverance, Self-Reliance, Meaningfulness and Existential Aloneness. All the items were scored on a 7- point Likert scale (1 = strongly disagree to 7 = strongly agree), with possible scores of 25 to 175. As per the norms (Wagnild, 2003), in this study total score above 146 indicated strong or high resilience while below 121 indicated weak or low resilience. Cronbach alpha for this study was found to be .79 suggesting high reliability of the scale.

Home environment and school environment scales:

The Home and School Environment questionnaires are subscales of The Resilience and Youth Development Module (RYDM.) which is a component of California Healthy Kids Survey (WestEd, 2002). Both, the home and school environment scales are for measuring external assets, have 9 items each and measure three common dimensions namely: Caring relationships, High expectations and Meaningful participation. Cronbach's alpha calculated for home and school environment scale were found to be .78 and .82 respectively for this study.

Procedure

Data were collected from four schools affiliated with Aligarh Muslim University located in Aligarh district. Permission to visit the schools was taken from the school principals and authorities concerned. Informed consent for participation was taken from the students and they were assured of the anonymity of their identities. The tests were administered in the school classrooms during free hours or periods especially allotted for conducting the survey. Detailed instructions on how to complete the questionnaires were also provided. Before the questionnaires were distributed to the voluntary participants, a good rapport was built with the students and a preliminary short session was held highlighting in brief the purpose of the study and how the results of the study would be used.

RESULTS

Table 1
Descriptive Statistics of the Resilience, Home Environment and School Environment

Variables	Minimum	Maximum	Mean	S.D
Resilience	81	163	131.54	15.55
Home Environment	17	36	28.91	4.65
Caring Relationships- Home	3	12	9.81	2.21
High Expectations-Home	6	12	10.25	1.67
Meaningful Participation-Home	3	12	8.85	1.92
School Environment	9	36	24.45	5.66

Table 1
Descriptive Statistics of the Resilience, Home Environment and School Environment

Variables	Minimum	Maximum	Mean	S.D
Caring Relationships- School	3	12	8.17	2.49
High Expectations-School	3	12	8.53	2.32
Meaningful Participation-School	3	12	7.75	2.22

Table 2
Pearson Product Moment Correlation between Resilience, Home Environment, Dimensions of Home environment, School Environment and Dimensions of School Environment

	1	2	2a	2b	2c	3	3a	3b	3c
1. Resilience	1								
2. Home Env	0.44**	1							
2a. Home-Care	0.27**	0.83**	1						
2b. Home-High Exp	0.33**	0.80**	0.55**	1					
2c. Home-MP	0.46**	0.75**	0.38**	0.45**	1				
3. School Env	0.53**	0.31**	0.16	0.28**	0.31**	1			
3a. School Care	0.34**	0.13	0.06*	0.12	0.14	0.85**	1		
3b. School High Exp	0.46**	0.29**	0.19*	0.29**	0.23**	0.84**	0.63**	1	
3c. School MP	0.49**	0.32**	0.14	0.26**	0.39**	0.71**	0.38**	0.38**	1

Note: Home Env = Home Environment; Home Care= Caring Relationships at Home; Home Exp = High Expectations at Home; Home MP= Meaningful Participation at Home; School Env = School Environment; School Care= Caring Relationships in School; School High Exp= High Expectations in School; School MP= Meaningful participations in school. * $p < 0.05$, ** $p < 0.01$

Table 2 shows the Pearson product moment correlation between overall resilience, home environment and school environment with their sub-dimensions. According to Table 2, home and school environments along with their three protective factors were found to be positively and significantly related with resilience scores.

Step-wise multiple regressions were conducted to investigate which of the predictor variables significantly accounted for variance in resilience scores. The predictor variables included home environment and school environment. The criterion variable was resilience. Preliminary analysis was conducted to ensure no violations of the assumption of multicollinearity among the predictor variables took place as tolerance and V.I.F values were found to be more than .10 and less than 10 respectively (Pallant, 2007).

The results of regression analyses are presented in Tables 3 and 4.

Table 3 presents the results of stepwise multiple regression analysis done in order to predict resilience of the participants from their

overall home and school environment scores. Table 3 shows that both home and school environment particularly school environment significantly and positively predicted resilience. Table 4 presents the results of stepwise

multiple regression analysis done in order to predict resilience from the dimensions of home and school environment. Table 4 shows that meaningful participation in school, high expectations in school and meaningful participations at home significantly and positively predicted resilience of adolescent girls.

Table.3
Stepwise Multiple Linear Regressions: Predicting Resilience from Overall Home and School Environments

Model	Unstandardized		Standardized		R ²	R ² change	F	t
	Constant	B	SE	Beta				
1	SE	95.703	5.148	.534			51.03**	18.589**
	Constant	72.627	7.430					7.144**
2	SE	1.206	0.204	0.440			37.09**	5.927**
	HE	1.017	0.248	0.304	0.369	.083		4.104

Note. HE: Home environment; SE: School environment. ** $p < 0.01$

Note: Home Env = Home Environment; Home Care= Caring Relationships at Home; Home Exp = High Expectations at Home; Home MP= Meaningful Participation at Home; School Env = School Environment; School Care= Caring Relationships in School; School High Exp= High Expectations in School; School MP= Meaningful participations in school. * $p < 0.05$, ** $p < 0.01$

Table 4
Stepwise Multiple Linear Regression: Predicting Resilience from Dimensions of Home and School Environment

Model	Unstandardized coefficients		Standardized coefficients		R ²	R ² (change)	F	T
	B	S.E	Beta					
1	(Constant)	104.951	4.353				40.345**	24.111**
	MPS	3.429	0.540	.490	0.240	0.240		6.352**
2	(Constant)	92.928	4.989					18.627**
	MPS	2.551	0.549	.364			31.698**	4.650*
	HES	2.207	0.524	.330	0.322	0.082		4.215**
3	(Constant)	79.433	5.895					13.475**
	MPS	1.826	0.554	.261			28.363**	3.296**
	HES	2.021	0.500	.302				4.044**
	MPH	2.339	0.608	.289	0.389	0.067		3.848**

** $p < 0.01$; * $p < 0.05$

Key: MPS = Meaningful Participation School; HES = High Expectation School; MPH = Meaningful Participation Home

DISCUSSION

Correlations between the variables presented in Table 2 show positive correlations of resilience with home environment and its protective factors and also with school environment and its protective factors. This implies that a positive linear relationship existed between resilience and home measure scores and also between resilience and school measure scores. Higher the respondents scored on the three dimensions of both home and school environment scales, higher were their resilience scores and vice versa.

Table 3 presents the results of the stepwise analysis done with composite scores of home and school environment measures revealed both predictor variables to be significant with school environment emerging to be stronger predictor of resilience score ($\beta = 0.44$, $p < 0.01$). Alone, school environment predicted almost 30% of the variance in resilience. Although home environment added up to only 8% contribution of predicting resilience

scores, the additive contribution of home environment to the overall model was statistically significant ($R^2 = 0.36$, $F_{(1, 127)} = 37.09$, $p < 0.01$). Individually both home and school environment emerged to be significant predictors of resilience level of adolescent girls in this study ($b = 0.44$, $t_{(127)} = 5.92$, $p < 0.01$; $b = 0.30$, $t_{(127)} = 4.10$, $p < 0.01$).

Since the home and school environment measures used in this study comprised specific 'resilience promoting' dimensions (namely caring relationships, high expectations and meaningful participation), it was important to examine which of the dimensions actually determined resilience level of adolescent girls in this study. Stepwise regression analysis was also performed wherein the three dimensions at both home and school, were entered simultaneously as predictor variables of resilience scores. Table 4 clearly shows that meaningful participation at school was the strongest predictor of resilience ($b = 0.49$, $t_{(123)} = 6.35$, $p < 0.01$), predicting 24% of variance in resilience scores in the first model which was found to be significant

($R^2 = 0.24$, $F_{(1, 128)} = 40.34$, $p < 0.01$). In the next successive model, high/positive expectations at school, made 8% increment in model prediction which was also significant. Simultaneously, both meaningful participation and high expectations at school, accounted for 32% of variance in resilience scores ($R^2 = .32$, $F_{(1,127)} = 31.69$, $p < 0.05$). Individually too, both emerged to be significant predictors of resilience ($b = 0.36$, $t_{(123)} = 4.65$, $p < 0.05$; $b = 0.33$, $t_{(123)} = 4.21$, $p < 0.01$). In the last model, meaningful participation at home emerged to be a significant contributing protective factor of adolescent resilience ($b = 0.28$, $t_{(123)} = 3.84$, $p < 0.01$), making a significant 6% increment to the model. Thus, collectively, meaningful participation at school, high expectations at school and meaningful participation at home accounted for 38% variance in prediction of resilience scores ($R^2 = 0.38$, $F_{(1, 126)} = 28.36$, $p < 0.01$). Individually also, each of these dimensions were found to be strong and significant predictors of resilience among adolescent girls (See Table 4). Therefore, conclusion can be drawn that meaningful participation at school followed by high expectations at school and meaningful participation at home are strong and influential protective factors of resilience among adolescent girls.

It must be mentioned that caring relationships from either of the two environments, did not predict resilience at all in this study. This finding however contradicts the general belief that girls use social support systems particularly relying and interacting with a caring and supportive parent or teacher for drawing resilience in times of stress. While prior studies have consistently shown that presence of a caring and supportive, empathy providing adult at home or in school, determine resilience in adolescent girls (Frydenberg & Lewis, 1993; Hampel & Petermann, 2005; Sun & Stewart, 2004), this study rather focuses on the importance of providing autonomy in making an adolescent girl resilient since both meaningful participation at school and home were significant predictors of resilience among adolescent girls. It is through opportunities for meaningful participation in a physically and psychologically safe and structured environment, that youth develop characteristics of resilience like better self concept, problem solving, competence and autonomy in social and academic spheres (Benard, 1991; Cartha, 1991; Glassner, 1990; Kohn, 1996; Sarason, 1990).

High expectations at school emerging as the immediate next predictor of adolescent resilience in this study again helps to infer how a school emphasizing on not just opportunities but also rewards and encouragement (for example word of praise from teacher or a trophy from the principal) for its students, can prove beneficial for their healthy development. Benard (1991, 1995) had argued that teachers play an important role in developing resilience in children through providing protective factors like positive and high expectations that are relevant and practical. According to a major mental health study on children and adolescents, a positive, rewarding school environment and a sense of connectedness to the school also promotes resilience (NIMH & NCCHC, 2000). Teachers can promote educational resilience in children by reducing stress and providing positive encouragement and feedback to the students (Russon & Boman, 2007). Therefore, meaningful participation along with positive expectations regarding success and achievement in the school settings can indeed function as enhancers of resilience for adolescent girls as well.

Adolescents, in this study the adolescent girls, also demand and crave for autonomy and independence in their personal and familial lives. They are in a stage where they struggle to understand their identity in family, school and other existing and forthcoming arenas of life and expect to be treated as mature individuals capable of making their own life decisions as they stand at the threshold of adulthood. In other words they demand and expect opportunities for meaningful participation from family elders, in family issues as well, which if readily provided, helps them take healthy decisions for self and significant others during times of stress and trouble in the family (Lamborn & Steinberg, 1993; Reitman, Rhode, Hupp, & Altobello, 2002; Werner, 1982 & 1990).

In short, parents who create opportunities for their children and adolescents to have some decision-making power and to solve problems on their own, help meet their basic need for psychological autonomy (Benard, 2004; Barber, 2002) thereby helping them grow into mature and competent young adults (Gupta & Tung, 2011).

The present study relatively supports a recent Indian finding where high expectations and

meaningful participation at home and school were some of the significant predictors of resilience among adolescent boys (Azam & Shaikh, 2011). However, Azam and Shaikh (2011) clearly revealed home environment with its caring relationships dimension to be strongest predictor of resilience among adolescent boys. The present study on the other hand depicts school environment and opportunities for growth in school, as primary determining factors of resilience among adolescent girls which also strengthens the association between academic achievement and success in school with better self concept among adolescent girls in India (Nagar, Sharma & Chopra, 2008).

In India, there has been a recent trend of better academic achievement among girls than among boys (Joshi & Srivastava, 2009). This may be one of the reasons why Indian parents have also begun to have a more affectionate and liberal parenting approach towards daughters instead of a conservative strict one (Shaikh, 2010). Such positive parenting behaviors wherein parents give their children reasonable freedom to make decisions for self and family have always been linked with positive health and academic outcomes for youth (Clark, 1984; Gandara, 1995; Herman, 1997). Hence, the present study also retains the importance of healthy home environment and positive parenting in building adolescent resilience, despite having a lower magnitude of prediction.

Limitations:

Why some of the dimensions of home and school environment failed to predict resilience has not been explained in the present research investigation and can be considered as one of its major limitations. Researches on adolescent resilience in future should also examine the relationship between resilience and these protective variables in a pathway perspective. As far as the school and home environment variables are concerned, only the psychological protective components (i.e. caring relationships, meaningful participation and high expectations) were under consideration. Studies in future should also address the role of 'physical aspects' of homes and schools (like location, sanitation, size, availability of facilities, etc) in building adolescent resilience not considered by this study. Comparative studies of resilience between adolescent males and females in future are also recommended so as to have a better un-

derstanding of protective factors at work for both the groups.

Summary: In short, the findings of this study indicate that positive and successful school life enriched with opportunities for healthy participation and rewards backed with reasonable independence from parents, enable the girls to be more resilient to adversity during this developmental phase.

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