



Assessment of Resilience levels among adolescents and analysing its associated factors

K. Ramya¹ and Ganga V. Yenagi²

¹Department of Human Development and Family Studies, College of Community Science, Dharwad
E-mail: ramya97koneru@gmail.com

²Department of Agricultural Extension Education, College of Agriculture
University of Agricultural Sciences, Dharwad - 580 005, Karnataka, India
E-mail: yenagigv@uasd.in

Date of Submission: 12-12-2023

Date of Acceptance: 26-12-2023

ABSTRACT:

Adolescence is a stage of stress and storm and involves several psycho-physiological changes. The study aimed to assess resilience levels and analyse its associated factors among 97 rural students from eight, ninth and tenth classes. The resiliency scale by Prince-Embury (2006) and general information questionnaire was used for data collection. Mean, standard deviation, t-test and chi square were the statistical tools employed. The findings reveal that the majority of adolescents are with average level of resiliency. A significant association of gender and mothers' occupation with adolescents' resiliency levels was observed.

KEYWORDS: Adolescents, resilience, gender, mothers' occupation

I. INTRODUCTION

[1] Human development stages have a unique function in life. One of the most notable typical stage is adolescence, which is distinguished by significant biological changes, novel experiences, and specific developmental prerequisites. In addition, a number of contextual influences, both internal and external, influence an individual's change in behavior. The World Health Organization (WHO, 2014) defines an adolescent as a person who is between the ages of 10 and 19. Stanley Hall referred to the adolescent stage as "Storm-and-Stress," characterizing it as a tumultuous time marked by mood swings and conflict. Adolescents must exhibit resilient traits in order to overcome the difficulties they face throughout this developmental stage.

[11] Psychological resilience is understood as the ability to adjust to a typical pattern of life (Tusaie & Dyer, 2004). [6] Resilience has been defined by Masten, 2001, (as quoted in Fine, 1991)

as the capacity to effectively resume regular living activities following adverse and serious challenges. [2] According to Begun, 1993, (as referenced in Fine, 1991), resilience is the ability to withstand adversity, stress, and hardship.

Some studies view resilience as a human trait, while others see it as a quality that can be acquired via experience and as a process that is influenced by the interaction of environmental circumstances. Nowadays, resilience is one of the hot areas in psychology and is garnering more and more attention. Numerous studies that evaluate the resilience level of different participants in different circumstances can be found in the literature.

II. REVIEW OF LITERATURE

[3] De Oliveira *et al.* (2017), studied the associated factors of resilience in 542 medical students in Brazil. It is a cross section study with majority of participants are in age range of 17 to 30 years. Through Resilience Scale, resilience level among participants was assessed and self-administered general questionnaire used to obtain personal details. The results indicate a significant association between age and resilience, where younger students (15%) with age < 22 years and older students (28%) of >22 years age exhibited higher level of resilience.

[5] In another study by Erdogan *et al.* (2015) carried out in Turkey, when relationship between gender and resilience was considered, boys had significantly higher scores than girls with respect to resilience. Societal expectation on gender was determined as pivotal factor, where woman was more dominated by men in Turkish society. Additionally, girls were emotional and experiencing more traumatic events compared to boys, where there is a requirement of promoting training



programmes for improving of resilience among girls.

[10] In a longitudinal study by Thompson *et al.* (2013), adolescents whose mothers' with low occupation level or unemployment status observed to have youth with low levels of resilience. Adolescents with employed parents observed to have healthy upbringing, with organised set of goals as well as reinforced to achieve the higher goals (Maynard and Fayombo, 2015).

On critical review of studies, some studies report the significant influence of individual, parental and family influence on adolescence resilience level. In contrast, resilience is considered as personal phenomenon irrespective the external influences. In this view the current study aimed to study the resiliency levels among rural adolescents in Dharwad district and to analyse the association between resilience and individual, parental and familial factors among rural adolescents in Dharwad district.

III. MATERIAL AND METHODS

The population of the current study includes of eighth, ninth and tenth class students from government and private schools of rural area of Dharwad district, Karnataka. The sample comprises of 97 adolescents from rural locality. Random sampling technique was employed for sample selection., almost equal percentage of participants across 8th, 9th and 10th classes (i.e., 34% from 8th class, 33% were from 9th class and 33% were from 10th class in rural area were included in the study.

Tools used for the study

By using self-structure questionnaire general information such as age, gender, ordinal position,

locality, class, type of school, education of parents, occupation of parents, type of the family and size of the family was collected.

[8] Prince-Embury (2006) "Resiliency scales for children and adolescents" was used to assess rural and urban adolescent's resiliency levels. Total 64 items are present and are related to the tool consists of sense of mastery, sense of relatedness and emotional reactivity sub domains. The total resiliency score obtained by summing up the sub domain scores and converting to *T* scores. Scores ≤ 40 denotes low resiliency and ≥ 60 denotes high resiliency.

Statistical tools

Frequency, means, standard deviation, chi square, t-test and ANNOVA were the statistical tools used in the study.

IV. RESULTS AND DISCUSSION

Table 1 shows the personal, parental and familial characteristics of rural adolescents. In rural area majority of the adolescents were in 15-17 years age range (57.7%) and remaining were in 12-14 years of age range (42.3%). More than half of the participants were males (52.6%), most of them were first borns (36.1%) and second borns (37.1%) and 69.1 per cent are from government schools and remaining from private schools (30.9%). 46.4 per cent of adolescent fathers and 52.6 per cent of adolescent mothers completed less than 10th class level of education. Majority of fathers (57.7%) and mothers (40.2) working at shops, home and own cultivation. Most of the participants belongs to nuclear family type (62.9%), medium size (43.3%) and from lower middle socio-economic status (84.6%).

Table 1: Personal, parental and familial characteristics of rural adolescents in Dharwad (N=192)

Characteristics	Category	Rural (n=97)
Personal characteristics		
Age	12-14	41 (42.3)
	15-17	56 (57.7)
Gender	Male	51 (52.6)
	Female	46 (47.4)
Ordinal position	First born	35 (36.1)
	Second born	36 (37.1)
	Later born	26 (26.8)
Class	8 th class	33 (34.0)
	9 th class	32 (33.0)
	10 th class	32 (33.0)
Type of school	Private school	30 (30.9)



	Government school	67 (69.1)	
Parental characteristics			
		Father	Mother
Parents education	Post-graduation	2 (2.1)	0
	Graduation	6 (6.2)	4 (4.1)
	10 th class pass< graduation	32 (32.9)	23 (23.7)
	Primary pass<10 th	45 (46.4)	51 (52.6)
	<primary but attended school for atleast one year	12 (12.4)	19 (19.6)
Parents occupation	Service in central/ state/public	2 (2.1)	5 (5.2)
	Service in private sector or independent business	12 (12.4)	5 (5.2)
	Service at shops, home, own cultivation	56 (57.7)	39 (40.2)
	Self-employed with income >Rs 5000	27 (27.8)	22 (22.6)
	Self-employed/Laborers<Rs 5000 income/ housewives	0	26 (26.8)
Familial characteristics			
Type of family	Joint	36 (37.1)	
	Nuclear	61 (62.9)	
Size of family	Small	33 (34.0)	
	Medium	42 (43.3)	
	Large	22 (22.7)	
Socio-economic status	High	1 (1.0)	
	Upper middle	14 (14.4)	
	Lower middle	82 (84.6)	

Figures in parenthesis indicates percentages

Distribution of resilience levels among rural and urban adolescents in Dharwad district is presented in table 3. In rural area, about 41 per cent of adolescents exhibited average level of resilience, 18.6 per cent were highly resilient and 16.5 per cent were above average. About 13.4 per cent were in

low and 10.3 per cent were at average level of resilience. The observed discrepancies between adolescents in rural and urban areas may be attributed to factors such as emotional competency, upbringing, crisis experiences, and various psychological and physical developmental paths.

Table 3: Distribution of adolescents' levels of resilience

(N=192)

Levels of resilience	Rural
High	18 (18.6)
Above average	16 (16.5)
Average	40 (41.2)
Below average	10 (10.3)
Low	13 (13.4)
Total	97 (100)

Figures in parenthesis indicates percentages

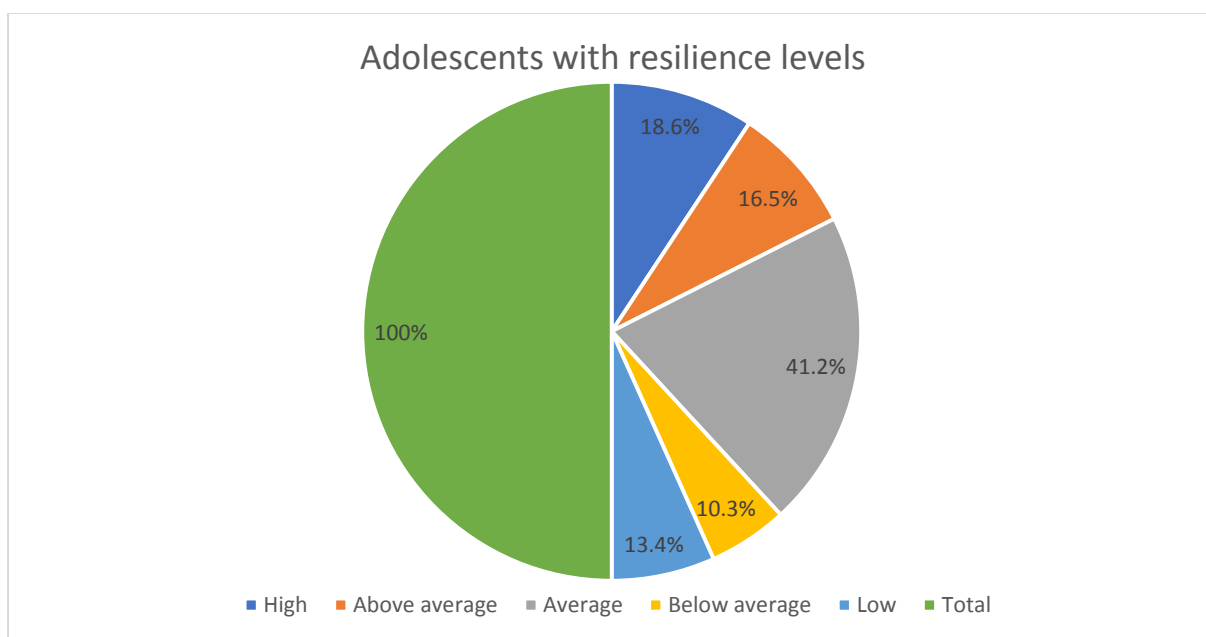


Fig 1. Resilience levels among adolescents

Fig.1 depicts the resiliency levels among adolescents in rural area. Majority of participants had average (41.2%) resiliency followed by high (18.6%), above average (16.5%), low (13.4%) and below average (10.3%).

Table 4. Association of personal factors with resilience among rural adolescents

		Levels of resilience			χ^2	Mean+SD	t value/ F value
		Average	Below average	Total			
Age	12-14	30 (73.2)	11 (26.8)	41 (100)	.382 ^{NS}	51.14±10.29	-.060 ^{NS}
	15-17	44 (78.6)	12 (21.4)	56 (100)		51.26±9.57	
Gender	Boys	44 (86.3)	7 (13.7)	51 (100)	5.928*	52.43±10.25	1.285 ^{NS}
	Girls	30 (65.2)	16 (34.8)	46 (100)		49.86±9.27	
Ordinal position	Frist born	29 (82.9)	6 (17.1)	35 (100)	4.324 ^{NS}	53.25±10.57	1.929 ^{NS}
	Second born	29 (80.6)	7 (19.4)	36 (100)		51.33±8.57	
	Later born	16 (61.5)	10 (38.5)	26 (100)		48.30±10.09	
Class	8 th class	23 (69.7)	10 (30.3)	33 (100)	3.361 ^{NS}	50.63±10.98	.942 ^{NS}
	9 th class	26 (81.2)	6 (18.8)	32 (100)		53.12±7.44	
	10 th class	23 (71.9)	9 (28.1)	32 (100)		49.90±10.66	
Type of school	Government school	49 (73.1)	18 (26.9)	67 (100)	1.192 ^{NS}	50.62±9.56	-.88 ^{NS}
	Private school	24 (80)	6 (20)	30 (100)		52.53±10.46	

Figures in parenthesis indicates percentages, *Significant at 0.05 level, NS indicates Non significance

Association between personal factors and resilience of rural adolescents was presented in table 4. Gender ($\chi^2 = 5.928$; $p < 0.05$) had a significant association with adolescents' resilience level where boys (83.6%) had better resilience levels than girls. Based on observations, the

majority of boys were found to have better resilience capacities and to be extremely optimistic, trustworthy, and capable of seeking support during times of crisis. On the other hand, girls were found to be extremely sensitive and less able to recover from emotional upheaval or excitation. The current



study's findings align with those of Erdogan *et al.* (2015). According to the study, boys were exhibiting higher degrees of resilience because of how emotional experiences of women and cultural gender norms affected their ability to adjust to various circumstances. In Dias and Cadime (2017) study, girls were better than boys at controlling their impulses. The experiences and varied responses on an individual's resilience levels are also influenced by the various adversities. Because

they were better at addressing problems than girls, boys were more resilient.

However, other personal factors such as age, ordinal position, class and type of school of adolescents with resiliency. The results also reports that there were no significant differences in adolescents with different age groups and similarly in boys and girls, ordinal position class and types of school of adolescents.

Table 5. Association of parental factors with resilience among rural adolescents

		Levels of resilience		Total	χ^2	Mean±SD	t value/ F value
		Average	Below average				
Fathers education	Professional/ post graduate and graduation	28 (82.35)	6 (17.64)	34 (100)	6.280 ^{NS}	58.00±4.44	2.735*
	Primary, secondary, 10 th and PUC	54 (85.7)	9 (14.3)	63(100)		50.16±9.88	
Mothers education	Professional/ post graduate and graduation	16 (66.7)	8 (33.3)	24 (100)	5.361 ^{NS}	61.25±5.86	2.823 ^{NS}
	Primary, secondary, 10 th and PUC	50 (68.5)	23 (31.5)	73 (100)		50.24±9.82	
Fathers occupation	Service in central/ state/public/private sector or independent business	6 (50)	6 (50)	12 (100)	7.243 ^{NS}	54.71±9.12	.444 ^{NS}
	Service at shops, home, own cultivation	38 (67.8)	18 (32.1)	56 (100)		50.51±10.60	
	Self-employed/Laborers/ housewives	19 (70.4)	8 (29.6)	27 (100)		51.21±9.83	
Mothers occupation	Service in central/ state/public/private sector or independent business	8 (57.1)	6 (42.8)	14 (100)	13.165*	58.80±3.63	2.330 ^{NS}
	Service at shops, home, own cultivation	25 (73.5)	9 (26.5)	34 (100)		50.00±11.16	
	Self-employed/Laborers/ housewives	35 (71.4)	14 (28.6)	49 (100)		50.61±8.94	

Figures in parenthesis indicates percentages, *Significant at 0.05 level, NS indicates Non significance

Table 5 shows the association between parental factors and adolescents resilience levels. The findings show that except mothers' occupation ($\chi^2=13.165$; $p<0.05$) there were no significant association of parental factors with adolescents' resilience levels. Where majority of adolescents exhibited average resiliency levels whose mothers were working at shops or at own cultivation. However, there is no significant difference on resiliency levels of the adolescents whose mothers were working in different service sector, but the mean scores of adolescents' mothers working in in central/ state/public/private sector or independent business showed better resilience than those with other occupation. Mothers who hold a professional position provide comfort for children and boost their self-esteem. The study by Thompson *et al.* (2013), which found that adolescents with low levels of occupation or unemployment in their mothers

showed poor levels of resilience, corroborated these findings. This could be the outcome of stressful parenting leading to poor parent-child interactions. Maynard and Fayombo (2015) discovered that teenagers whose parents worked were brought up in a methodical manner, with well-defined objectives and consistent reinforcement for achieving them.

The t-values shows a significant difference between adolescents' resiliency levels with respect to fathers' education level ($t=2.735$; $p<0.05$), where adolescents fathers who completed higher education i.e., professional/ post-graduation or graduation ($M=58.00$; $SD=4.44$) had better resiliency compared to adolescents' fathers who had only minimum Primary, secondary, 10th and PUC educational qualification ($M=50.16$; $SD=9.88$). Observation revealed that in a rural location, adolescents with professionally degreed fathers exhibited a higher level of resilience than those with lower educational



attainment. A major factor in fostering children's resilience is parental education. Prince-(2009) Embury's findings corroborated these findings, explaining that children's resilience increases with the father's level of education. The children of parents with the lowest education levels showed the

highest emotional reactivity, while parents with the highest education levels had children with the lowest sense of mastery, relatedness, and emotional reactivity. Thus, these findings suggest that children's general well-being is impacted by greater education levels.

Table 6. Association of familial factors with resilience among rural adolescents

		Levels of resilience		Total	χ^2	Mean±SD	t value/ F value
		Average	Below average				
Family type	Nuclear	49 (80.3)	12 (19.7)	61 (100)	1.482 ^{NS}	52.00±8.66	1.021 ^{NS}
	Joint	25 (69.4)	11 (30.6)	36 (100)		49.88±11.56	
Family size	Small	28 (84.8)	5 (15.2)	33 (100)	2.279 ^{NS}	53.182±9.34	1.296 ^{NS}
	Medium	31 (73.8)	11 (26.2)	42 (100)		50.881±8.05	
	Large	15 (68.2)	7 (31.8)	22 (100)		48.909±13.06	
Socio-economic status	Middle	54 (71)	22 (28.9)	76 (100)	4.268 ^{NS}	50.89±11.66	1.145 ^{NS}
	Poor	14 (66.6)	7 (33.3)	21 (100)		56.25±6.20	

Figures in parenthesis indicates percentages, *Significant at 0.05 level, NS indicates Non significance

Table 6 shows depict association of familial factors with adolescents' resilience levels. The findings reveals that there were no significant association of type of family, family size and socio-economic status with resilience levels of adolescents.

V. CONCLUSION

Resilience is an individual trait, essential in times of adversity. Adolescents from rural area possessed with better resiliency levels. The findings report the role of gender and mothers' occupation on adolescents' level of resilience, where boys had significantly better resiliency levels than girls. Adolescents with working mother exhibited greater resiliency levels, which indicates that healthy development of adolescents depends on systematic up bringing. However, further analysis is needed to have deeper understanding on influential factors of adolescents' resiliency levels.

REFERENCE

- [1]. Anonymous, 2014, Health for the World's Adolescents, A second chance in the second decade. <https://www.who.int>
- [2]. Begun A L, 1993, Human behavior and the social environment: The vulnerability, risk, and resilience model. *Journal of Social Work Education*, 29(1), 26-35.
- [3]. De Oliveira P A C, Machado A P G and Aranha R N, 2017, Identification of factors associated with resilience in medical students through a cross-sectional census. *British Medical Journal*, 7(11): 1-8.
- [4]. Dias P C, and Cadime I, 2017, Protective factors and resilience in adolescents: The mediating role of self-regulation. *Psicologia Educativa*, 23(1): 37-43.
- [5]. Erdogan E, Ozdogan O and Erdogan M, 2015, University students' resilience level: The effect of gender and faculty. *Procedia-Social and Behavioral Sciences*, 186: 1262-1267.
- [6]. Masten A S, 2001, Ordinary magic: Resilience processes in development. *American psychologist*, 56(3), 227.
- [7]. Maynard D M B and Fayombo G A, 2015, Influence of parental employment status on Caribbean adolescents' self-esteem. *International Journal of School and Cognitive Psychology*, 2(2), 123-129.
- [8]. Prince-Embury S, 2006, Resiliency scales for children and adolescents, Pearson, United States.
- [9]. Prince-Embury S, 2009, The resiliency scales for children and adolescents as related to parent education level and race/ethnicity in children. *Canadian Journal of School Psychology*, 24(2): 167-182.
- [10]. Thompson R B, Corsello M, McReynolds S and Conklin-Powers B, 2013, A longitudinal study of family socioeconomic status (SES)



variables as predictors of socio-emotional resilience among mentored youth. *Mentoring & Tutoring: Partnership in Learning*, 21(4): 378-391.

- [11]. Tusaie K and Dyer J, 2004, Resilience: A historical review of the construct. *Holistic nursing practice*, 18(1), 3-10.