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Assessment of status of psychological well-being and its determinants among adolescent school students residing in Raipur city, Chhattisgarh

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ABSTRACT

Background: Psychological well-being is a multidimensional concept, including both individual capacities of the adolescents and social competencies. Good overall adjustment and a sense of psychological well-being are very crucial factors for the adolescent's positive contribution to the society. The objective of this study was to assess the status of psychological well-being and its socio-demographic determinants among adolescent school students of Raipur city.

Methods: A cross-sectional observational study was done on 576 adolescent school students of Raipur city to assess their psychological well-being using Ryff's scale of psychological well-being along with their socio-demographic characteristics. Association and regression analysis were done.

Results: Overall, 79.9% of study subjects were scored as having average psychological well-being followed by 20.1% study subjects having good psychological well-being according to Ryff's scale. Study subjects with female gender, studying in english medium, private school, following non-state board syllabus, belonging to unreserved category, having educated father or mother, working father or mother, at least one parent working at distant place, residing in joint family whose parents are living together, who gets attended by someone after returning from school are having higher psychological well-being than the other group.

Conclusions: Socio-demographic determinants has a significant role to predict the psychological well-being of the study subjects. These determinants are mostly non modifiable displaying the need for integrating key behavioural factors on positive health promotion policies and programs.

Keywords: Adolescent, Psychological well-being, Socio-demographic determinants, Ryff's scale

INTRODUCTION

Human life completes its journey through various stages and one of the most vital stage is adolescence. The word adolescence is derived from the Latin word adolescere (to grow up). Adolescence is therefore literally the period of growing up & becoming an adult.¹ According to WHO adolescence is defined as those people between 10 and 19 years of age. Adolescence is divided into early, middle and late periods, which are respectively the 10-14, 15-17

and 18-19 year age groups.² It is the period when child moves from dependency to autonomy, lessens his/her emotional dependence on their parents, developing a mature set of values and responsible self-direction and vocational identity.³ Good overall adjustment and a sense of psychological well-being are very crucial factors for the adolescent's positive contribution to the society.⁴

Salami defines psychological well-being as a state that emerges from feeling of satisfaction with one's physical health and oneself as a person and with one's close interpersonal relationships.⁵

The research of student well-being can be useful for schools and universities in understanding the degree to which their students are self-accepting, are pursuing meaningful goals with a sense of purpose in life, have established quality ties with others, are autonomous in thought and action, have the ability to manage complex environments to suit personal needs and values and continue to grow and develop.⁶ Hence, the present study was conducted to assess the status of psychological well-being and its determinants among adolescent school students residing in Raipur city, Chhattisgarh.

METHODS

It was a cross-sectional observational study done among school going adolescents (both boys and girls) of standard 9 to 12 in selected schools of Raipur city. The data collection was done from July 2019 to October 2019. Adolescents studying in selected schools of Raipur city who were willing to participate, present on the day of survey and whose parents gave written consent for the study were included in the study.

Selection of study centre

One government and one private school were selected from each of 8 zone of Raipur city through lottery method (total 16 schools) and permission was taken from the district educational officer as well as the principal of the school.

Sample size

The sample size for the study was 576. Using the standard deviation of psychological well-being as 0.19 from the pilot study and assuming 50% non-response rate, the sample size was calculated using the formula,

 $n = \{(1.96 \times SD)/M. E.\}^2,$

where,

n=sample size,

SD=standard deviation

M. E.=margin of error.

Selection of study subjects

On the day of survey, list of total number of students studying in each class was obtained from the school whose parents gave consent for the study. To cover the sample size of 576 from 16 schools, 36 students has to be selected from each school (576/16=36). Equal number of students has to be selected from class 9 to 12. Therefore,

a total of 9 students (36/4=9) each from class 9 to 12 who were present on the day of survey, willing to participate in the study and fulfils the subject's criteria were included in the study. Attendance register was taken and first student was selected from the attendance register within the first sampling interval.⁷ Thereafter, next student was selected with a gap of sampling interval.

Study tool

The study tools used for the present study were; predesigned, pretested semi structured questionnaire was used consisting of socio-demographic profile, structured questionnaire 54-itemed version of Ryff scale of psychological well-being developed by Carol Ryff divided into six domains consisting of 9 questions in each domain.⁸

Interpretation of the questionnaire

The questionnaire contains a 6-point likert scale for the responses with anchors of 1 to 6 with the statement with higher scores indicating a higher level of psychological well-being. Reverse coding of the responses to items 4, 5, 7, 9, 10, 11, 13, 14, 15, 17, 18, 22, 23, 25, 26, 27, 29, 31, 34, 36, 38, 42, 43, 44, 45, 46, 52 and 53 were done. All the responses were summed and the total scores of each domain were divided into 3 groups as poor, average and good. For each category, a high score indicates that the respondent has a mastery of that area in his or her life. Conversely, a low score shows that the respondent struggles to feel comfortable with that particular concept.

Study technique

The study technique implemented was self-administered questionnaire method.

Ethical consideration

Before starting the study, institutional scientific and ethics committee approval of Pt. J.N.M. medical college, Raipur, Chhattisgarh was taken.

Data analysis

The data obtained were entered in MS excel spreadsheet, coded and analysed using data analysis software. The distribution of data set was assessed using Kolmogorov-Smirnov test and was found to be normally distributed (p>0.05).

RESULTS

During adolescence, school plays a major role in their cognitive and social development. Majority of the study subjects studied in hindi medium (68.8%) and coeducational school (75%) with state board (81.3%) syllabus (Table 1).

Majority of study subjects (75.9%) were belonging to the age group of 15-17 years with female predominance (39.9%). The mean age of study subjects is 15.60 ± 1.90 . Out of all the study subjects, 46% were male and 54% were female (Table 2).

Majority of study subjects were hindu (93.6%) by religion, belonging to OBC category (49.3%). Parents of majority of the study subjects (91.3% of fathers and 85.1% of mothers) were literate. Around 4.34% of study subjects has lost their father and 1.04% have lost their mother. Out of all the parents, 121 (21%) were working mothers and almost all 544 (94.4%) were working fathers. Approximately 91.3% of the parents were either locally working in Raipur city or were unemployed whereas 8.7% of the parents (any one of them) were working at distant place. Majority of study subjects were living in joint family (54.9%) with their parents (91.7%). Most of the study subjects (69.3%) were not attended by anyone at home after returning from school. 26.9% of the study subjects were attended by parents followed by grandparents (2.8%) and relative (1.2%) while returning home from school. Parents of 94.1% of study subjects were staying together, 29 (5%) were single parent and only one had his both parents dead. Out of 29 single parents, 24 were single mother and 5 were single father with majority (19 and 4 respectively) living in joint family (Table 3).

Overall, 460 (79.9%) of study subjects were scored as having average psychological well-being followed by 116 (20.1%) study subjects having good psychological wellbeing according to Ryff's scale of psychological wellbeing. It was good to find that none of the study subjects had poor psychological well-being. On comparing the

mean values of good and average scorers, it was found that the difference between them was significantly high. Majority of study subjects scored average for all domain except for self-acceptance for which majority of study subjects were categorised as good. Also, mean score was found higher for self-acceptance was 38.38 ± 4.78 with lowest F value of 114.94 (Table 4).

Purpose in life was the major predictor of the overall psychological well-being of the study subjects with highest F value of 393.58 which is statistically significant, followed by personal growth with second highest F value of 345.49 (Table 4).

Table 5 shows the predictors of socio-demographic variables with the psychological well-being of study subjects. Study subjects of hindi medium schools had 0.46 times lower psychological well-being than study subjects of english medium. Males were 0.42 times less psychologically well than females. Study subjects with illiterate fathers or mothers were 0.78 and 0.64 times psychologically weak as compared to study subjects with literate fathers or mothers respectively. Occupation of father has significant role to play in the psychological well-being as study subjects with unemployed fathers were 0.88 times psychologically weak than study subjects whose fathers were working.

Table 6 also shows that the study subjects who live with their parents, gets attended after coming back from school and whose parents are living together had greater psychological well-being as compared to the other group. The study subjects whose parents were not living together had 0.89 times lower psychological well-being than the study subjects whose parents were living together.

Table 1: Distribution of stud	y subjects on the basis of their school and sy	yllabus followed by them (n=576).

Schooling status		N (%)
	Boys	36 (6.2)
Nature of school	Girls	108 (18.8)
	Co-ed	432 (75)
Medium of school	Hindi	396 (68.8)
Wiedium of School	English	180 (31.2)
	Central (CBSE)	72 (12.5)
Syllabus followed	State	468 (81.3)
·	ICSE	36 (6.2)
Total		576 (100)

Table 2: Distribution of study subjects on the basis of their age and gender (n=576).

Age (in years)	Gender	Gender			
	Male	Female	Total		
	N (%)	N (%)	N (%)		
10-14	40 (6.9)	74 (12.9)	114 (19.8)		
15-17	207 (36)	230 (39.9)	438 (75.9)		
18-19	18 (3.1)	7 (1.2)	25 (4.3)		
Total	265 (46)	311 (54)	576 (100)		
Mean age (in years): 1	5.60±1.90				

Table 3: Distribution of study subjects on the basis of their socio-demographic variables (n=576).

Socio-demographic variables		N (%)
	Hindu	539 (93.6)
D. V. 1	Muslim	20 (3.5)
Religion	Sikh	2 (0.3)
	Christian	15 (2.6)
	General	146 (25.3)
Caste	OBC	284 (49.3)
Caste	SC	108 (18.8)
	ST	38 (6.6)
Education of father	Literate	526 (91.3)
Education of father	Illiterate/died	50 (8.7)
Education of mother	Literate	490 (85.1)
Education of mother	Illiterate/died	86 (14.9)
Occupation of father	Working	544 (94.4)
Occupation of father	Not-working	32 (5.6)
Occupation of mother	Working	121 (21)
Occupation of mother	Not-working	455 (79)
Information regarding working	Distant working	50 (8.7)
parents	Locally working/not applicable*	526 (91.3)
Type of family	Joint	316 (54.9)
Type of family	Nuclear	260 (45.1)
	Parents	528 (91.7)
Living with	Relatives	20 (3.5)
	Hostel/paying guest	28 (4.8)
	Any of the parent	154 (26.9)
Attended after coming from school	Any of relative	7 (1.2)
Attended after coming from school	Any of grandparent	16 (2.8)
	No one	399 (69.3)
Relationship of parents	Living together	542 (94.1)
Kelauonship of parents	Others	34 (5.9)
Total		576 (100)

Table 4: Distribution of study subjects on the basis of their overall psychological well-being score (n=576).

Domains	Scores	Status of p	osychological wel	Mean score±SD	F value	
Domains	Scores	Poor	r Average Good		Wiean score±SD	(df=575)
Autonomy	9-54	7 (1.2)	404 (70.1)	165 (28.7)	35.80±5.40	212.66, p<0.001
Environmental mastery	9-54	9 (1.6)	424 (73.6)	143 (24.8)	35.28±4.66	210.01, p<0.001
Personal growth	9-54	1 (0.2)	337 (58.5)	238 (41.3)	37.04±5.14	345.49, p<0.001
Positive relations with others	9-54	9 (1.6)	377 (65.4)	190 (33)	36.30±6.01	304.79, p<0.001
Purpose in life	9-54	1 (0.2)	380 (66)	195 (33.8)	36.65±5.23	393.58, p<0.001
Self-acceptance	9-54	1 (0.2)	280 (48.6)	295 (51.2)	38.38±4.78	114.94, p<0.001
Overall	54-324	0 (0)	460 (79.9)	116 (20.1)	219.46±17.20	-

Table 5: Univariate regression analysis of socio-demographic profile of study subjects with their psychological wellbeing (n=576).

Socio-demographic variables		Psychological well-being score		Odd's	P	Confidence interval	
		Average N (%)	Good N (%)	ratio	value	Lower limit	Upper limit
Type of school	Private (n=288)*	224 (48.6)	64 (55.2)	0.771	0.213	0.512	1.161
	Govt. (n=288)	236 (51.4)	52(44.8)	0.771	0.213	0.312	1.101
Medium of	English (n=180)*	131 (28.5)	49 (42.2)	0.544	0.005	0.358	0.829
school	Hindi (n=396)	329 (71.5)	67 (57.8)	0.544	0.003	0.330	0.027
Syllabus	Non-state (n=108)*	80 (17.3)	28 (24.1)	0.662	0.098	0.406	1.079
followed	State (n=468)	380 (82.7)	88 (75.9)	0.002	0.070	0.400	1.077
Standard	11-12 (n=288)*	230 (50)	58 (50)	1	1.000	-	
Stanuaru	9-10 (n=288)	230 (50)	58 (50)	1	1.000		-
Age (years)	>Median (n=134)*	105 (22.8)	29 (25)	0.887	0.621	0.553	1.424
Age (years)	<median (n="442)</td"><td>355 (77.2)</td><td>87 (75)</td><td>0.667</td><td>0.021</td></median>	355 (77.2)	87 (75)	0.667	0.021		
Gender	Female (n=311)*	236 (51.3)	75 (64.7)	0.576	0.010	0.378	0.879
Gender	Male (n=265)	224 (48.7)	41 (35.3)	0.570			
Religion	Non-hindu (n=37)*	28 (6.1)	9 (7.8)	0.771	0.513	0.353	1.681
Kengion	Hindu (n=539)	432 (93.9)	107 (92.2)	0.771			
Catagony	Unreserved (n=146)*	112 (24.3)	34 (29.3)	0.776	0.273	0.493	1.221
Category	Reserved (n=430)	348 (75.7)	82 (70.7)	0.776			
Education of	Literate (n=526)*	413 (89.8)	113 (97.4)	0.233	0.016	0.071	0.763
father	Illiterate/died (n=50)	47 (10.2)	3 (2.6)	0.233	0.010		
Education of	Literate (n=490)*	382 (83)	108 (93.1)	0.363	0.000	0.170	0.774
mother	Illiterate/died (n=86)	78 (17)	8 (6.9)	0.303	0.009	0.170	
Occupation of	Working (n=544)*	429 (93.3)	115 (99.1)	0.120	0.038	0.016	0.891
father	Not working (n=32)	31 (6.7)	1 (0.9)	0.120	0.038	0.016	0.891
Occupation of	Working (n=121)*	89 (19.3)	32 (27.6)	0.630	0.053	0.394	1.006
mother	Not working (n=449)	371 (80.7)	84 (72.4)	0.030			
Information regarding	Distant working (n=50)*	36 (7.8)	14 (12.1)	0.617	0.150	0.322	1.190
working parent	Locally working/not applicable (n=526)	424 (92.2)	102 (87.9)	0.617	0.130		1.190

Table 6: Univariate regression of family status of study subjects with their psychological well-being (n=576).

Family status		Psychological well-being score		Odd's	D 1	Confidence interval	
		Average	Good	ratio	P value	Lower limit	Upper limit
Tyme of femily	Joint (n=316)*	251 (54.6)	65 (56)	0.942	0.776	0.625	1.420
Type of family	Nuclear (n=260)	209 (45.4)	51 (44)	0.942			
T !!!41.	Parents (n=528)*	420 (91.3)	108 (93.9)	0.778	0.532	0.354	1.710
Living with	Others (n=48)	40 (8.7)	8 (6.1)	0.778			1./10
Attended after coming from school	Someone (n=177)*	134 (29.1)	43 (37.1)		0.099	0.455	
	No one (n=399)	326 (70.9)	73 (62.9)	0.698			1.070
Relationship of parents	Living together (n=542)*	427 (92.8)	115 (99.1)	0.113	0.032	0.015	0.831
	Others (n=34)	33 (7.2)	1 (0.9)				

^{*}reference population.

DISCUSSION

Psychological well-being of adolescents means being content with life and understanding an abundance of positive emotions, when joined with the absence of psychopathology, is linked with greatest academic function, social skills and support and physical health, guaranteeing psychological well-being of adolescents is a necessity.9,10 socio-psychological The psychological well-being of the adolescents were found to be average in the present study. Domain wise analysis showed average status for all the domains except for selfacceptance where majority of adolescents achieved good scores. Positive influence was found among female gender, 11 and 12 standard adolescents, who studied in private, english medium schools, who had educated and working parents, gets attended after returning back from school, whose parents are living together for different domains of psychological well-being.

In contrast, in a cross sectional study done by Jeny and Paul in 2014 among 153 adolescents selected from five higher secondary schools of Kerala, it was found that 88.8% of adolescents were moderate and 10.4% were high in their psychological well-being. Variables like type of school, pace of residents and the individually determined variables like age and gender did not have a direct effect on the psychological well-being of adolescents.

In contrast, Easow and Ghorpade in 2017 in a study on adolescent students from Tumkur, Karnataka found that majority (84%) of adolescents had adequate, 11% had moderate and 5% had inadequate psychological wellbeing by using psychological well-being scale developed by Masse et al.¹²

Similar to the present study, a cross sectional study was done by Sadeghi et al in 2015 among high school students in Khomeinishahr, Iran.⁵ The result showed that the level of psychological well-being was moderate among high school students. Psychological well-being of the 15-16 age range students was better than those were at the age of 18 which was statistically significant.

In contrast, almost 51% of adolescent students had a high and 49% of them were having low psychological well-being in a study done by Francis et al in 2020 in five randomly selected schools of Karnataka. Majority (95.5%) had purpose in life and positive relations with others. Highest mean score was attained for positive relations with others among all the domains.

Similar to the present study, in a study done by Akhter in 2015 female were found to have significantly higher psychological well-being than male at 0.01 level which was similar to the finding of Iqbal and Nishat in 2017 and Pulickal in 2020. ¹⁴⁻¹⁶

In contrast, a similar study done by Pravitha et al showed that gender does not significantly influence psychological well-being. ¹⁷ Age was found to be negatively correlated with psychological well-being. Although insignificant students who stayed in the hostel had poor psychological well-being as compared to day scholars.

Contrasting results were also seen by Sood and Gupta in 2012 in their study that adolescents in the age group 12-15 years scored significantly higher on well-being than in the age group 16-19 years. ¹⁸ Pearson correlation analysis showed negative correlation with age.

According to Katyal et al in 1998 socio-personal factors like joint family, non-working mothers and fathers in business, low parented education and family income acts as adverse stresses for adolescents.¹⁹

Fernandes and Vasconcelos-Raposo in 2008 demonstrated that psychological well-being is related to specific socio-demographic (gender and age), socio-cultural (parent-child relationship, family structure and place of residence) and psychological variables (self-esteem, school satisfaction and social anxiety) during adolescence.²⁰

One limitation is that the scales used in the present study relies on self-reported assessments of psychological wellbeing. As with all self-report instruments, students may respond in ways that are socially desirable rather than reveal their actual response to each statement.

CONCLUSION

This study has provided a multi-faceted look at various factors and their contribution to adolescents psychological well-being. With a better understanding of psychological well-being within adolescents, various counselling or educational implications can be derived for assisting adolescents to develop holistically in terms of body, mind, and spirit as they venture into the world of adulthood.

Recommendations

Post of one easily approachable integrated counsellor must be made mandatory in every school who should be present in the school during school timings daily. Regular counselling sessions should be planned in the school where the counsellor counsel the school children about all the aspects of adolescent health while maintaining confidentiality. Counselling of parents can also be done during parent teacher meeting in special cases since counselling for good parenting, if started early, can be beneficial for both parents and children. The responsibility of training and monitoring the services provided by the counsellor can be done under national health programmes and school education department respectively. Also, provision of peer educators should be started for each class in every school.

The need for integrating key behavioural factors on positive health promotion policies and programs is of maximal importance. Thus, approaches to health promotion should not only emphasize the prevention and treatment of problem behaviours, but also the inclusion of the promotion of optimal health behaviours and sustaining supportive environments. The implementation of national mental health program can be started from school level to ensure that the students are aware of the stressors and coping strategies, the type of services provided and avail them whenever required.

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