

Adolescent Well-Being among School Students: A Descriptive Study Using the EPOCH Measure

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Abstract: *Adolescence is a key period for building psychological strengths, yet school-based research has often focused on problems rather than positive functioning. This study described the level and profile of well-being among school students using the EPOCH measure, which assesses engagement, perseverance, optimism, connectedness, and happiness. A quantitative, descriptive, cross-sectional survey was conducted with 106 school students aged 11 to 18 years (63.2% female; 71.7% in Grades 11–12), selected through convenience sampling. Data were collected through an online questionnaire and analysed using descriptive statistics and Cronbach's alpha. The overall well-being mean was 3.57 (SD = 0.75) on a 1–5 scale. Connectedness had the highest domain mean ($M = 3.69$), followed by happiness ($M = 3.64$), optimism ($M = 3.60$), and perseverance ($M = 3.60$), while engagement was the lowest ($M = 3.31$). The full measure showed excellent internal consistency ($\alpha = .920$), and domain alphas ranged from .728 to .832. The findings suggest that students feel supported and positive about life but less often experience deep absorption in their activities. Schools may build on students' connectedness while designing learning experiences that foster engagement.*

Keywords: Adolescent well-being, EPOCH, school students, positive psychology, connectedness

1. Introduction

Adolescence is a period of rapid biological, cognitive, emotional, and social change in which young people form a sense of identity and take on greater responsibility for their own choices [21]. Habits of thinking, relating, and coping formed during these years tend to persist into adulthood, which is why adolescence is regarded as a critical window for investing in lifelong health and well-being [16]. For most adolescents, school is the main setting in which this development unfolds. It offers learning, friendships, and contact with supportive adults, but it also brings examinations, comparison with peers, and decisions about future careers.

Traditionally, school mental health work has focused on identifying and reducing problems such as anxiety, depression, and behavioural difficulties. Positive psychology argued that this focus gives an incomplete picture of human functioning and called for equal attention to the conditions that help people flourish [18]. The dual-factor model of mental health supports this view by showing that well-being and distress are related but separate dimensions, so that a student who reports few symptoms is not necessarily thriving [14, 22].

Seligman's PERMA model describes well-being in terms of positive emotion, engagement, relationships, meaning, and accomplishment [17]. Building on this model and on research on adolescent development, Kern et al. developed the EPOCH measure for young people aged 10 to 18 years [12]. The measure assesses five positive characteristics: *engagement*, the capacity to become absorbed in activities; *perseverance*, the pursuit of goals despite obstacles; *optimism*, hopefulness about the future; *connectedness*, the presence of caring and supportive relationships; and *happiness*, positive feelings and enjoyment of life. Its brevity, simple language, and strengths-based wording make it well suited to research in schools.

In India, adolescents face considerable academic pressure, particularly around board examinations and entrance tests for professional courses. The National Mental Health Survey of India estimated that about 7.3% of adolescents aged 13 to 17 years had a mental health condition [11]. Such figures highlight the need for attention to students' emotional lives, but they leave a complementary question unanswered: what positive strengths do students report, and in which areas do they feel less well supported? The present study addresses this question by describing the well-being profile of school students across the five EPOCH domains.

2. Literature Survey

Kern et al. [12] reported the development and validation of the EPOCH measure across several samples of adolescents. They found support for the five-domain structure, acceptable reliability, and expected associations with life satisfaction and depressive symptoms, and recommended the measure as a brief tool for school-based assessment of strengths. In earlier work, Kern et al. [13] applied the PERMA framework to school students and showed that the elements of well-being can be measured separately and relate differently to school outcomes, which supports a profile-based rather than a single-score approach.

Keyes [15] classified adolescents in the United States on the mental health continuum and found that only a minority were flourishing, while those who were languishing showed poorer school and social functioning. Suldo and Shaffer [22] grouped middle school students by both well-being and psychopathology and found that students with low well-being but few symptoms functioned less well than their symptom-free status would suggest. Together, these studies show why well-being should be measured directly rather than inferred from the absence of problems.

Research on the individual domains points in the same direction. Flow theory describes engagement as deep

absorption in an activity that is challenging but matched to one's skills [6]. Using experience sampling, Shernoff et al. [20] found that high school students were most engaged when instruction was challenging, relevant, and active, and least engaged during passive activities such as listening to lectures. Duckworth and Seligman [7] showed that self-discipline predicted adolescents' grades and attendance better than intelligence, highlighting the value of perseverance. The need to belong is regarded as a fundamental human motivation [1], and perceived social support buffers the harmful effects of stress [4]. Optimism is consistently linked with active coping and subjective well-being [3], and positive emotions broaden thinking and help build lasting personal resources [9].

School-based programmes can strengthen these qualities. A meta-analysis of 213 universal social and emotional learning programmes involving more than 270,000 students reported gains in social and emotional skills, behaviour, and academic performance [8]. Reviews of positive education and school-based positive psychology interventions report similar benefits for well-being and engagement, while stressing that programmes should be adapted to the local context [19, 23]. However, most of this evidence comes from Western samples, and descriptive evidence on the EPOCH profile of Indian school students remains limited.

3. Problem Definition

Research on adolescents in Indian schools has concentrated mainly on stress, anxiety, and academic difficulties, and has less often described students' positive resources. Where well-being has been measured, it has frequently been treated as a single global score, which does not show which strengths are high and which are low. Without such information, school counsellors may plan programmes on assumptions rather than evidence. The present study therefore aimed to describe the level and profile of adolescent well-being among school students using the EPOCH measure. Its objectives were (a) to describe the sociodemographic profile of the participants; (b) to assess their overall level of well-being; (c) to describe their scores on the five EPOCH domains and identify the relatively higher and lower domains; and (d) to examine the internal consistency of the measure in this sample.

4. Methodology

4.1 Research Design

A quantitative, non-experimental, descriptive, cross-sectional survey design was used. No variables were manipulated and no hypotheses were tested; the study was guided by descriptive research questions.

4.2 Participants

The online form yielded 106 response records. All respondents gave consent, no record had missing data on any EPOCH item, and no duplicate records were found, so all 106 students were included in the analysis. Participants were aged 11 to 18 years ($M = 16.33$, $SD = 2.27$) and were studying in Grades 6 to 12. A non-probability convenience sample was used. The profile of the participants is presented in Table 1.

Table 1: Sociodemographic profile of participants (N = 106)

Variable	Category	n	%
Gender	Female	67	63.2
	Male	37	34.9
	Prefer not to say	2	1.9
Age (years)	11–13	15	14.2
	14–16	23	21.7
	17–18	68	64.2
School level	Grades 6–8	15	14.2
	Grades 9–10	14	13.2
	Grades 11–12	76	71.7
	Not reported	1	0.9

4.3 Tool

The questionnaire had two sections. Section A recorded age, gender, and grade. Section B was the 20-item EPOCH measure of adolescent well-being [12], with four items for each of engagement, perseverance, optimism, connectedness, and happiness. Eleven items were rated for frequency (1 = almost never to 5 = almost always) and nine items for self-description (1 = not at all like me to 5 = very much like me). All items are positively worded, so higher scores indicate greater well-being and no reverse scoring was required.

4.4 Procedure and Ethical Considerations

The questionnaire was administered online under the researcher's guidance between 1 September and 24 October 2026. Participants first indicated their agreement to take part, and for students below 18 years of age permission was also sought from parents or guardians. Participation was voluntary, no identifying information such as names, phone numbers, or school names was retained, and the data were used only for academic purposes. The questionnaire contained only positively worded strength statements, which minimised the risk of discomfort.

4.5 Data Analysis

Response labels were coded from 1 to 5. Domain scores were computed as the mean of the four items of each domain and the overall score as the mean of all 20 items, so that every score ranges from 1 to 5. Data were analysed using IBM SPSS Statistics. Frequencies and percentages were computed for the demographic variables, and means, standard deviations, ranges, skewness, and kurtosis for the item, domain, and overall scores. Internal consistency was estimated with Cronbach's alpha [5] and the mean inter-item correlation [2], and alpha values were interpreted using the guidelines of George and Mallery [10]. No cut-off scores were applied to classify students.

5. Results and Discussion

5.1 Sociodemographic Profile

Of the 106 participants, 67 (63.2%) were female, 37 (34.9%) were male, and 2 (1.9%) preferred not to state their gender. Nearly half were aged 18 years (48.1%), 64.2% were aged 17 or 18 years, and 76 students (71.7%) were in Grades 11 and 12 (Table 1). The sample therefore mainly reflects late

adolescence and the final years of school, although early and middle adolescents were also represented.

5.2 Level and Profile of Well-Being

The overall well-being mean was 3.57 (SD = 0.75), with scores ranging from 1.00 to 4.80 (Table 2). This lies above the midpoint of the scale, indicating that, on average, students described the well-being statements as applying to them between “often” and “very often.” Connectedness had the highest mean (M = 3.69), followed by happiness (M = 3.64), optimism (M = 3.60), and perseverance (M = 3.60). Engagement was clearly the lowest domain (M = 3.31), about 0.3 points below the other four (Figure 1).

Table 2: Descriptive statistics and internal consistency of EPOCH scores (N = 106)

Scale	M	SD	Range	Skew	Kurt	α
Engagement	3.31	0.86	1.00–5.00	-0.32	-0.34	0.728
Perseverance	3.6	0.89	1.00–5.00	-0.44	-0.48	0.738
Optimism	3.6	0.9	1.00–5.00	-0.64	0.13	0.762
Connectedness	3.69	0.97	1.00–5.00	-0.5	-0.19	0.792
Happiness	3.64	0.98	1.00–5.00	-0.46	-0.51	0.832
Overall well-being	3.57	0.75	1.00–4.80	-0.8	0.74	0.92

Note. Scores are mean item scores (possible range 1–5); four items per domain, 20 items overall.

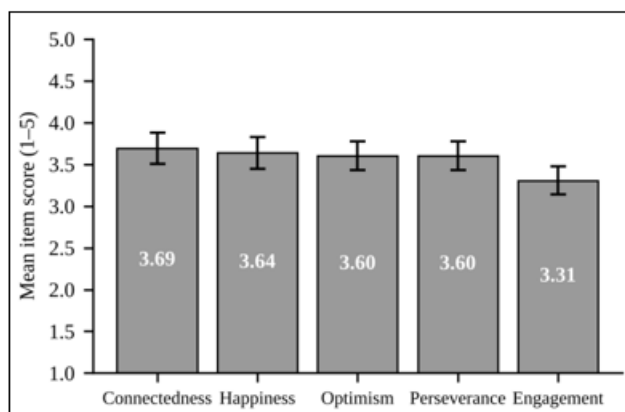


Figure 1: Mean EPOCH domain scores with 95% confidence intervals (N = 106)

Skewness and kurtosis values were within ± 2 for all scores, which is acceptable for descriptive reporting. All scores were negatively skewed, and the overall score showed the strongest skew (-0.80), with a longer tail towards lower scores (Figure 2). Students differed most in their happiness (SD = 0.98) and connectedness (SD = 0.97) scores and least in their engagement scores (SD = 0.86).

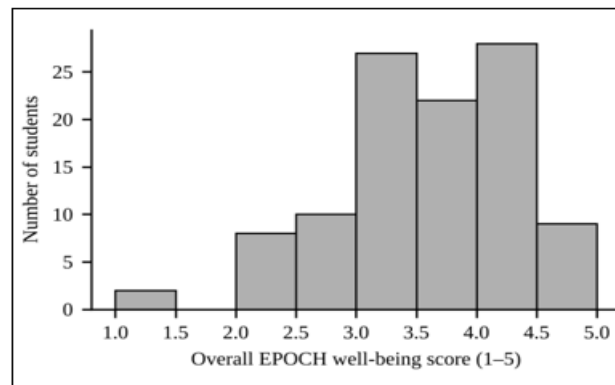


Figure 2: Distribution of overall EPOCH well-being scores (N = 106)

5.3 Item-Level Results

The highest-rated items were “I love life” (H3, M = 3.90), “I am a hard worker” (P4, M = 3.89), and “I am optimistic about my future” (O1, M = 3.85); nearly half of the students (48.1%) chose “almost always” for loving life. The lowest-rated items were “I get so involved in activities that I forget about everything else” (E3, M = 3.17), for which 34.0% of students chose “almost never” or “sometimes,” and “When I am learning something new, I lose track of how much time has passed” (E4, M = 3.21). Three of the four lowest-rated items belonged to engagement (Table 3).

Table 3: Item-level means and standard deviations of the EPOCH items (N = 106)

Code	Item	M	SD
E1	When I do an activity, I enjoy it so much that I lose track of time.	3.45	1.15
E2	I get completely absorbed in what I am doing.	3.4	1.11
E3	I get so involved in activities that I forget about everything else.	3.17	1.21
E4	When I am learning something new, I lose track of how much time has passed.	3.21	1.15
P1	I finish whatever I begin.	3.41	1.23
P2	I keep at my schoolwork until I am done with it.	3.57	1.26
P3	Once I make a plan to get something done, I stick to it.	3.54	1.1
P4	I am a hard worker.	3.89	1.17
O1	I am optimistic about my future.	3.85	1.29
O2	In uncertain times, I expect the best.	3.39	1.11
O3	I think good things are going to happen to me.	3.66	1.18
O4	I believe that things will work out, no matter how difficult they seem.	3.52	1.12
C1	When something good happens to me, I have people who I like to share the good news with.	3.76	1.35
C2	When I have a problem, I have someone who will be there for me.	3.73	1.25
C3	There are people in my life who really care about me.	3.58	1.16
C4	I have friends that I really care about.	3.7	1.18
H1	I feel happy.	3.5	1.18
H2	I have a lot of fun.	3.42	1.19
H3	I love life.	3.9	1.26
H4	I am a cheerful person.	3.73	1.17

Note. E = engagement, P = perseverance, O = optimism, C = connectedness, H = happiness.

5.4 Reliability

The full 20-item measure showed excellent internal consistency ($\alpha = .920$). Domain alphas ranged from .728 for engagement to .832 for happiness, all within the acceptable to good range (Table 2), and the mean inter-item correlations of the domains ranged from .401 to .554. These values are in line with the reliability reported in the original validation [12] and support the use of both the domain and the overall scores for describing this group of students.

5.5 Discussion

The high connectedness score agrees with theories that place relationships at the centre of well-being [1, 17] and with evidence that perceived support protects young people during stressful periods [4]. It also fits the Indian cultural context, in which family and friends remain close sources of emotional security for adolescents. The high ratings for loving life and being a cheerful person add to a picture of students who feel generally positive about their lives. Because positive emotions help build lasting personal resources [9], this is a strength on which schools can build.

The relatively low engagement score is the most notable finding. In flow terms, absorption occurs when tasks are challenging and matched to a person's skills [6, 20]. The present data cannot show why engagement was lower, but one possible explanation is that most participants were in the final school years, when examination preparation may leave little room for self-chosen, absorbing activities. Within perseverance, students rated themselves highly as hard workers but lower on finishing whatever they begin ($M = 3.41$), and within optimism they were less confident about expecting the best in uncertain times ($M = 3.39$). These patterns may reflect realistic concern about the transition out of school. Such interpretations are tentative and need to be tested in further research.

The findings have practical implications for school counsellors and teachers. Strengths-based approaches such as social and emotional learning and positive education [8, 19, 23] could preserve students' strong sense of connectedness through peer support and mentoring, while classroom tasks that are challenging, relevant, and active could foster engagement. Goal-setting and planning exercises may help students complete what they start, and group discussions may build realistic optimism about uncertain situations.

The study has some limitations. It used a cross-sectional design, a convenience sample, and self-report data, so causal inference and generalisation to all school students are not possible. Most participants were in Grades 11 and 12, so the profile may not apply equally to younger students. Four records showed uniform response patterns and were retained, which may have slightly affected the estimates.

6. Conclusion

This study described adolescent well-being among 106 school students using the EPOCH measure. Students reported moderate-to-good overall well-being ($M = 3.57$), with connectedness the strongest domain and engagement the

weakest, while happiness, optimism, and perseverance were close to connectedness. The measure showed excellent internal consistency in this sample. The results suggest that students feel supported and positive about life but less often experience deep absorption in their activities, which points to engagement as a priority area for school-based well-being programmes.

7. Future Scope

Future research should use larger, randomly selected samples that include more students from the middle and secondary grades, so that results can be compared across gender, age, and school type. Studies could also examine how the EPOCH domains relate to academic stress, academic performance, and psychological distress; test the factor structure and develop norms for the EPOCH in Indian students; and use longitudinal and mixed-methods designs to understand how well-being develops across the school years.

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References

- [1] Baumeister RF, Leary MR. The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychol Bull.* 1995;117(3):497–529.
- [2] Briggs SR, Cheek JM. The role of factor analysis in the development and evaluation of personality scales. *J Pers.* 1986;54(1):106–48.
- [3] Carver CS, Scheier MF, Segerstrom SC. Optimism. *Clin Psychol Rev.* 2010;30(7):879–89.
- [4] Cohen S, Wills TA. Stress, social support, and the buffering hypothesis. *Psychol Bull.* 1985;98(2):310–57.
- [5] Cronbach LJ. Coefficient alpha and the internal structure of tests. *Psychometrika.* 1951;16(3):297–334.
- [6] Csikszentmihalyi M. *Flow: the psychology of optimal experience.* New York: Harper & Row; 1990.
- [7] Duckworth AL, Seligman MEP. Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychol Sci.* 2005;16(12):939–44.
- [8] Durlak JA, Weissberg RP, Dymnicki AB, Taylor RD, Schellinger KB. The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. *Child Dev.* 2011;82(1):405–32.
- [9] Fredrickson BL. The role of positive emotions in positive psychology: the broaden-and-build theory of positive emotions. *Am Psychol.* 2001;56(3):218–26.
- [10] George D, Mallery P. *SPSS for Windows step by step: a simple guide and reference, 11.0 update.* 4th ed. Boston: Allyn & Bacon; 2003.
- [11] Gururaj G, Varghese M, Benegal V, Rao GN, Pathak K, Singh LK, et al. National Mental Health Survey of India, 2015–16: prevalence, patterns and outcomes. Bengaluru: National Institute of Mental Health and Neuro Sciences; 2016. NIMHANS Publication No. 129.

- [12] Kern ML, Benson L, Steinberg EA, Steinberg L. The EPOCH measure of adolescent well-being. *Psychol Assess.* 2016;28(5):586–97.
- [13] Kern ML, Waters LE, Adler A, White MA. A multidimensional approach to measuring well-being in students: application of the PERMA framework. *J Posit Psychol.* 2015;10(3):262–71.
- [14] Keyes CLM. The mental health continuum: from languishing to flourishing in life. *J Health Soc Behav.* 2002;43(2):207–22.
- [15] Keyes CLM. Mental health in adolescence: is America's youth flourishing? *Am J Orthopsychiatry.* 2006;76(3):395–402.
- [16] Patton GC, Sawyer SM, Santelli JS, Ross DA, Afifi R, Allen NB, et al. Our future: a Lancet commission on adolescent health and wellbeing. *Lancet.* 2016;387(10036):2423–78.
- [17] Seligman MEP. *Flourish: a visionary new understanding of happiness and well-being.* New York: Free Press; 2011.
- [18] Seligman MEP, Csikszentmihalyi M. Positive psychology: an introduction. *Am Psychol.* 2000;55(1):5–14.
- [19] Seligman MEP, Ernst RM, Gillham J, Reivich K, Linkins M. Positive education: positive psychology and classroom interventions. *Oxf Rev Educ.* 2009;35(3):293–311.
- [20] Shernoff DJ, Csikszentmihalyi M, Schneider B, Shernoff ES. Student engagement in high school classrooms from the perspective of flow theory. *Sch Psychol Q.* 2003;18(2):158–76.
- [21] Steinberg L. Cognitive and affective development in adolescence. *Trends Cogn Sci.* 2005;9(2):69–74.
- [22] Suldo SM, Shaffer EJ. Looking beyond psychopathology: the dual-factor model of mental health in youth. *School Psych Rev.* 2008;37(1):52–68.
- [23] Waters L. A review of school-based positive psychology interventions. *Aust Educ Dev Psychol.* 2011;28(2):75–90.