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Hidden Strain: Affective and Somatic Distress among Senior Secondary Students in Uttarakhand

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Abstract

Adolescence is the period in which most lifetime mental health difficulties first appear, yet school-based evidence from the hill states of India remains thin. Most Indian studies report composite scores for stress, adjustment or emotional intelligence and say little about which specific symptoms students actually report. To describe the extent to which senior secondary students in Uttarakhand report affective (unexplained sadness, difficulty maintaining a positive outlook) and somatic-vegetative (stress-related bodily symptoms, disturbed sleep, persistent exhaustion) distress indicators, alongside a positively worded life-satisfaction item. A descriptive cross-sectional survey was conducted with senior secondary students sampled purposively and randomly from urban and rural schools in six districts (Haridwar, Dehradun, Tehri, Rudraprayag, Pauri and Nainital). Responses to six five-point Likert-type items were summarised using frequencies, means, standard deviations, Wilson 95% confidence intervals for the proportion agreeing, and one-sample *t* tests against the neutral midpoint with Cohen's *d*. Between 80.2% and 87.2% of students agreed or strongly agreed with each of the five distress statements: unexplained sadness (87.2%, 95% CI [83.3, 90.3]), disturbed sleep (84.7% [80.6, 88.0]), stress-related physical symptoms (83.3% [79.1, 86.8]), difficulty maintaining a positive outlook (82.8% [78.5, 86.4]) and exhaustion despite sleep (80.2% [75.8, 84.0]). At the same time, 71.7% [66.8, 76.1] endorsed feeling happy and satisfied with life. All item means were significantly above the scale midpoint (d = 0.80–1.38). Confidence intervals for the distress items overlapped, so the items cannot be ranked. Students reported a very high burden of self-perceived distress symptoms that coexisted with positive life evaluation. Because the figures far exceed clinically derived prevalence estimates, they should be read as indicators of perceived symptom burden requiring confirmation with validated screening instruments, rather than as diagnostic prevalence. Findings support routine school-based screening, sleep-sensitive school policies and counsellor access in Uttarakhand.

Keywords: Adolescent mental health, senior secondary students, somatic complaints, sleep disturbance, psychological distress, Uttarakhand, India

1. Introduction

Adolescence is a developmental window of unusual opportunity and unusual risk. Biological maturation, identity formation, changing peer relationships and rising academic stakes converge in a few years, and the emotional systems that must absorb these demands are themselves still maturing (Patel *et al*., 2007) [29]. Epidemiological work consistently shows that the onset of mental health difficulties clusters in this period: roughly half of all lifetime cases of mental disorder begin by the mid-teens and three-quarters by the mid-twenties (Kessler *et al*., 2005) [19]. The global burden attributable to child and adolescent mental disorders is large, and the great majority of affected young people live in low-and middle-income countries where services are scarce (Kieling *et al*., 2011) [21].

India has the world's largest adolescent population, and the National Mental Health Survey of 2015–16 estimated that approximately 7% of those aged 13–17 years had a current mental morbidity (Gururaj *et al*., 2016; Murthy, 2017) [16, 27]. Such estimates are derived from structured diagnostic interviews and are conservative by design: they count disorders, not the subthreshold symptoms that precede, accompany or follow them. For school systems, the subthreshold range matters at least as much as the diagnostic range, because it is where students first become distracted, sleepless, withdrawn or unwell, and where low-cost preventive action is most feasible.

Senior secondary schooling (Classes XI and XII in India) is a particularly demanding stage. Students choose academic streams, prepare for high-stakes board and entrance

examinations and face parental and social expectations about their future. Indian studies of adolescents in comparable settings report substantial academic stress and examination anxiety, with academic pressure and parental pressure both implicated in poorer mental health (Deb *et al*., 2015) [8]. Uttarakhand adds a further layer of context. Its students study across steep, dispersed and sometimes remote hill terrain as well as in the plains districts of Haridwar and Dehradun, and urban and rural schools differ markedly in resources, travel burden and access to counsellors. To the authors' knowledge, school-based data on how students in this state describe their own emotional and bodily distress are sparse.

Most research on students' mental health in India reports composite scale scores or tests associations between constructs, for example between stress, emotional intelligence and adjustment. Such analyses are valuable but conceal the pattern of symptoms beneath the score. Two students with the same total may differ completely: one may report mainly low mood, another mainly insomnia and headaches. School counsellors, teachers and health workers need to know which indicators are most commonly reported if they are to design screening and support that fit the students in front of them. An item-level view also exposes the response patterns that composite scores hide, including the coexistence of positive and negative evaluations in the same group of students.

The present paper therefore takes a deliberately different approach from earlier reports based on the same doctoral research project, which examined adjustment, academic stress and gendered patterns of emotional intelligence. It does not model relationships between constructs. Instead it asks a descriptive question that the earlier papers did not address: how many senior secondary students in Uttarakhand endorse specific affective and somatic distress statements, with what precision, and how does this compare with their endorsement of a positive life-satisfaction statement?

1.1 Objectives

1. To estimate the proportion of senior secondary students who agree with each of five affective and somatic-vegetative distress statements, with 95% confidence intervals;
2. To describe the full response distribution, mean and variability of each item;
3. To test whether item means differ from the neutral midpoint of the response scale, and by how much; and
4. To examine how endorsement of distress indicators coexists with endorsement of a positively worded life-satisfaction item.

2. Conceptual Background and Review of Literature

2.1 Mental health as a continuum, and positive and negative states as distinct dimensions

The World Health Organization (2004) [38] defines mental health not as the absence of disorder but as a state of well-being in which individuals realise their abilities, cope with the normal stresses of life, work productively and contribute to their communities. Keyes (2002) [20] operationalised this view in the mental health continuum, arguing that flourishing and languishing are not simply the opposite ends of the symptom scale; a person may be free of diagnosable illness yet languish, or be symptomatic yet report meaningful life satisfaction. Greenspoon and Saklofske (2001) [14] made a related empirical argument, showing that subjective well-being and psychopathology are correlated but separable dimensions, and that a two-dimensional classification describes people better than either dimension alone. This dual-continua perspective is central to the present analysis. It implies that finding high endorsement of both a satisfaction item and distress items in the same sample is not necessarily contradictory, and that the two kinds of indicators should be reported side by side rather than collapsed into one score.

2.2 Affective indicators: sadness without a clear cause and difficulty sustaining a positive outlook

Low mood in adolescence frequently appears without an identifiable trigger. Developmentally, depressive symptoms rise across adolescence, and longitudinal work shows that this increase is steepest in the middle teen years (Hankin *et al*., 1998) [17]. Cognitive and affective accounts agree that adolescents have greater emotional reactivity but less mature regulatory capacity, so that diffuse negative affect is common (Gross, 2002) [22]. Meta-analytic evidence indicates that maladaptive regulation strategies, such as rumination and avoidance, are associated with elevated symptoms across a range of psychopathology, whereas strategies such as reappraisal and problem-solving show the opposite pattern (Aldao *et al*., 2010) [1]. Difficulty maintaining a positive outlook is the cognitive-motivational counterpart of low mood and is usually seen as an early marker of vulnerability rather than of disorder.

2.3 Somatic indicators: bodily expressions of psychological strain

Headaches, stomach aches and other bodily complaints are among the most common ways in which children and adolescents express psychological strain. In a community sample, Garber *et al*. (1991) [11] found that recurrent somatic symptoms were widespread in young people and were associated with anxiety and depressive symptoms. Cross-cultural clinical research further shows that the presentation of distress varies by setting: in many cultural contexts, bodily idioms are a primary and socially legitimate way to communicate emotional suffering, and somatic complaints may reach clinicians or teachers before emotional ones do (Kirmayer, 2001) [22]. In Indian schools, where emotional language for distress may be limited and stigma remains a concern, bodily complaints are therefore a particularly informative indicator.

2.4 Sleep disturbance and persistent fatigue

Sleep is both a consequence and a cause of mental health difficulties in adolescence. Biological changes in circadian timing delay the adolescent sleep phase, while early school start times, long study hours, examination pressure and screen use shorten opportunities to sleep, a combination Carskadon (2011) [4] has described as a "perfect storm". Dahl and Lewin (2002) [7] reviewed the evidence that sleep regulation and emotional and behavioural regulation are tightly coupled in adolescence. A meta-analytic review found that poorer sleep quality, shorter sleep duration and

daytime sleepiness were associated with poorer school performance in children and adolescents (Dewald *et al*., 2010) [9]. Exhaustion that persists after a full night's sleep is of particular interest, because it suggests that the problem lies in sleep quality or in non-sleep contributors to fatigue, including low mood, anxiety and chronic stress.

2.5 Coping, emotional skills and the school as a setting for prevention

The transactional model of stress and coping treats distress as the outcome of an individual's appraisal of demands relative to resources (Lazarus & Folkman, 1984) [23]. Reviews of coping in childhood and adolescence emphasise that the availability and flexibility of coping strategies determine whether demands become symptoms (Compas *et al*., 2001) [6]. Emotional intelligence, conceptualised as the ability to perceive, understand, use and manage emotion (Salovey & Mayer, 1990; Mayer *et al*., 2004) [33, 25], has been linked to better health in two meta-analyses (Martins *et al*., 2010; Schutte *et al*., 2007) [24, 34]. Because these capacities can be taught, schools are a logical setting for prevention. A large meta-analysis of universal school-based social and emotional learning programmes found significant gains in emotional skills, attitudes and behaviour, and in academic performance (Durlak *et al*., 2011) [10], and a coordinated framework linking social, emotional and academic learning has been advanced as a basis for school-based prevention (Greenberg *et al*., 2003) [13]. Help-seeking among young people is, however, constrained by stigma, poor mental health literacy and limited access to trusted adults, which makes active identification within schools more important (Rickwood *et al*., 2005) [32].

2.6 Rationale and gap

Taken together, the literature suggests that (a) adolescent distress is common and often subthreshold; (b) it presents through affective, somatic and sleep-related channels; (c) positive and negative states are partly independent; and (d) schools are a feasible setting for early identification. What is missing for Uttarakhand is a transparent, item-level description of how many students report each indicator, with estimates of precision. Such evidence is necessary before more complex models can be interpreted and before screening priorities can be set.

3. Methodology

3.1 Design

A descriptive cross-sectional survey design was used. The survey formed part of a larger doctoral project on mental health, emotional intelligence and adjustment of senior secondary students; the present analysis is restricted to the six items that address affective and somatic-vegetative distress and life satisfaction.

3.2 Setting and participants

Data were collected from senior secondary schools in six districts of Uttarakhand: Haridwar, Dehradun, Tehri, Rudraprayag, Pauri and Nainital. The districts span plains, foothill and high-hill settings. Purposive random sampling was used. The purposive element ensured representation of male and female students and of urban and rural schools; students within each stratum were then selected at random. Approximately 30 students (15 male, 15 female) were drawn from each participating school. The full project sample comprised 720 students, equally divided by gender (360 male, 360 female) and by locality (180 urban and 180 rural in each gender group). Item-level analysis reported here is based on 355–360 valid responses per item [Author to confirm and state the exact analytic sample, and whether the item distributions pertain to the full sample or to a subsample].

3.3 Instrument

A structured, self-administered questionnaire with five-point Likert-type items was used (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The six items analysed here were:

- **Life satisfaction (positively worded):** "I feel happy and satisfied with my life most of the time."
- **Unexplained sadness:** "I often feel sad or depressed without knowing the reason."
- **Positive outlook:** "I find it hard to maintain a positive outlook on life."
- **Somatic symptoms:** "I experience physical symptoms (e.g., headaches, stomach aches) due to stress or anxiety."
- **Sleep disturbance:** "My sleep patterns are often disturbed due to my mental health."
- **Exhaustion:** "I feel physically exhausted even after a full night's sleep."

The five distress items are worded so that higher scores indicate greater distress; the life-satisfaction item is worded in the positive direction, so that higher scores indicate greater satisfaction. Items were therefore analysed one by one and were not summed into a total score.

3.4 Procedure and ethical considerations

Permission was obtained from school authorities, and students completed the questionnaire in school after the purpose of the study was explained. Participation was voluntary and responses were anonymous.

3.5 Data analysis

For each item, the frequency and percentage of each response category were computed from valid responses. Agreement was defined as the proportion choosing *agree* or *strongly agree*, and disagreement as the proportion choosing *strongly disagree* or *disagree*. Ninety-five percent confidence intervals for proportions were computed with the Wilson score method, which performs well for proportions close to 0 or 1 and for moderate sample sizes (Brown *et al*., 2001; Wilson, 1927) [3, 37]. Means and standard deviations were computed by coding categories 1–5; although individual Likert items are ordinal, treating five-point items as interval-scaled for descriptive and parametric purposes is defensible with samples of this size (Norman, 2010; Sullivan & Artino, 2013) [28, 35]. Each mean was compared with the neutral midpoint (3.00) using a one-sample *t* test, and effect size was expressed as Cohen's *d* (Cohen, 1988) [5], with values of about 0.2, 0.5 and 0.8 conventionally read as small, medium and large. Because the same respondents

answered all items, confidence intervals for different items are not independent; comparisons between items are therefore descriptive. Analyses were carried out in SPSS and cross-checked by hand calculation. No inferential comparison of gender or locality groups is made in this paper.

4. Results

4.1 Response distributions and central tendency: Table 1 presents the response profile for each item. Valid responses ranged from 355 to 360 per item, so missing data never exceeded 1.4% of cases.

Table 1: Response profile and one-sample tests against the scale midpoint (3.00)

Item	*n*	Disagree (%)	Neutral (%)	Agree (%)	*M*	*SD*	*T*	Cohen's *d*
Life satisfaction (positive)	360	13.1	15.3	71.7	3.90	1.13	15.11	0.80
Unexplained sadness	359	6.7	6.1	87.2	4.28	0.93	26.07	1.38
Hard to keep positive outlook	355	7.9	9.3	82.8	4.17	1.00	21.94	1.16
Stress-related physical symptoms	359	7.5	9.2	83.3	4.18	0.96	23.30	1.23
Sleep disturbed by mental health	359	8.6	6.7	84.7	4.26	0.97	24.59	1.30
Exhausted despite full night's sleep	359	7.5	12.3	80.2	4.10	0.98	21.35	1.13

Note: Disagree = strongly disagree + disagree; Agree = agree + strongly agree. Percentages are based on valid responses. All *t* tests are significant at $p<.001$.

All six item means lay above the midpoint of the scale, and every test was significant at $p<.001$. For the five distress items, mean scores fell between 4.10 and 4.28, that is, between "agree" and "strongly agree". The associated effect sizes (d = 1.13 to 1.38) were large by conventional standards. The life-satisfaction item also exceeded the midpoint (M = 3.90, d = 0.80), but its mean was lower and its standard deviation higher (1.13) than for any distress item, indicating a more dispersed response pattern.

4.2 Proportion agreeing, with confidence intervals

Table 2 gives the proportion of students agreeing with each statement and the proportion choosing the strongest category.

Table 2: Proportion agreeing with each statement (Wilson 95% confidence intervals)

Item	Agree or strongly agree, *n*	% [95% CI]	Strongly agree (%)
Unexplained sadness	313	87.2 [83.3, 90.3]	49.3
Sleep disturbed by mental health	304	84.7 [80.6, 88.0]	52.1
Stress-related physical symptoms	299	83.3 [79.1, 86.8]	44.3
Hard to keep positive outlook	294	82.8 [78.5, 86.4]	45.1
Exhausted despite full night's sleep	288	80.2 [75.8, 84.0]	40.4
Life satisfaction (positive)	258	71.7 [66.8, 76.1]	36.7

The most frequently endorsed statement was unexplained sadness (87.2%), followed by sleep disturbance (84.7%), stress-related physical symptoms (83.3%), difficulty maintaining a positive outlook (82.8%) and exhaustion despite sleep (80.2%). The span between the highest and lowest of these five proportions is only 7 percentage points, and the confidence intervals overlap extensively (the lowest lower bound is 75.8% and the highest upper bound is 90.3%). The ordering of the five distress items should therefore not be over-interpreted: the data show that these indicators are all very commonly endorsed, not that one is reliably more common than another.

Intensity of endorsement was also high. About half of all students choose *strongly agree* for unexplained sadness (49.3%) and sleep disturbance (52.1%), and 40% to 45% did so for the remaining distress items. Disagreement was uncommon, ranging from 6.7% to 8.6% across distress items, and neutral responses were also few (6.1% to 12.3%), suggesting that students held clear views on these statements rather than defaulting to the midpoint.

4.3 Coexistence of distress and life satisfaction

Similar proportions of students endorsed positive and negative statements: 71.7% agreed that they were happy and satisfied with life most of the time, while between 80.2% and 87.2% endorsed each distress statement. The interval for life satisfaction [66.8, 76.1] did not overlap with the intervals for unexplained sadness, sleep disturbance, physical symptoms or difficulty maintaining a positive outlook, and overlapped only marginally with the interval for exhaustion; because the same respondents answered all items, this comparison is indicative only. Substantively, the result means that most students described themselves simultaneously as satisfied with life and as burdened by distress symptoms, though satisfaction was somewhat less widely endorsed than distress. Item-level data cannot show how many individual students gave both responses, an issue taken up in the Discussion.

5. Discussion

5.1 Principal findings

This study described how senior secondary students in six districts of Uttarakhand responded to six items on affective and somatic-vegetative distress and life satisfaction. Four findings stand out. First, endorsement of every distress statement was very high, with 80.2% to 87.2% of students agreeing. Second, the effect sizes relative to the scale midpoint were large (d = 1.13 to 1.38), and about half of all students chose the strongest category for unexplained sadness and for sleep disturbance. Third, the five distress indicators were statistically indistinguishable in prevalence, so that no single symptom emerged as the dominant problem. Fourth, a clear majority (71.7%) simultaneously endorsed feeling happy and satisfied with life. Taken

together, the results describe a student population that perceives itself as carrying a heavy symptom load across mood, body and sleep, while still evaluating life positively.

5.2 How should the very high prevalence be read?

The proportions reported here are an order of magnitude higher than the roughly 7% current mental morbidity estimated for Indian adolescents aged 13–17 years in the National Mental Health Survey (Gururaj *et al*., 2016; Murthy, 2017) [16, 27]. The two figures are not in conflict, because they measure different things. The survey estimate counts clinically defined disorders ascertained by structured interview, whereas the present items ask whether a symptom statement is generally true of the respondent, with no frequency, duration, impairment or severity threshold. Agreement with a statement such as "I often feel sad without knowing the reason" is a long way from meeting criteria for depression. The appropriate reading is that students perceive themselves as experiencing these states often, not that more than four-fifths of them are clinically unwell.

Several features of the instrument also call for caution. The statements are worded so as to presuppose a problem (for example, "my sleep patterns are often disturbed due to my mental health"), which invites agreement from students who sleep poorly for other reasons. All five distress items are keyed in the same direction, and a general tendency to agree with statements regardless of content, known as acquiescence, is a recognised source of bias in self-report scales (Paulhus, 1991; Podsakoff *et al*., 2003) [30, 31]. The questionnaire was also presented as a mental-health survey, which may prime respondents to consider and report difficulties. These possibilities cannot be separated from true symptom burden in the present data, since no reverse-keyed distress items or validated comparison scales were included. They do not make the findings uninformative, but they do mean that the exact magnitudes should be confirmed with validated screening tools before being used as prevalence figures.

5.3 Coexistence of distress and satisfaction

The coexistence of high satisfaction and high distress is, at first sight, puzzling. Two explanations are plausible and are not mutually exclusive. The first is substantive: if well-being and distress are partly independent dimensions, as the dual-continua literature argues (Greenspoon & Saklofske, 2001; Keyes, 2002) [14, 20], then students can evaluate their lives as satisfying overall while experiencing a considerable amount of low mood, bodily tension and poor sleep. Adolescents who value education, family and future prospects may rate life satisfaction highly even while under strain. The second explanation is methodological: acquiescence would inflate agreement with both positively and negatively worded statements. Because the data are item-level, the analysis cannot show how many individual students gave both responses, and the satisfaction proportion was in fact significantly lower than the proportion endorsing most distress items, which is what a pure acquiescence account would not predict. A cross-tabulation or latent-profile analysis of respondent-level data would be the most direct way to discriminate between the explanations.

5.4 Somatic, sleep and mood indicators together

The finding that stress-related physical symptoms, sleep disturbance and exhaustion despite a full night's sleep were endorsed by 80% to 85% of students fits the view that psychological strain in adolescents is often expressed through the body (Garber *et al*., 1991; Kirmayer, 2001) [11, 22]. In many Indian school settings, bodily complaints are socially easier to voice than emotional ones, which makes headaches, stomach aches and tiredness useful entry points for identification. The persistence of exhaustion after sleep deserves particular attention. It suggests that the issue is not only the quantity of sleep but also its quality, and that fatigue may in part reflect mood and chronic stress rather than simple sleep restriction (Carskadon, 2011; Dahl & Lewin, 2002) [4, 7]. Because sleep problems are consistently associated with poorer school performance (Dewald *et al*., 2010) [9], the sleep-related findings are relevant to educational outcomes as well as to health.

The prominence of unexplained sadness and difficulty in maintaining a positive outlook is consistent with developmental evidence that depressive symptoms rise across adolescence (Hankin *et al*., 1998) [17] and with the account that emotion regulation capacities are still developing (Gross, 2002) [22]. The finding that the most common affective indicator is sadness without a known reason suggests that many students may lack the emotional vocabulary or the reflective space to link their feelings to causes. This is precisely the situation in which skills for identifying and understanding emotion, which are central to emotional intelligence (Mayer *et al*., 2004; Salovey & Mayer, 1990) [25, 33], and for coping and regulation (Aldao *et al*., 2010; Compas *et al*., 2001) [1, 6], are likely to be useful.

5.5 Contextual considerations for Uttarakhand

The sample was drawn from six districts that differ in terrain, urbanisation and school resources, and the project design included equal numbers of urban and rural students. The analysis reported here pools all students, so it cannot say whether the burden is greater in hill or plains districts, or in rural or urban schools. Ecological accounts of development (Bronfenbrenner, 1979) [2] would predict that distance from school, household responsibilities, migration of family members, limited counselling provision and examination pressure all shape adolescents' experience in different ways in different districts. These are hypotheses for future stratified analysis, not conclusions of the present study.

5.6 Implications for practice and policy

Several implications follow, offered with the caution that the data are descriptive and self-reported.

Screening before intervention. Schools should adopt brief, validated screening tools suited to adolescents and to Indian languages and contexts, for example the Patient Health Questionnaire for Adolescents (Johnson *et al*., 2002) [18], the Strengths and Difficulties Questionnaire (Goodman, 1997) [12] and the WHO-5 Well-Being Index (Topp *et al*., 2015) [36], so that students needing further assessment can be distinguished from those experiencing ordinary distress.

Use somatic and sleep complaints as entry points. Teachers and school health staff can be trained to treat recurrent

headaches, stomach aches, tiredness and sleep complaints as possible signs of psychological strain, and to respond with a supportive conversation and referral pathways rather than only with physical remedies.

Sleep-sensitive school and home routines. The evidence on adolescent sleep supports schedules that avoid very early starts, limit late-night study and screen use, and protect sleep during examination periods (Carskadon, 2011; Dahl & Lewin, 2002) [4, 7]. Schools and parents can jointly discuss realistic study-sleep trade-offs.

Universal social and emotional learning. Whole-class programmes that teach emotion recognition, understanding and regulation, coping and help-seeking have demonstrable benefits for emotional skills and for academic outcomes (Durlak *et al*., 2011; Greenberg *et al*., 2003) [10, 13]. Such programmes fit with the emphasis on holistic development and student well-being in India's National Education Policy (Ministry of Education, 2020) [26].

Counsellor access and stigma reduction. Because adolescents seldom seek help on their own (Rickwood *et al*., 2005) [32], schools should make counsellors visible and approachable, ensure that rural and high-hill schools are not left behind, and involve parents in mental health literacy activities.

5.7 Limitations

The findings should be interpreted in light of the following limitations. First, the data are cross-sectional self-reports, and responses may have been affected by social desirability, acquiescence and priming. Second, each construct is represented by a single item, so reliability at the construct level cannot be assessed and the items do not map onto diagnostic criteria. Third, there was no clinical or validated-scale benchmark against which to calibrate the agreement threshold. Fourth, the analysis is based on item-level response distributions rather than respondent-level data, so individual-level co-occurrence of symptoms, and the comparison of gender, locality or district groups, could not be examined here. Fifth, the sample was drawn from six districts of a single state, and although it was purposive-random rather than convenience-based, generalisation to all students in Uttarakhand or India should be made cautiously. Finally, the five distress items were worded in a common direction, which limits the ability to separate substantive from stylistic agreement.

5.8 Directions for future research

Future work should (a) administer validated screening instruments alongside the present items to calibrate the agreement thresholds; (b) include reverse-keyed items and acquiescence controls; (c) analyse respondent-level data to examine symptom co-occurrence and latent profiles; (d) compare districts, urban and rural schools and gender groups with multilevel models that account for clustering of students within schools; (e) follow students longitudinally through the board-examination year; and (f) use interviews or focus groups to understand what students mean by "sadness without a reason" and how they interpret bodily symptoms.

6. Conclusion

In a sample of senior secondary students from six districts of Uttarakhand, more than four in five students agreed with each of five statements describing affective and somatic-vegetative distress, and about seven in ten simultaneously agreed that they were happy and satisfied with life. The distress indicators were so uniformly endorsed that none could be called the leading problem. These figures describe perceived symptom burden and are not diagnostic prevalence estimates; nevertheless, their size, together with the central role of sleep, bodily complaints and low mood, justifies attention from schools and policymakers. Validated screening, sleep-sensitive school practices, social and emotional learning and accessible counselling are practical starting points, and respondent-level, stratified and longitudinal research is the necessary next step.

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