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Effect of Heartfulness Relaxation Technique on Psychological Well-Being Among Adolescents and Adults

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Abstract: ***This investigation examined psychological outcomes associated with Heartfulness Relaxation in two distinct samples. Sixty-six adolescent girls completed a 14-day single-group pretest–posttest intervention, while 81 adults who already practised Heartfulness completed a multilingual, cross-sectional survey. Adolescent outcomes were WHO-5 well-being, PSS-10 stress and a researcher-developed cognition self-rating survey (CSRS); adult outcomes included WHO-5, PSS-10, anxiety-related GAD-7 items and sleep experiences. In adolescents, WHO-5 scores increased from 15.23 to 18.68 ($t(65)=4.65$, $p<.001$), and CSRS scores rose from 23.71 to 30.36 ($t(65)=9.86$, $p<.001$). PSS-10 change was nonsignificant ($p=.182$). In adults, mean WHO-5 was 85.43/100 and PSS-10 was 14.32/40; mean GAD-7 was 2.57 among 58 scorable respondents. Adults reported perceived sleep-related benefits, but lacked baseline observations. Findings support further controlled evaluation; adult results cannot establish causal effectiveness. Open-ended adult responses suggested perceived calmness and stress relief, but were not formally coded.***

Keywords: Heartfulness Relaxation, psychological well-being, perceived stress, anxiety, sleep quality, adolescents, adults

1. Introduction

Psychological well-being and perceived stress are important across adolescence and adulthood. Heartfulness Relaxation uses progressive bodily relaxation followed by resting attention on the heart. It may be practised independently or alongside meditation [1]. Prior Heartfulness programmes have reported favourable stress and well-being outcomes, although the relaxation component alone remains less studied [2], [3]. The present study combines a short adolescent intervention with a descriptive survey of established adult practitioners; their distinct designs are analysed separately.

2. Literature Survey

Research on mindfulness and relaxation provides a rationale for studying stress and well-being. Desai et al. [2] described improved stress and sleep-related outcomes in a virtual Heartfulness programme, while Gupta et al. [3] reported reduced perceived stress among female students participating in a Heartfulness meditation programme. These studies concern broader meditation programmes and do not establish the independent effect of the relaxation component. The WHO-5 [4] and PSS-10 [5] provide established self-report measures for the present investigation.

3. Problem Definition

Evidence specific to Heartfulness Relaxation alone remains limited, particularly across different age groups. This study addresses two related questions: whether psychological scores changed after a 14-day relaxation programme in school-going adolescents, and what psychological characteristics and relaxation-related experiences were reported by adults already practising the technique. Because the samples were studied using different designs, their outcomes are analysed and interpreted separately.

4. Materials and Methods

Design and recruitment. The adolescent study used a single-group pretest–posttest design among 66 Class IX girls (ages 12–16) at a girls' school in Ganapavaram, Andhra Pradesh. They practised relaxation for approximately 10–15 minutes daily for 14 days. The adult study used a cross-sectional, voluntary survey of 81 existing practitioners (56 women, 25 men; age 27–79 years) in Telugu (n=49), English (n=24) and Hindi (n=8). The total sample was 147, but groups were not combined for intervention-effect estimation.

Measures. Adolescents completed the WHO-5 Well-Being Index [4] (reported as raw scores, 0–25), PSS-10 [5] (0–40), and a researcher-developed cognition self-rating survey (CSRS). Adults completed WHO-5 (transformed to 0–100), PSS-10, anxiety items based on GAD-7 [6], four researcher-constructed sleep questions and open-ended experience items. For adult PSS-10, items 4, 5, 7 and 8 were reverse coded. Only 58 adults selected exclusively standard GAD-7 categories; 23 nonstandard responses could not be assigned comparable GAD-7 totals. The questionnaire recall wording also differed from the standard GAD-7.

Statistical approach. Adolescent paired-sample t tests, Shapiro–Wilk checks, Wilcoxon signed-rank sensitivity tests and paired effect sizes were reported from the approved dissertation, with $\alpha=.05$. The adult component was summarised through means, standard deviations, frequencies and percentages; it had no matched baseline or follow-up and therefore no adult change tests or causal effect sizes. Participants provided informed consent as described in the dissertation.

Qualitative approach: Open-ended adult responses in English, Telugu and Hindi were also reviewed descriptively for recurring experiences. The summary was not a formal

coded thematic analysis; no theme frequencies or inter-rater agreement statistics were calculated.

5. Results

The adolescent intervention was followed by increased WHO-5 and CSRS scores; the PSS-10 decrease did not meet the statistical significance threshold (Table 1).

Table 1: Adolescent pretest–posttest results (n=66)

Scale	Pre M (SD)	Post M (SD)	Test / p
WHO-5	15.23 (5.10)	18.68 (4.62)	t=4.65; <.001
PSS-10	18.44 (3.80)	17.65 (3.63)	t=−1.35; .182
CSRS	23.71 (4.77)	30.36 (4.88)	t=9.86; <.001

For the adolescent paired comparisons, degrees of freedom were 65. Reported Cohen's d values were 0.57 (WHO-5), −0.17 (PSS-10) and 1.21 (CSRS); the CSRS is not a validated cognition instrument.

Among 81 adults, 68 (84.0%) obtained WHO-5 scores above 70. PSS-10 descriptive categories were low in 36 (44.4%), moderate in 44 (54.3%) and high in one (1.2%). Among 58 adults with scorable GAD-7 responses, 48 (82.8%) were within the minimal-anxiety band. Table 2 presents adult scale summaries.

Table 2: Adult cross-sectional outcomes

Measure	N	Mean (SD)	Median [IQR]
WHO-5 /100	81	85.43 (18.78)	92 [80–100]
PSS-10 /40	81	14.32 (6.61)	15 [10–19]
GAD-7 /21*	58	2.57 (3.71)	1 [0–3.75]
Sleep /20**	81	17.14 (2.86)	18 [16–20]

*Only standard-category answers were scored; **unvalidated, exploratory sleep-favourability composite, not a change score.

For sleep-related individual items (1–5), reported reduction in pre-sleep thoughts averaged 4.37 (SD=1.16), and ease of falling asleep after the technique averaged 4.20 (SD=1.20). Reported frequent awakening averaged 2.19 (SD=1.23) and continued sleep-medication need 1.25 (SD=0.83). The first two items specifically asked about perceived Heartfulness benefits. Open-ended adult accounts described calmness, reduced tension, emotional composure and restful sleep, with variation in perceived duration and benefit; no formal coded thematic analysis was conducted.

Qualitative findings: Across open-ended responses, recurring themes included perceived stress relief and inner calm, coping with worry, sleep-related comfort, clearer thinking, and applying relaxation to daily responsibilities. Some adults described temporary or inconsistent effects. Respondents sometimes practised relaxation with meditation or prayer, limiting attribution to relaxation alone.

6. Discussion

The adolescent results show within-person changes in reported well-being and cognition after two weeks, without statistically significant change in perceived stress. This pattern accords broadly with prior interest in relaxation-based approaches, but the uncontrolled design does not distinguish practice effects from expectancy, maturation or other influences. The self-constructed CSRS warrants particular caution.

Adult respondents generally reported favourable current well-being and low-to-moderate stress; many also attributed subjective pre-sleep relief to the relaxation practice. These findings are relevant to participants' experiences but cannot be read as before-and-after improvements. The adult sample comprised established practitioners rather than an experimentally assigned comparison group, and standard GAD-7 interpretation is limited by altered response/recall options. Direct comparisons of effects across adolescent and adult samples would therefore be misleading.

Qualitative interpretation: The descriptive responses add context to these numerical findings: participants often characterised the practice as calming and helpful before sleep or meditation, while a minority reported uncertainty or only short-lived relief. These accounts reflect participants' interpretations and were not independently verified.

6.1 Interpretation of Outcome Measures

The WHO-5 assesses subjective well-being, rather than diagnosing a psychological condition. Raw adolescent WHO-5 scores and the adult 0–100 transformed scores are on different numerical scales; they should not be compared by subtracting group means. Perceived stress represents personal appraisal of demanding circumstances and can coexist with reports of positive well-being. Accordingly, high adult WHO-5 scores are not incompatible with moderate PSS-10 scores for a substantial proportion of respondents.

The adult GAD-7 analysis requires careful denominators. All 81 adults answered the anxiety-related questionnaire, but the reported mean and symptom categories apply only to the 58 people whose response options allowed conventional numerical scoring. The 23 remaining responses are not automatically evidence of absent anxiety, nor can the 58-person subgroup be assumed representative of every surveyed adult. Likewise, the sleep-favourability score combines different question directions; item-level interpretations better reflect what respondents were actually asked.

6.2 Implications for Practice

The short, guided format of Heartfulness Relaxation may make it feasible to study in educational and community settings. The adolescent findings suggest that a brief practice can be followed by changes in self-reported well-being and cognitive confidence within a school setting. Nevertheless, the present investigation did not test academic performance, clinical diagnoses or sustained change. The adult survey provides information about perceptions among people familiar with the practice, rather than evidence supporting adoption as a stand-alone clinical therapy.

A useful next study would recruit intervention-naïve adolescents and adults and collect the same validated measures at baseline, immediately after a prespecified

practice period and at follow-up. Allocation to an active comparator or wait-list group would help separate intervention-specific changes from contextual factors. Standardised multilingual response options and consistent recall periods would also improve the comparability of psychological measures.

7. Limitations

The adolescent sample included only girls from one school, had a short follow-up and no control group; cognition was measured with a nonvalidated survey. The adult survey was voluntary and cross-sectional, with potential selection and social-desirability biases, unvalidated multilingual equivalence, partially unscorable GAD-7 responses and a nonvalidated mixed-direction sleep composite. Randomised or controlled longitudinal studies with consistent validated instruments, larger diverse samples and longer follow-up are needed.

7.1 Reporting and Generalisability

Recruitment context matters when considering applicability. The adolescent intervention involved participants of a single sex and similar school grade in one institution; reported changes may depend on classroom structure, facilitator presence and the timing of assessment. The adult cohort, by contrast, spanned a much wider age range and was largely composed of respondents with more than three months of previous practice (79 of 81; 97.5%). The adult findings therefore speak mainly to current experiences of self-selected, established practitioners, rather than outcomes for adults beginning the relaxation technique for the first time.

Importantly, neither component permits a direct estimate of the difference in treatment response between adolescents and adults. The adolescent study measured repeated outcomes during a specified 14-day period, while the adult study measured current status only; the absence of a common baseline, comparator and observation interval prevents an age-group intervention comparison. The two components are complementary primarily because they illuminate different populations and research questions.

The qualitative descriptions in the adult questionnaire are useful contextual information but have not been systematically coded by independent raters. Frequencies for individual qualitative themes were not established, and no attempt was made to turn these accounts into additional statistical outcomes. In future investigations, preplanned qualitative interviews, translated and independently checked transcripts, and a documented coding procedure could improve understanding of why some practitioners perceive benefits and others report uncertain or short-lived effects.

8. Future Scope

Future studies should use controlled, adequately powered designs with matched baseline and follow-up measures in both age groups. Validated multilingual versions of anxiety and sleep instruments, consistent recall periods, and prespecified measures of practice adherence would improve interpretability. Longer follow-up and comparison with other relaxation methods could assess whether observed changes persist and whether they are attributable specifically to Heartfulness Relaxation.

9. Conclusion

Heartfulness Relaxation was followed by significant improvements in adolescent self-rated well-being and cognition, but not perceived stress, in a 14-day uncontrolled programme. Adults who were already practising reported generally favourable psychological status and perceived sleep-related benefits. These complementary observations justify further rigorous investigation but do not demonstrate causality, particularly for adults. The adults' descriptive responses similarly emphasised perceived calmness, stress management and sleep-related comfort, alongside some variable or temporary experiences. Such reports are subjective and do not establish a causal effect.

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Author Profile

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