**Short Research Report**

# Enhancing Mental Health and Emotional Intelligence in Peruvian University Students through Socioformative Strategies

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The prevalence of mental health issues among young people, including anxiety, depression, and stress, has risen significantly. This study examines the effectiveness of socioformative strategies in enhancing emotional intelligence and reducing mental health issues in university students. A quantitative, pre-experimental study involved 187 students from one university in Peru with diagnosed mental health issues, utilising the Emotional Intelligence Socio-Formation Scale (EOSF), Trait Meta-Mood Scale (TMMS), and Depression, Anxiety, and Stress Scales (DASS). Wilcoxon test analysis revealed significant improvements in emotional intelligence ($p = 0.03$), depression ($p = 0.02$), anxiety ($p = 0.00$), and stress ($p = 0.01$). These findings show a substantial reduction in mental health symptoms and a 79.68% improvement in emotional intelligence, supporting broader implementation in Peruvian universities.

**Keywords:** university students; socioinformative strategies; educational guidance; emotional intelligence; mental health.

## Introduction

The mental health of university students is a major concern, with academic demands, social pressures, and expectations leading to stress, anxiety, and depression (American College Health Association, 2021). Recent

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research after the pandemic among Peruvian university students found that 36.8% experienced extremely severe anxiety, 33.4% depression, and 18.1% stress. Path analysis revealed that resilience, social support, academic self-efficacy, and digital inclusion significantly impacted students' general distress (Cassaretto, et. al., 2024).

Socioformation offers a promising solution to address mental health issues amongst university students by integrating social and formative aspects to support holistic development and learning (Tobón et al., 2015). It is an educational approach focused on developing comprehensive competencies, emphasising cognitive, emotional, and social growth. It prioritises mental well-being through collaborative learning, problem-solving, and emotional management, helping students build resilience and cope with stress, anxiety, and depression (Prado, 2018; Tobón et al., 2015).

## Methodology

### Population and sampling

The study began with 207 students, but 10% dropped out, leaving 187 participants at the end. Selected through non-probability sampling, all participants had pre-existing mental health issues identified via self-assessments and diagnostic tests. Recruited through announcements and referrals, they completed a pretest, participated in a five-month intervention, and took a posttest to assess the intervention's effects.

**Table I**

*Sociodemographic data of students who participated in this study*

| Indicator | Categories | Frequency | Percentage (%) |
|---|---|---|---|
| N | | | 187 |
| Age | 18 - 20 | 54 | 28.9 |
| | 21 - 25 | 72 | 38.5 |
| | 26 - 30 | 61 | 32.6 |
| Gender | Male | 104 | 55.6 |
| | Female | 83 | 44.4 |

### Intervention Programme

From December 2023 to April 2024, the intervention aimed to enhance emotional intelligence and reduce symptoms of anxiety, depression, and stress through participatory, experiential socio-formative strategies. This pre-experimental programme featured structured sessions with hands-on activities, emphasising teamwork and practical learning over traditional theoretical approaches. The programme comprised five components: intrapersonal skills, interpersonal skills, adaptability, emotional management, and general mood. Activities such as self-assessment, role-play, problem-solving, mindfulness, and creative expression developed socio-emotional skills progressively, with a non-linear approach that allowed these components to interconnect, enhancing emotional intelligence through multiple dimensions.

*Instruments*

To assess participants' emotional intelligence and emotional states, three validated instruments were used.

*Meta-Trait Mood Scale (TMMS)*: Adapted by Salguero et al. (2010), this 24-item scale measures emotional intelligence in three dimensions: Emotional Attention, Emotional Attention, Emotional Clarity, and Emotional Repair. Scores are summed across all items and classified as good, fair, or poor. The reliability index is α = 0.85 for both pretest and posttest.

*Depression, Anxiety, and Stress Scale (DASS):* Developed by Lovibond and Lovibond (1995), this 21-item scale measures the severity of depression, anxiety, and stress symptoms, with 7 items per subscale. Results are classified as severe, moderate, or mild, and the reliability index is α = 0.90.

*Socioformative Emotional Intelligence Scale (EOSF):* Designed by Silva Fernandez (2023), it measures emotional intelligence across five subscales: intrapersonal skills, interpersonal skills, adaptability, emotional management, and general mood. The scale consists of 30 items rated from 1 (strongly disagree) to 7 (strongly agree), with scores summed to provide an overall classification of good, fair, or poor (α = 0.93).

Pretest and posttest data were matched by participant identifiers, allowing individualised progress tracking. Analysis with SPSS v27 used Wilcoxon tests for paired data to calculate statistically significant changes, reflecting individual improvements.

## Results

**Table II**

*Average scores (means) and standard deviations (SD) for each scale before the cut-off points are applied*

|  | Mean | Std Dev |
|---|---|---|
| DASS Depression | 12.45 | 3.21 |
| DASS Anxiety | 10.3 | 2.87 |
| DASS Stress | 14.67 | 3.45 |
| TMMS Emotional Attention | 20.12 | 4.05 |
| TMMS Emotional Clarity | 18.54 | 3.98 |
| TMMS Mood Repair | 16.75 | 4.22 |

**Table III**

*Severity of symptoms of depression, anxiety, and stress in the pretest and posttest using the DASS*

| Levels | Depression | | | | Anxiety | | | | Stress | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Pretest | | Postest | | Pretest | | Postest | | Pretest | | Postest | |
|  | f | % | f | % | f | % | f | % | f | % | f | % |
| Severe | 17 | 9.09 | 0 | 0.0 | 72 | 38.50 | 0 | 0.0 | 180 | 96.26 | 0 | 0.0 |
| Moderate | 62 | 33.16 | 16 | 8.56 | 102 | 54.5 | 6 | 3.21 | 7 | 3.74 | 0 | 0.0 |
| Mild | 108 | 57.75 | 171 | 91.44 | 13 | 6.95 | 181 | 96.79 | 0 | 0.0 | 187 | 100.0 |

**Table IV**

*Overall level of emotional intelligence in pretest and posttest using the TMMS*

| Levels | Pretest | | Postest | |
|---|---|---|---|---|
| | f | % | f | % |
| Good | 0 | 0.0 | 149 | 79.68 |
| Fair | 46 | 24.60 | 38 | 20.32 |
| Poor | 141 | 75.40 | 0 | 0.0 |

Table V presents the post-intervention evaluation methods using the socio-formative rubric (EOSF) in general for all items, confirming its effectiveness and providing a comprehensive evaluation of the programme's impact and learning process.

**Table V**

*Level of socioformative emotional intelligence (EOSF)in three types of post-intervention evaluation.*

| Levels | Self-evaluation | | Coevaluation | | Heteroevaluation | |
|---|---|---|---|---|---|---|
| | f | % | f | % | F | % |
| Good | 151 | 80.75 | 159 | 85.03 | 157 | 83.96 |
| Fair | 36 | 19.25 | 28 | 14.97 | 30 | 16.04 |
| Poor | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

Table VI shows a significant enhancement in students' emotional management, with the Wilcoxon test confirming the statistical significance of these improvements.

**Table VI**

*Relational analysis of the Wilcoxon test on emotional intelligence*

| Emotional Intelligence (Pretest/Postest) | |
|---|---|
| Z | -2.320 |
| Sig. asymptot. (bil.) | 0.03 |

Table VII shows significant reductions in post-test levels of depression, anxiety, and stress symptoms.

**Table VII**

*Relational analysis of the Wilcoxon test on depression, anxiety, and stress*

| Depression (Pretest/Postest) | Anxiety (Pretest/Postest) | Stress (Pretest/Postest) |
|---|---|---|
| Z = -2.020 | Z = -3.150 | Z = -5.220 |
| Sig. asymptot. (bil.) = 0.02 | Sig. asymptot. (bil.) = 0.00 | Sig. asymptot. (bil.) = 0.01 |

## Discussion

This study evaluated the effectiveness of a socioformative programme in reducing symptoms of depression, anxiety, and stress while improving emotional intelligence among Peruvian university students. Results showed significant reductions in symptoms of severe depression (9.09% to 0%), anxiety (38.50% to 0%), and stress (96.26% to 0%) post intervention, along with an increase in emotional intelligence (7.81% to 79.68%). These findings suggest that socioformative strategies equip students with tools for emotional regulation, helping them manage academic and personal pressures.

The intervention's intensive design offered opportunities for practising emotional regulation, fostering deeper engagement. The supportive group setting likely promoted community and participation. However, factors beyond the intervention, such as familiarity with self-assessment tools and changes in academic pressures, may also have influenced improvements, necessitating cautious interpretation of the results. The pre-experimental design and absence of a control group limit the findings' generalisability. Future research needs to use control groups and larger samples to validate these results across different contexts. Moreover regular, extended sessions are more effective than brief interventions, emphasising the importance of programme duration and design in enhancing effectiveness.

## Conclusion

This study suggests that university students who attended socioformative interventions experienced reduced symptoms of stress, anxiety, and depression in the post-test, along with increased emotional intelligence. Socioformative strategies promote healthier academic environments and better equip students to handle pressures with long term benefits for both personal and professional development.

## Conflict of interest

The authors declare that they have no conflicts of interest to report regarding the present study.

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