

A Digital Adaptation Framework for Post-Vacation Stress Management: Promoting Student Harmony and Social Cohesion in Universities

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Abstract

Students of the university also face a problem of post-vacation stress, which is difficult to overcome after holiday breaks. Described as momentary emotional exhaustion, diminished motivation, lack of concentration, and disturbed social reintegration within the 1–2 weeks of academic reintegration. This phenomenon, although repeated in academic terms, has had little academic attention in spite of its impact on student well-being. The current exploratory research (n=54, restricting external validity) is expected to build a Digital Adaptation Framework to assist students in emotional, academic and social re-adjustment after vacation periods, which may also lead to peace and internal unity in university environments. Data were collected using explanatory sequential mixed-method design. Obtained on 54 undergraduates using structured online questionnaires/surveys and 21 follow-ups. University of Vavuniya, Sri Lanka interviews. More quantitative analysis found that 70 percent of students reported emotional exhaustion and 59% had a feeling of insufficient counseling support. The thematic analysis was able to identify the following elements: “emotional fatigue,” “workload shock,” and “lack of guidance.” The paper suggests the implementation of a digital framework with the integration of emotional tracking done by AI through natural processing of journal entries of the user, motivation reinforcement and social interaction facilities to facilitate easier psychological acculturation. Although it was not directly the case that social cohesion was not involved quantitatively, qualitative themes indicate that these interventions can be used to enable stronger campus relationships.

Keywords: Post-vacation stress, Emotional exhaustion, Student well-being, Digital adaptation framework, Artificial intelligence, Natural language processing, Mixed-methods research, Higher education, Social reintegration, Academic adjustment

Introduction and Background

Life in the university is a complicated psychological and social process that requires sustained acclimatization to the academic loads and peer relations as well as to the institutions. While students need to have vacations and semester breaks when they can rest, reunite with their family and when back to campus, rejuvenate, a number of them have a hard time re-adjusting. This at this point, operationalized is transitional discomfort, post-vacation stress of adjustment. Temporal (1–2 weeks) deterioration of emotional stability, motivation and academic concentration, post-breaks, which can be determined using such

validated scales as PANAS (Watson, Clark, & Tellegen, 1988). This stress can have a strong impact on emotional regulation, inspiration, and achievement (Smith, 2023).

Even though a lot of research has been conducted on first-year transition anxiety, recurrent post-vacation little scholarly interest has been paid to the process of adjustment. The distinction is in the fact that it is cyclical: this stress is experienced by students each and every time they have a break and hence they experience a disruption in their psychological rhythm. Lee and Martinez (2022) note that post-holiday transitions result in momentary yet significant reductions in interest, trust and concentration. Kumar and Al-Sayed



Table 1: Google Form data were compared with interview findings

Theme	Google Form Findings	Interview Confirmation
Emotional Fatigue	70% of students reported low motivation and energy	Students said, "I feel mentally slow and tired for several days after vacation."
Lack of Support	58% disagreed that counseling systems were sufficient	"We don't get guidance to restart or manage the sudden workload."
Interest in Digital Tools	65% open to digital adaptation support	"An app with reminders or check-ins could really help."

Table 2: Readjustment Difficulty

Response Category	% of Students
Very easy / Slightly easy	27%
Neutral	31%
Somewhat / Very difficult	42%

Table 3: Emotional and Motivational Balance

Agreement Level	%
Disagree / Strongly disagree	46%
Neutral	34%
Agree / Strongly agree	20%

Table 4: Qualitative Themes of Interviews

Theme	Description	Example Statements
Emotional Reset	Students reported loss of routine and mental momentum.	"My brain feels lazy after long holidays."
Workload Shock	Rapid assignment resumption increased anxiety.	"Lecturers start fast — we don't get adjustment time."
Lack of Guidance	Minimal emotional or academic counseling post vacation.	"There's no one to talk to during this transition."
Motivational Need	Desire for workshops or social programs to boost morale.	"We need small motivational programs to restart."
Digital Opportunity	Openness to AI and appealed support systems.	"A self-guided app with daily reminders would be great."

(2021) also observe that the abrupt change of the flexible, supportive home conditions into the ones of austerity was accompanied by organized university systems leads to emotional dissonance and less motivation. Studies demonstrate that this phenomenon is on an international level. Parker, Willis, and Cheng (2023) discovered that more than a half of students at three continents surveyed by the author of the study noted that their mood and energy were lower during the first two weeks following holidays. However, in most universities, orientation and support is offered at

the start of academic year, departure after break times were mostly unprovided. The lack of cyclical psychological transition solutions by the institution, leads to reduced unity and college unity. In this regard, higher education digital transformation creates new opportunities in particular with cyclical transitions such as post-vacation readjustment. Artificial intelligence (AI), individualized emotional support to patients, using mobile applications, and web-based well-being systems. friendliness, emotional monitoring through emotion recognition, and conversation assistants

scheduled to be predictable. post-vacation windows, which assist students to fit better following breaks (Nguyen & Zhang, 2024). Through balancing the use of technology and psychological understanding, universities have the capability of producing adaptive ecosystems that check and intervene on the needs of students during these periodic transitions. The proposed study will create and preliminary test a Digital Adaptation Framework that should reduce post-vacation stress and assist students in being well at the University of Vavuniya, Sri Lanka.

Literature Review

Students Studies regarding student well-being mostly concentrate on the transitions of the first year or exam stress, or the issue of academic burnout is addressed, and the cyclical nature of post-vacation is not given substantial attention. readjustment. Parker et al. (2023) found that more than half of the students in three continents reported that the two weeks after holidays had decreased energy and mood. This directly relates to post-vacation stress because it characterizes the identical time cycle of emotional and motivational decrease had been noticed in our investigation.

According to the theory of Job Demands-Resources by Bakker and Demerouti (Bakker & Demerouti, 2020), the motivational aspect implies a positive correlation between job demands and job resources. energy varies with the support of the environmental conditions, and this clearly shows why there is a sudden post-vacation workload that takes resources and leads to fatigue. Similarly, Baumeister and The Theory of Belongingness by Leary (Baumeister & Leary, 1995) the Psychological Bulletin article progeny throws light. human need belonging, which is why social reintegration problems following breaks are directly related to social reintegration. lack of harmony and productivity (cited here by the original 1995).

The use of digital mental health has demonstrated potential in solving such transitional problems. Nguyen and Zhang (2024) suggested the use of emotional support systems based on AI, which has the potential to monitor. The stress among students using natural language

processors. But the South knows of empirical evidence. There is scanty information about Asian higher education. This paper therefore fills that void by combining psychological knowledge and technological resolutions into an integrated adaptation model.

Research Question

Main Research Question

What are the key psychological, academic, and social factors contributing to post-vacation stress among university students, and how can a digital adaptation framework support their emotional and social readjustment after returning from vacation.

Specific Research Questions

1. What emotional and behavioral patterns are associated with post-vacation stress among university students?
2. How effective are the existing university support systems in assisting students during post-vacation adjustment?
3. What digital features or support mechanisms do students perceive as useful (rated 4/5 or higher) for improving emotional and social reintegration after returning from vacation?

Research Objectives

Main Objective

To develop a Digital Adaptation Framework for managing post-vacation stress among university students at the University of Vavuniya.

Specific Objectives

1. To identify the psychological, academic, and social difficulties experienced by students after returning to university following vacation.
2. To examine the emotional, motivational, and environmental factors that contribute to post-vacation stress among students.

3. To evaluate the effectiveness of existing university support systems in assisting students during the post-vacation transition period.
4. To analyse survey and interview data using a mixed-methods approach (quantitative and qualitative triangulation) to understand post-vacation stress patterns.
5. To develop a Digital Adaptation Framework based on empirical findings to support students in managing post-vacation stress.

Methodology

Research Design

This paper took the explanatory sequential mixed-method approach (Creswell & Plano Clark, 2023), combining quantitative survey data initially with qualitative interview data on the same. Explanation and validation.

Participants and Sampling

The sample used a purposive convenience sampling of undergraduates aged 18–25 years in different faculties of the University of Vavuniya. Google Forms was used to get 54 valid survey responses. Qualitative validation was done through interviewing 21 students face to face. The participation was voluntary, and the ethical clearance was received by the research committee of the university. All data were anonymized.

Data Collection

Quantitative Data (Google Form Survey)

The survey contained 10 closed-ended and one open-ended question, focusing on:

- Emotional and motivational states after returning from vacation.
- Perceived academic pressure and workload.
- Levels of social connection or isolation.
- Opinions on university support systems.
- Willingness to use a digital platform for emotional support.

A 5-point Likert scale was used in the questionnaire as Strongly Disagree (1) to Strongly Agree (5) and had a number of Yes/No questions. Instrument reliability: Cronbach $\alpha = 0.82$ of Likert items (pilot-tested, $n=15$). The questionnaire was accessible in two weeks and received answers of students of all academic years.

Qualitative Data (Interviews)

In order to verify the findings of the survey and deepen the results, 21 participants were interviewed face to face. The Interviews were semi structured and they took 15–20 minutes on a one-on-one basis. Their feelings and lives without restraint. Emotional balance as well as motivation were questioned. Social involvement, and the post university coping measures.

Data Analysis

Thematic analysis was applied in order to analyze interview transcripts (Braun & Clarke, 2019). Quantitative analysis descriptive statistics (frequencies, percentages) in SPSS v.27 no inferential tests. Because of the limitation of the sample size.

The most common recurrent themes were represented by the emotional exhaustion, academic overload, the lack of guidance, etc. and “desire for motivation.”

Data Validation and Reliability

To ensure credibility, the Google Form data were compared with interview findings (triangulation). The consistency between both sets of results confirmed high reliability. Table 1 presents the comparison.

Ethical Considerations

Informed consent, data confidentiality and voluntary participation were some of the ethical procedures. The respondents were informed that the answers would remain confidential but only in academic purposes. Support services were provided in the form of emotional support.

Results and Data Analysis

Demographic Overview

Out of 54 survey participants:

- 100% were undergraduate students.
- 39% were first-year, 30% second-year, 22% third-year, and 9% fourth-year students.

This spread allowed for cross-year comparison of post-vacation adjustment experiences.

Table 2 presents the readjustment difficulty. Interpretation: Nearly half of the respondents experienced some difficulty in getting back to work after vacation. These were echoed by comments made in the interviews like it takes me almost a fortnight to get into focus. quantitative findings.

Table 3 presents emotional and motivational balance. Interpretation: Only one in five students reported feeling emotionally balanced after returning from vacation, suggesting a widespread motivational slump consistent with prior literature (Smith, 2023).

Psychological and Social Indicators

On inquiry, do you feel sad, anxious, or lack of energy after returning to campus?", 74% answered "Yes." Additionally:

- 78% had social disconnection at least every now and then.
- 62% reported that academic workloads were overwhelming during the first week.
- 59% of people felt that universities were not offering enough counseling support after vacations.

Interpretation: In most instances, the students were temporarily psychologically strained which confirms the phenomenon of post-vacation stress as a repeat psychological complaint within this particular scenario.

Interest in Digital Solutions

In response to the question of whether or not to use a digital platform to adapt to post-vacation:

- 67% said Yes.

- 88% evaluated such features as emotional check-ins, mood monitoring, and motivational reminders as useful or highly useful.

Feedback in the courses of the interview did not dispel this excitement: "In case we had some little app that reminds us that we need to take monitor or follow our stress, it would facilitate transitional processes. Digital peer support groups are capable of assist us in coming back in touch with friends."

Qualitative Themes of Interviews

Table 4 presents qualitative themes of interviews. Thematic coding of interview data revealed five recurring insights. Interpretation: Survey and interview data triangulation proved the existence and severe post-vacation stress, and the willingness of students to be involved in digital well-being tools at this institution.

Discussion

The results support the argument that post-vacation adjustment stress is chronic and underwritten. higher education problem in the University of Vavuniya. Almost three-quarters of sampled students had reports of emotional exhaustion and demotivation. These results align with evidence on the international level that psychological energy and focus lose following longer breaks. Although we have a smaller sample (n=54) which restricts our ability to do statistical analysis, (Parker et al., 2023; Smith, 2023). generalizability. Further, the study confirms that the university support systems are mostly reactive as opposed to proactive. than preventive. Majority of the students reported lack of counseling opportunities and unexpectedness. post-intervention academic loads. This has been created by the institutional gap that underscores the need to have systemic. re-adaptation programs with the help of technologies. The willingness of students with regard to digital well-being tools is encouraging. The interviews and the survey demonstrated. highly advocate individualized online treatment. This is in line with that of Nguyen and Zhang (2024). evidence that AI-based emotional support systems are able to bolster the resilience of students and engagement. The

Digital Adaptation Framework proposed therefore deals with a critical point of intersection of technology, psychology and education. Social cohesion is another protective factor in the study. Students repeatedly cited the importance of peer connection, community work and joint learning environments. These social processes, digitally supported, can help a great deal in reducing them. Isolation and emotional distress qualitative reports. Limitations Small sample (n=54) Single institution, self-reported data, lack of direct social. Lack of longitudinal follow-up, cohesion metrics restrict generalizations.

Conclusion

This research addressed the problem of post-vacation stress in university students and how a digital solution can be proposed. System to control its psychological and social consequences. A combination of survey data provided an opportunity to achieve it. The research was validated, (n=54) and face to face interviews (n=21) at the University of Vavuniya. That students with post-preparation emotional, motivational, and social difficulties occur after vacations in this context. Key findings include:

- 70% of students indicated emotion or motivational exhaustion.
- 59% of respondents believed that university counseling services were poor.
- The company has seen a 67% interest in digital well-being platform.

Such insights justify the necessity of Digital Adaptation Framework that would incorporate emotional tracking, motivational reinforcement and social reconnection tools. While short-term stress mitigation has potential, the consequences of long-term harmony can only be established in longitudinal studies. The model combines Job Demands-Resources theory (Bakker & Demerouti, 2020) and The need of belongingness (Baumeister & Leary, 1995), which represents a model that is theoretically-based. Strengths consist of the sample size (exploratory) and context. Ultimately, human psychology combined with digital technology is a promising solution to use after the vacation. Resilience.

Future Work: Software Development and AI Integration

After such an empirical confirmation, the second step is to construct and test a prototype of the online adapting model. Planned components include:

1. **Artificial Intelligence-Driven Emotion Recognition:** An NLP and sentiment analysis application to detect emotional condition based on text entries.
2. **Individual Motivation Engine:** Artificial intelligence to suggest a routine, free time, or social life.
3. **Gamified Rebuilding of Habits:** Rewards and prizes after a vacation: Points and badges each time you engage.
4. **Cross-Platform Integration:** Integrating with LMS to deliver motivation study and notification reminders.
5. **Predictive Analytics:** Proactive stress pattern earlier detection to prevent stress through counseling outreach. Feasibility note: The first stage of MVP can be developed on non-code services (e.g. Bubble.io) in months, and then pilot testing (n=100+). Co-operation between the software, psychologists.
6. The developers, and academic counselors will play a major role in making this structure a reality. Student well-being evidence-based online tool.

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