Adaptation, Stress Management, Mood, and Their Relationship with Academic Performance in Peruvian Students Starting Their University Studies

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Abstract

Students face significant challenges when starting their studies, including social and academic pressures that require specific skills to adapt without compromising their well-being. The objective of this study was to analyze the relationship between adaptation to the university environment, stress management, mood, and academic performance in a sample of Peruvian university students. The study adopted a quantitative approach with a non-experimental, cross-sectional, and correlational design. A survey was administered to 201 students who were starting their university studies. The results confirmed the hypothesis; by applying the Spearman correlation test, high coefficients were obtained between academic performance and the variables Adaptability (rs= .848), Stress Management (rs= .860), and General Mood (rs= .823), indicating a strong positive relationship between these variables and academic performance. It is confirmed that the relationships are statistically significant at the 1% significance level, highlighting the importance of psychosocial factors in the academic success of those starting their university studies.

Keywords: Adaptability; stress management; mood; academic performance; university education.

Introduction

After the non-in-person classes due to COVID-19, many students are facing a new scenario that could potentially create an adaptation problem affecting their mental health and academic performance. At the beginning of their university studies, students experience new pressures both social and academic, the former such as interaction with new teachers and classmates, and the latter stemming from the greater number of subjects with different rigor and scientific depth, new and varied teaching methodologies, and a variety of schedules (Hudley, et al., 2009; Wang et al., 2022). These students require support, guidance from their teachers, certain capacities and skills to successfully adapt to this new scenario without affecting their physical and mental health and academic performance (Von, et al., 2024). In Peru, universities seem to focus more on aspects of infrastructure and curricula, paying less attention to improving the psychological

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conditions of students entering higher education. It is unknown whether Peruvian universities have programs to promote the adaptation and academic success of students who are just starting their university studies. Students face significant challenges when starting their studies, including social and academic pressures that require specific skills to adapt without compromising their well-being.

Despite the growing attention to student well-being, there is a gap in the comprehensive understanding of how adaptation, stress management, and mood relate to academic performance in students starting university, especially in the Peruvian context. International studies have found that difficulties in adaptation and stress can lead to mental health problems and poor performance in university students (Gurková and Zeleníková, 2018; Finkelstein et al., 2019; Bhurtun et al., 2019; Trunce et al., 2020; Zuñiga et al., 2020; Yildirim and Akman, 2021; Castillo et al., 2022; López et al., 2023; Martínez and Ferreira, 2023; Niño et al., 2024; Nieto et al., 2024; Araoz et al., 2024).

The objective of this study is to analyze the relationship between adaptation to the university environment, stress management, mood, and academic performance in a sample of Peruvian university students who are starting their in-person university studies after the social isolation due to the COVID-19 pandemic. It is necessary to investigate these constructs jointly to offer a novel perspective that allows for the development of effective intervention and support strategies, based on hypotheses that consider the interaction between these factors. The novelty of this research lies in the integration of these elements into a study model that can provide a deeper understanding of the challenges faced by students and how to overcome them (Lopez et al., 2023).

The theoretical justification of the study is based on the need to understand how socio-emotional skills, such as resilience and self-efficacy, and coping strategies can mediate the impact of social and academic pressures on academic performance (Tracy, et al., 2022). Regarding its practical relevance, the results could serve as a basis for universities to implement support programs to improve adaptation and stress management, similar to the interventions described in the literature (Ning, Luo, and Guo, 2024). This is essential for promoting healthy lifestyles and preventing mental health issues in the student population. At the social level, the study could benefit students by promoting their well-being and academic success, which would have a positive impact on their personal and professional development (Ning, Luo, and Guo, 2024; Yildirim and Akman, 2021).

The research not only provides practical knowledge to university institutions but also enriches theory and practice in the social sciences. It allows for understanding and appreciating the importance of the adaptation process, identifying personal, emotional, and social capacities for well-being in the university environment and academic success.

Theoretical Reflections on the Research

Adaptability to the University Environment

The transition from basic education to university studies represents a significant change in the personal, academic, and social lives of many students. The adaptation to the university environment occurs during a stage of complex changes for the student, so, in many cases, this process of habituation becomes a stressful factor in coping with the new academic demands, which can affect mental health (Fernandes et al., 2019; Trunce et al., 2020; Castillo et al., 2022). Adaptability is a fundamental and crucial element in the processes of transition and social and

academic integration during university stages, contributing to the reduction of issues related to academic failure and dropout (Lopez et al., 2023).

Some researchers highlight the importance of socio-cognitive variables in the adaptation process of university students, as the lack of adequate adaptation to university life is due to an overload of both academic and cognitive-motivational aspects, which affects the continuity of university studies (Zuñiga et al., 2020). Students coming from basic education must adapt to the university environment to a series of factors such as new classmates, new teachers, a new environment, and greater academic demands. To achieve this, students must possess specific competencies and abilities such as: problem-solving, identifying and defining them while generating and implementing effective solutions; reality testing or the ability to evaluate the correspondence between what they experience (the subjective) and what exists in reality (the objective); flexibility or the ability to adequately adjust their own emotions, thoughts, and behaviors to changing situations and conditions (Ugarriza, 2001).

1.2. Stress management in university students

The student, upon entering university, must have the skills to face and adequately manage various stressful situations that arise in that environment. Stress is a common problem among university students, resulting from the pressure, demands, and expectations associated with academic life (Araos et al., 2024; Barrios & Torales, 2019). It can occur when there is a perception of imbalance between the demands and the perception of their personal capabilities. Stress can affect students when they perceive it as a threatening situation to their well-being. The inability to manage their tensions and regulate their mood could lead to health problems such as stress. adequately managing stress in the university environment is fundamental for the physical and mental health of students (Franco et al., 2023). There are certain mediating components to adequately cope with stress, such as personality, thoughts, attitude, social skills, lifestyle, hobbies, among others, which should be identified and, based on that, support programs should be organized with activities that reduce stress in students and minimize the damage it could cause (Barrios and Torales, 2019).

Stress constitutes a prevalent issue among university students that can negatively affect their well-being and academic performance (Yildirim and Akman, 2021). This stress is a critical biopsychosocial factor that influences students' academic performance and overall well-being (Yildirim and Akman, 2021). While moderate stress drives students to acquire knowledge, elevated moderate stress can harm their physical and mental health, causing difficulties in learning, making mistakes, and presenting unfavorable clinical and academic performance (Gülnar, Aşık, and Özveren, 2024). A high level of stress can negatively affect students' critical thinking skills, decision-making ability, and interpersonal relationships, with the most common causes being the inadequate presence and intervention of teachers (Bhurtun, et al., 2019; Yildirim and Akman, 2021).

Students who are newly entering the university environment suffer an emotional mismatch due to the new relationships they encounter. This new educational context is an environment of psychological pressure, an unfamiliar setting with new stresses, to which they must adapt quickly and adequately, so as not to affect their physical and mental health. The student must possess certain competencies such as stress tolerance or the ability to withstand adverse events, stressful situations, and strong emotions, actively and positively facing stress, as well as impulse control or the ability to resist or postpone an impulse or temptation to act and control our emotions (Araoz et al., 2024).

Mood

The mood is the perception and emotional condition of the student regarding university environments. It constitutes a relatively enduring psychological state that influences perception, behavior, and the way a person responds to the situations they face. Proper management of mood is essential to avoid affecting students' physical health, mental well-being, and academic performance. Students must develop competencies of happiness or the ability to feel satisfied with life, to enjoy themselves and others, and to have fun and express positive feelings; and optimism or the ability to see the brighter side of life and maintain a positive attitude, despite adversity and negative feelings (Araoz et al., 2024). Mood can be affected by academic pressures, in the case of students who are just starting their university studies. Mood is considered a possible predictor of stress for those starting their university studies, due to the new academic responsibilities they must assume, the packed schedules that do not allow for quality free time, and many students lack university educational programs or systems for motivation and support during the adaptation process (Castañeda et al., 2018).

Academic Performance in University Students

In the university educational system, academic performance is understood as the achievement of competencies and skills within a specific curriculum. Such achievements are expressed in expected learning outcomes, and the data are collected in rubrics, tests, document analysis, or others, which are graded to obtain a score and an average per units that are averaged, and at the end of the academic cycle or semester, grades that are recorded in academic records and transcripts (Rodríguez et al., 2024; Tezén et al., 2024). Some researchers found internal and external factors associated with academic performance, internal factors such as resilience, physical health, mental health, emotional state, self-motivation, among others; the predominant external influencing factors are curricular programs adapted to the student's characteristics, flexible academic loads, educational programs for student support and follow-up, methodologies, and prepared teachers (Martinez & Ferreira, 2023; Nieto et al., 2024).

Material and Methods

The research was of a basic type, with a non-experimental, cross-sectional, and correlational design, as it aimed to analyze the relationship between the variables of adaptation, stress management, general mood, and academic performance in students of the Faculty of Education at the National University of Trujillo in the year 2024.

The sample consisted of 201 students from various professional training programs at the National University of Trujillo: 33 students (16.4%) from the Communication Sciences program, 33 students (16.4%) from Secondary Education with a specialization in History and Geography, 30 students (14.9%) from Secondary Education with a specialization in Philosophy, Psychology, and Social Sciences, 45 students (22.4%) from Secondary Education with a specialization in Languages, 33 students (16.4%) from Initial Education, and 27 students (13.4%) from Primary Education.

For data collection, the validated Baron Inventory (I-CE) was used, with Likert-type questionnaires. The reliability of the instruments was determined using the Cronbach's Alpha test, obtaining values of 0.827 for the Adaptability variable, 0.841 for Stress Management, and 0.879 for General Mood, which indicates a good level of internal consistency.

In the data collection and organization, descriptive statistics were used to create frequency

distribution tables and graphical figures that allowed visualization of the levels of the studied variables, as well as inferential statistics to evaluate the normality of the data using the Kolmogorov-Smirnov test. Additionally, a Spearman correlation test was conducted to verify the relationship between socio-emotional variables and academic performance, finding significant coefficients that support a positive association between these variables. The statistical analysis was conducted using RStudio software version 4.3.2.

Results and Discussion

The objective of the present study was to establish the relationship between adaptation to the university environment, stress management, mood, and academic performance in university students in Peru.

According to Figure 1, at the Faculty of Education of the National University of Trujillo, the data shows that the majority of students have adequate or good levels in Adaptability (95.0%) and Stress Management (91.0%), although only 78.1% reach this category in General Mood, which suggests a significant area of opportunity. In terms of optimal development (Very developed), a higher percentage is observed in General Mood (21.9%) compared to Adaptability (4.5%) and Stress Management (3.0%), indicating strengths in the emotional stability of some students. However, the group needing improvement or at risk is small in Adaptability (0.5%) and General Mood (0.0%), but reaches 6% in Stress Management, indicating a more urgent need for intervention in this latter area. The results suggest that intervention strategies should prioritize strengthening stress management through practical workshops on emotional regulation and coping techniques. Additionally, the comprehensive development of general mood and adaptability should be promoted through personalized tutoring and group psychological support programs, especially for those who show at-risk levels in these personal areas.
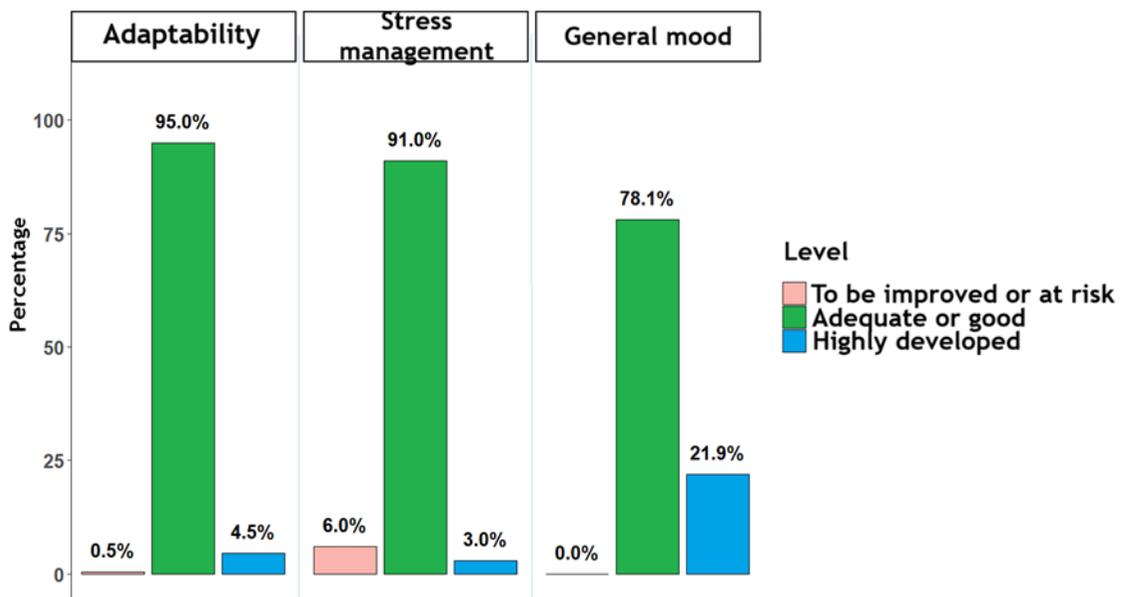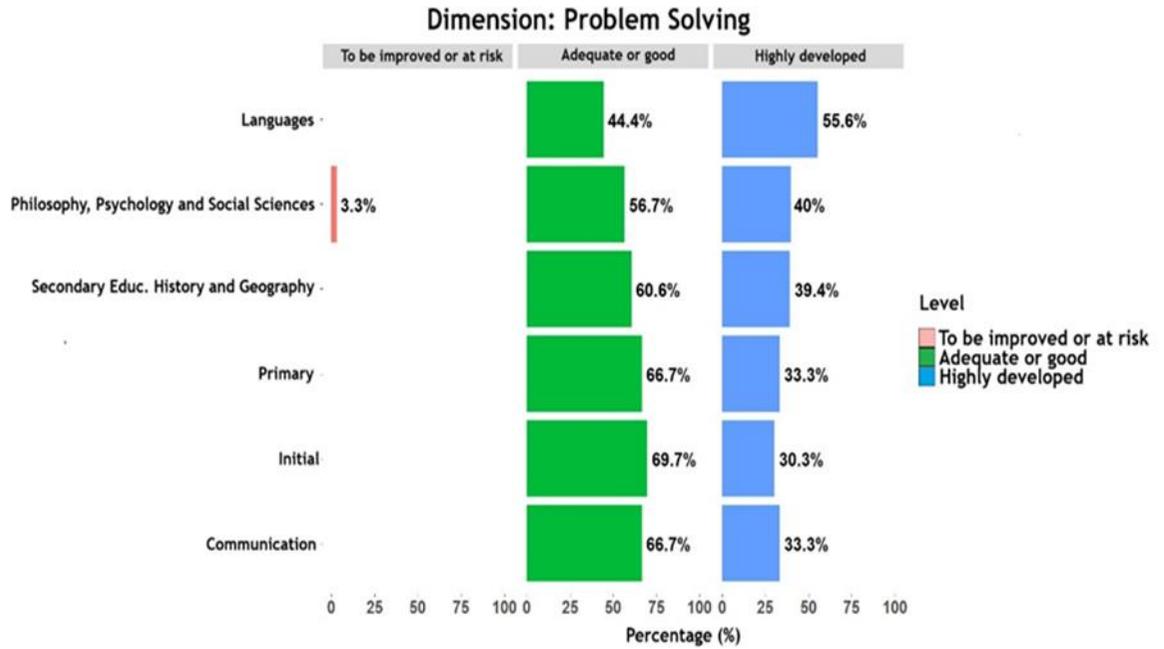

Figure 1.

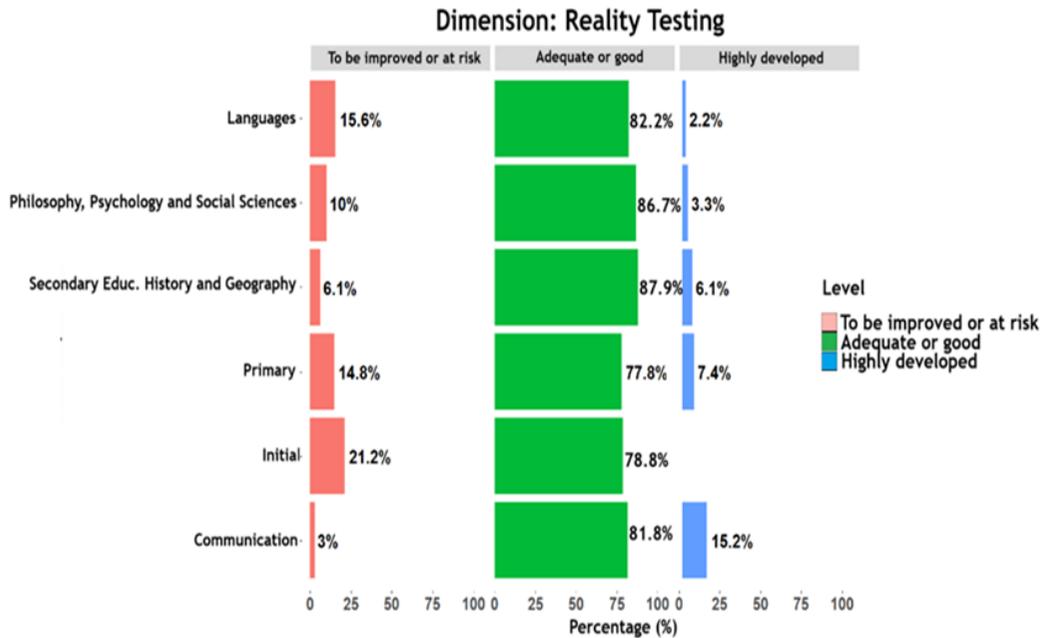Percentage distribution of the variables Adaptability, Stress Management, and General Mood,

among students of the Faculty of Education at the National University of Trujillo, 2024, by level

The results in Figure 1 show a prevalence of adequate levels in adaptability, stress management, and general mood among students in the Faculty of Education. These findings are consistent with previous studies that highlight the importance of these variables in the university context (Bhurtun et al., 2019; Abouammoh et al., 2020; Garbóczy et al., 2021; Reis et al., 2021). The high proportion of students with adequate levels of adaptability (95.0%) suggests that the majority have developed effective strategies to adjust to the new academic environment, which is fundamental for success in higher education (Yildirim and Akman, 2021; López et al., 2023). The proper management of stress in 91.0% of students is a positive indicator, considering that stress is a common issue in university life that can negatively affect well-being and academic performance. However, the 6.0% at risk in this variable deserves attention, as elevated levels of stress can negatively impact critical thinking skills and decision-making (Bhurtun et al., 2019). The adequate general mood in 78.1% of the students, with 21.9% at a very developed level, suggests a favorable emotional state, which can be a protective factor against stress at the beginning of university life (Castañeda et al., 2018).

Based on figures 2(a), 2(b), and 2(c), the dimensions of the variable Adaptability (Problem Solving, Reality Testing, and Flexibility) are analyzed in students of the Faculty of Education at the National University of Trujillo, according to their level of development. In Problem Solving, it stands out that Language students reach 55.6% in the highly developed level, Primary with 33.3%, while Philosophy, Psychology, and Social Sciences are at 40.0% and Secondary Education (History and Geography) at 39.4%. In Reality Testing, the very developed levels are low, with an emphasis on Languages at 2.2%, Philosophy, Psychology, and Social Sciences at 3.3%, History and Geography at 6%, and Primary reaching 7.4%. Finally, in Flexibility, the very developed category is equally low, with Languages at 6.6%, History and Geography at 6.1%, Philosophy, Psychology, and Social Sciences at 3.3%, and Primary with no cases at this level, although it stands out with 96.3% in the adequate or good category. Although the majority of students are at adequate or good levels in all dimensions, the proportion of students at very developed levels is limited, especially in Reality Testing and Flexibility. It is recommended to implement adaptive skills development programs through practical workshops and simulated activities that reinforce critical decision-making, objective evaluation of situations, and cognitive flexibility to address changes in educational and social contexts.

Dimension: Problem Solving

(a)

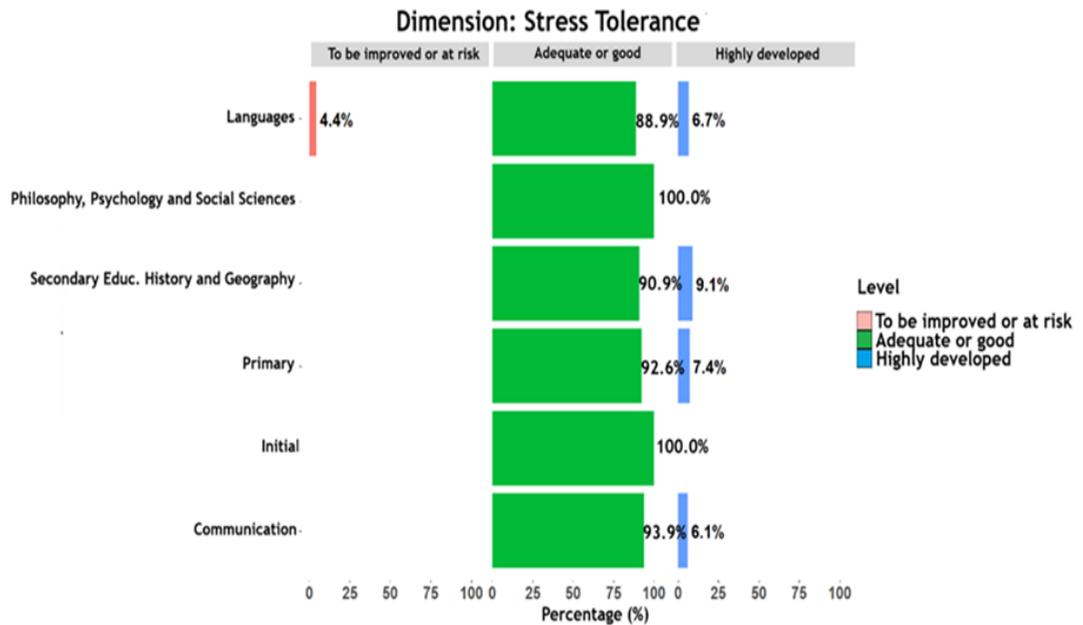## Dimension: Reality Testing

(b)
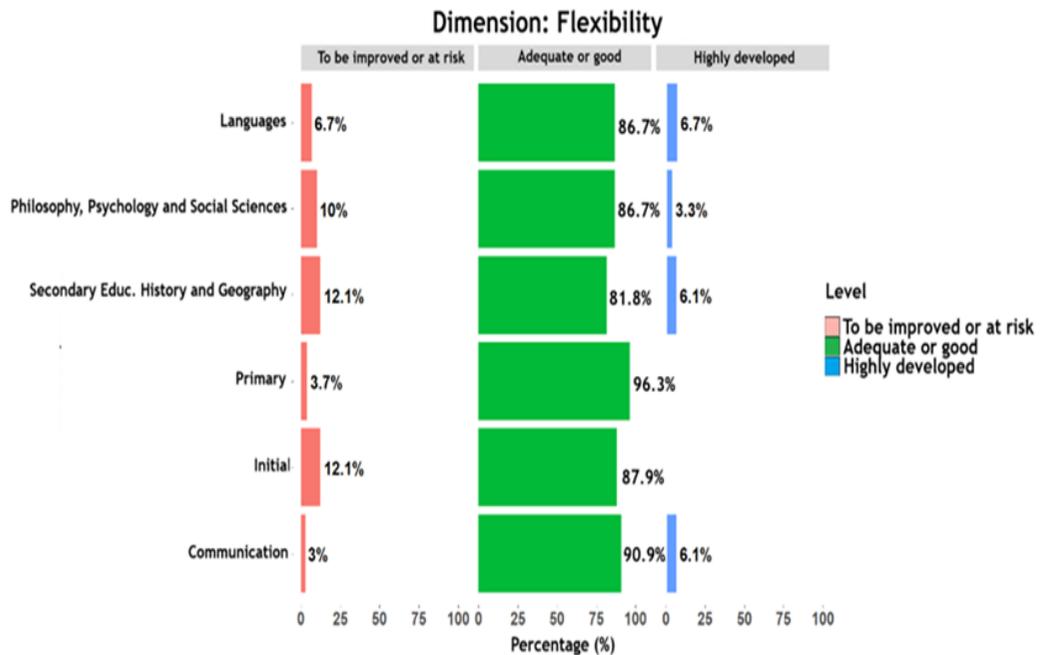
(c)

Figure 2.

Percentage distribution of the dimensions of the Adaptability variable, among students of the Faculty of Education at the National University of Trujillo, 2024, by level

The results of Figure 2 reveal significant variations in the dimensions of adaptability among the different programs in the Faculty of Education, which underscores the complexity of the adjustment process to the university environment. The high flexibility observed in most programs, especially in Primary Education and Communication, aligns with what Lopez et al. (2023) proposed regarding the importance of this competence to adapt to the changing conditions of the academic environment. However, the percentages of students needing improvement in History and Geography and Initial Education in this dimension, as well as the 21.2% at risk in the Reality Test in Initial Education, suggest the need for specific interventions, supporting observations on the relevance of cognitive-motivational factors and mental health in university adjustment (Zuñiga et al., 2020; Castillo et al., 2022). The variability in the Problem-Solving Dimension, with Languages standing out positively and other programs requiring attention, highlights the importance of developing skills to identify and solve problems effectively, as noted in the adaptability model, and suggests the need for differentiated approaches to strengthen these competencies in various educational programs (Lopez et al., 2023).

According to figures 3(a) and 3(b), in the dimension of Stress Tolerance, the percentages of students in the Adequate or Good category are high: Languages reach 88.9%, Philosophy, Psychology, and Social Sciences reach 100%, Secondary Education (History and Geography) records 90.9%, and Primary Education obtains 92.6%. However, the proportion of students at Very Developed levels is low in all groups, with a maximum of 9.1% in History and Geography and 7.4% in Primary, while Languages has 6.7%. Only Languages shows 4.4% in Needs

Improvement or at risk. In the dimension of Impulse Control, the levels of Needs Improvement or at Risk are concerning: Languages reach 48.9%, Philosophy, Psychology, and Social Sciences and History and Geography share 33.3%, while Primary Education records 40.7%. In contrast, the levels of Highly developed are low, with Philosophy leading at 10%, followed by Languages at 8.9%, History at 6.1%, and Primary at only 3.7%. Although the majority of students show an adequate handling of stress, the need to strengthen Impulse Control is evident, where almost half of the students in some groups are at critical levels. It is recommended to implement specific emotion management programs that include breathing techniques, relaxation, meditation, and emotional self-regulation, especially in the most affected groups such as Languages and Primary. These actions will contribute to improving emotional stability and academic performance.
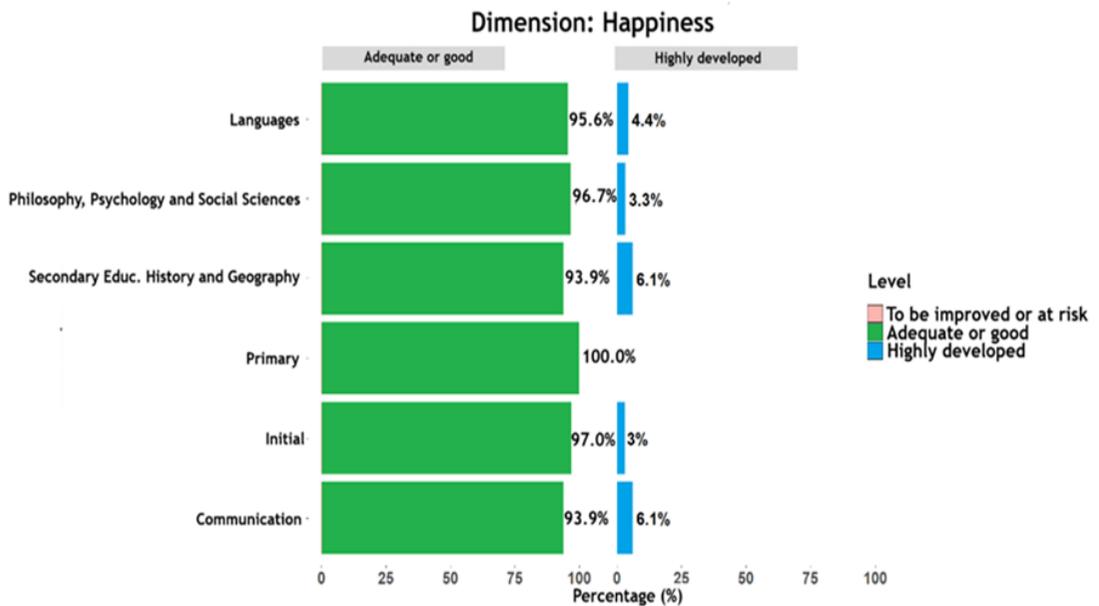

(a)
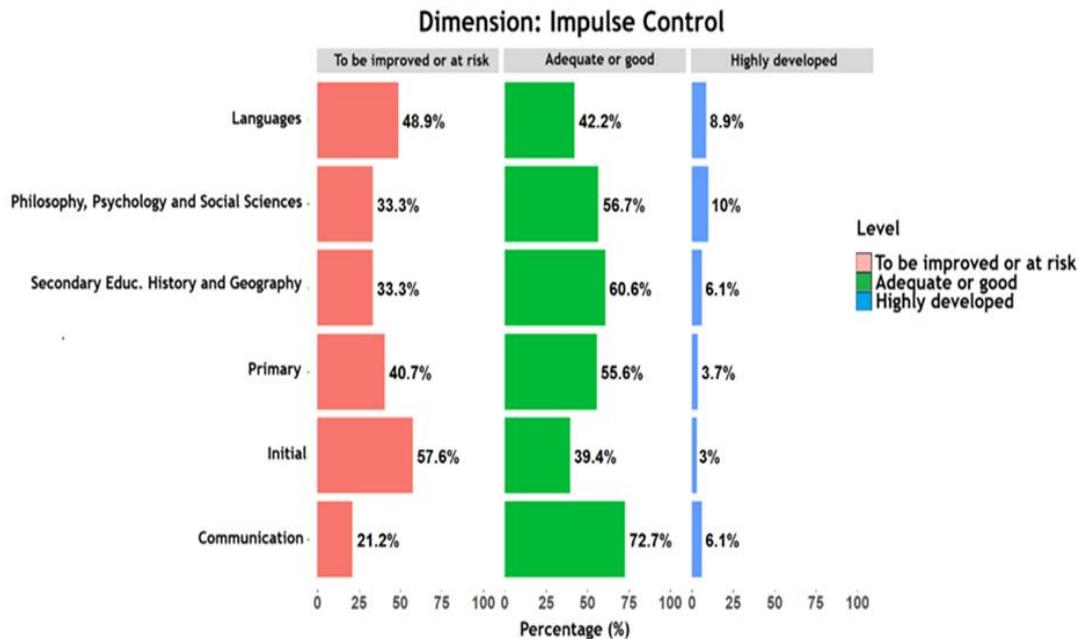
(b)

Figure 3.

Percentage distribution of the dimensions of the Stress Management variable, among students of the Faculty of Education at the National University of Trujillo, 2024, by level

The results of Figure 3 reveal significant contrasts in the Stress Management dimensions among students from different programs in the Faculty of Education. In the Stress Tolerance Dimension, most programs show adequate or very developed levels, with Languages standing out at 88.9% in adequate or good levels. This suggests that a large portion of the students have developed skills to withstand adverse events and stressful situations, aligning with what has been proposed regarding the competencies necessary to face stress in the university environment (Zuñiga et al., 2020). However, the Impulse Control Dimension presents significant challenges, especially in Languages (48.9% at risk) and Early Childhood Education (57.6% at risk), which aligns with observations regarding how elevated stress can negatively affect students' academic performance and mental health (Martínez and Ferreira, 2023). These findings highlight the need to implement stress management and emotional regulation programs, as some suggest, particularly focused on improving impulse control in the most vulnerable groups, to promote a more balanced and resilient academic environment, in line with recommendations on the importance of developing effective coping strategies in university students (Barrios & Torales, 2019; Abouammoh et al., 2020; Moeller et al., 2020).

Based on figures 4(a) and 4(b), the analyzed data for the dimensions of the variable General Mood in students of the Faculty of Education highlight relevant results in Happiness and Personal Satisfaction, differentiated by development level. In Happiness, the levels Adequate or Good predominate: Primary reaches 100%, followed by Initial with 97.0%, then Philosophy, Psychology, and Social Sciences with 96.7%, Languages with 95.6%, and History and Geography with 93.9%. However, the levels of Very developed are low, with Languages at

4.4%, Philosophy at 3.3%, and Primary with no records in this category. In Personal Satisfaction, the levels of Highly Developed are more balanced, with Primary leading at 51.9%, History and Geography at 36.4%, Philosophy at 40%, and Languages at 42.2%, although a slight percentage of Improvement Needed or at risk is also observed in Languages (2.2%) and Philosophy (3.3%). Although the results mostly reflect an adequate general mood, the levels of advanced development are limited, especially in Happiness, indicating the need to strengthen interventions in emotional well-being. It is recommended to implement comprehensive strategies such as motivational workshops, psychological support sessions, and personal development activities that foster emotional stability and promote greater personal satisfaction and happiness among students.

(a)

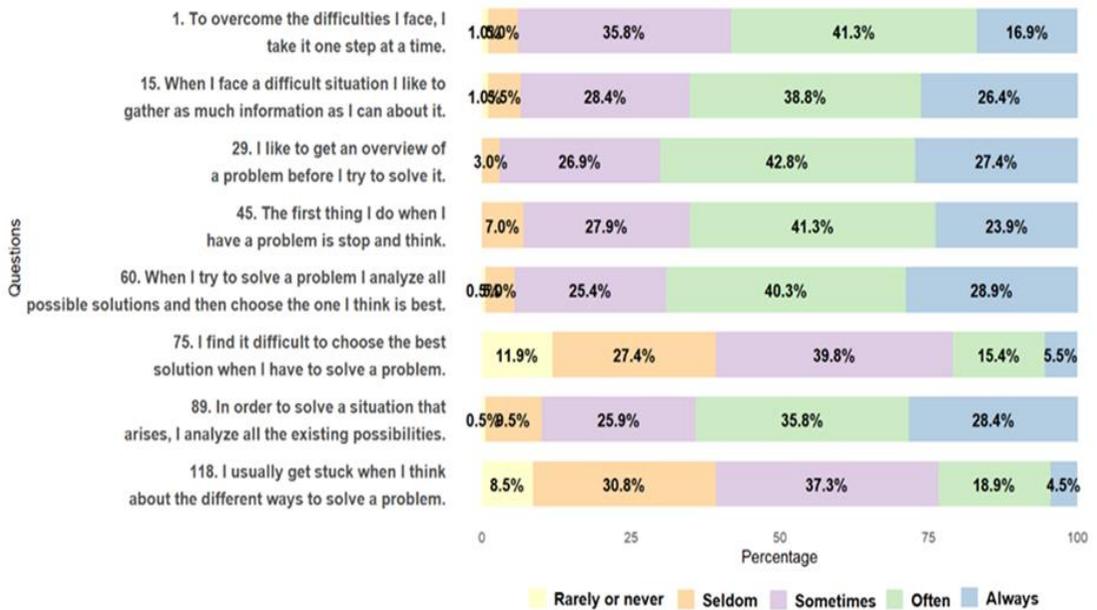## Dimension: Optimism
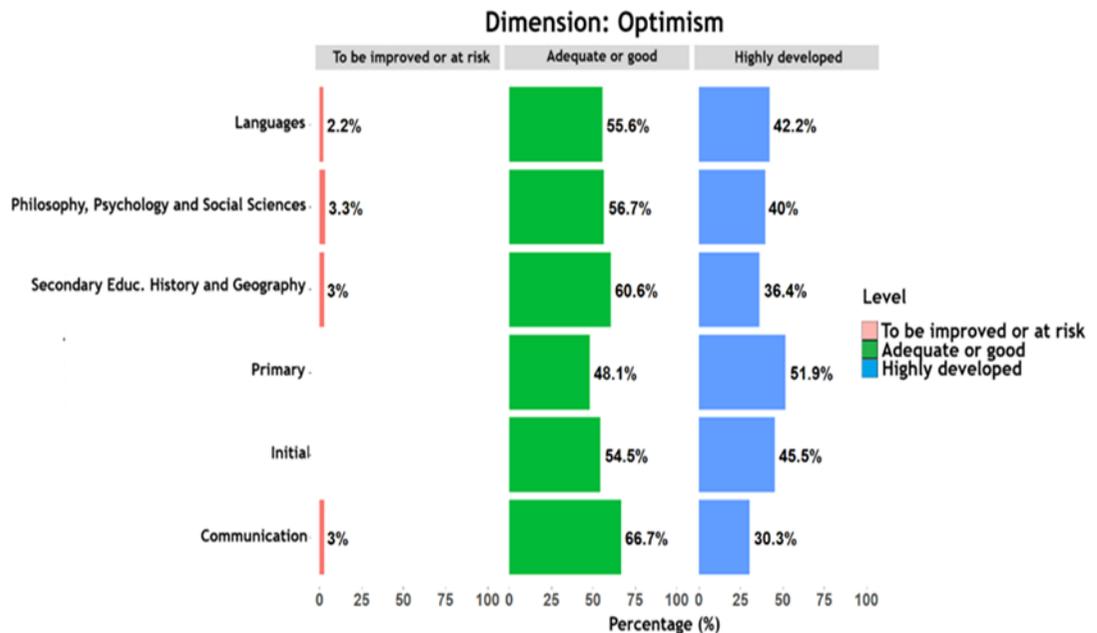
(b)

Figure 4.

Percentage distribution of the dimensions of the variable General Mood, in students of the Faculty of Education at the National University of Trujillo, 2024, by level

The results of Figure 4 reveal a generally positive outlook in the dimensions of General Mood among students of the Faculty of Education, which is crucial for their adaptation and academic success. The high prevalence of adequate or good levels of happiness, particularly in Primary (100%) and Early Childhood Education (97%), suggests a favorable emotional environment that can act as a protective factor against stress. This aligns with the perspective on the importance of mood in the response to challenging academic situations (Beedie et al., 2022). Regarding optimism, the high levels observed, especially in Early Childhood Education (51.9% very developed), Philosophy, Psychology, and Social Sciences (40%), and Languages (42.2%), reflect a positive attitude that can facilitate adaptation to the university environment and improve academic performance (Nieto et al., 2024). However, the small percentage of at-risk students in some programs, such as Languages (2.2%) and Philosophy (3.3%), indicates the need for specific interventions to strengthen emotional well-being, in line with recommendations on the relationship between mood and academic performance in university students (Trunce et al., 2020).

According to figures 5(a), 5(b), and 5(c), an academic and technical interpretation of the dimensions of the variable Adaptability is presented, where in the Problem Solving dimension, it is noteworthy that a significant proportion of students often respond when they indicate that they face difficulties step by step (41.3%) and when they analyze all possible solutions before deciding (40.3%). However, a significant percentage rarely or never responded to the statement about getting stuck when thinking about different ways to solve a problem (8.5%), which reflects a low level of blockage in complex decision-making. In the Reality Testing dimension, a high

proportion sometimes responds to questions about experiencing difficulties in understanding themselves emotionally (34.8%) or having inexplicable experiences (27.9%), suggesting areas for improvement in introspection and emotional clarity. Finally, in the Flexibility dimension, the majority of students sometimes responded to difficulties in changing habits (49.3%) and adapting to new situations (32.3%), which could indicate a partial adaptation to changes in their environment. The results suggest that students exhibit moderate strengths in problem-solving and flexibility, but there are still significant areas for improvement in emotional introspection and adaptation to new scenarios. As a solution, it is recommended to implement emotional intelligence training programs and workshops on effective problem-solving strategies to strengthen overall adaptability in this group. Additionally, fostering spaces for reflection and practice in novel situations could enhance a more effective transition in dynamic environments.
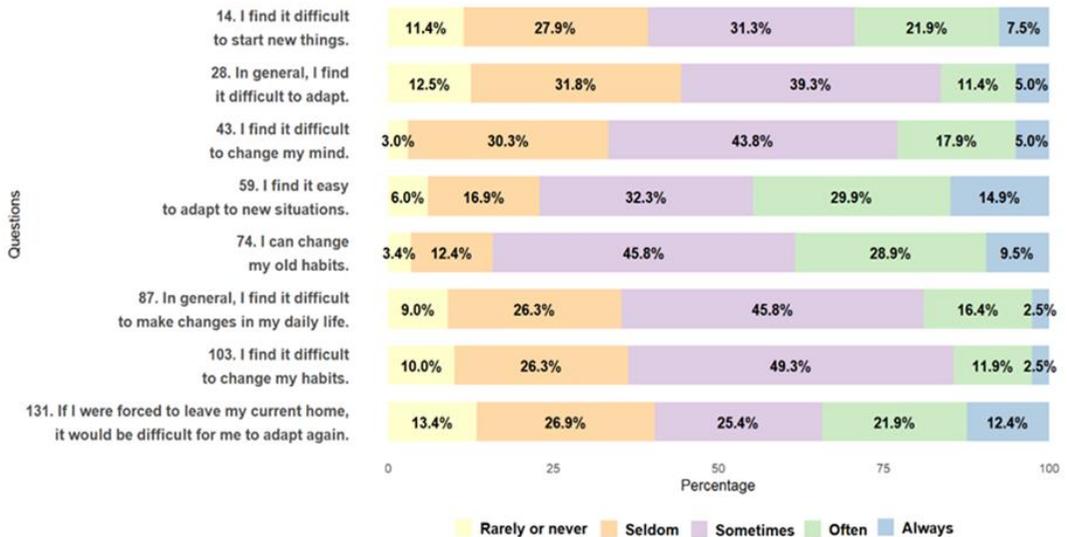

(a)

Dimension: Reality Testing
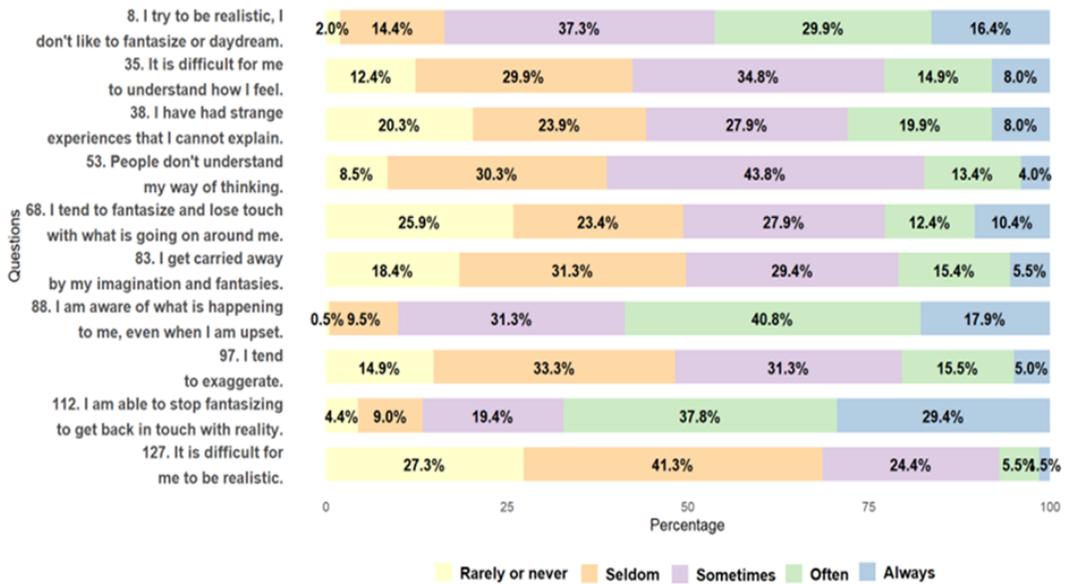
(b)

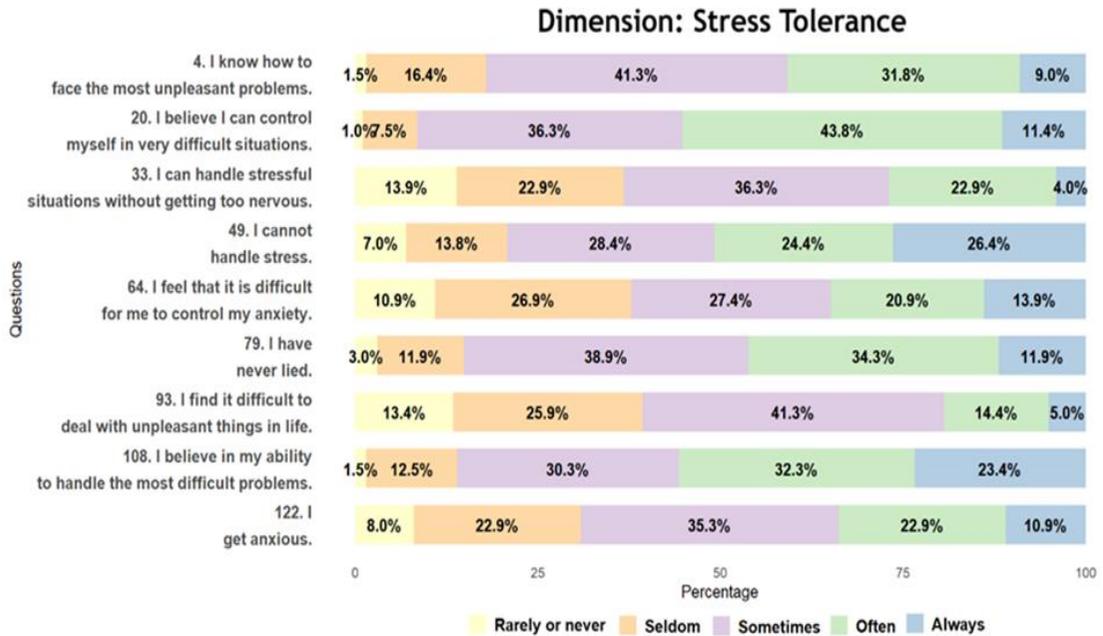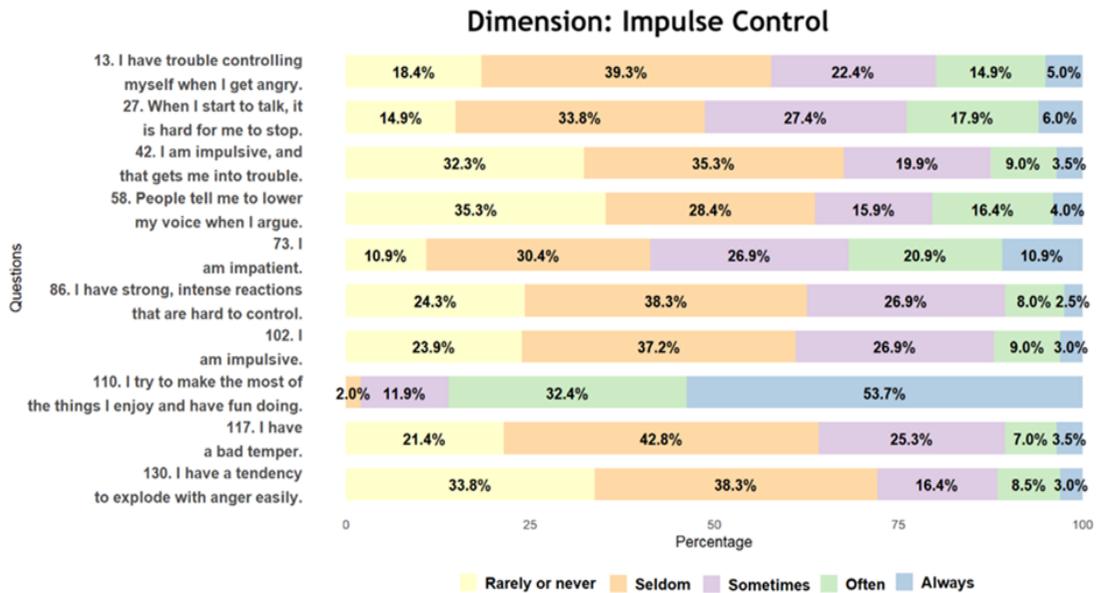## Dimension: Flexibility

(c)

Figure 5.

Percentage distribution of the dimensions of the Adaptability variable, among students of the Faculty of Education at the National University of Trujillo, 2024, according to items and response frequency

The results of Figure 5 provide a detailed view of the dimensions of Adaptability in students of the Faculty of Education, revealing areas of strength and opportunities for improvement. In the Flexibility Dimension, the fact that 44.0% of students find it generally difficult to adapt and 39.0% have trouble starting new things suggests a significant resistance to change, which contrasts with the importance of flexibility for university adjustment. However, the 45.0% who report ease in adapting to new situations indicates a potential for resilience. Regarding Problem Solving, the structured and reflective approach of the majority of students (58.0% act step by step, 69.0% analyze all solutions) aligns with the competencies necessary for successful adaptation (Lopez et al., 2023). However, the 39.0% who find it difficult to choose the best solution under pressure indicates a critical area for intervention. The Reality Testing Dimension shows mixed results, with 50.0% tending to be carried away by their imagination, which could hinder an objective evaluation of situations, a crucial aspect for cognitive-motivational adjustment to the university environment (Zuñiga et al., 2020). These findings underscore the need for targeted interventions to develop adaptability skills, in line with the recommendations of (Barrios & Torales, 2019) to improve university adaptation and academic performance.

In figures 6(a) and 6(b), in the stress management dimension, the results highlight the consistent response in the items I can't stand stress (26.4%) and I believe in my ability to handle problems (23.4%). This reveals two contrasting trends: a significant proportion of students constantly feel overwhelmed by stress, while another group maintains a perception of personal confidence, but this confidence may not be supported by effective practical strategies. Additionally, a considerable percentage responded Often (32.3%) to the item related to confidence in their management skills, suggesting that, although there is a positive perception among part of the group, it is neither universal nor consistent. In the second dimension, the items I have a bad temper and I have trouble controlling myself reflect that 42.8% and 39.3%, respectively, indicated Rarely, which implies a significant and frequent difficulty in managing negative emotional impulses. Similarly, the items I am impulsive and I have a tendency to explode with anger show responses in critical categories (Rarely and Sometimes) with percentages ranging between 35% and 38%. This pattern reinforces the existence of recurrent emotional self-regulation problems in a large group of students. To a lesser extent, some items like I am impatient show 30.4% in the Rarely category, indicating that this difficulty affects a significant subset of the sample. The results suggest that the Faculty of Education should prioritize interventions aimed at improving students' emotional management, with a differentiated approach. On one hand, work should be done with those who feel unable to manage stress by strengthening their self-efficacy and teaching practical coping techniques, such as meditation and problem-solving. On the other hand, for those who frequently experience self-control issues and impulsive reactions, it is essential to implement emotional regulation strategies that include anger management, mindfulness exercises, and the practice of assertive communication skills.

Dimension: Stress Tolerance

(a)

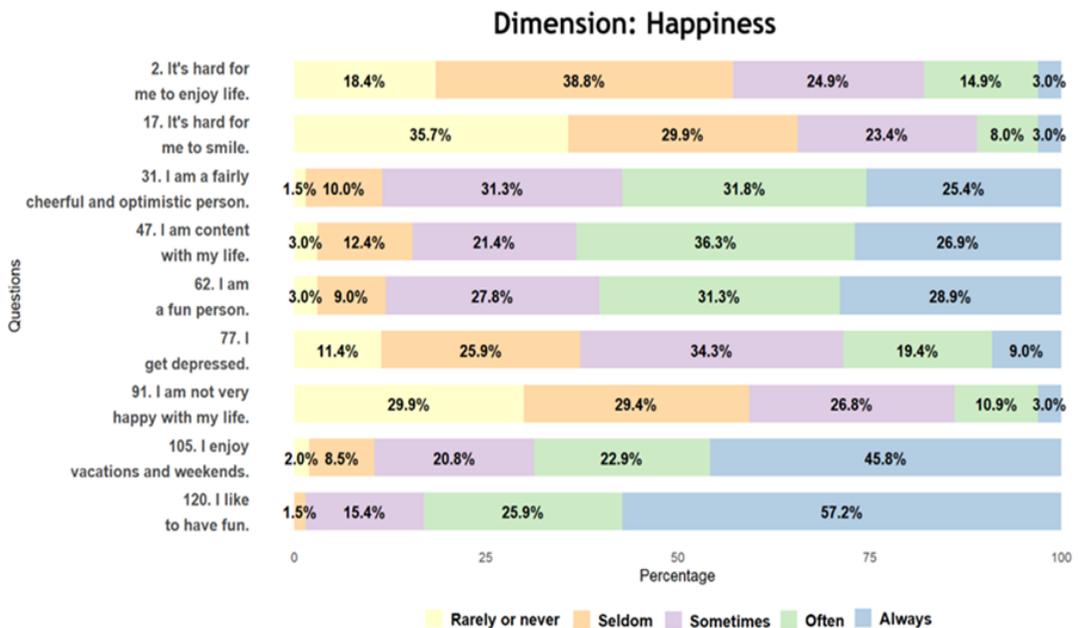## Dimension: Impulse Control

(b)

Figura 6.

Percentage distribution of the dimensions of the variable Stress Management, in students of the Faculty of Education at the National University of Trujillo, 2024, according to items and response frequency

The results of Figure 6 reveal significant challenges in Stress Management among university students. In the Impulse Control Dimension, the high percentage of students who admit to being impulsive (68.0%) and having difficulty controlling themselves when they get angry (58.0%) suggests a significant vulnerability to academic stress. This aligns with observations on how elevated stress can negatively affect students' performance and mental health (Gülnar et al., 2024). The Stress Tolerance Dimension shows mixed results, with 55.0% able to cope in difficult situations, but 51.0% unable to withstand stress in certain circumstances. These findings support the need to implement stress management programs (Barrios & Torales, 2019) and develop effective coping strategies, in line with recommendations to improve the adaptation and academic performance of university students (Abouammoh et al., 2020).

In figures 7(a) and 7(b), corresponding to the Happiness dimension, the items I like to have fun and Enjoying vacations and weekends stand out, with 57.2% and 45.8% of responses in the Always category, respectively. This reflects a predominant positive attitude towards recreational activities and moments of rest. Likewise, items such as I am a fun person and I am happy with my life show significant responses in Always (28.9% and 26.9%) and Often, indicating a widespread perception of personal satisfaction and optimism. In the second dimension, Optimism, the items I generally expect the best and I am optimistic about most things record high percentages in Always (36.3% and 24.9%) and Often (39.8% and 41.3%), suggesting that most students maintain a positive perspective towards life and its challenges. Although a generally positive attitude is evident, it is crucial to reinforce these attitudes so that they are sustainable in higher-pressure scenarios. It is recommended to implement programs that enhance resilience and optimism skills, as well as regular recreational activities that promote social integration and emotional well-being. This not only consolidates the existing good mood but also prepares students to face adversities more effectively.

(a)
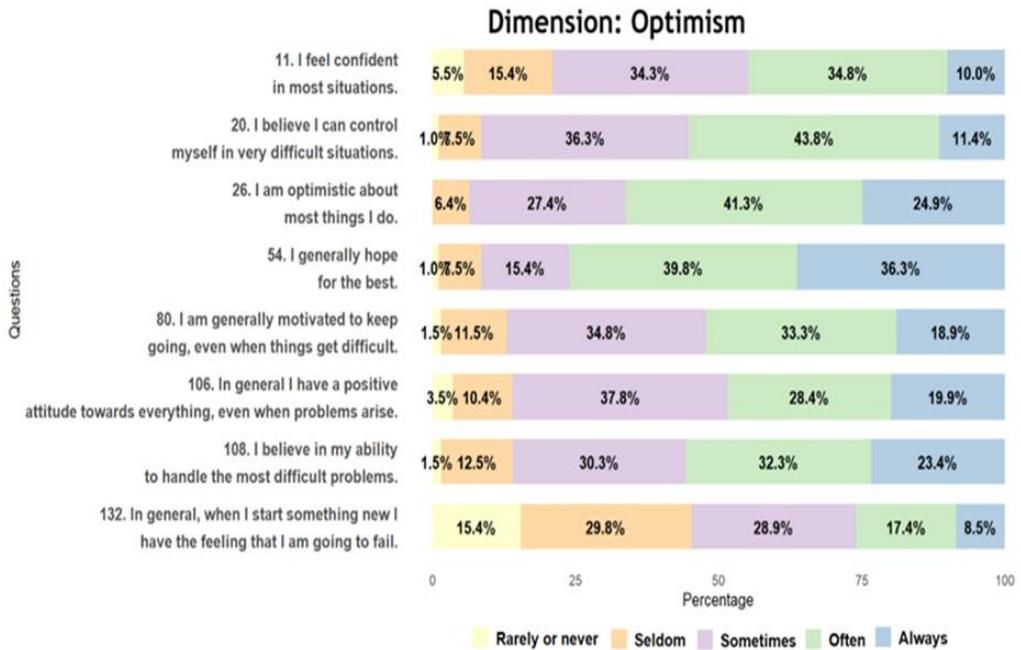
(b)

Figura 7.

Percentage distribution of the dimensions of the variable General Mood, in students of the Faculty of Education at the National University of Trujillo, 2024, according to items and response frequency

Figure 7 presents a complex overview of the General Mood among students. In the Happiness Dimension, while 57.0% describe themselves as cheerful and optimistic, and 63.0% feel content with their lives, a concerning 66.0% find it difficult to smile. This suggests the presence of stress factors that affect emotional well-being. Regarding Optimism, the high percentages of students who expect the best (76.0%) and consider themselves optimistic (66.0%) are positive indicators that can facilitate university adaptation. However, the 45.0% who feel they will fail when starting something new reveals significant insecurities (Martinez and Ferreira, 2023). These results underscore the importance of implementing emotional well-being programs to strengthen resilience and improve students' academic performance, especially considering the relationship between mood and academic performance (Niño et al., 2024; Beedie et al., 2022).

Tabla 1

Spearman Correlation Test to determine the relationship between Academic Performance and the variables Adaptability, Stress Management, and General Mood, in students of the Faculty of Education at the National University of Trujillo, 2024

Variable	Variables	N	p-valor*	r_s**
Academic Performance	Adaptability	201	.000	.848
	Stress	201	.000	.860

	Management			
	General Mood	201	.000	.823

Nota: Se evaluó el no cumplimiento de la normalidad con la prueba de Kolmogorov-Smirnov en las correlaciones estudiadas.

* La correlación es significativa en el nivel 0.01 (bilateral).

** Coeficiente de correlación de Spearman.

Table 1 presents the results of the Spearman correlation test between academic performance and the variables of Adaptability, Stress Management, and General Mood in 201 students from the Faculty of Education. The obtained correlation coefficients are high, with Stress Management reaching rs= .860, followed by Adaptability with rs=0.848 and General Mood with rs= .823, indicating a strong and positive relationship between these variables and Academic Performance. The p-values for all correlations are less than .01 (p= 000< .01), which confirms that the relationships are statistically significant at the 1% significance level. These results suggest that better adaptability, proper stress management, and a good mood are directly associated with better academic performance. Based on this conclusion, it is recommended to implement psychoeducational programs that strengthen these socio-emotional skills in students, as they could play a fundamental role in their academic success.

The results presented in Table 1 reveal high and positive correlations between academic performance and the variables of Adaptability, Stress Management, and General Mood in students of the Faculty of Education. These strong associations (rs=0.848, rs=0.860, and rs=0.823, respectively) are statistically significant (p<0.01), highlighting the crucial importance of these Socioemotional factors in the academic success of university students.

The high correlation between Adaptability and Academic Performance (rs=0.848) supports the theory proposed by other authors who assert that adaptability is an essential component in the processes of academic transition and integration. This finding suggests that students with a greater ability to adjust to the demands of the university environment tend to achieve better academic results. Cognitive flexibility, problem-solving ability, and reality testing, which are key components of adaptability, seem to play a fundamental role in students' ability to successfully face academic challenges (Finkelstein et al., 2019; Niño et al., 2024).

Stress Management shows the strongest correlation with Academic Performance (rs=0.860), which aligns with previous observations about the critical impact of stress on academic performance. This strong relationship can be explained by the influence of stress on students' cognitive abilities and overall well-being, as noted by other studies. Students who effectively manage stress are likely better prepared to face academic pressures, maintain concentration, and apply effective study strategies, resulting in better academic performance (Trunce et al., 2020; Martinez and Ferreira, 2023; Nieto et al., 2024).

The significant correlation between General Mood and Academic Performance (rs=0.823) supports previous findings (Zuñiga et al., 2023) on the importance of mood in the university context. This result indicates that students with a more positive mood tend to achieve better academic performance. Moreover, previous research (Bhurtun et al., 2019; Garbóczy et al., 2021; Reis et al., 2021; Beedie et al., 2022) has explained that mood influences perception and the way students respond to different situations, which can translate into greater motivation, perseverance, and the ability to face academic challenges.

It is important to note that these correlations do not imply causality, but they do suggest a

complex interrelationship between these socio-emotional factors and academic performance. For example, better stress management could lead to superior academic performance, but it is also possible that academic success reinforces the student's confidence in their ability to handle stress, creating a positive feedback loop.

These findings have important implications for higher education institutions. They indicate that interventions focused on improving students' adaptability, stress management, and mood could positively influence their academic performance. This supports the recommendations of previous studies (Zuñiga et al., 2020; López et al., 2023; Gülnar et al., 2024) regarding the need to implement stress management and psychological support programs in the university environment.

According to Figure 8, the results of the Kruskal-Wallis analysis reveal significant differences in the variables of Adaptability (p= .046< .05), Stress Management (p= .037< .05), and Academic Performance (p= .000< .01), highlighting the importance of these variables in the academic context of students in the Faculty of Education. In the Adaptability variable, Communication students present the highest values (84.2 points), followed by Secondary Education and Languages, where multiple comparisons show significant differences between the groups, with Communication clearly superior to Initial (letter "b"). In Stress Management, Communication students also excel, with an average of 55.8 points, while Initial presents the lowest value (52.5 points), indicating the need for specific interventions in this group. Regarding General Mood, no significant differences are found (p= .941), which could suggest a uniform emotional stability among the groups. Academic Performance stands out for the clear differentiation between groups, where Language students achieve the best results (17.5 points), and Secondary Education students the lowest (16.3 points), with multiple comparisons revealing significant differences between these groups. In conclusion, these findings suggest that intervention strategies should focus on improving adaptability and stress management, particularly in Initial Education students, while, in terms of academic performance, attention should be directed towards groups with lower scores, such as Secondary Education, in order to implement specific pedagogical support programs.
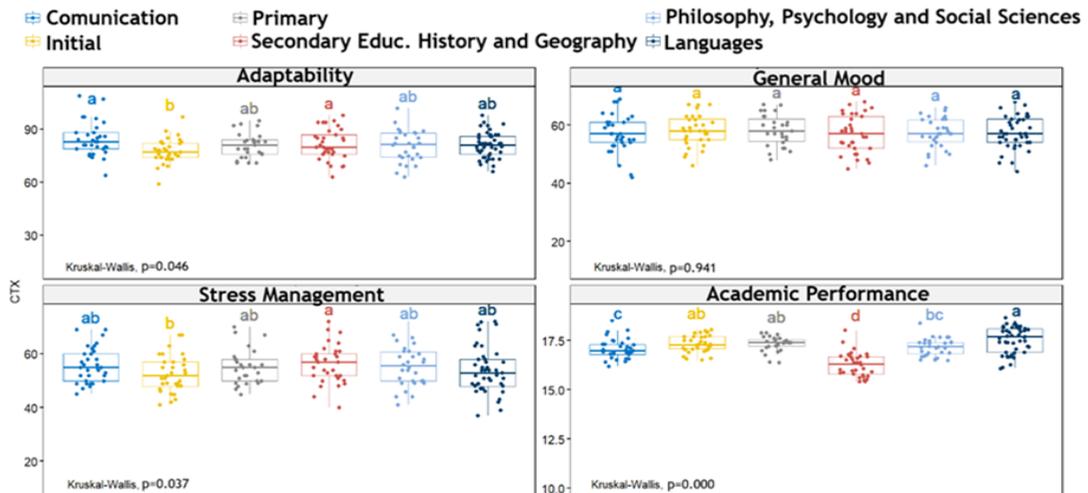

Figura 8.

Kruskal-Wallis test of the variables Adaptability, Stress Management, General Mood, and Academic Performance, in students of the Faculty of Education at the National University of Trujillo, 2024

The results shown in Figure 8, obtained through the Kruskal-Wallis test, reveal significant differences between the programs of the Faculty of Education in the variables of Adaptability, Stress Management, and Academic Performance, but not in General Mood. This suggests that the particular context of each educational program differentially influences these socio-emotional variables and the academic performance of the students. Communication students excel in Adaptability and Stress Management, while Language students show superior Academic Performance, highlighting the relevance of these skills for academic success, as noted by other studies (Barrios & Torales, 2019; López et al., 2023). In contrast, the lower scores in Stress Management and Academic Performance in the Early Childhood Education and History and Geography programs, respectively, suggest areas that require specific interventions, in line with previous observations on the impact of stress on academic performance (Gülnar et al., 2024). The lack of significant differences in General Mood indicates a relatively uniform emotional stability among the programs, which differs from previous research reporting variability in the mood of university students (Castañeda et al., 2018). These results highlight the importance of applying student support strategies tailored to the particular characteristics of each program, in order to improve adaptation, stress management, and consequently, students' academic performance.

Conclusion

The results of this study demonstrate a strong positive relationship between adaptability, stress management, general mood, and academic performance in university students from the Faculty of Education. These significant correlations underscore the importance of socio-emotional factors in the academic success of students beginning their university studies. The high levels of happiness and optimism observed in most programs are positive indicators. However, the presence of students experiencing emotional difficulties suggests the need for support programs for psychological well-being. The findings of this research provide a solid foundation for designing intervention strategies in the Peruvian university context, thus contributing to the improvement of educational quality and student well-being in higher education.

It is suggested that universities, within their educational policies and practices, implement psychoeducational support programs for students starting their university studies by offering workshops for the development of emotional self-regulation skills, to ensure their well-being and academic performance.

Author Contribution.

José L. Bautista Cóndor: Conceptualization, Data Analysis, and Writing, Diana E. Germán Reyes: Data collection and organization, Luis A. Orbegoso D. e Iris L. Vásquez A.: Results, discusión and final review. All authors have read and approved the manuscript.

Conflict of Interest

All the authors of the manuscript declare that they have no conflict of interest.

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