



Research Article

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Digital Entrepreneurship Profiles and Quality of Life in University Students from Northern Peru

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Abstract

In the present era, entrepreneurship is a critical competency for societal development that must be intertwined with the digital realm. The purpose of this research was to determine the digital entrepreneurship profiles of students and to identify the relationship between digital entrepreneurship and quality of life among university students in the year 2022. This study is framed within a quantitative approach of an applied type utilizing a nonexperimental, cross-sectional, and correlational design. A survey was administered to 384 individuals selected using simple random probabilistic sampling. The dendrogram from the cluster analysis enabled the identification of three profiles: cluster 1 consisted of university students in the early stages of development regarding skills and attitudes related to digital entrepreneurship; cluster 2 consisted of highly competent and committed entrepreneurial students in the field of digital entrepreneurship; and cluster 3 included entrepreneurial university students from the city of Trujillo whose profile was exceptionally competent and committed in the field of digital entrepreneurship. Additionally, a significant and positive relationship was identified between the dimensions of Digital Entrepreneurship and the Quality of Life variable. The study contributed to the characterization of digital entrepreneurship profiles, emphasizing the importance of promoting digital entrepreneurship in higher education.

Keywords: Digital, Economy, Entrepreneurship, Quality of life, University students, COVID-19

1. Introduction

The economic, social and cultural transformations of recent decades have led to changes in the way young people enter the labor market, considering that they are a vulnerable group since they have no work experience and lack the financial resources to look for an independent job. Likewise, the pandemic has damaged the economies of countries worldwide, entrepreneurs have seen new ways to manage their businesses, and others have lost their jobs and developed new ideas to obtain income. Traditional commerce also had to use digitalization; otherwise, people would lose market share in a market with the shocks of the economy, which were generated globally (Leach *et al.*, 2021). In this health and economic situation, it has been necessary to rethink how to survive, stay in the market, or reinvent oneself to continue with some type of business. Thus, some establishments have adopted digital technologies.

Kuratko & Audretsch (2022) discussed losers and winners, highlighting how digital platforms have economically leveraged their knowledge, technological capabilities and market adaptability due to global lockdown restrictions. In this way, young entrepreneurs in the midst of the health crisis have been able to become self-employed and improve their quality of life. In the new economy, the Internet plays a leading role in the marketing of new products and services that have started from a global approach to sustain traditional business and other cases, such as new business concepts aimed at young people with extension to the entire society. (Peregrina *et al.*, 2017). The constant progress of digital technologies, such as mobile services, artificial intelligence, crowdfunding platforms, 3D digital printing, social networking platforms, big data and cloud computing, has generated a wide variety of opportunities leading to new forms of entrepreneurship (Cavallo *et al.*, 2019; Zahra *et al.*, 2023). Furthermore, according to the Global Digital 2021 report, during the pandemic, social networks grew by 13.2% over the previous year, new users increased by 490 million, for a total of 4200 million in the first quarter of 2021 alone; additionally, mobile usage registered an increase of 93 million new users, and computer sales grew by 27% in 2020, reaching 450,000 more PCs (We are social, 2021).

Entrepreneurship has become one of the essential sectors for addressing unemployment issues among college students since it provides them with the opportunity to start digital businesses while in college (Wibowo *et al.*, 2023). For students, the presence of sophisticated technology and digitalization opens up wider opportunities to start digital businesses while studying in college (Crittenden *et al.*, 2019). According to Saha *et al.* (2023), academic practitioners and policy researchers are significantly promoting entrepreneurship strategies, as their key role lies in expanding innovation, enhancing economic growth, and supporting economic development. To support entrepreneurship, entrepreneurial intention is vital because it determines the ability to bridge entrepreneurial behavior (Jena, 2020).

On the other hand, quality of life is closely linked to physical well-being, i.e., to health conditions in university students, as well as to social, housing, sociodemographic and cultural characteristics. However, there are no national or international programmes that promote the development of quality of life. Young people need emotional, physical and personal support for a better quality of life (Olivella-Lpez *et al.*, 2020). University students see their quality of life in a positive or negative way according to the fulfillment or absence of certain requirements they expect from their environment from their evolutionary stage of socioaffective development, without disregarding the cognitive aspects of consolidating when entering the university, which are affected if there are socioaffective deficiencies. In that sense (Tho, 2019), quality of life is considered a predominantly desired university outcome in general, so it is considered a fundamental measure of subjective well-being, is applied to a particular domain of life in a higher education setting (Arslan & Akkas, 2014) Sirgy *et al.*, 2007), and is considered a subdomain of students' overall life satisfaction (Sirgy *et al.*, 2007b).

Latin American youth show higher rates of entrepreneurship than their peers in countries from the Organization for Economic Cooperation and Development (OECD). These ventures are mostly concentrated in the domestic market and are small; the others are located in the commerce sector,

restaurants, and the hotel industry (ILO, 2016). Since 2017, 40.1% of young people aged 18 to 29 years have had access to formal financial systems, such as savings accounts, current accounts, fixed-term savings, credit card accounts or debit cards (INEI, 2017). Therefore, it is possible to consider that since that time, a group of young people has used services such as checking accounts that may indicate that they used these accounts for some kind of entrepreneurship. During the pandemic, Peru lost more than two million jobs, causing the employed population to decrease considerably with respect to the previous year due to the crisis generated by COVID-19. Similarly, the number of workers in companies decreased by more than twenty-five percent according to figures from (INEI, 2021).

This situation forced many entrepreneurs to reinvent themselves and generate other modalities to continue obtaining income, opting to make use of digital media since eight out of ten enterprises have been affected by the health crisis; thus, more than fifty percent of those who marketed stopped doing so, and those who were in the process of undertaking these activities were interrupted. The average stay in the market was two months, during which they needed to participate in activities online, courses and seminars (Kantis *et al.*, 2020). It is expected that more than 70% of Peruvian university students consider choosing an entrepreneurial activity to be good for their professional careers, as the means and status of successful entrepreneurs are above the Latin American average. Likewise, half of Peru's entrepreneurial youth can access bank financing as a source, as can the family who also helps with financing. Ninety percent of young people use new technologies for their ventures (Soto *et al.*, 2018).

Entrepreneurs from Lima and Trujillo have not been oblivious to this reality. Young university students have been able to improve their quality of life because digital entrepreneurs affect success by persevering in entrepreneurship and can also influence future generations of entrepreneurs. Young people are very dynamic but also vehement in their decisions, which positively or negatively affect their quality of life. For this reason, it is important to determine the relationships among the variables under study.

Therefore, after presenting important aspects of the variables, the following research questions are proposed: What are the profiles of university students according to the variable digital entrepreneurship? What is the relationship between digital entrepreneurship and the quality of life of university students in 2022?

2. Literature Review

2.1 Perspectives on digital entrepreneurship

The action of entrepreneurship encompasses all those economic activities that occur in society and can generate various projects linked with one another, which start from the university or any area of a company, thus being entrepreneurs endowed with creativity, initiative and action orientation (Kirberg, 2016). On the other hand, entrepreneurial attitudes are defined as the capabilities needed to undertake, among which the greatest is the level of risk since the entrepreneur is ready to persevere and others have discernment of their own skills, what they know, their achievements and their experiences in the creation of a business (Correa and Villareal, 2018).

As entrepreneurship is an important element for explaining regional and national economic development (Stam, 2009), there are several types of entrepreneurship, ranging from business to economic growth. Additionally, social entrepreneurship refers to safeguarding social needs. Artistic, cultural, political, religious, spiritual and digital entrepreneurship are also considered (Kirberg, 2016). The latter type of entrepreneurship is a new form of entrepreneurial activity in which part or all of the entrepreneurial process has been digitalized or other information and communication technologies are used to pursue opportunities (Liu *et al.*, 2023; Nambisan, 2017). The digitalization of entrepreneurial processes such as crowdfunding systems (Mollick, 2014), social platforms (Fischer & Reuber, 2011) and 3D digital technology (Rayna *et al.*, 2015) offers new opportunities for the

development of entrepreneurial projects for young people since the pandemic.

According to Correa & Villarreal (2018), up to three main components of entrepreneurship can be identified: entrepreneurial attitudes, activities and aspirations, the combinations of which can contribute to improving quality of life and economic development.

Martínez & Bañón (2020) noted that the crisis has transformed digitalization into a primacy to address the challenges and opportunities that arise. It is important to continue fostering the entrepreneurial culture since they have capabilities that allow them to identify profitable business niches, reflected in this way in more than sixty percent of the respondents who, during the health crisis, had new opportunities, taking advantage of their strengths and the resources they have had to promote their business; here, institutions play an important role in supporting the financing of such ventures.

Likewise, García (2016) argues that digital entrepreneurship is based on four axes—empathy, satisfaction, commitment and innovation—which are relevant when assessing technologies in accordance with the psychosocial dynamics of groups. Therefore, (Montalvo-Castro, 2016) noted that more than sixty percent of the respondents are highly interested in starting a business in the future, which reflects the great entrepreneurial potential and basic conditions necessary to take a company forward, and more than fifty percent of them are highly interested in a digital venture. In addition, it was shown that business ideas arise from the personal experiences of the students, either to solve a personal problem or a shortage in their daily lives.

Similarly, Kolle *et al.* (2021) affirm that female digital entrepreneurship has an impact on economic development, which dynamizes the economy, and that the main difficulty faced by digital entrepreneurs is related to finding financing. In the case of women, another barrier is the role of women in their families. Similarly, Solis *et al.* (2021) conclude that there is a positive association between entrepreneurship and innovation in SMEs. Therefore, the greater the value for the client is, the greater the entrepreneurship and innovation, keeping the competitive advantage constant.

Entrepreneurship competence can be understood as the ability of a person to put into action and plan his or her ideas. To do so, creativity, innovation, and planning and managing projects to achieve their objectives must be applied (Prendes-Espinosa *et al.*, 2021). Finally, the management and safety dimension evaluates aspects such as learning from experience, solving problematic situations, planning and organizing activities, having a vision where technology and ethics are applied, and showing constant motivation and perseverance (Prendes-Espinosa *et al.*, 2021).

2.2 Approaches to quality of life in young entrepreneurs.

Classically, Lawton (1999) defines quality of life as a multidimensional evaluation according to intrapersonal and socionormative criteria of an individual's personal and environmental system. Similarly, the quality-of-life variable incorporates sciences such as economics, medicine and social sciences (Cummins, 2005). Likewise, Haas (1999) argues for the multidimensional evaluation of individual life circumstances in the cultural and value context to which one belongs. Thus, quality of life is an individual's perception of his or her position in life in the context of the culture and value systems in which he or she lives, as well as his or her goals, expectations, standards and concerns (Tan *et al.*, 2014; WHOQOL, 1995).

To assess quality of life, objective and subjective indicators can be used, although the latter are more common (Davis *et al.*, 2008). The former refer to family income, the number of illness days at school and the number of medications a person takes. However, the subjective indicators cannot be completed by another person, as they refer to a person's feelings, such as their feelings about their health, school or family. In the study, the orientation of the term quality of life was related to the individual's perception of his or her own life as good or bad (Holden & Linnerud, 2012), as it is determined by the degree to which a person's feelings, hopes and desires coincide with his or her achievements (Glicken & Robinson, 2013).

According to Olivella-Lopez *et al.*, (2020), the implementation of programs for the development

of quality of life determines the origin of attention given to the prevalence of mental disorders, which highlights the need for a range of interdisciplinary professionals that allow linking human processes with contextual circumstances that occur over time and with community, family and personal resources. Additionally, (Riveros & Vinaccia-Alpi, 2017) state that quality of life is related to physical health, highlighting that perceived stress, depression, and anxiety, as psychological variables, impact quality of life. Finally, (Meda-Lara *et al.*, 2021) claim that quality of life and psychological well-being include self-perception, autonomy, purpose in life, mastery of the environment and satisfaction with life and negatively related to academic stress.

3. Methodology

The approach on which the research is based is quantitative, and data are collected with the objective of testing hypotheses based on statistics in a numerical way and establishing models of the behavior of the study variables (Hernández & Mendoza, 2018).

This type of research is basic since it seeks to integrate the theoretical knowledge observed in a social problem in different economic sectors based on the scientific successes of basic research and corresponding and supporting the theory in a study (Vara, 2012). The study corresponds to the correlational research level because the objective is to establish the level of correlation between the study variables.

The population was composed of 45,036 university students from the Department of La Libertad according to the 2010 INEI PERU Census: total undergraduate students, study modality, and gender according to the location where they received their classes. To determine the sample size, simple random probabilistic sampling was applied, resulting in 383 selected students. The distribution of the universities of origin is shown in Table 1. Notably, 32.1% (123 participants) of the participants were male, with an average age of 21.67 years, and 67.9% (260 participants) were female, with an average age of 21.07 years. Additionally, 96.2% (376 participants) reported being single. Furthermore, 52.6% (202) were from the academic specialty of administration, and the highest percentage, represented by 30.0% (115 participants), belonged to the V-to-VI cycles.

Table 1. Distribution of percentages of entrepreneurial university students in the city of Trujillo in 2023 according to university of origin.

University	fi	%
Antenor Orrego University (UPAO)	92	24.0
Cesar Vallejo University (UCV)	106	27.7
National University of Trujillo (UNT)	87	22.7
Universidad Privada del Norte (UPN)	98	25.6
Total	383	100.0

The data collection instruments used include the Digital Entrepreneurship Questionnaire for University Students by Prendes *et al.* (2021), which consists of 55 questions divided into four dimensions: Opportunity Identification, Action Planning, Initiative and Collaboration, and, finally, Management and Assurance. The response scales used a Likert scale ranging from 1 to 5 (where 1: Strongly Disagree and 5: Strongly Agree), and the Quality of Life Questionnaire for CEOs in Peru 2020, which includes 22 questions divided into three dimensions—time investment, enjoyment of activities, and habits—also using a Likert scale ranging from 1 to 5. The validity of the instruments was determined through the processing of scores obtained from expert judgment using the V-Aiken coefficient (0.95 for the Digital Entrepreneurship Instrument and 0.99 for the Quality of Life Instrument). The reliability of the instruments was assessed using Cronbach's alpha coefficient, with the Digital Entrepreneurship Instrument achieving reliability ($\alpha=0.932$) and the Quality of Life Instrument ($\alpha=0.965$), demonstrating the instruments' reliability.

The data were analyzed using descriptive statistics, including the creation of tables and statistical graphs, such as simple bars, horizontal stacked bars, and ring charts. Inferential statistics were employed to assess the bivariate normality of variables using the Royston test and to quantify the correlation between variables using Spearman's correlation test. Furthermore, cluster analysis was conducted through dendrogram evaluation to identify clusters with defined profiles of entrepreneurial university students in the city of Trujillo, employing Ward's method of clustering using RStudio software version 4.3.2.

4. Results

4.1 Descriptive statistics

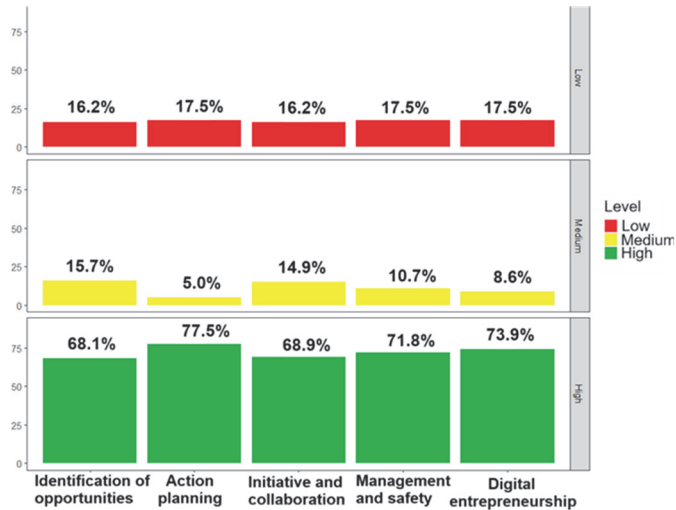
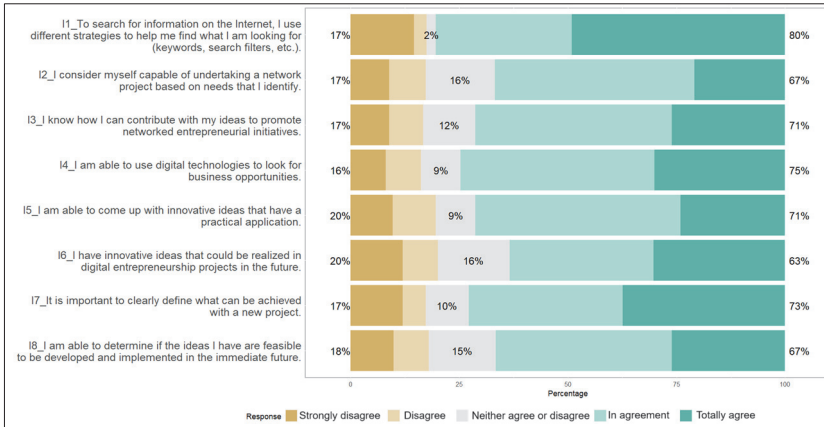
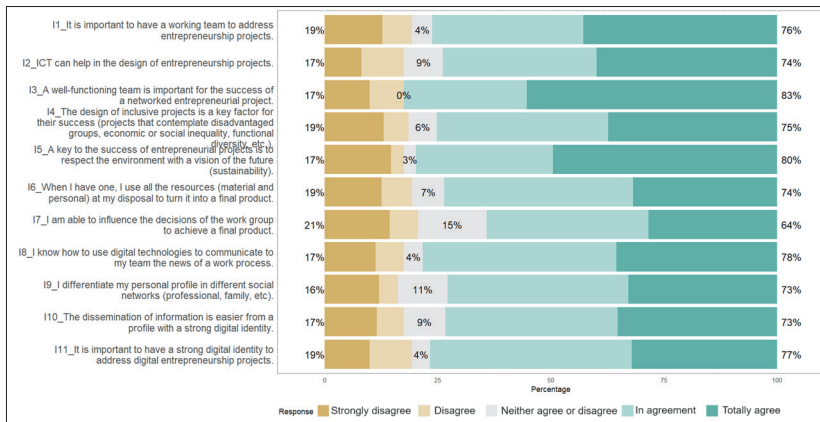


Figure 1. Bars of the percentage distribution of the variable Digital Entrepreneurship of university students in 2023, according to dimensions and level.

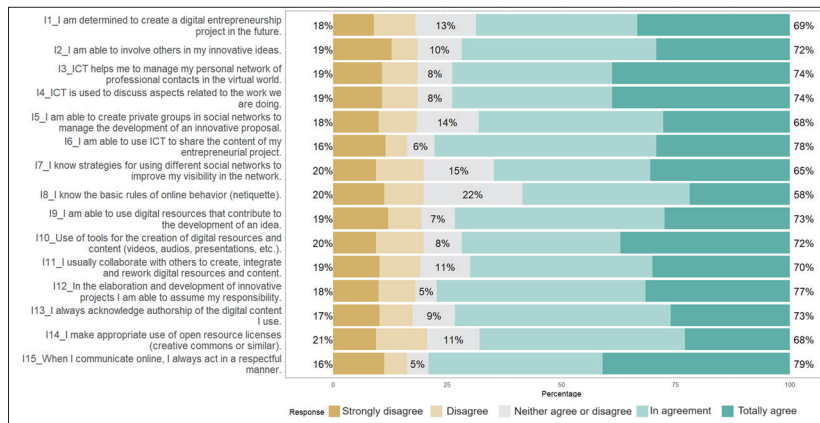
According to the results shown in Figure 1, the highest percentage of students surveyed presented a high percentage of the Digital Entrepreneurship Variable, represented by 68.1% in the Identification of Opportunities dimension, 77.5% in the Action Planning dimension, 68.9% in the Initiative and Collaboration dimension, 71.8% in the Management and Security dimension and 73.9% in the Digital Entrepreneurship variable. Thus, we can affirm that the level of the variable Digital Entrepreneurship, as in each of its dimensions of the entrepreneurial university students of the city of Trujillo in 2023, was found to be high.



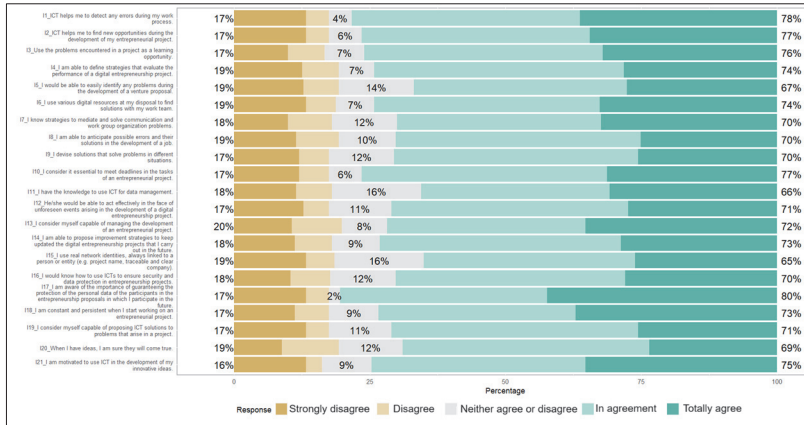
a. Dimension: Opportunity identification



b. Dimension: Action Planning



c. Dimension: Initiative and Collaboration



d. Dimension: Management and Security

Figure 2. Horizontal stacked bars of the percentage distribution of the variable Digital Entrepreneurship of University Students in 2023 according to the items and frequency of response.



Figure 3. Dendrogram of the hierarchical agglomerative cluster analysis of the digital entrepreneurship variable of university students in 2023.

Note: The dendrogram was constructed based on the Euclidean distance, with Ward's link and the horizontal line cut in the dendrogram for the determination of the number of clusters.

As shown in Figure 3, the dendrogram allowed us to determine the existence of three clusters. The characteristic corresponding to cluster 1 is that it consists of entrepreneurial university students from the city of Trujillo. Those who presented these results show a profile that, for the most part, seems to be in the early stages of development in terms of skills and attitudes related to digital entrepreneurship. In general, they lack confidence in their ability to undertake online projects, identify business opportunities and contribute innovative ideas. In addition, they show a low level of knowledge and skills in the use of digital technologies for information search, project management and digital content creation. They also seem to be unaware of the importance of aspects such as digital identity, sustainability and data protection in the digital entrepreneurship environment. In

summary, these students can benefit from significant development in their skills, knowledge and confidence in the digital entrepreneurship environment. In cluster 2, they are entrepreneurial university students from the city of Trujillo whose profile is highly competent and committed in the field of digital entrepreneurship. They are skilled at searching for information online and able to identify business opportunities and promote entrepreneurial initiatives in the network. Their focus is on the practical innovation and feasibility of digital projects, in addition to valuing the importance of sustainability and inclusion in their initiatives. They have a deep understanding of digital technologies and use them effectively to communicate, collaborate and manage projects, displaying a strong digital identity and a strong commitment to online ethics. These students are determined to be perseverant and willing to overcome challenges, allowing them to be prepared to successfully complete digital entrepreneurial projects in the future. Finally, in cluster 3, they are entrepreneurial university students from the city of Trujillo whose profile is exceptionally competent and committed in the field of digital entrepreneurship. They are highly skilled at searching for information online and have a deep understanding of how to use digital technologies to identify business opportunities. Their ability to generate innovative ideas and turn them into entrepreneurial projects is outstanding, and they are aware of the importance of sustainability and inclusiveness in their proposals. They are collaborative and respectful online and know how to build and maintain a strong digital identity. In addition, they are motivated and persistent in pursuing their projects and show great confidence that their ideas will become a reality. In brief, these students are well prepared to lead digital entrepreneurship projects successfully in a highly technological and competitive environment.

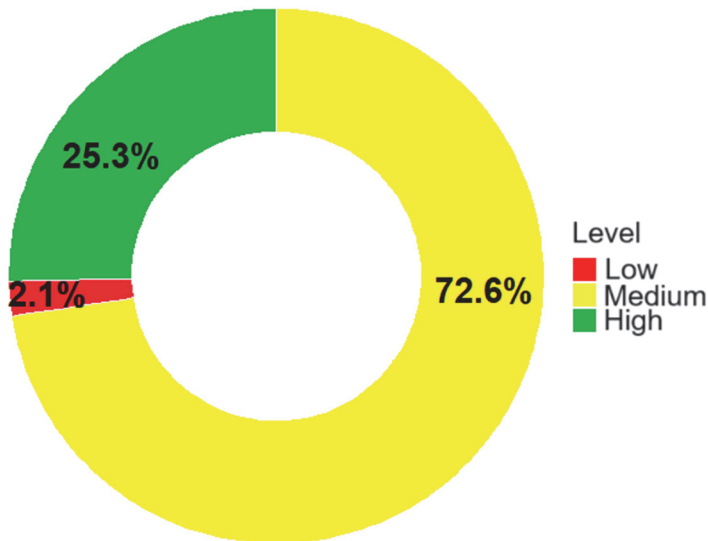


Figure 4. Bars (Anillos) of the percentage distribution of the variable quality of life for university students in 2023 according to education level.

Figure 4 shows that the highest percentage of the entrepreneurial students surveyed had a medium level of quality of life (72.6%), while 2.1% and 25.3% had low and high levels, respectively; thus, we can show that the quality of life level of the entrepreneurial university students in the city of Trujillo in 2023 was moderate.

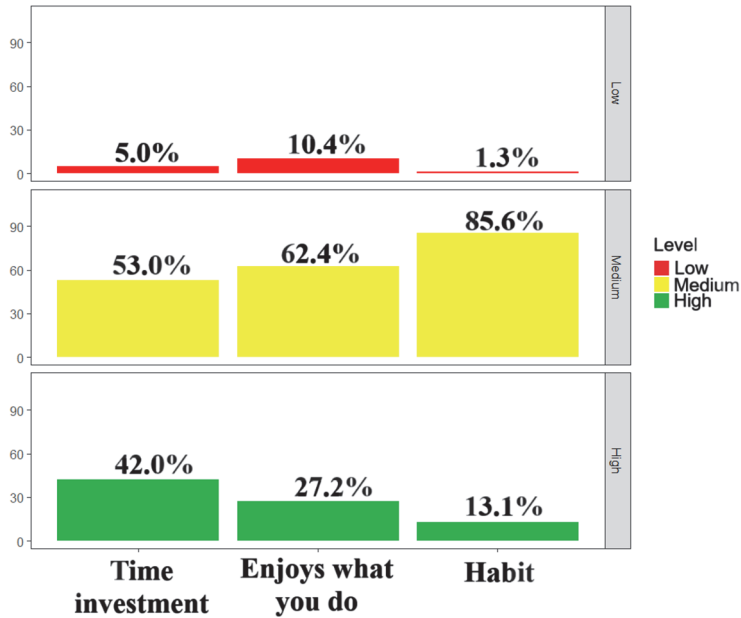


Figure 5. Simple bars of the percentage distribution of the variable quality of life of university students in 2023 according to dimension and level.

Figure 5 clearly shows that the majority of the surveyed students exhibited a medium level of education across each dimension of the quality of life variable, represented by 53.0% in the time investment dimension, 62.4% in the enjoyment of activities dimension, and 85.6% in the habits dimension. Therefore, it can be affirmed that the level observed in each dimension of the quality of life variable for entrepreneurial university students in the city of Trujillo in 2023 was medium.

4.2 Inferential statistics

Table 2. Spearman correlation test between the variable Digital entrepreneurship and dimensions with the variable Quality of Life of University Students in 2023.

Dimension of the Digital Entrepreneurship variable	Variable	n	rho	CI 95%	p value *
Identification of Opportunities	Quality of Life	383	0.881	[0.856;0.901]	0.000
Planning of the Action		383	0.879	[0.855;0.900]	0.000
Initiative and Collaboration		383	0.882	[0.858;0.903]	0.000
Management and Security		383	0.880	[0.855;0.902]	0.000
Variable		n	rho	CI 95%	p value *
Digital Entrepreneurship	383	0.885	[0.861;0.905]	0.000	

Note: The noncompliance of the bivariate correlation of the variable Digital entrepreneurship and dimensions with the variable Quality of Life was verified with the Royston test.

* The correlation is significant at the 0.01 level (bilateral).

Table 1 shows that the p value for the significance of Spearman's correlation was less than 0.01 ($p < 0.05$), in the evaluation of the correlation between each of the dimensions of the Digital Entrepreneurship variable and the Quality-of-Life variable, as found in the dimension Identification of Opportunities and Quality of Life ($p = 0.000 < 0.01$, $r_s = 0.881$), as well as between the dimension

Action Planning and Quality of Life ($p=0.000<0.01$, $rs=0.879$). Furthermore, we explored the associations between the Initiative and Collaboration dimensions and quality of life ($p=0.000<0.01$, $rs=0.882$) and between the Management and Safety dimension and quality of life ($p=0.000<0.01$, $rs=0.880$). A p value of significance lower than 0.01 ($p<0.01$) was also registered in the correlation test between the variables Digital Entrepreneurship and Quality of Life ($p=0.000<0.01$, $rs=0.885$), indicating that the correlations are significant at the 1% level. Additionally, they are positive or direct correlations, whose correlation values were high for each of them ($0.70 \leq rs < 1.00$).

5. Discussion

Currently, entrepreneurship is an essential competence for the development of society and must be related to digital knowledge; thus, it is important that university students promote strategies that allow them to subsequently innovate (Saha *et al.*, 2023). Economic development is a process that requires the participation of all citizens. This has a greater relationship with young people, who, through their fresh and innovative ideas, can generate business ideas to execute them and improve quality of life (González, 2017).

Based on the data collected, the analysis made it possible to determine the level of digital entrepreneurship of university students to subsequently measure the relationship between digital entrepreneurship and quality of life. That is, knowing whether the training that university students receive in their educational institutions allows them to develop entrepreneurial skills that help improve their quality of life.

Thus, the study showed that university students have a high level (more than 68%) of education in all the dimensions of digital entrepreneurship (identification of opportunities, action planning, initiative and collaboration, and management and security). In addition, it was observed that in all four dimensions, the highest percentage was concentrated in the alternatives "agree" and "strongly agree" (Figure 2). This result is similar to that of the study of Zabala Moreno (2017), where the majority of respondents showed interest in continuing in the field of digital entrepreneurship; these responses were complemented in interviews where they expressed interest in continuing entrepreneurship despite difficulties that may arise showing appreciation for the opportunity to develop and work on their own projects. However, a study conducted in Colombia by Gaibor (2019) showed that millennials of the Faculty of Business Sciences lack a culture of entrepreneurship because they are not motivated to use traditional business; this is dictated within their curriculum since they have new technologies and digital applications that help them undertake business through social media at low cost, so they disregard traditional investment. On the other hand, university students displayed medium levels of quality of life, indicating a predominance of habits that reflect the average daily hours of sleep, which generally amount to seven hours per day. Additionally, they currently report feeling little stress, are regularly connected to their digital devices, perceive themselves as reasonably productive on a daily basis, and often do not consume alcoholic beverages. Furthermore, time investment, another dimension, holds significant emotional importance due to the number of hours spent with family, working, or engaging in personal activities that bring about satisfaction. This finding confirms that quality of life is closely linked to the health conditions of students and is influenced by habits that contribute to their physical, emotional, and personal well-being (Olivella-Lopez *et al.*, 2020), which are highly relevant to the profile of digital entrepreneurship.

The results of cluster 1 include characteristics in the early stages of development in terms of skills and attitudes related to digital entrepreneurship among university students. Such a result was also evidenced in the study by Page and Holmström (2023) conducted in multiple cases of incubators of young Swedish entrepreneurs with 2 years of operation; one of their findings showed that there are inhibiting factors that include a worrying inertia for entrepreneurs that can be caused by underinvestment and indifference in the incubator, which can lead to entrepreneurs without aspirations, where failure reduces investment and time but can also be considered learning

experience.

Cluster 2 includes university students who are highly competent and committed to digital entrepreneurship. Young people who demonstrate the ability to search for information online are able to identify business opportunities and promote entrepreneurial initiatives in social networks. Young people who face challenges in entrepreneurship are more attentive to seeking modern technological solutions that help them achieve their personal goals (Mohammad *et al.*, 2016). Now, for entrepreneurs to perform optimally, they must have adequate digital infrastructure. According to the study by Elshaiekh *et al.* (2023), which applied to digital entrepreneurs in Oman, respondents showed a neutral posture regarding satisfaction with digital infrastructure ($t=1.516$). In other words, there is a need for constant improvement in digital platforms. This response was consistent with the growth of social networks reported by Global Digital 2021 (We are Social, 2021). In addition, we are immersed in a digital disruption, and it is a shared responsibility not only for universities or educational institutions at all levels but also for state agencies to provide the necessary resources to small or large entrepreneurs to meet their goals.

The largest, cluster 3, includes the characteristics of exceptionally competent university students committed to digital entrepreneurship. The analysis of this cluster hints at the high proficiency of many entrepreneurs who use digital tools to grow their business. This finding is consistent with the findings of López-Lemus (2023), who applied to young people in Guanajuato, Mexico, on social networks and innovation in the industry; the results showed that the most commonly used digital media for marketing entrepreneurship is social media. In addition, these social networks influence innovation and increase sales, which are the main motivations for entrepreneurs. In addition, the performance of digital entrepreneurs can reach 100 to 1000 times higher than the average performance of their competitors (Gala *et al.*, 2024).

Regarding the dimensions of the Digital Entrepreneurship variable and the Quality-of-Life variable, all of them registered a high and significant correlation of less than 0.01. Thus, students agreed on the importance of identifying opportunities ($r_s=0.881$) to improve quality of life. A similar result was found in the research by Román-García and Calatayud (2022), where men had a greater mean BMI than women did ($28.1>26.99$); i.e., this difference is probably associated with the idea that men are more related to business. This finding is similar to that of Elshaiekh *et al.* (2023), where entrepreneurs in Oman agreed that an increase in graduate education has increased unemployment, further agreeing on the need to adopt specialist centers to help organize and implement employment opportunities in entrepreneurial projects. Consequently, the Management and Security dimension together with Quality of Life ($p=0.000<0.01$, $r_s=0.880$) shows that the majority of respondents agree that management and security skills and abilities are related to quality of life. This finding is in line with the study by López-Lemus (2023), who indicates that entrepreneurs use social networks to generate new products and services, which they identify through customer trends and tastes, the same of which are provided by the same digital platforms and social media. This information makes it easier to promote processes for production and trade and diversify services according to customer needs, which enhances their entrepreneurship.

Finally, the general objective regarding the variable Digital Entrepreneurship and Quality of Life applied to the entrepreneurial students of Trujillo had a significant p value of less than 0.01 and a direct and very high positive correlation ($r_s=0.885$). This may be because in recent decades, many universities have developed a culture that contributes to innovation, becoming the most entrepreneurial organization as students develop risk-taking skills and solve challenges by finding innovative opportunities, thereby indirectly strengthening a sustainable society and quality of life (Seikkula-Leino & Salomaa, 2020). In Muhammad's study (2023), on a model of technological acceptance and evaluation of entrepreneurs' behavior, whose sample included 200 small and medium-sized companies that make use of digital platforms for the development of their activities, the verification of the model indicated satisfactory fit indices (CMIN/DF=1.314, CFI=0.954, SRMR=0.046, RMSEA=0.040 and PClose>0.05). The results showed a significant relationship between satisfaction and entrepreneurial behavior. Entrepreneurship favors professional practice, and in

addition to improving the quality of life of students, it also generates a good image for universities.

This study underscores the importance of incorporating digital entrepreneurship into educational programs as a key element to enrich both the professional profile of students and their quality of life. The implementation of educational policies and university practices that foster these skills can open doors to innovative business and employment opportunities, contributing significantly to economic development. It is suggested that higher education institutions adopt a more active approach in this area through the creation of specialized programs, access to mentoring networks and support for entrepreneurial initiatives. These actions will not only prepare students for the challenges of the digital labor market but also boost economic growth by promoting the emergence of innovative technology companies.

6. Future Lines of Research

This study opens several avenues for future research in the field of digital entrepreneurship. First, it is crucial to explore in depth how cultural and socioeconomic differences between regions affect the adoption and impact of digital entrepreneurship on students' quality of life. Second, it would be valuable to investigate the role of formal and informal education in the development of digital and entrepreneurial competencies to identify the most effective teaching methods. Third, future studies could analyze the long-term impact of digital entrepreneurship on the professional and personal trajectories of university graduates, including psychological well-being and economic stability.

A gap identified in the present study is the limited exploration of the inhibiting factors of digital entrepreneurship among students, such as technological barriers, resistance to change, and lack of institutional and financial support. Future research should address these barriers to provide concrete solutions to foster a more conducive environment for digital entrepreneurship. In addition, it would be enriching to compare digital entrepreneurship profiles among students from different academic disciplines to better understand how the field of study influences the predisposition and capacity for digital entrepreneurship.

7. Conclusion

The present study revealed that the population of university students under analysis demonstrates solid performance in all dimensions of digital entrepreneurship, with a percentage that exceeds the threshold of 68%, presenting levels of agreement in the categories "agree" and "strongly agree". Consequently, 72.6% of the participants reported a moderate level of quality of life, indicating the need for improvement; however, they emphasized that they are on the right path in terms of their habits and time investment. This highlights students' ability to confront challenges inherent in the digital entrepreneurial environment and underscores the urgent need to foster an entrepreneurial spirit in higher education as well as to promote programs for the development of university students' quality of life.

This highlights the students' ability to address the challenges inherent in the digital entrepreneurial environment and underscores the imperative need to foster the development of entrepreneurship in higher education.

On the other hand, the study contributed to the characterization of the digital entrepreneurship profiles of the participants in three clusters. In the first cluster are those students who are at an early stage of development in terms of their preparation in the field of digital entrepreneurship. This cluster suggests that these students may gain a greater advantage in participating in projects and proposals within the university to improve their skills, knowledge and capabilities. The second cluster presents the characteristics of university students who are entrepreneurial and committed to digital entrepreneurship, in addition to searching for information online and creating entrepreneurial projects on the web. The third cluster exhibits the particularities of entrepreneurial students, whose profile is highly skilled and committed to digital entrepreneurship. The above discussion emphasizes

the importance of promoting digital entrepreneurship among university students. Participation in projects and proposals within the university can be an excellent way for students to acquire skills and knowledge in the field of digital entrepreneurship. In addition, it is crucial that students have access to resources and tools that allow them to develop entrepreneurial projects online. In this way, entrepreneurship and innovation can be fostered among students, which can have a positive impact on their professional future and the country's economy.

Finally, the study contributes by identifying a highly significant relationship between digital entrepreneurship and quality of life, both with respect to the variable and in each of the dimensions, which implies that digital entrepreneurship is not only a necessary competence for young university students but also related to the quality of life of the participants. This is because digital entrepreneurship allows greater flexibility at work, as well as the possibility of working from anywhere with an internet connection. In addition, digital entrepreneurs can have greater control over their time and personal lives, which can have a positive impact on their quality of life.

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