

Entrepreneurial Habits and Professional Preferences in Students of Business Administration from Arequipa City

Hábitos empreendedores e preferências profissionais em estudantes de administração de empresas da cidade de Arequipa

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ABSTRACT

This article presents the description and comparison of entrepreneurial habits and professional preferences in 213 students in the last year of the Business Administration career at three universities in the city of Arequipa. For the present study, the Entrepreneurial Habits Questionnaire and Pereyra's Profile of Professional Preferences were applied collectively. It was found that 30.5% have professional preferences for the administration career and only 14% have a current business, while, with respect to professional preferences, it was found that UCSM students have a greater vocation for their career (40.5%), compared to students from UNSA (29%) and UCSP (20%). Likewise, students who have started a profitable business have more entrepreneurial habits and there are positive relationships between entrepreneurial habits, age, and Realism, perhaps they are low.

Keywords: Entrepreneurial habits, professional preferences, business administration, entrepreneurship.

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RESUMO

Este artigo apresenta a descrição e comparação de hábitos empreendedores e preferências profissionais de 213 estudantes do último ano de Administração de Empresas de três universidades da cidade de Arequipa. Para este estudo foram aplicados coletivamente o Questionário de Hábitos Empreendedores e o Perfil de Preferências Profissionais de Pereyra. Verificou-se que 30,5% têm preferências profissionais pela carreira de administração e apenas 14% têm um negócio atual, enquanto, com relação às preferências profissionais, constatou-se que os alunos da UCSM têm maior vocação para a carreira (40,5%),

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RESUMO

em comparação com Alunos da UNSA (29%) e UCSP (20%). Da mesma forma, os alunos que iniciaram um negócio lucrativo apresentam mais hábitos empreendedores e existem relações positivas entre hábitos empreendedores, idade e Realismo, embora sejam Baixas.

Palavras-chave: Hábitos empreendedores, preferências profissionais, administração de empresas, empreendedorismo.

Entrepreneurship in students: contexts and associated variables

In 1974 at Harvard, courses and programs were created to promote entrepreneurship, with Joseph Alois Schumpeter being the first to refer to the term “entrepreneurship” (León, 2023). Later in the 1980s, the term entrepreneurship gained greater interest from business schools with respect to business generation or company management. Likewise, more theoretical resources have been generated about entrepreneurship in some branches such as economics, anthropology and psychology (Guzmán & Trujillo, 2008).

Now, we can define entrepreneurship as the ability to generate a business or create a company, thus, to start a business or company the entrepreneur faces difficulties, challenges and must confront adversity (Portocarrero et al., 2010). Likewise, an education that emphasizes entrepreneurship can generate attributes and attitudes to be more favorable towards business creation (Duarte & Ruiz, 2009). In that sense, Colombia is a country that has implemented various mechanisms to educate entrepreneurship, since 85% of universities have entrepreneurship centers (León, 2023), and according to some reports, up to 52% of entrepreneurs have a level of higher education, which provides their businesses with greater sustainability and success due to their technical knowledge, projects and management or management of technologies, among other aspects (Soria-Barreto et al., 2021). Likewise, a qualified entrepreneur obtains greater success due to the experience and knowledge acquired, which promotes entrepreneurial conditions (Vázquez, 2018).

However, the reality in Latin America is different from developed countries, since the majority of young Latin Americans start their businesses because they do

not have a job, have low levels of education and are self-employed, which generates a low productivity, greater chances of failure and little chance of generating a larger company. In this way, they become subsistence entrepreneurs, a type of entrepreneurship that occurs out of necessity (Saavedra, 2020). Reinforcing the above, Schneider (2008) points out that managing a business by intuition has a greater probability of failing, and also states that in Latin America a strategic process is not carried out due to lack of knowledge, because little usefulness is perceived and it is considered that it is not there will be greater changes in business. In fact, only 40% of businesses started in Latin America are older than 5 years (Arias & Jiménez, 2014), and a large number of young people do not study or work, mainly due to social exclusion (Cavieres et al., 2020), so social entrepreneurship emerges as an alternative for the training of young low-income entrepreneurs (Vázquez, 2018).

Therefore, an important aspect is the support that the government can provide to promote entrepreneurship. In this regard, some countries such as Spain, Chile, Uruguay and Peru, offer spaces where help and information is provided for the creation of new businesses (Frías & Pérez, 2001). On the other hand, the Latin American population perceived that among the main obstacles to starting a formal business are the payment of taxes and the regulation of companies, in addition to the bureaucracy underlying the management for the creation of a new business, which usually involve on average 11.4 procedures and 63 days, unlike Europe which involves 9.6 procedures and 36.4 days or Asia with 7.9 procedures and 35.3 days, while in countries that belong to the OECD 6.5 procedures and 19.5 days are followed. In contrast, in Brazil it takes an average of 152 days to meet the requirements of formalizing a company, while in Venezuela it takes 116 days and in Peru 102 days (Schneider, 2008). It should be noted that these procedures have been accelerated due to the introduction of digital procedures during the pandemic, so much so that Brazil now has a new model to assist companies, less bureaucratic and faster, taking around 10 days (Heredia & Dini, 2021). In the case of Peru, the procedure of establishing a company digitally takes around 24 hours (Superintendencia Nacional de Registros Públicos [SUNARP], 2021), and in 2019, a greater number of companies were registered through this system due to the pandemic. Despite this, in Peru only one in four SMEs manages to formalize their business (Tuesta & Espinoza, 2019).

To these numbers, we can add that in Peru there is a negative perception in tax matters on the part of SMEs, with respect to SUNAT and municipalities (Tuesta, 2018), therefore, many people prefer to work informally, due to the lack of job opportunities or low salaries that are insufficient to cover family expenses. In this way, informal self-employment is an alternative to generate income, jobs and production, since only for 2020, 17.7% of the GDP was generated by the informal sector, which represents 704,939 million soles (Instituto Nacional de Estadística e Informática [INEI, 2021]). The sectors where the greatest informality is found are agriculture, commerce and public transportation.

Now, formalization is important because tax revenues and GDP allow the government to create the appropriate conditions for the development of the country. Therefore, the government has a great task in reducing the times of formalization of companies, it must carry out training regarding taxation, commercial management, technology and financing in order to formalize and strengthen businesses (Saavedra, et al., 2022). Despite this unfavorable panorama, it should be noted that Peru is the second country with the highest rate of business creation in Latin America, after Ecuador and fifth worldwide according to the annual report of Global Entrepreneur Monitor 2015/2016 (León, 2018). It is also known that a high level of unemployment causes many people to become self-employed, as pointed out by the Andean Development Corporation (2013, cited by Zamora-Boza, 2017), since 28.7% of the EAP (Economically Active Population) are self-employed, 54.8% have a salaried job and 4% generate jobs.

On the other hand, entrepreneurs highly value their economic independence and work autonomy, which is associated with the management of their own time and the feeling of being able to govern their destiny (Sastre, 2013). Sánchez et al. (2012) point out that there are other types of motivations with respect to entrepreneurial intention, such as power or social prestige, personal success, satisfaction from realizing a dream, novelties and life changes, greater independence, avoiding routine, feelings of personal fulfillment and finally job security. It has also been found that achievement motivation is associated with entrepreneurial capacity, since people with high achievement motivation are more creative, look for more effective methods and shorter procedures to achieve their objectives, and like challenges, are positively oriented towards work, show greater job satisfaction, are happier and prefer

work to leisure (McClelland, 1992). Finally, McClelland (1992) points out that people who have a high need for achievement are more interested in business, because this activity requires being responsible, taking risks, being innovative, achieving difficult objectives, achieving optimal results and the have good social relationships. Worldwide, young people with a greater need for achievement feel more attracted to entrepreneurship. Likewise, achievement motivation is a behavioral characteristic that must be present in the personality of every entrepreneur because this condition favors entrepreneurial activity (Sánchez et al., 2021).

In this sense, the studies reveal contradictory data, since in some research personality is associated with entrepreneurship, but in others it is not (Sánchez et al., 2017). A study carried out with 499 Peruvian students of International Business Administration reported that only 15.23% had high levels of entrepreneurial capacity, and that affability, extroversion, self-efficacy, independence and self-control are associated with entrepreneurship (Kaneko, 2012). Consequently, it is necessary to investigate the entrepreneurial capacity of students of Business Administration and related careers, since entrepreneurship is an excellent predictor of business creation, although according to some studies, only a low percentage of management students want to start an own business (Gálvez et al., 2020). In this regard, it has been pointed out that the factors that could be associated with this have to do with negative attitudes towards research (Olivera, 2020) and the low academic performance of Business Administration students (Ahumada-Tello et al., 2020). Some studies have reported that engineering students have greater entrepreneurial capacity than Business Administration students (Arroyo et al., 2021; Loli et al., 2010), but it is understood that the social context and the training environment are the factors that favor or limit the development of entrepreneurial capabilities; through variables such as the educational level of the parents, entrepreneurship experiences within the family, the prestige of the universities where they study and the development of skills to capture new business opportunities (Araníbar, 2022; Lopes et al., 2022).

Therefore, it is important to keep in mind that the training structure of various careers must promote entrepreneurial skills, and even more, the careers associated with business administration, international business or management; since adequate orientation and training regarding entrepreneurship will allow for the generation of a greater number of companies (Portocarrero et al., 2010) and greater organizational

development (Morales, & Morales, 2018), contributing to the economic growth of the country (León-Mendoza, 2019). Thus, entrepreneurial education goes beyond readings and exams, because it requires effective strategies supported by experiential learning in real contexts, such as Start-up and other programs for entrepreneurship education (Sánchez et al., 2017). In Peru, for example, according to Sánchez et al. (2017) the Ministry of Education prioritizes entrepreneurial disposition as a skill to be trained in secondary school students; while at the university level, it has been reported that the academic training of administrative science students is strongly and positively related to entrepreneurial capabilities (Alarcón, 2022). Furthermore, it has been reported that entrepreneurship is associated with proactivity and resilience in university students in Lima (Holguín, & Rodríguez, 2020) as well as with innovation and creativity to materialize their own businesses (Pérez, & Solano, 2022).

In summary, it can be stated that specialized education predicts entrepreneurial intention, because entrepreneurship can be acquired; likewise, it reinforces skills and competencies and enables businesses to be even more successful (Vélez et al., 2020). But given that entrepreneurship in students is an under-researched phenomenon, it is necessary to focus into possible factors associated with the development of entrepreneurial capabilities (Lopes et al., 2022), such as vocation. Therefore, this research aims to analyze the relationships between entrepreneurial habits and professional preferences of Business Administration students from the city of Arequipa, located in the south of Peru.

Professional preferences in Business Administration students

It is evident that the demand for job opportunities is found according to the attitudes and skills that each person may have (Vidal & Fernández, 2009). Thus, professional guidance plays an important role in the formation of certain professional skills and competencies. Unfortunately, there are many university students who have doubts about the career they are studying, presenting inadequate and unrealistic ideas regarding the chosen career and their professional expectations (Álvarez-Pérez et al., 2020). Hence, knowing the professional preferences of students becomes vital be-

cause of its guiding potential in making decisions about the career they choose to study or about the routes they should follow in their professional career.

Vocation is a process that goes from basic education to professional life (Alfaro-Barquero & Chinchilla-Brenes, 2019). For Oliveros and Gonzales (2012), vocational guidance ensures that students are not confused when they make decisions regarding their vocation, which means discovering professional interests and preferences, linked to their qualifications, educational and socioeconomic conditions; components that allow predicting professional success through the appropriate career choice. Now, there are various theoretical models that explain the vocation, with John Holland's being the most widespread model in Peru. According to this author's theory, professional preferences can develop from the interaction between personality and work environments where people feel satisfied (Holland, 1959). This gives rise to six dimensions, which determine a vocational typology known as RIASEC: Realist (R), Investigator (I), Artist (A), Social (S), Entrepreneur (E) and Conventional (C) (Holland, 1996).

The *Realistic* dimension refers to carrying out manual activities, using tools or machines, and has the need to carry out outdoor activities. The *Researcher* dimension refers to generating investigations of physical, cultural or biological phenomena, transmitting knowledge. The *Artist* dimension characterizes people who prefer to create forms or products and manipulate physical, verbal or human materials. The *Social* dimension refers to activities associated with help, care, guidance and training. The *Entrepreneur* dimension involves managing, handling conflicts, convincing, planning actions and generating economic profits. Finally, the *Conventional* dimension is related to classifying information, controlling and applying rules systematically (Martínez & Valls, 2008).

Based on his theory, Holland designs an instrument to measure career preferences, which after combining the six dimensions offers various career choice options (Holland, 1985). However, it is necessary to consider that vocation, as it is linked to personality, develops from the first stages of life and is enriched, clarified and defined with lived experiences, learning opportunities and personal interests; which are linked to the historical-cultural context of each person (Béjar, 1993). For example, Cruz and Silva (2018) reported that students who aspire to study business careers come from families with high income or who already have their own

company, and that they are more motivated by external factors, having greater predictive weight on the career choice, financial rewards. In Chile, Araya-Pizarro (2021) reported that business administration students at a public university value autonomy, economic power, innovation and do not have an altruistic profile, as they are motivated by ambition. In Peru, Yamada and Lavado (2017) point out that, based on the evidence from their research, business careers are the most profitable when students enter into the occupational market, and therefore, they are more attractive for students.

On the other hand, an important aspect is school support, since educational experiences and good advice from the school and parents are necessary to define vocational guidance according to the skills, abilities and the students' project of life (Alfaro-Barquero & Chinchilla-Brenes, 2019; Sánchez-Martín, 2019; Super, 1965). In the study by Fracica and García (2021), in which the professional preferences of Colombian administration students are qualitatively analyzed, it was found that 98% want to work in an already established company and that they manifest low proactivity and low self-efficacy, concluding that there are few students who have an adequate profile for the career and it is necessary, to strengthen entrepreneurship training. It has also been reported that the work preferences of Chilean Business Administration students are linked to working as entrepreneurs or independent workers, but not as dependent employees (Araya-Pizarro, 2021).

In Peru, and more specifically in the city of Arequipa, where the present study is located, Arias has carried out several investigations on professional preferences (Arias et al., 2016; Arias et al., 2019; Callata et al., 2017; Checya, & Arias, 2019). In a research that involved the evaluation of the professional identity and professional preferences of Business Administration students from a private university in the city, it was found that only 27.4% of the sample of 117 students from the last two undergraduate semesters had professional preferences oriented towards a career in administration, 15.4% did not have a defined profile and 57.2% obtained a vocational profile for other professional careers (Callata et al., 2017). In another investigation with 422 engineering career students from the same university, it was found that 18.22% of Industrial Engineering students had preferences for the Business Administration career and 24.17% had an undefined vocational profile (Arias et al., 2019).

On the other hand, various studies have associated the vocation of Administration students with entrepreneurial abilities; but this topic has not been investigated in our city, and previous reports provide contradictory conclusions, since in some studies the association between both variables is not confirmed (Ahumada-Tello et al., 2020; Loli et al., 2010) and in others they do (Araya-Pizarro, 2021; Cruz & Silva, 2018; Portocarrero et al., 2010). In this sense, with the purpose of delving into this problem and making up for some limitations of previous research, the sample has been expanded and the aim is to analyze the relationships between professional preferences and entrepreneurship of students of Business Administration majors at three universities from the city of Arequipa.

Method

RESEARCH DESIGN

This research work is quantitative in nature, at a descriptive-correlational level (Hernández et al., 2010).

SAMPLE

The sample was conformed by 217 students in the last years of Business Administration careers from three universities in the city of Arequipa: the Universidad Nacional de San Agustín (UNSA, 34%), the Universidad Católica de Santa María (UCSM, 36.5 %) and the Universidad Católica San Pablo (UCSP, 29.5%). However, given that some evaluation instruments were filled out inadequately, the sample was reduced to 203 students from the last two semesters of the Business Administration careers. 59.1% were women and 38.9% were men, while 2% did not complete this information. The mean age was 22.81 with a standard deviation of ± 2.52 within a range of 18 to 35 years of age. The sample was selected using the quota sampling technique (Hernández et al., 2010).

MEASUREMENTS

The instrument that was used to measure entrepreneurship was the *Entrepreneurial Habits Scale*, which was designed and validated by Flores (2001, cited by

Portocarrero, 2010). The instrument is conformed of 20 items, which are grouped into five subscales: Self-knowledge and self-efficacy, Future vision, Achievement motivation, Planning and Persuasion. Each item contains two types of responses (YES or NO), which are rated 1 and 0. The validity of the instrument was tested through exploratory factor analysis and a unidimensional internal structure was determined in a sample of 453 people from the city of Arequipa. Regarding the reliability of the scale, an index of .790 was obtained with Cronbach's alpha test (Jiménez et al., under review).

The *Professional Preferences Inventory* of José Luis Pereira (1992) was also applied, which is based on Holland's theory (1985) and allows the vocational interest of students to be evaluated. The test is conformed of 60 response options, which consist of workplaces with their respective descriptions, ordered into six categories (ten for each of the typologies of the RIASEC model) that must be marked in three ways and exclusively. The twenty most preferred workplaces are marked with the plus sign, the twenty least interesting workplaces are marked with the minus sign, and the remaining twenty are marked with a triangle. The qualification of the test is done by adding the options in each type and multiplying the value of each option by a certain figure: the favorites are multiplied by 3, the indifferent ones by 2 and the negative ones by 1. The three highest values of the six typologies obtained after this procedure make up a combination that reflects professional preferences in profiles pre-established by the author.

PROCEDURES

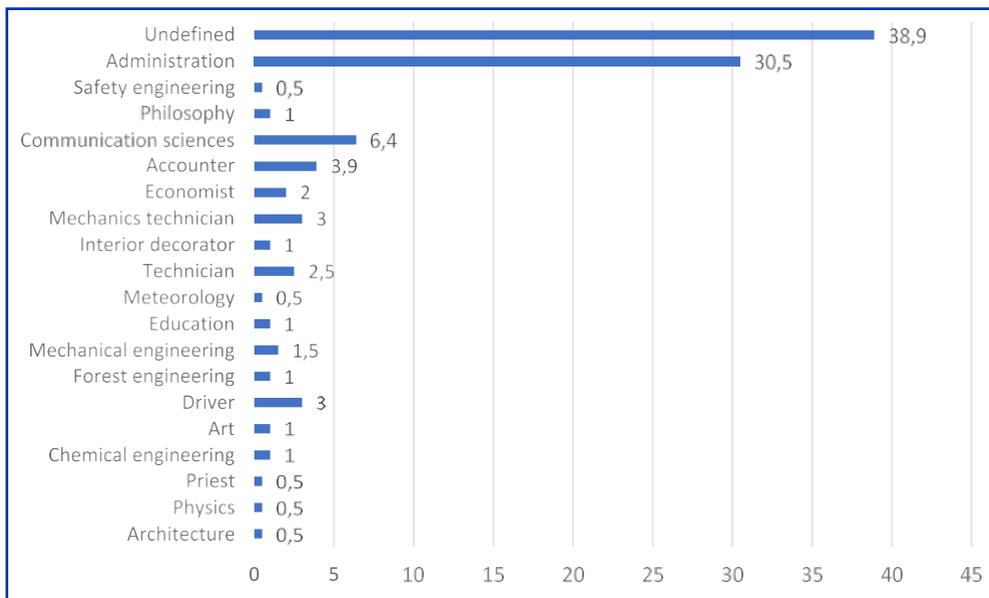
First, the corresponding permissions were obtained from each of the three universities to be able to collect the data. To apply the instruments, they physically went to the universities and requested permission from the professors who taught in the last two semesters. The tests were administered collectively and students' concerns were resolved when they existed. In addition, all participants signed the informed consent and participated voluntarily after the purposes of the research were explained to them. Finally, after having collected the data, they were statistically processed using the Statistical Package for Social Sciences (SPSS 24.0) program, depending on the level of measurement of the variables and the normality of the data.

Results

DESCRIPTIVE ANALYSIS

Regarding the entrepreneurial habits variable, the mean obtained was 36.8 with a standard deviation of 3.25 within a range of 20 to 40, which suggests that entrepreneurial habits are closer to the highest score than to the lowest within an average level. Likewise, 18.42% have started a business and 81.58% have never created a business, with the average time of business creation being 5.37 years with a standard deviation of ± 0.765 . Skewness and kurtosis were -1.02 and 2.14, respectively, suggesting that the data tend to have a non-normal distribution.

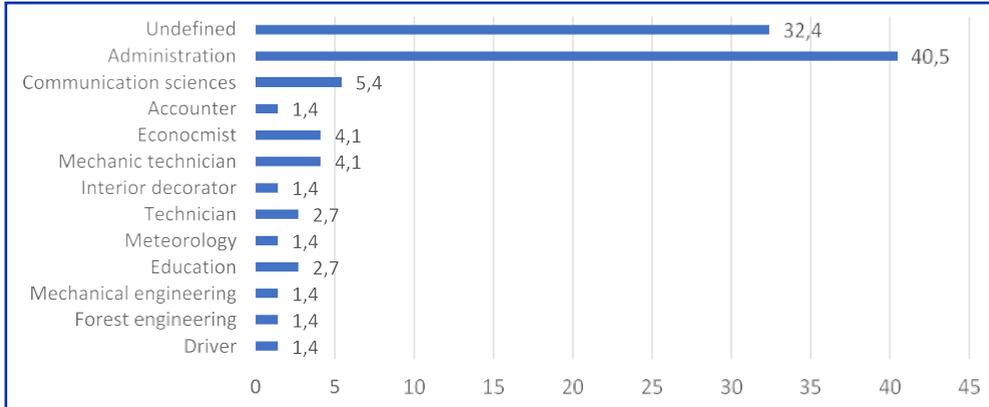
Figure 1. Professional Preferences



Regarding professional preferences, in Figure 1 it can be seen that 38.9% of the students have an indefinite professional orientation, followed by 30.5% of the students who have a clear professional preference for the Business Administration career, while 6.4% are oriented towards Communication Sciences, 3.9% towards Accounting, 2% towards Economics and 2.5% towards a technical profession. Oth-

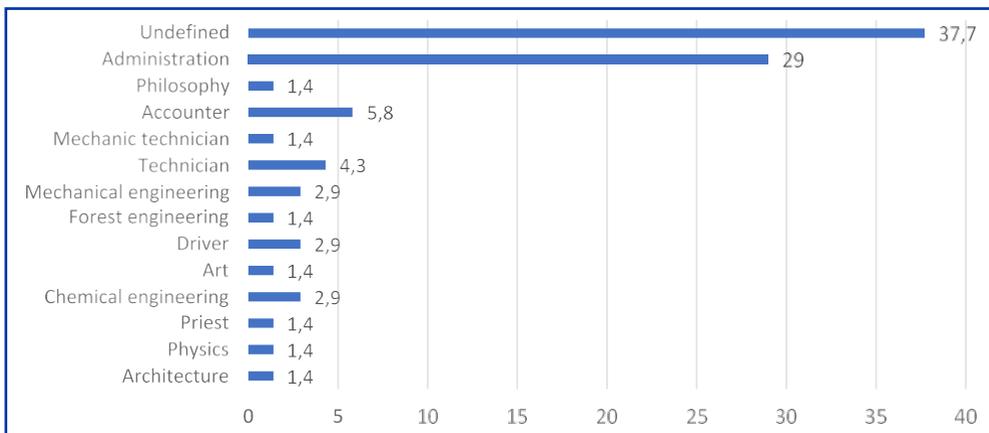
er professional preferences obtained, but less frequently, were Engineering, Interior Decoration and Architecture.

Figure 2. Professional Preferences in UCSM students



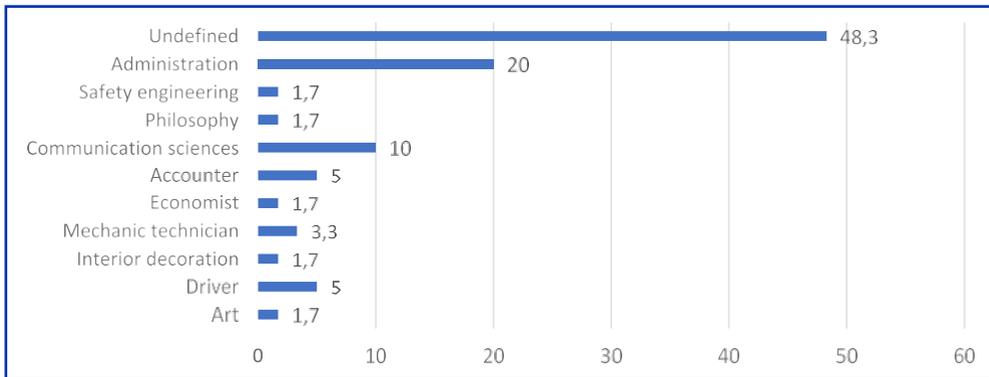
Regarding professional preferences by university, UCSM students have a greater desire for their career (40.5%) compared to UNSA (29%) and UCSP (20%). Other professional preferences that show a high percentage of UCSM students are Communication Sciences (5.4%), Economics (4.1%), Mechanical technician (4.1%) and Education (2.7%); although 32.4% of the students did not have a defined vocational profile (see Figure 2).

Figure 3. Professional Preferences in UNSA students



As for UNSA students, in addition to the fact that 29% have a vocation for their career, the Accounting career reaches 5.8%, the Communication Sciences career 4.3%, the Chemical Engineering, Mechanical Engineering and Driver 2.9%, preferences for Architecture, Physics, Priest, Art, Forest Engineering, Mechanical technician and Philosophy 1.4%; while 37.7% have an undefined vocational profile (see Figure 3).

Figure 4. Professional Preferences in UCSP students



With respect to UCSP students, they have professional preferences for the Business Administration career by 20%, the percentage of students with an undefined vocational profile is 48.3%), while it is 10% for Communication sciences, for Accounting it is 5%, for Mechanical technician 3.3%, and finally with 1.7% there are preferences for the careers of Art, Interior Decoration, Economics, Philosophy and Industrial safety engineering (see Figure 4).

Table 1. Descriptive statistics

| | Minimum | Maximum | Media | Standard deviation | Skewness | Kurtosis |
|---------------------|---------|---------|-------|--------------------|----------|----------|
| Entrepreneur habits | 20 | 40 | 36,08 | 3,258 | -1,027 | 2,144 |
| Realism | 11 | 30 | 19,47 | 3,747 | 0,103 | -0,193 |
| Research | 10 | 28 | 17,91 | 3,102 | 0,134 | 0,221 |
| Art | 10 | 29 | 19,98 | 3,972 | -0,162 | -0,376 |
| Social | 12 | 28 | 19,24 | 3,160 | 0,115 | -0,258 |
| Entrepreneurship | 10 | 29 | 22,67 | 3,208 | -0,674 | 0,966 |
| Convencionalism | 10 | 30 | 21,33 | 4,089 | -0,438 | -0,011 |

On the other hand, in Table 1, you can see the values that describe the means of the six types of professional preferences according to Holland. The professional preference with the highest mean was Entrepreneurship (22.67), followed by Conventionalism (21.33), Art (19.98), Realism (19.47), Social (19.24) and Research (17.91).

NORMALITY TESTS

Now, in order to assess the normality of the data to determine the type of statistical tests to process the information, both the Kolmogorov-Smirnov test and the Shapiro-Wilk test were applied, finding that in all continuous variables, which means, the mean of entrepreneurial habits and the means of the six dimensions of professional preferences, the values were significant, suggesting that the data have a non-normal distribution. In this way, it was decided to apply non-parametric statistical tests (see Table 2).

Table 2. Normality tests

| | Kolmogoro -Smirnov ^a | | | Shapiro-Wilk | | |
|---------------------|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | Fd | Sig. | Statistic | Fd | Sig. |
| Entrepreneur habits | 0,112 | 202 | ,000 | ,915 | 202 | ,000 |
| Realism | 0,080 | 202 | ,003 | ,986 | 202 | ,051 |
| Research | 0,091 | 202 | ,000 | ,987 | 202 | ,057 |
| Art | 0,081 | 202 | ,002 | ,987 | 202 | ,070 |
| Social | 0,078 | 202 | ,005 | ,987 | 202 | ,065 |
| Entrepreneurship | 0,131 | 202 | ,000 | ,963 | 202 | ,000 |
| Convencionalism | 0,090 | 202 | ,000 | ,978 | 202 | ,003 |

a. Lilliefors significance correction.

COMPARISONS

To assess whether there are differences in entrepreneurial habits and professional preferences according to sex, the Mann Whitney U test was applied, finding that there are no significant differences between men and women, which suggests that entrepreneurial habits are not associated with sex of the students. However, professional preferences do register significant differences in the Realism and Social dimensions, in favor of men in the first case and women in the second. This suggests that while men prefer careers that involve the use of instruments and practical sense, women prefer social careers in which they communicate and interact with others (see Table 3).

Table 3. Comparisons of entrepreneur habits according to sex

| | Sexo | Médias | U | p |
|---------------------|--------|--------|--------|------|
| Entrepreneur habits | Female | 36.10 | -0.261 | .797 |
| | Male | 36.22 | | |
| Realism | Female | 18.40 | -5.167 | .000 |
| | Male | 21.06 | | |
| Research | Female | 17.59 | -1.685 | .093 |
| | Male | 18.35 | | |

| | | | | |
|------------------|--------|-------|--------|------|
| Art | Female | 20.22 | 1.132 | .260 |
| | Male | 19.56 | | |
| Social | Female | 19.78 | 2.963 | .003 |
| | Male | 18.44 | | |
| Entrepreneurship | Female | 22.58 | -0.648 | .518 |
| | Male | 22.88 | | |
| Convencionalism | Female | 21.78 | 1.963 | .051 |
| | Male | 20.68 | | |

Secondly, the scores of entrepreneurial habits and professional preferences were compared depending on whether or not the students have a business, for which the Mann Whitney U test was also applied. The results suggest that there are only significant differences in entrepreneurial habits among those who have a business, so that those who have a business achieve higher scores than those who have not started a business (see Table 4).

Table 4. Comparisons of entrepreneur habits according to current business

| | Current business | Means | U | p |
|---------------------|------------------|-------|--------|------|
| Entrepreneur habits | Yes | 37.23 | 2.366 | .011 |
| | No | 35.78 | | |
| Realism | Yes | 19.86 | 0.580 | .563 |
| | No | 19.41 | | |
| Research | Yes | 17.52 | -0.689 | .492 |
| | No | 17.95 | | |
| Art | Yes | 18.86 | -1.675 | .096 |
| | No | 20.23 | | |
| Social | Yes | 19.38 | 0.419 | .676 |
| | No | 19.11 | | |
| Entrepreneurship | Yes | 23.28 | 0.785 | .433 |
| | No | 22.76 | | |
| Convencionalism | Yes | 20.93 | -0.268 | .789 |
| | No | 21.16 | | |

Table 5 shows comparisons of entrepreneurial habits and professional preferences based on the profitability of the students' businesses, finding that students who have more profitable businesses are those who have more entrepreneurial habits, compared to students whose businesses are not profitable, since the values calculated with the Mann Whitney U test were significant.

Table 5. Comparisons of entrepreneur habits according to business rentability

| | Rentability | Means | U | p |
|---------------------|-------------|-------|--------|------|
| Entrepreneur habits | Si | 37.19 | 2.947 | .004 |
| | 35.05 | | | |
| Realism | Si | 19.97 | 1.049 | .298 |
| | Não | 19.03 | | |
| Research | Si | 17.57 | -0.066 | .947 |
| | Não | 17.62 | | |
| Art | Si | 19.17 | -1.836 | .071 |
| | Não | 20.86 | | |
| Social | Si | 19.34 | 0.638 | .526 |
| | Não | 18.89 | | |
| Entrepreneurship | Si | 23.40 | 1.034 | .305 |
| | Não | 22.76 | | |
| Convencionalism | Si | 20.74 | -0.856 | .395 |
| | Não | 21.62 | | |

CORRELATIONS

Regarding the degree of relationship between the quantitative variables, that is, those that have a scalar or interval measurement level, it was calculated using Spearman's Rho test, given that they have a non-normal distribution.

Table 6. Correlations

| | 1. Entrepreneur habits | 2. Age | 3. Number of business | 4. Time of business | 5. Realism | 6. Research | 7. Art | 8. Social | 9. Entrepreneurship | 10. Conventionalism |
|----|------------------------|--------------|-----------------------|---------------------|--------------|---------------|----------------|----------------|---------------------|---------------------|
| 1 | 1 | .144* | .103 | .129 | .163* | -.075 | -.193** | .030 | -.078 | .038 |
| 2 | | 1 | .279** | .162 | .140 | -.021 | -.112 | -.143* | .119 | -.159* |
| 3 | | | 1 | .139 | .065 | -.063 | -.026 | .032 | .050 | -.074 |
| 4 | | | | 1 | .246 | .011 | -.209 | -.100 | .091 | -.056 |
| 5 | | | | | 1 | .256** | -.326** | -.242** | -.147* | -.197** |
| 6 | | | | | | 1 | -.049 | -.149* | -.355** | -.234** |
| 7 | | | | | | | 1 | -.014 | .106 | -.338** |
| 8 | | | | | | | | 1 | -.028 | .053 |
| 9 | | | | | | | | | 1 | -.058 |
| 10 | | | | | | | | | | 1 |

* The correlation is significant at the 0.05 level (two-sided).

** The correlation is significant at the 0.001 level (two-sided).

In Table 6, it can be seen that entrepreneurial habits have a positive and low relationship with age and the Realism dimension of professional preferences, but significant, and a negative and low relationship with the Art dimension of professional preferences, which suggests that students who are older and who like to manipulate tools and have concrete reasoning are those who have more entrepreneurial habits, while those who have an interest in art have less entrepreneurial capacity. Age was positively, moderately and significantly correlated with the number of businesses and in a low and negative way with the Conventionalism dimension. Furthermore, the realism dimension correlates positively and significantly with the Research dimension, but negatively with the Art, Social, Entrepreneurship and Con-

ventionalism dimensions; while the Research dimension also correlates negatively and significantly with the Social, Entrepreneurship and Conventionalism dimensions of the professional preferences test. Finally, the Art dimension is negatively, moderately and significantly correlated with the Conventionalism dimension.

Discussion

Vocational guidance understands and links three essential aspects of each person's life. Your personal project (which aims at the development of the person), your professional project (focused on the development of sustainable and dignified work) and your social project (which emphasizes the sense of belonging associated with your community); that determine, as a whole, the successful adjustment of a person to the exercise of their profession (Oliveros & Gonzáles, 2012). Faced with this, entrepreneurial capabilities play a managerial role in any profession (Sánchez et al., 2017), but they turn out to be more essential in professions related to business administration, accounting and finance (Callata et al., 2017).

Thus, in the present study we proposed to analyze the relationship between professional preferences and entrepreneurial habits of students in the last semesters of the Business Administration career at three universities in the city of Arequipa. The descriptive analysis indicates that 18.42% have started a business and that 30.5% of the students have a clear professional preference for the Business Administration career, but 38.9% of the students have an indefinite professional orientation; UCSM students most frequently present professional preferences for their career (40.5%), followed by Business Administration students from UNSA (29%) and UCSP (20%). These results align with reports from other research that indicate that a low percentage of management students have professional preferences for their career (Ahumada-Tello et al., 2020; Callata et al., 2017; Cruz & Silva, 2018). Likewise, the entrepreneurial habits score places the students at a moderate level with respect to their entrepreneurial capacity, which confirms the studies in which it is found that business career students have competencies for entrepreneurship (Araya-Pizarro, 2021; Cruz & Silva, 2018; Portocarrero et al., 2010); but given that only a low percentage has started a business, it could be pointed out, as in other research, that

few Administration students are interested in creating their own company (Gálvez et al., 2020; Kaneko, 2012; Loli et al., 2010).

At a comparative level, it was found that, firstly, there are no differences in entrepreneurial habits based on sex; that is, both men and women have similar levels of entrepreneurial capacity (Araya-Pizarro, 2021; Fracica, & García, 2021). But, on the other hand, and secondly, in terms of professional preferences, men obtained higher scores in the Realism dimension and women in the Social dimension, which suggests that the former have greater interest in professions that involve putting in practice motor skills and the use of tools, while the latter have preferences for careers in which social interactions predominate (Arias et al., 2016; Callata et al., 2017).

Likewise, entrepreneurship was found to be significantly associated with the fact that the evaluated students have a current business, and with its profitability. This means that students with more entrepreneurial habits, with a higher level of entrepreneurship, are more likely to have their own business, and even more likely to have it be profitable, as has been reported by some authors (Holguín, & Rodríguez, 2020; Pérez, & Solano, 2022; Sánchez et al., 2017). This finding is consistent with the theory of entrepreneurship, which indicates that those people who are entrepreneurs develop their own business and obtain their livelihood from it, taking advantage of the opportunities that the environment and circumstances offer them, and strategically using their resources, resources and their talents (Alarcón, 2022; Arroyo-López et al., 2020; Lopes et al., 2022).

However, it is still worrying that 38.9% of the students evaluated do not have a defined professional profile even though they are in the last two semesters of their Business Administration career; while 30.5% have a vocational profile oriented towards a career in administration. This result is consistent with what was reported in a previous study by Callata et al. (2017), where it was found that only 27% of Business Administration students at a university in Arequipa had professional preferences for this career and that up to 57.3% had professional preferences for other careers. In this sense, in the present study, among the majors that appear as the most predominant professional preferences of the Administration students of the three Arequipa universities, are Communication Sciences, Accounting, Mechanics and Economics with a cumulative score of 15.3%. And although Economics and Accounting are courses related to Administration, Mechanics and Communication

sciences, they are further removed from the purposes and processes involved in this profession. To this we must add that among the careers that occupy a lower percentage weight are: Philosophy, Interior decoration, Education, Art, Chemical engineering, Architecture, Priesthood and even Car driver, which reach a cumulative percentage of around 15%.

This is interesting because they are final year students, who are close to pursuing their Bachelor degree and who, however, do not present a defined vocational profile in the field of administration, which could be due to the fact that many of the Administration students in Peru, they hope to take over their families' businesses, as has been reported in an analysis of employability at the national level, or because they only base themselves on the economic rewards that the commerce and business sector represents in the country (Yamada & Lavado , 2017). It should be noted that in another previous study by Arias et al. (2019), an overlap was found between the Administration and Industrial engineering careers, which suggests that in these professions the training processes are very similar. However, in the best of cases, the evaluated Administration students could present combinations of interests that would guide them to start businesses in the field of telecommunications or engineering.

Finally, some limitations of the study have to do with the self-report format, which may be subject to falsification of information or social desirability biases, but the results obtained suggest that this factor has not interfered in this study. On the other hand, although the sample is representative of the city since the students evaluated come from three of the most important universities in Arequipa, currently, other universities such as the La Salle University, the Continental University and the Technological University of Peru, which have a considerable number of students who would need to be recruited for future studies on entrepreneurship. Aside from these limitations, it can be concluded that the entrepreneurial habits of the city's three Business Administration majors are at a moderate level, although only 18.42% have started a business. Likewise, only 30.5% of the sample has professional preferences for their career, and entrepreneurial habits are associated with the intention of starting a business and its profitability; while only the Realism dimension has been correlated with entrepreneurship positively and the Artistic dimension negatively, but in both with a low magnitude and moderate statistical significance.

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