EXAMINING THE VOCATIONAL PERSONALITY AND MOTIVATIONS OF PRE-COLLEGE STUDENTS

DIEGO GARCÍA-ÁLVAREZ
ddgarcia@unimet.edu.ve
Universidad Metropolitana de Caracas. (Venezuela)

RUBIA COBO-RENDÓN
rcobo@udd.cl
Universidad de Concepción. (Chile)

PEDRO CERTAD
pcertad@unimet.edu.ve
Universidad Metropolitana de Caracas. (Venezuela)

Abstract

At the educational level, promoting healthy and prosperous student trajectories is a significant topic. The aim of this research was to examine the correlation between the RIASEC typology and conscientious academic motivations and the likelihood of college enrollment. The research adopted an empirical quantitative and cross-sectional approach within the associative strategy to achieve predictive objectives. The research sample comprised 206 high school students who had not yet enrolled in college, with an average age of 16.44 years (SD: 1.76) and a majority female representation (66%). Holland's vocational personality typology, conscious academic motivations, and college enrollment probability were evaluated using reliable and valid scales. The study indicates that the sample's vocational traits are Entrepreneurial, Social, and Artistic. The primary studying objectives are instrumental, and the personal motives are associated with personal expectations, learning, knowledge, reaching maturity, and motivation for self-improvement. Gender differences were observed in Realistic, Artistic, and Social traits and some objectives and motives. The findings suggest that possessing Social and Entrepreneurial traits and valuing education are positively associated with the likelihood of enrolling in a university, whereas having the Artistic trait has a negative effect on this probability.

Keywords: RIASEC; motivation; university entrance; secondary students.

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1. Introduction

University education in Venezuela has undergone significant changes in recent years. On one side, the country was already facing a generalized crisis characterized by high inflation, economic collapse, historical migration levels, especially of teaching staff, and management difficulties in national public universities that have affected their teaching, research, and extension functions, accompanied by high reports of university student dropout (Carvajal 2020). In this described context, the complex situation produced by the COVID-19 virus globally, described as emergency remote education (García-Aretio 2021), must be added. The student experience upon returning to classes in Latin American universities, with emphasis on Chile, Ecuador, and Venezuela, reflects that self-efficacy regarding academic performance is low. Students even considered that they were not prepared for the post-pandemic return to classes, although they believed in their resilient capacity to face emerging problems to advance in their studies. The voice of the students emphasizes aspects that the university must consider in designing the academic experience as lessons learned from the educational emergency, including: teaching and learning strategies, whether face-to-face, virtual, or hybrid; collaborative learning activities that generate interactions with peers and teachers; teacher engagement in synchronous class spaces; problem-based learning, contextualized learning, meaningful activities for professional training, and above all, curricular flexibility (Lobos et al. 2023a; Lobos et al. 2023b).

In this context, aspects affecting the quality of education that impact educational trajectories of students in the university system are apparent, making it necessary to study the problems of entry, permanence, and abandonment of careers. The university, as an institution, faces the challenge of offering training programs in a world constructed in global uncertainty, involving wars, economic crises, forced displacements, and a crucial factor of providing relevant training to integrate into the labor market. This last point is very relevant to stimulate university entry, as young people tend to have a very pragmatic or instrumental vision of obtaining a university degree, usually associated with earning money, having a better life, and achieving a higher socioeconomic status (Alcántara-Santuario 2022).

In this sense, research has focused on psychological aspects to explain university entry, finding that personality traits, vocational interests, and self-efficacy in specific domains are significant predictors in career choice goals (Cupani & Pérez 2006). In this field, Holland (1995a; 1995b; 1997) made significant contributions to explaining vocational behavior by formulating the theory of vocational personality and occupational environments. This theory synthesizes personality expression in vocational interests that fit in environments conducive to their deployment. Therefore, vocational personality is a set of dispositions linked to interests, competencies, skills, and values that can be assessed by interest inventories (Fernández-Nistal et

al. 2022). Holland formulated the RIASEC typology of vocational personality into six major traits: Realistic (R), with a clear tendency toward skilled but concrete trades, technical occupations, manual and mechanical work; Investigative (I), with analytical skills oriented towards scientific techniques for writing or speaking; Artistic (A), related to creative and expressive abilities; Social (S), with skills for interacting with others, teaching, and even treating and healing people; Enterprising (E), with skills for leading, persuading, and convincing others to perform tasks; and Conventional (C), linked to traditional and routine skills such as administrative tasks, following standards, prices, and clear performance norms. In this theory, the traits predispose a person to find an occupational environment where they can naturally operate their skills. The author also explained that the vocational personality profile is usually a mix of two traits, for example, realistic and social (RS).

The RIASEC typology has been linked to other psychological constructs, including vocational interests (Fernandez-Nistal et al. 2019), self-efficacy for career choice (Fernández-Nistal et al. 2022), career interests in high school students (Mudhar et al. 2023), the big five personality traits (Hurtado-Rúa et al. 2018), vocational constructs (Fernández-Nistal et al. 2020), and occupational classification (Martinez and Valls 2008), as well as to explain career choice and satisfaction in career development along with other factors like family, economic, gender, life events, and job opportunities (Zainudin et al. 2020). They have also been linked to predicting professional success for vocational training students (Thamrin et al. 2023). Some studies have shown gender differences in the RIASEC typology among both high school and university students (Lee et al. 2022). Some studies show differences in Realistic and Investigative traits favoring men, while Social and Artistic traits favor women (Baerg-MacDonald et al. 2023; Einarsdóttir & Rounds 2020; van Huizen et al. 2021). However, evidence shows these differences are minor and inconclusive (Darcy & Tracey 2007).

In the field of vocational guidance and educational psychology, the construct of motivation is not foreign. It is known to be essential for explaining behaviors, including learning and maintaining sustained efforts based on specific goals (Schunk 2012). This research assumes the conceptualization of conscious academic motivation in its dimensions related to achievement goals and career choice motives that link to professional, personal, and even human aspirations (Boza 2010; Boza-Carreño & Méndez-Garrido 2013; Carreño-Boza & Toscano-Cruz 2012). For this approach, life goals are of affective, cognitive, self-assertive (personal success), social, and task order; while personal motives are varied, classified into four factors: motives of satisfaction or university experience, work/profession, and institutional incentives. At a specific level, students experience them in friendship, learning, new experiences, vocation, job market, and more (Boza-Carreño & Méndez-Garrido 2013). Studies have shown that both cognitive, social, and task life goals influence university students' motivation, as well as personal motives related to the labor market, self-improvement, the importance of studies, and knowledge acquisition (Carreño-Boza & Toscano-Cruz 2012). In studies led by Boza-Carreño, no analysis was reported on conscious academic motivations concerning gender, an interesting aspect for this study.

Personal goals of affective, power, and achievement types have been studied, finding links with university career choice. Gender differences have also been detected, with men relating more to task or prestige goals and women more to social, personal goals, and even higher intrinsic motivation for learning (Araya 2019; Doña & Luque 2019; Gámez & Marrero 2003; Rodríguez-Muñiz et al. 2019). Although the RIASEC model is considered robust and quite current for its explanatory capacity, it does not include aspects related to goals and self-perception like the Social Cognitive Career Development Model, which includes self-efficacy, outcome expectations, and goals. These latter play an important motivational role in students' symbolic capacity to maintain performance to achieve desired goals. Goals are influenced by vocational interests (Lent et al. 1994; Olaz 2003).

A study in Argentina found that Realistic, Investigative, and Artistic vocational traits explain career choice goals to a greater extent, while Enterprising, Social, and Conservative traits do so to a lesser extent (Cupani et al. 2017), in line with other European studies that found the RIASEC typology predicts vocational interests together with self-efficacy and outcome expectations (Lent et al. 2003). Empirical evidence is completed by a study in Africa reporting positive correlations between each RIASEC and goals, ranging from 0.35 to 0.83, and determining the empirical application of social cognitive theory to RIASEC, with higher means in Artistic, Social, and Enterprising traits (Dickinson et al. 2017). Empirical evidence supports that RIASEC and self-concordant goals (closely related to intrinsic motivation) predict career choice, with the former being more potent than goals (Sheldon et al. 2020). It has also been related that the RIASEC typology can influence the training path people aspire to; students scoring higher in Investigative or Enterprising traits were more likely to choose the general educational route, while those scoring higher in Conventional or Social traits were less likely. Also, Realistic and Artistic traits were not significantly associated with the choice of educational route after secondary education (Usslepp et al. 2020). Thus, empirical evidence supports the influences of the RIASEC model and conscious academic motivation on educational trajectories, whether progressing with university enrollment or considering other vocational alternatives after secondary education (Kindelbeger & Safont-Mottay 2023; Guay et al. 2020).

This study aims to contribute to the level of educational quality, enabling the objectives of sustainable development: SDG 4 Quality Education, significantly increasing the number of people entering technical, professional, and even university education. This research is also justified in generating knowledge that can be instrumentalized in university guidance and student welfare departments in designing strategies for university adaptation, emphasizing motivational and vocational interest profiles. More broadly, it aims to design national educational policies to optimize university student allocation, promoting prosperous educational trajectories considering vocational profiles, student motivation in life goals, and student motives for pursuing a university career. Evidence has shown that among the causes of dropout are low motivation and confusion of personal expectations in career choice (Alvarado et al. 2021; Blanco et al. 2022). Another important aspect of this study is that most research on vocational choice and intention to enroll in a university career has been conducted with active university students, meaning they have already resolved vocational choice and indeed enrolled in university.

Therefore, the primary intention of this study is to analyze the relationships between the RIASEC typology and conscious academic motivations in the probability of university enrollment. The objectives of this research are: a) to characterize the vocational personality types of students before university enrollment; b) to describe conscious academic motivation for learning in the dimensions of life goals and personal motives; c) to establish gender differences in vocational traits and conscious academic motivation for learning, including each of its dimensions; and d) to determine if vocational traits and conscious academic motivation influence the intention to enroll in a university. The main hypothesis system guiding this study is: 1. Statistically significant differences will be found in some RIASEC traits according to gender; 2. Statistically significant differences will be found in the dimensions of conscious academic motivation according to gender; 3. Some traits of the RIASEC typology will predict the probability of university career enrollment; and 4. Some dimensions of conscious academic motivation will predict the probability of university career enrollment.

2. Methodology

Design

The study was empirical, quantitative, and cross-sectional, under the associative strategy with predictive purposes, according to Ato et al. (2013), to evaluate how vocational personality and conscious academic motivation influence the probability of university enrollment.

Participants

The study sample comprised 206 students before university enrollment. There were 70 men (33.98%) and 136 women (66.02%), with a mean age of 16.44 years (SD: 1.76). All students came from private secondary educational institutions, and 28% were taking the Preparation Course for Higher Education at Universidad Metropolitana (Caracas, Venezuela). Sampling was non-probabilistic by convenience in educational institutions that authorized the study's application.

Instruments

a) The Self-Directed Search (SDS) in its Form R by Holland (1995a, 1995b, 1995c), comprising the SDS scales to obtain scores for each RIASEC occupational trait, consisting of items in four sections: activity preference (66 items), own competence estimation (66 items), specific occupation preferences (74 items), and self-evaluation in specific occupational domains (12 items). The scale allows summing scores for each section to obtain an estimate of the predominant occupational traits. The reliability of the RIASEC subscales in this study ranged from Cronbach's $\alpha = 0.88$ to 0.91.

b) The conscious motivation scale for learning by Carreño-Boza and Toscano-Cruz (2012). In this research, only the life goals subscales with 22 items were used, an

example of these phrases is “I study to have a better future”; and also the personal motives subscale with 20 items, an example of these items is: “I think studies are very important; that’s why I study”. Both subscales were in Likert format with five response options ranging from strongly disagree to strongly agree, coded from 1 to 5. The measurement reliability in this study for the life goals subscale was Cronbach’s α = 0.93, and for the personal motives subscale, Cronbach’s α = 0.94.

c) Ad hoc question to measure the probability of university enrollment. This was: “How likely are you to enroll in a university career?” with five response options ranging from very unlikely to very likely, coded from 1 to 5.

Procedure

To conduct the research, an online form was created in Google forms to be distributed in two ways for data collection: one was the contact network of private educational institutions of Universidad Metropolitana, and the other was the curricular space of the Preparation Course for Higher Education of the aforementioned university. In those institutions that agreed to participate in the study, the form was applied during class hours in the guidance and orientation periods. The research was conducted under ethical mandates of confidentiality, anonymity, scientific purposes, and the guarantee of not affecting the physical, mental health, or well-being of the participants. Similarly, as indicated by the APA, informed consent was dispensed with because the governing boards of the institutions accepted the study, the forms were anonymous, there was no experimentation, and the study’s object was educational.

Data Analysis

The database was transferred to JASP to transform the variables according to the operationalizations and codifications of the scales used in this research. Outliers and normality of distribution were explored; non-parametric statistics were used to respond to the research objectives because normal distribution was not assumed according to the Shapiro-Wilk test results ($p < .001$). Therefore, analyses based on the median, Mann-Whitney U tests, and binary logistic regression were used. In the latter, the dependent variable was the probability of university career enrollment, and response options ranging from 1 to 5 were dichotomized into two options: yes and no. The assumed statistical significance level was ≤ 0.05.

3. Results

Regarding the characterization of vocational traits of students before university enrollment, it is observed in Table 1 that the most predominant traits in the sample are: entrepreneurial, social, artistic, and investigative, while the lowest are realistic and conventional.

RIASEC Descriptives	Median	Mean	SD	RIC (IQR)
Realistic	13.00	14.86	9.72	15.00
Investigative	18.00	18.62	9.72	15.00
Artistic	21.00	20.88	11.55	18.00
Social	25.00	25.20	9.95	14.00
Entrepreneurial	27.00	26.66	10.50	16.00
Conventional	13.00	15.94	10.67	15.00

Conscious academic motivations at the level of life goals indicate that the reasons for studying are: to have a better future, a secure life, earn money, succeed in life, and to know; while the lowest item was "I study to calm down to avoid stress," see Table 2. Regarding personal motives, it shows that "I study because I want my expectations to be met" is the highest item, while one of the lowest was "my teachers and their methodology motivate me to continue studying," see Table 3.

Life Goals Descriptives	Median	Mean	SD	RIC (IQR)
Study to have a better future	5.00	4.51	0.88	1.00
Study to have a secure life	5.00	4.28	1.03	1.00
Study to be competent in my field	4.00	4.07	1.07	2.00
Study to earn money	5.00	4.29	1.03	1.00
Study to succeed in life	5.00	4.46	0.98	1.00
Study to know	5.00	4.33	0.93	1.00
Study to understand the subject in depth	4.00	3.99	1.09	2.00
Study to help others	4.00	3.69	1.11	2.00
Study to develop intellectual creativity	4.00	4.09	1.03	1.00
Study to take on social responsibility	4.00	3.56	1.15	2.00
Study to be freer in opinions and decisions	4.00	4.11	1.06	1.00
Study to improve self-confidence	4.00	3.90	1.13	2.00
Study to integrate into society	3.00	3.29	1.26	2.00
Study to promote justice and equity	3.00	3.39	1.14	1.00
Study to be valued by others	3.00	2.96	1.29	2.00
Study brings me satisfaction	3.00	3.39	1.20	1.00
Studying makes me feel healthy, strong, energetic	4.00	3.38	1.20	1.00
Study to feel active, avoid boredom	3.00	3.14	1.28	2.00
Study to feel unique, different from others	3.00	2.86	1.26	2.00
Study because it makes me happier	3.00	3.01	1.25	2.00
Study to be better than others	3.00	3.16	1.36	2.00
Study to calm down, avoid stress	2.00	2.44	1.21	2.00

Personal Motives Descriptives	Median	Mean	SD	RIC (IQR)
Study to increase my job market opportunities	4.00	3.98	1.09	2.00
Study because I want my expectations to be met	5.00	4.37	0.94	1.00
Study because my profession requires these studies	4.00	3.66	1.16	2.00
I think studies are very important; that's why I study	4.00	3.88	1.11	2.00
My studies make me feel more responsible	4.00	3.81	1.07	2.00
Study to learn and advance my knowledge	4.00	4.12	0.97	1.00
Motivated by proving I can surpass myself	4.00	4.17	1.03	1.00
Prefer to live an orderly, organized life	4.00	3.96	1.05	2.00
Study to educate myself, mature as a person	4.00	4.11	1.05	1.00
Study for more independence and freedom	4.00	4.14	1.07	1.00
Student life is a unique and gratifying experience	4.00	3.69	1.16	2.00
Family influence and support decided my study	4.00	3.72	1.17	2.00
Study by vocation; always wanted this career	4.00	3.61	1.14	2.00
Study makes me feel good about myself	4.00	3.68	1.11	2.00
Receiving a scholarship motivates me to continue studying	4.00	3.92	1.22	2.00
Enjoy being involved in creative activities	4.00	3.94	1.10	2.00
Study to meet new people, make friends	4.00	3.64	1.11	1.00
My teachers and their methodology motivate me	3.00	3.12	1.20	2.00
Study at university because I also have fun	3.00	3.34	1.06	1.00

In terms of establishing gender differences in vocational traits and conscious academic motivation for learning, including each of its dimensions, only statistically significant differences were found in vocational traits specifically in: realistic ($U = 6047.50$, $p < .001$, $rb = .08$) favoring men, while artistic ($U = 5837.50$, $p < .001$, $rb = .08$) and social ($U = 5969.50$, $p < .001$, $rb = .08$) favoring women. Although no differences were found in the total scores of conscious academic motivation in its dimensions of personal motives and life goals, in the latter, differences were found in two items: “study to help others” favoring women ($U = 589950$, $p < .001$, $rb = .08$) and “study to be better than others” favoring men ($U = 3825.00$, $p < .001$, $rb = .08$).

To determine if vocational traits and conscious academic motivation influence the intention to enroll in a university career, several analyses were carried out, starting by establishing relationships between variables. In Table 4, it can be observed that the strongest and significant Spearman’s Rho correlations between enrollment probability and vocational traits are: investigative, social, and conventional, as well as statistically significant correlations with life

goals and personal motives. It is also important to highlight the very low correlation between the realistic trait and even the negative correlation with the artistic trait and enrollment probability. A differential analysis was also conducted, taking vocational traits and life and personal goals according to the probability or not of university enrollment. Previously, the enrollment probability variable had been dichotomized to yes and no options. The results indicated only statistically significant differences in social ($U = 1398.50$, $p < .001$, $rb = .13$), entrepreneurial ($U = 1063.50$, $p < .001$, $rb = .13$), and conventional ($U = 1348.50$, $p < .001$, $rb = .13$) traits, with the common finding that higher scores in these coincide with the affirmative probability of university enrollment. Additionally, the items representing life goals were delved into, and differences were found in items: "study to earn money" ($U = 1401.00$, $p < .001$, $rb = .13$) and "study because I want my expectations to be met" ($U = 1486.00$, $p < .001$, $rb = .13$) and "I think studies are very important; that's why I study" ($U = 1365.00$, $p < .001$, $rb = .13$), the last two referring to personal motives. In all three cases, high scores coincide with the probability of enrollment.

Correlations between variables	1	2	3	4	5	6	7	8
1. Life goals	—	—	—	—	—	—	—	—
2. Personal goals	0.63 ***	—	—	—	—	—	—	—
3. Realistic	0.11	0.20 **	—	—	—	—	—	—
4. Investigative	0.23 **	0.24 ***	0.51 ***	—	—	—	—	—
5. Artistic	0.09	0.24 ***	0.35 ***	0.24 ***	—	—	—	—
6. Social	0.25 ***	0.33 ***	0.16 *	0.32 ***	0.46 ***	—	—	—
7. Entrepreneurial	0.35 ***	0.27 ***	0.32 ***	0.22 **	0.14 *	0.23 ***	—	—
8. Conventional	0.32 ***	0.26 ***	0.46 ***	0.39 ***	0.19 **	0.33 ***	0.65 ***	—
9. Enrollment probability	0.18 **	0.20 **	0.05	0.19 **	-0.04	0.16 *	0.26 ***	0.17 *

- $p < .05$ ** $p < .01$ *** $p < .001$

Logistic regressions were explored to determine the influence of vocational traits and conscious academic motivation, taking only the items that showed differential capacity in the previous analysis since total scores were not significant as independent variables on the probability of enrolling in a university career, considering sex as a cofactor. The model was statistically significant ($X2(196) = 21.95$, $p < .0001$, Nagelkerke's $R^2 = .21$), and the model correctly classified 89% of cases. The following significant predictors were found: social (OR = 1.06, 95% CI = -0.04 to 0.11, $p < .05$), entrepreneurial (OR = 1.11, 95% CI = 0.00 to 0.18, $p < .05$),

and artistic (OR = 0.95, 95% CI = -0.11 to 0.03, $p < .05$), and in motivation, only the item "I think studies are very important; that's why I study" (OR = 1.50, 95% CI = 0.00 to 0.81, $p < .05$).

4. Discussion

The general objective that guided this study was to analyze the relationships between the RIASEC typology and conscious academic motivations in the probability of university enrollment. According to the review of the background on this topic, it is possible to affirm that this is the first study in Venezuela considering these two variables simultaneously concerning university entry. Firstly, the findings indicate that the sample of students is characterized by the following ascending distribution of vocational traits (1995a; 1995b; 1997):

1. Enterprising (E): Associated with occupations involving convincing or directing others. Motivated by money, prestige, and social position, closely related to the status quo. This profile is more capable of sales, resource management, and leading groups but struggles with scientific and rigorous issues.

2. Social (S): Associated with occupations seeking to interact with other people, such as helping, teaching, guiding, and serving society. Motivated by working for others' welfare. Usually empathetic, understanding, given to social interactions, and conversational, with better social than mechanical or instrumental skills.

3. Artistic (A): Associated with occupations involving reading books, musical activities, literary and artistic activities in general. Motivated by ideas or feelings considered creative and expressive. Therefore, characterized by being open to new experiences, seeking innovation, and having better artistic than administrative or office skills.

4. Investigative (I): Associated with occupations exploring to understand study objects, motivated by knowledge and learning, analytical, intelligent, and with better academic than social skills.

5. Conventional (C): Associated with occupations involving clear, methodical routines and satisfying well-defined norms. Attracted by making money, having power in social relations or own businesses, with good skills for finance and productions than artistic ability.

6. Realistic (R): Associated with occupations involving machines, objects, and instruments, motivated by tangible rewards and instrumental tasks, practical, and with better manual than social skills.

Regarding describing conscious academic motivation for learning in the dimensions of life goals and personal motives, the highest goals are those related to an instrumental vision of a university career: to have a better future, a secure life, earn money, and succeed in life. Cognitive goals such as being competent in tasks and knowledge; to a lesser extent, self-assertive and affective goals, including feeling active, avoiding boredom, feeling different, happiness, or

avoiding stress. Personal motives are among the highest: personal expectations, learning and knowledge, reaching maturity, motivation for self-improvement, feeling independent and free, while the lowest motives were related to fun through studies or their teachers' methodology. The results are consistent with studies by Boza-Carreño & Méndez-Garrido (2013) and Carreño-Boza & Toscano-Cruz (2012) with the Spanish population.

The analysis of RIASEC according to gender confirmed hypothesis 1 related to finding statistically significant differences in some RIASEC traits, consistent with empirical evidence showing differences in Realistic traits favoring men, while Social and Artistic traits favoring women (Baerg-MacDonald et al. 2023; Einarsdóttir & Rounds 2020; van Huizen et al. 2021), also reported as small effect size differences (Darcy & Tracey 2007). Similarly, hypothesis 2, related to finding statistically significant differences in the dimensions of conscious academic motivation according to gender, was partially confirmed, as differences were found only in some items for personal motives: "study to help others" favoring women and in life goals item "study to be better than others" favoring men, which is consistent with previous evidence suggesting men relate more to task or prestige goals, while women to social themes (Araya 2019; Doña & Luque 2019; Gámez & Marrero 2003; Rodríguez-Muñiz et al. 2019).

Correlations between RIASEC and students' goals and motives in this study are positive but not all significant, and of lower magnitude than those reported in Africa, ranging from 0.35 to 0.83 (Dickinson et al. 2017). Also noteworthy is the very low correlation between the realistic trait and even the negative correlation of the artistic trait with the probability of enrollment. The results also confirm previous findings related to hypothesis 3, stating that some traits of the RIASEC typology will predict the probability of university career enrollment, and partially confirm hypothesis 4, related to some dimensions of conscious academic motivation predicting the probability of university career enrollment. Specifically, the results are interpreted in four findings: 1) increased probability of enrollment with an increase in the social vocational trait; 2) increased probability of enrollment with an increase in the entrepreneurial vocational trait; 3) increased probability of enrollment with a higher score in the item referring to thinking studies are important; and 4) while artistic trait scores increase, there is a decrease in the probability of university enrollment.

Among the theoretical implications of the results is confirming that the RIASEC typology influences the probability of enrollment or at least developing educational trajectories that unfold in the university (Cupani et al. 2017; Lent et al. 2003; Kindelbeger & Safont-Mottay 2023; Guay et al. 2020). Also, similarities with Usslepp et al.'s (2020) study, where the Artistic trait was not significantly associated with the choice of educational route after secondary education. Other theoretical implications include the importance of intrinsic motivation, as explained in Sheldon et al.'s (2020) study on the influence of self-concordant goals for predicting career choice, referring to Deci and Ryan's (1985) self-determination theory.

Among the practical implications are designing educational policies addressing the university's challenges as a global institution, focusing on three core academic processes: student recruitment, retention, and loyalty. These processes could be outlined in a timeline,

starting with student recruitment, designing significant entry pathways aligning with students' vocational traits, and even appealing to curricular creativity to offer options for profiles less attracted to a long career, such as Artistic and sometimes Realistic. Additionally, entry and recruitment pathways require guidance and welfare departments to design strategies allowing the university career to be seen as a developmental context catalyzing life goals and purposes. The results have implications for marketing departments through communication that attracts potential students interested in the idea of enrolling in the university to build their life project. It is important to highlight that the university, as a global institution, competes with multiple options that emerged during the pandemic, such as certifications, workshops, short courses, and other alternatives.

Once students enter the university, retention becomes crucial. It involves designing strategies and support instances during their academic life, relating to their vocational traits and career goals, ensuring they successfully complete their university training. This does not compromise quality, as the university's great objective is for all enrolled students to graduate with relevant training to enter the labor market according to their professional profile. Universities must combat the significant enemy of dropout, as nearly half of enrolled students abandon their career, with numbers quite large and concerning. Causes include low motivation, low congruence between provided training and professional expectations, personal interests, and even worse, many Latin American students abandon to enter the labor market urgently to face poverty. Some students leave a career to switch to a shorter, even innovative option, while others abandon the university project altogether for other life alternatives (Castro et al. 2023).

Regarding more innovative training options, there is a strong surge in artificial intelligence, data mining, and machine learning, impacting global educational offerings. The third aspect is loyalty, understood as establishing solid, significant relationships with graduates, who become ambassadors promoting academic excellence, values, and roots developed during their studies. Graduates are a vital, hereditary, and relational resource for the university, perhaps one of its most important assets, with whom new projects and connections with the labor market must be envisioned. It is important for new students to be aware of these successful educational and professional trajectories. Recapping the university's challenge of recruitment, retention, and loyalty, understanding students' motivations and vocational traits provides an approximation of what students truly need. A triangulation should be sought in the productive sector, life project expectations, and program offerings, allowing student development according to their profile, interests, and characteristics. As educational policies refine this, interest in the university by these students and the number of students wanting to enroll will likely increase. An important last aspect is the sustainability of the university, particularly for privately managed universities. Covering these aspects of motivations and vocation could point to improving university sustainability as a strategic decision carried forward.

Among this research's limitations are sample size and convenience sampling, which may limit the generalizability of results to a student sample. Future studies should include a more heterogeneous sample from different educational institutions. Longitudinal studies exploring

RIASEC and motivations' relationships in university entry to understand their influence on educational trajectories would also be interesting.

5. Conclusion

The vocational traits characterizing this sample of students are: Enterprising, Social, and Artistic. The highest life goals are those related to an instrumental vision of a university career: to have a better future, a secure life, earn money, and succeed in life. Regarding personal motives, the highest are: personal expectations, learning and knowledge, reaching maturity, self-improvement motivation, feeling independent and free. Differences were found in Realistic traits favoring men, while Social and Artistic traits favoring women, as well as differences in goals, specifically men relating more to task or prestige goals, while women to social themes. Social and Enterprising traits, along with the importance placed on studies, positively predict the probability of university enrollment, while the Artistic trait decreases it.

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