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Determinants of Entrepreneurial Intention in Dental Students

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Abstract

This study analyzes the determinants of entrepreneurial intention in dental students in Chachapoyas, Amazonas, Peru. The main objective was to determine the relationship between attitudes, subjective norms and entrepreneurial self-efficacy in the intention to open a dental practice. A quantitative, descriptive-correlational design was used with a census sample of 27 students. The Entrepreneurial Intention Questionnaire (EIQ) was used, analyzing the data with descriptive and correlational statistics in SPSS. The results indicate that entrepreneurial self-efficacy is the most influential factor in entrepreneurial intention (66.7%), followed by entrepreneurial attitudes (77.8%). In contrast, subjective norms have a moderate influence (48.1%). It is concluded that the strengthening of self-efficacy and entrepreneurial education is key to promoting entrepreneurship in dentistry. It is recommended that academic programs oriented to business management and entrepreneurial leadership be designed.

Keywords: *Entrepreneurial Intention, Self-Efficacy, Dentistry, Subjective Norms, Entrepreneurial Education.*

Introduction

Financial literacy has become a vital component in the training of professionals, especially in fields where autonomous financial management is essential (Koskelainen et al., 2023). For dentists, the development of financial competencies not only influences their personal financial stability but also directly affects the sustainability and success of their practices. (Thakkar et al., 2022). However, recent studies suggest that many health professionals, including dentists, have limited financial literacy, which can undermine the economic viability of their professional activities.

Entrepreneurial intention among university students is influenced by various psychological and contextual factors. Previous studies have identified entrepreneurial self-efficacy, social support, and the perception of risks and benefits as key determinants in the entrepreneurial decision-

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making process (Nowotny, 2022). In this context, the Theory of Planned Behavior by Ajzen, (1991) and Conner and Armitage (1998) has been widely employed to analyze factors influencing entrepreneurial intention. According to this theory, entrepreneurial intention is shaped by three main components: (i) attitudes towards entrepreneurship, (ii) subjective norms, and (iii) perceived behavioral control or self-efficacy (Mohr & Kühl, 2021).

Recent studies have emphasized the importance of financial literacy in higher education. West et al. (2021) analyzed entrepreneurial intention among students in Australia, highlighting that perceived desirability and feasibility are significant predictors of entrepreneurship. Similarly, Johan et al. (2021) found that an innovative environment and professional self-efficacy influence students' entrepreneurial intentions in Indonesia. Furthermore, Lusardi and Mitchell (2023) explored the relationship between personal attitudes, subjective norms, and perceived behavioral control, demonstrating that these factors positively impact entrepreneurial intention.

In the field of dentistry, Anwar et al. (2021) examined the relationship between family income and entrepreneurial education in India, concluding that self-efficacy and entrepreneurial attitude are strongly correlated with entrepreneurial intention. Similarly, Kusumojanto et al. (2021) investigated the relationship between personality traits and entrepreneurial intention in Malang, Indonesia, finding that factors such as internal locus of control and innovativeness have a significant impact on entrepreneurial decision-making.

In Peru, despite the growing interest in the relationship between financial education and professional practice, there is little research that specifically addresses financial literacy in dental students. This study aims to evaluate the level of financial literacy in dental students and its relationship with preparation for dental practice management. Through a quantitative and correlational approach, the relationship between financial literacy, personal resource management, applied financial competencies and knowledge of fiscal and legal aspects in dental practice will be analyzed.

The findings of this research will contribute to the design of educational strategies that strengthen the financial training of future dentists, promoting a more autonomous professional profile oriented towards innovation in clinical management. It also seeks to provide recommendations that will allow university institutions to improve their training programs, fostering a solid entrepreneurial culture in dentistry.

This study also aligns with the Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure) and SDG 10 (Reducing Inequalities). Integrating financial literacy into curricula could reduce knowledge gaps and improve economic stability and entrepreneurship in the dental sector.

Materials and Methods

Study Design

The present study adopts a **quantitative** approach, with a **descriptive-correlational** and **crosssectional** design, allowing to evaluate the relationship between financial literacy and preparedness for dental office management. A methodology based on structured surveys is used to collect data efficiently and objectively (Buvé et al., 2022) (Li et al., 2022).

Population and Sample

The target population is made up of dental students at a public university in Peru. A **census** sample of 27 students is used, ensuring the inclusion of all individuals available in the study period. According to Takona, (2023) the use of census samples makes it possible to obtain greater precision in the analyses without the need for complex inferential techniques.

Data Collection Instrument

The Financial Literacy Self-Assessment Quiz, adapted from the original version, evaluates five key dimensions: (1) Keeping track, (2) Making ends meet, (3) Planning ahead, (4) Staying informed, and (5) Choosing financial products. This questionnaire was developed by the Financial Consumer Agency of Canada (FCAC) to help individuals assess their financial knowledge and decision-making abilities (Liu & Zhang, 2021).

Data

The data will be processed using **SPSS** software, using descriptive statistics and Pearson and Spearman correlation tests, according to the normality of the data. To evaluate the reliability of the instrument, **Cronbach's Alpha** coefficient will be calculated, considering an acceptable value higher than 0.7 (Amirrudin et al., 2020). Additionally, a multiple regression analysis will be performed to identify the most relevant predictor variables of financial literacy in dental office management (Ponomareva et al., 2022).

This methodology will provide a detailed and informed analysis of the relationship between financial literacy and the ability of future dentists to effectively manage their professional practice.

Cronbach's alpha	Cronbach's alpha based on standardized items	N of elements
,808	,806	20

Table 1: Reliability Statistics

Results

SO1: Relationship between attitudes towards entrepreneurship and entrepreneurial intention

		Entrepreneurial intent		Total
		Medium (12-18)	High (19-25)	
Attitudes towards entrepreneurship	Regular (12-18)	5	1	6
	Good (19-25)	4	17	21
Total		9	18	27

Table 2: Attitudes Towards Entrepreneurship Vs. Entrepreneurial Intention

Table Interpretation: The results show that entrepreneurial intention is related to attitude towards entrepreneurship. It is observed that:

- 77.8% of the students have a good attitude towards entrepreneurship, and of these, 81% posthumanism.co.uk

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have a high entrepreneurial intention.

- On the contrary, only 22.2% of the students show a regular attitude, of which the majority (83.3%) have a medium entrepreneurial intention.
- Overall, 66.7% of students have a high entrepreneurial intention, indicating that a positive attitude towards entrepreneurship increases the likelihood of developing a stronger entrepreneurial intention.

These findings suggest that strengthening entrepreneurial attitudes through educational strategies could be key to encouraging the creation of independent dental practices.

SO2: Influence of Subjective Norms on Entrepreneurial Intention

	N	%
Regular (12-18)	14	51.9%
Good (19-25)	13	48.1%
Total	27	100.0%

Table 3: Subjective Norms Vs Entrepreneurial Intention

Table Interpretation: The results reflect that subjective norms have a moderate influence on students' entrepreneurial intention. It is observed that:

- 51.9% of the students perceive regular subjective norms, indicating that their social environment (family, teachers and peers) does not exert a strong influence on their entrepreneurial intention.
- 48.1% of the students consider that their environment is favorable to entrepreneurship, which suggests that social support is important but not decisive.

Overall, the results suggest that while support from the social environment may motivate students to become entrepreneurs, it is not the main factor driving entrepreneurial intention. This reinforces the importance of strengthening entrepreneurial training within the university to compensate for the lack of a highly stimulating social environment in some cases.

SO3: Impact of Entrepreneurial Self-Efficacy on the Intention to Open a Dental Practice.

	N	%
Regular (12-18)	9	33.3%
Good (19-25)	18	66.7%
Total	27	100.0%

Table 4: Entrepreneurial Self-Efficacy Vs. Intention To Open A Practice

Interpretation of the Table: The results evidence that entrepreneurial self-efficacy is a key factor in students' intention to open a dental practice. It is highlighted that:

- 66.7% of the students present a high level of entrepreneurial self-efficacy, suggesting high confidence in their ability to manage a practice.
- 33.3% of students report fair self-efficacy, indicating some doubt about their entrepreneurial skills.

These findings suggest that strengthening entrepreneurial self-efficacy through business management trainings and mentoring could increase students' predisposition to entrepreneurship in dentistry.

Discussion

SO1: To analyze the relationship between attitudes towards entrepreneurship and entrepreneurial intention in dental students.

The results of this study corroborate a significant positive association between dental students' attitudes toward entrepreneurship and their entrepreneurial intentions. Students who held favorable views of entrepreneurship were markedly more inclined to pursue entrepreneurial endeavors. These findings are consistent with prior research by Lv et al. (2021), which underscores the critical influence of entrepreneurship education and skill development in fostering entrepreneurial intent. Moreover, the work of Anwar and Saleem (2019) identified both attitude and perceived behavioral control as key predictors of entrepreneurial behavior. In line with these studies, our results reveal that students with stronger entrepreneurial attitudes are more likely to envision self-employment as a viable and desirable career path.

On the other hand, Byun et al., (2018) emphasizes the importance of entrepreneurship education in the formation of new entrepreneurs. The results of this research reinforce this idea by showing that a favorable attitude towards entrepreneurship is associated with higher levels of entrepreneurial intention, which suggests that strengthening business management education could enhance these indicators. Furthermore, Sánchez-Altamirano and Valiente-Saldaña (2024) reported elevated entrepreneurial intention among students of economic and administrative sciences at the Universidad Nacional Toribio Rodríguez de Mendoza de Amazonas. Our findings broaden this perspective by revealing a similarly significant relationship between entrepreneurial attitudes and the intention to establish dental practices among dentistry students. These results underscore the imperative to implement academic strategies that cultivate entrepreneurship within dental education, fostering leadership and business management competencies from early stages in the university curriculum.

SO2: Assess the influence of subjective norms on students' entrepreneurial intention.

The results show that subjective norms have a moderate influence on the entrepreneurial intention of dental students. It was observed that 51.9% of the students perceive regular subjective norms, while 48.1% consider that their social environment is favorable for entrepreneurship. These findings coincide with the study of Vamvaka et al., (2020), who found that subjective norms have a moderate influence on the entrepreneurial intention of university students. Likewise, (Aga & Singh, 2022) demonstrated that family and teacher support is a key factor in the development of entrepreneurial intention, although in this study, its impact is not determinant, indicating that other factors such as self-efficacy could be more relevant in dentistry.

Conversely, Ambad and Damit (2016) propose that subjective norms can significantly enhance entrepreneurial intention when reinforced by formal entrepreneurship education. Within this framework, the absence of a strongly motivating environment may be mitigated through targeted academic training programs. Similarly, Sánchez-Altamirano and Valiente-Saldaña (2024) found that while entrepreneurial intention is high among students at the Universidad Nacional Toribio Rodríguez de Mendoza in Amazonas, the support derived from subjective norms remains low—a finding that aligns with the present study's results.

Furthermore, Rashid et al. (2024) point out that in certain regions, the support of the social environment towards entrepreneurship remains limited, which explains why a slight majority of students perceive only moderate subjective norms. This observation reinforces the notion that promoting entrepreneurship in dentistry should prioritize strengthening entrepreneurial self-efficacy and providing education focused on business management, rather than relying solely on social environment support..

SO3: To determine the impact of entrepreneurial self-efficacy on students' decision to open their own dental practice.

The results obtained confirm that entrepreneurial self-efficacy is a key factor in the decision of dental students to open their own dental practice. It was observed that 66.7% of the students have a high level of entrepreneurial self-efficacy, which indicates a strong confidence in their entrepreneurial skills. In contrast, 33.3% of the students have a fair level, suggesting that a smaller proportion still do not feel fully prepared to manage their own business.

These results coincide with the study by López Al-Qadasi et al., (2023), who identified that self-efficacy is a determining factor in the entrepreneurial intention of university students. Likewise, Anjum et al., (2020) highlighted that greater entrepreneurial self-efficacy is related to more effective business planning, which reinforces the idea that confidence in one's own abilities drives entrepreneurship.

In addition, Byun et al., (2018) argues that entrepreneurship education programs play a key role in strengthening students' self-efficacy. In this study, the high percentage of students with good self-efficacy could be related to the training they have received in entrepreneurial management topics. On the other hand, Sánchez-Altamirano and Valiente-Saldaña (2024) found that at the Universidad Nacional Toribio Rodríguez de Mendoza de Amazonas, entrepreneurial intention is high when the students perceive that they possess the necessary skills, which is consistent with the results of this study.

Finally, Deng and Wang (2023) indicate that in rural or underserved regions, students who are confident in their financial and administrative skills are more likely to pursue entrepreneurial paths. The findings of this study support this perspective, as entrepreneurial self-efficacy emerges as a key determinant in the decision to establish a dental practice. These results highlight the importance of strengthening business management training to enhance self-efficacy among future dentists and foster entrepreneurship within the profession.

Conclusions

- The results confirm that students with a **favorable attitude toward entrepreneurship have a higher intention to undertake entrepreneurship in dentistry**. This suggests that fostering an entrepreneurial mindset in dental students may contribute significantly to their consideration of entrepreneurship as a viable career option.

- The study shows that **subjective norms have a moderate influence on the entrepreneurial intention of dental students**, with a slight majority of students perceiving them as regular. This indicates that the social environment is not a decisive factor and that students may be motivated by other elements, such as their confidence in their own abilities and the perception of opportunities in the sector.
- **Entrepreneurial self-efficacy is a key factor in dental students' decision to open their own practice.** The majority of respondents are confident in their abilities to manage a business, suggesting that strengthening self-efficacy can significantly increase entrepreneurial intention in this sector.

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