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INNOVATION IN VOCATIONAL EDUCATION AND TRAINING IN GREECE: EDUCATORS' MOTIVATIONS

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Abstract:
This study investigates the motivations of educators at Greek Higher Vocational Training Schools for adopting innovative practices in education. It explores both internal and external factors influencing innovation. The findings reveal that internal motivations and the perceived needs of students and educational units are key drivers of innovation, whereas gender and age do not significantly correlate with motivation. Experienced educators show a greater inclination toward innovation, associating it with professional

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prestige and collaboration satisfaction. External mandates, such as government policies, often lack effectiveness unless adequately supported. The study emphasizes that educational innovation should stem from intrinsic motivation, collaborative environments, and student-cantered approaches, and highlights the crucial role of internal leadership. Future research should delve into specific innovative practices, such as experiential learning, to enhance empathy.

Keywords: educational innovation, motivation, educators, vocational training, Greece

1. Introduction

The aim of vocational education and training is to offer young people and adults the skills, knowledge, and expertise needed for specific jobs or, more generally, the labor market (European Commission, 2025).

In Greece, the operation of Higher Vocational Training Schools (SAEK, in Greek) aims to play an enhanced role in actively linking trainees and graduates with the labor market at local and regional levels (Law 5082, 2024). This framework includes practices to secure jobs, partnerships with business and industry, and an effort to strengthen the educational process and offer new research and educational opportunities to the S.A.E.K. Since education is a dynamic field that is in constant evolution in order to meet the educational needs and requirements of modern society, it is considered essential for educators to introduce innovations in the educational process. Educational innovations encompass a wide range of changes and improvements in the teaching and learning process (Mykhailyshyn *et al.*, 2019). These innovations can take many forms, including new teaching methodologies, digital learning tools, curriculum redesigns, assessment approaches, and organizational structures within educational institutions (Rodés Paragarino & Gewerc, 2023; Vázquez-Parra *et al.*, 2024). The fundamental purpose of introducing innovations in education is to enhance learning outcomes, improve educational efficiency, and better prepare students for future challenges (Li *et al.*, 2023; Stasewitsch *et al.*, 2022). Educational innovation is a deliberate and systematic process that aims to enhance the quality of teaching and learning by introducing changes to educational practices, systems, and approaches (Gregorzewski, 2018). The introduction of innovations contributes to improving the quality of education, as well as helping to develop critical thinking and creativity in students, and educators play a key role in adopting innovative practices (Suyuti, 2024).

The introduction of innovations in the field of education is a multifaceted challenge, and educators face a variety of motivations in this process. Educational innovation is frequently initiated or accelerated by policy directives and governance frameworks that establish requirements for educational institutions (Wai, 2017). Policy changes create competitive environments that force educational organizations to innovate to remain viable. As institutions enter "*the path of competition in the market of educational services*" due to changing educational policies, they must adapt to survive,

captured in academic V.S. Lazarev's observation that *"to survive, the school must change"* (Kharisova, 2016).

While institutional leadership typically bears responsibility for implementing innovation strategies, research indicates that often the initiative for innovation comes not from above, but from below - from educators-innovators (Chychuk *et al.*, 2021). These educator-innovators possess distinctive characteristics that enable them to drive educational change (Klaeijsen *et al.*, 2017). Research indicates that internally motivated innovation produces more persistent and higher-quality results than externally motivated work. People driven by intrinsic motivation demonstrate higher creativity accompanied by emotions of joy and satisfaction, while those with primarily external motivation tend to choose simpler tasks and produce lower quality creative work (Seryapina, 2018). This suggests that fostering intrinsic motivation is essential for meaningful educational innovation, as the internal motive for work is the most significant factor in the educational process (Issa *et al.*, 2023). At the same time, introducing innovation into the educational process is driven by several pedagogical motivations aimed at enhancing both teaching effectiveness and student learning outcomes. Student-centered improvement plays a crucial role in driving educational innovation, as educators are motivated by the desire to make the curriculum more engaging and relevant to students, increasing learning opportunities through innovation (Stumbrienė *et al.*, 2024).

The aim of the present study is to investigate the motivations that push SAEK educators to adopt innovative practices in the educational process.

2. Research Methodology

2.1. Aim and Objectives

The purpose of this research is to investigate the motivations for introducing innovations in vocational training. Specifically, the characteristics of SAEK educators, at the individual and professional level, related to their motivation to adopt and implement innovative practices in the training process are investigated. Based on the purpose of the research, in order to investigate the factors that influence the introduction of innovations in vocational training, the specific hypotheses of the research are set as follows:

RQ1: What are the motivations of public SAEK educators for introducing innovations in training?

RQ2: How do the demographic and professional characteristics of the trainers relate to their motivation to introduce innovations in training?

Through the exploration of these issues, it seeks to understand how innovation in education can be supported, contributing to the improvement of the teaching and learning experience.

2.2. Research Design

A cross-sectional study was conducted among public SAEK educators. The choice of this type of survey relates to characteristics related to speed of conduct (Setia, 2016) limited

costs (Wang & Cheng, 2020) and the consideration of multiple factors to evaluate the results (Sedgwick, 2014). The survey was conducted from October to May 2024, and the research data was obtained utilizing an online survey methodology.

2.3. Sample and Instrument Tool

Simple random sampling was used. The research sample included public SAEK educators from central Macedonia, Greece. The questionnaire was compiled via Google Forms, and a total of 170 questionnaires were distributed by email, with a response rate of 60.6% (n=103).

The questionnaire was designed after a review of the international literature (2015 - present) concerning studies investigating the motivations for introducing innovations in education (Abd Majid & Mafarjaa, 2024; Kearney & Kelly, 2022; Emo, 2015; Head *et al.*, 2023; Kyndt, *et al.*, 2016; Lingyan Meng, 2024; Matúšová, 2021; Selezneva, 2020; Stumbrienė *et al.*, 2024; Walder, 2017).

An anonymous, structured questionnaire with closed-ended questions was chosen for the collection and recording of primary data. Closed-ended questions were preferred because of the ease of answering, coding, and extracting results and conclusions (Menexes & Economou, 2016). In the wording of the questions, as far as possible, expressive errors, wording errors, double negatives, ambiguities, unfamiliar abbreviations, and technical terms with which participants were not familiar were avoided.

The questionnaire was structured in two sections: the first section concerned the individual data of the statistical population and included questions to obtain demographic and occupational characteristics. The second section of the questionnaire included questions, which were related to the identification of motivations for introducing and managing innovations in the educational interaction, using a six (6) point Likert-type scale.

In order to identify the impact of specific factors on the intention of trainers to introduce innovative practices in the educational process, the questions were classified according to the motivations investigated. Specifically, educators' internal motivations and personal drive, external factors that create pressure for change within educational institutions, and motivations for innovative pedagogies are investigated. The high Cronbach's alpha reliability index (α=0.967), which meets the acceptable threshold of 0.70 (Field, 2009), confirms the appropriateness of clustering these questions.

Participants were informed in writing about the purpose and procedure of the survey, as well as about anonymity, confidentiality, data confidentiality, and voluntary participation.

2.5. Pilot Study

It was preceded by a pilot survey, as it is considered an essential initial stage of the research process (Hazzi & Maaldaon, 2015). A preliminary, small-scale test of the procedures to be applied on a large scale was carried out (Porta, 2014). Ten of the participants completed an equal number of questionnaires in order to collect preliminary

data and to test the scales used in terms of the understanding of the questions, their meaning and content, and to identify possible practical problems in the research process; the time taken to complete the questionnaire was also calculated. The required completion time was estimated not to exceed 10 minutes. The results were positive, as the questionnaire was found to be easy to use and understand. The minimal adjustments made did not affect the original structure and content.

2.6. Data Analysis

This study used both inferential and descriptive statistics. The response frequencies and percentages were determined. The structure of the questionnaires provided the possibility of obtaining quantitative variables and qualitative variables (nominal and ordinal scale). The nonparametric Shapiro-Wilk test was applied to assess whether a dataset is normally distributed. Furthermore, correlation tests were conducted between the participants' characteristics and their incentives to adopt innovations by applying the non-parametric Spearman's correlation coefficient. The significance level was set to 0.05. All data analyses were performed using SPSS version 23.0.

3. Results

Table 1 provides a description of the study population. An uneven distribution was observed between men and women (20.4% and 79.6%, respectively). The majority of participants were aged 41-50 years (47.6%). More than half of the participants (53.4%) had up to ten years of professional experience.

Table 1: Characteristics of participants (n=103)

Characteristics		**N**	**%**
Gender	Male	21	20.4
	Female	82	79.6
Age	25 - 30	12	11.7
	31 - 40	25	24.3
	41 - 50	49	47.6
	51 - 60	15	14.6
	60+	2	1.9
Experience (Years)	1 - 10	55	53.4
	11 - 15	13	12.6
	16 - 20	13	12.6
	21 - 25	11	10.7
	26 - 30	6	5.8
	30+	5	4.9

The correlation tests using the non-parametric Spearman correlation coefficient between gender and motivation to introduce and manage innovations did not show any significant correlation. Similarly, no significant correlation was found between the age of the participants and the motivation to introduce innovations in education. Regarding teachers' years of experience and motivation for introducing innovations, the results

showed that there is a moderate positive correlation between participants' years of experience and the statement that their involvement in innovations gives them high professional prestige (0.262, p <0.01). In addition, a statistically significant correlation was observed between years of experience and the statement that the interest in introducing innovations has been triggered by the needs of the educational unit (0.206, p < 0.05), as well as with the statement that cooperation with the local community offers satisfaction with the introduction and management of innovations (0.222, p <0.05).

4. Discussion

As far as the internal motivation, the majority of participants indicate that their involvement in training programs, focused on innovative methods, offers minimal benefit to their professional growth, although they acknowledge the role of training in enhancing their status as professionals. This finding is in contrast to previous research studies, where teachers view innovative activities as a means for personal and professional self-growth (Gavrilyuk *et al.*, 2019; Theodoropoulos & Kiprianos, 2020). The results of the present study are consistent with a previous survey (Karipolglou, 2012) examining employment policies in Greece, which refer to the lack of a link between education and the labor market, which may affect the perception of professionals about the value of training programs in their professional growth.

Despite the emphasis on supporting and training teachers in effective and innovative teaching methods, national education policies differ in terms of the compulsory nature and quality of professional growth, which may affect teachers' perceptions of the effectiveness of these programs (Kyrimi, 2018). Teachers are sometimes reluctant or even resistant to the introduction of innovations, which can limit the effectiveness of training programs in their professional growth (Karava, 2018).

According to the results of the study, the participants reported that the satisfaction they get from the introduction and management of innovations is significant. Educators' satisfaction plays a key role in the successful introduction and management of innovations in education. The relationship between teacher satisfaction and educational innovation is multifaceted and fundamental to successful educational change. Job satisfaction in teaching represents an emotional response to various aspects of the profession, where teachers may feel differently about different elements of their work (Susilawati *et al.*, 2021). International studies have highlighted the link between teachers' professional satisfaction and their willingness to adopt new teaching practices and technologies (Atasoy & Özden, 2022; Blömeke *et al.*, 2021; Sodergren *et al.*, 2023).

The participants' positive attitude towards cooperation with the local community suggests that the desire to innovate also stems from the need to cooperate and connect with the wider community. Engaging with the local community serves as a powerful catalyst for educational innovation. Collaborations between schools and community organizations not only enrich the learning experience but also address specific local needs, fostering a more holistic educational environment (Epstein *et al.*, 2018; Kakungulu Samuel, 2024).

Recent decades have highlighted the critical intersection between educational institutions and their surrounding communities. Through significant community engagement, educational institutions have been urged to take a more active role in tackling urgent social, civic, economic, and moral issues (Martinovic *et al.*, 2018). This commitment reflects a fundamental understanding that education both shapes and is shaped by society, requiring strong backing from parents, community members, and broader societal stakeholders for effective functioning (Serdyukov, 2017).

According to the respondents' answers, the experiences of working with their colleagues seemed to have a positive effect on creating a sense of satisfaction, and this fact motivates them to adopt innovative practices in their teaching. This finding is consistent with other research that found that schools with robust collaborative environments reported higher levels of teacher satisfaction and were more effective in implementing innovative teaching practices (Reeves *et al.*, 2017; Vangrieken *et al.*, 2015). Moreover, research by Goddard *et al.* (2007) suggests that collaborative professional communities within schools not only enhance teacher satisfaction but also positively impact student learning outcomes. The study indicates that when teachers collectively engage in reflective dialogue and shared decision-making, they are more inclined to adopt innovative approaches in their teaching.

Based on the survey's results, there is a high level of belief that the implementation of innovations enhances the role of trainers and gives them a higher level of prestige and societal recognition. According to Lokhvytska and Martovytska (2022), internal motives manifest through teachers' interest in innovation activities, coupled with their desire for self-improvement and recognition of their professional significance. The relationship between innovative teaching practices and teacher prestige is evolving, with evidence suggesting that educators who embrace modern pedagogical approaches gain increased respect. Research indicates that teachers who demonstrate effective methodology, maintain classroom discipline, and take unconventional approaches to problem-solving are viewed as more authoritative by students (Fomin, 2024). Societal recognition and respect are particularly strong for teachers who acknowledge and adapt to the changing role of education in modern society (Smak & Walczak, 2017).

Regarding the external requirements, an important percentage of participants indicated that their colleagues motivate them to introduce innovations. These results point to a general trend of positive opinions toward the necessity of collaboration for innovation. In accordance with Akinyemi *et al.* (2020) teachers develop new teaching strategies and improve their methodologies through group learning and mutual support. Similarly, Wang *et al.* (2024) point out that collaborative opportunities facilitate idea-sharing and increase professional fulfillment. Collaborative work among teachers serves as a powerful catalyst for educational innovation. Previous research highlights the professional discussions and emotional support from mentors and colleagues as crucial motivational factors to adopt new educational methods (Akinyemi *et al.*, 2020; Eisenschmidt & Oder, 2018).

Additionally, on the external sources that act as motivating factors for the adoption of innovative practices in education, it was observed that the majority seem to have

doubts or disagree with the view that the requirements for implementing innovations in education set by the central government. Several studies have explored educators' skepticism or disagreement with centrally mandated educational innovations provide insights into the complexities of implementing centrally mandated innovations in education (Kalman & Bozbayindir, 2017; Kramer *et al.*, 2021; Matsumura & Wang, 2014). Ministerial directives play a crucial role in fostering innovation within educational systems (HiDubai Newswire, 2025; Reuters, 2025). By setting clear policies and providing strategic guidance, these directives can create an environment conducive to the adoption of new teaching methods, integration of advanced technologies, and overall improvement in educational outcomes. However, the effectiveness of such directives largely depends on their implementation. Top-down mandates must be accompanied by adequate resources, professional growth for educators, and a culture that encourages experimentation and feedback. Without these supporting elements, even well-intentioned policies may face resistance or fail to produce the desired outcomes. Therefore, while ministerial directives are vital in setting the stage for innovation, their success hinges on thoughtful execution and the active involvement of all stakeholders in the educational community (Hadijah, 2024; Hammond *et al.*, 2017).

Based on the respondents' answers, the importance of internal leadership in promoting innovation in the organization is highlighted. It has been pointed out that internal leadership can drive change, while external pressures, such as ministerial directives, frequently catalyze innovation initiatives (Chychuk *et al.*, 2021). Successful internal educational leaders exhibit several key characteristics that enable them to drive innovation effectively. At their core, these leaders act as responsive innovators and system workers who can establish shared goals while building professional and personal capital (García-Martínez *et al.*, 2020). The centralized approach creates significant tensions for school principals who must balance competing demands (Ganon-Shilon & Schechter, 2017). This approach is exemplified in systems like Greece, where the Ministry of Education serves as the primary decision-maker for everything from funding allocation to human resource management, leaving little room for local creativity and initiative (Chandolia & Anastasiou, 2020). The limitations of such centralized control have been a subject of ongoing debate in education, with research consistently showing that complex educational goals require discretionary judgment that cannot be effectively mandated from above (Trimmer, 2017).

The majority of survey participants indicated that their enthusiasm for implementing innovations was motivated by the educational unit's and trainees' needs. They are of the opinion that innovation can enhance the character of education and offer more effective educational experiences. Research has shown that when educators consider implementing innovations, their primary focus revolves around student-centered aspects (Mariapan, 2018; Wong, 2018). Teachers are especially interested in innovative tools that could help students use what they've learned in real life. This means that teachers want to move away from more standard descriptive methods of teaching and toward more practical, application-based learning (Karolčík & Marková, 2023).

The majority of educators stated that an important criterion for introducing and managing innovation is the alternative form of education offered. Alternative education represents a significant departure from traditional reproductive and normative educational approaches (Omelyanenko *et al.*, 2018). The adoption of this view is reflected in previous research that has explored various innovative methods and techniques of teaching through alternative forms of education that encourage teachers to adopt creative approaches to teaching (Pliushch, 2022; Shamanska, 2022; Sharmila, 2022).

The results of the survey indicated that a high proportion of participants consider the improvement of the educational objective as an important criterion for introducing innovative practices in education. The relationship between educational innovation and objectives is fundamentally improvement-oriented. Innovation in education is inherently tied to the goal of enhancing educational outcomes, with any meaningful innovation necessarily leading to improvements in the educational system's ability to achieve its objectives (Riveras-León & Tomàs-Folch, 2020). Research shows that innovations are more likely to be implemented when teachers perceive high value and likelihood of success, and when the benefits clearly outweigh implementation costs (Lysenko *et al.*, 2022).

In the present survey, gender did not seem to be particularly related to the motivation to introduce innovations in educational work. This finding is in contrast to previous research (Abidi *et al.*, 2022; Hitka *et al.*, 2020; Yorulmaz *et al.*, 2016) that consistently demonstrates that gender plays a significant role in shaping motivation to introduce innovations in educational settings.

With regard to demographic characteristics, age also appeared unrelated to the intention to adopt innovative practices in educational settings. Nevertheless, studies indicate that teachers' approaches to innovation vary significantly based on their age, with these differences manifesting in several key areas of educational practice. (Čábelková, *et al.*, 2022; Gómez-Trigueros *et al.*, 2019; Karolčík & Marková, 2023; Lo & Nasri, 2022).

The correlation between teachers' years of experience and their motivation to implement educational innovations represents an important area of educational research with significant implications for school improvement initiatives. According to the results of this research, work experience seemed to correlate with the intention to introduce innovations in the educational process. Several studies corroborate these findings. Kinnunen and Eriksson (2018) discovered that teachers with 7-15 years of experience were more likely to identify as "*innovators*" on Rogers' innovation adoption curve. Similarly, Cui and Yin (2023) found a positive correlation between teaching experience and innovation, with teachers having more than 10 years of experience demonstrating significantly higher levels of teaching innovation than those with fewer than 5 years. Almalki and Faqihi (2021) reported that teachers with more than 10 years of experience possessed greater knowledge, skills, and experiences concerning STEAM education (Henriksen, 2017), which positively affected their beliefs and self-efficacy toward implementing this innovative approach. Similarly, Osmanović-Zajić and Maksimović (2020) found that teachers with longer teaching experience had more positive attitudes

toward action research and higher competence for conducting it, identifying themselves more readily as reflective practitioners

5. Conclusions

The present research aims to not only update the data of previous studies of similar subjects but also to serve as an inspiration for a comprehensive and multifaceted examination of the subject field. The analysis and interpretation of the results revealed the criteria that determine the willingness and desire to introduce innovations in the educational process. Although some results emerged that are in disagreement with the corresponding results of previous studies, the majority of the findings are in agreement with the international literature.

According to the findings, educators' desire for professional growth and self-improvement is a major factor driving their enthusiasm for educational innovation. Furthermore, the needs of students are a significant source of motivation for educators, while external influences do not appear to inspire them to adopt innovative methods.

Based on the current state of the literature and the results of this study, future research should focus on several issues, such as exploring the attitudes of trainers towards the implementation of a specific innovation element, such as empathy enhancement through experiential projects.

Conflict of Interest Statement
The authors declare no conflicts of interest.

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