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Springboarding on EFQM in vocational education – A stakeholder perspective

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Abstract

Purpose of the paper: Stakeholder satisfaction relates closely to service quality and performance of educational organizations. Often this relationship is addressed in literature through the lens of excellence models, such as the European Foundation for Quality Management (EFQM) model. Nevertheless, limited studies focus on the effect of the EFQM model enablers on stakeholder satisfaction, and hardly any in vocational education. To fill this void, our research aimed to investigate the relationship between EFQM enablers and stakeholder satisfaction under the different perspectives of teachers and students in Greek public vocational education. To address our research purpose, we used the case study methodology. We employed the focus group method to distill the EFQM enablers related to the Greek context (namely leadership, human resources, and processes) and to develop a questionnaire administered to teachers and students of a vocational education school. From September 2021 to June 2022, 90 teachers and 216 students participated in the survey.

Main findings: The partial least squares structural equation modeling (PLS-SEM) method was used for data analysis, indicating that leadership and human resources have a positive and significant relationship with the satisfaction of both students and teachers. However, results did not corroborate the relationship between processes and stakeholder satisfaction either from the student's or the teacher's perspective.

Type of paper: Quantitative case study

Keywords: EFQM, stakeholder satisfaction, PLS, vocational education

1. Introduction

Stakeholder satisfaction relates closely to service quality and performance of educational organizations. Quite often this relationship is addressed in literature through the lens of excellence models, such as the European Foundation for Quality Management (EFQM) Model (Fonseca, 2022). The EFQM Model is a systematic and comprehensive self-assessment performance improvement tool based on a cause and effect relationship. Organizations apply the EFQM model in order to manage the important factors (namely “enablers”) that trigger higher and enduringly performance “results” (Edgeman, 2018). Empirical research confirms that its implementation could provide higher financial and non-financial results (Boulter et al., 2013), yet acknowledging that excellent organizations may end up failing (Dale et al., 2000). Taking into consideration the continuing changes in the business and governmental environment it could be supported that stakeholder satisfaction plays a major role in the sustainability of private and public organizations (Freeman, 1984; Fonseca et al., 2016; Barney, 1991; 2001).

In literature, there are many studies investigating the EFQM model application in higher education institutions (Laurett and Mendes, 2019), but there are limited empirical studies

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focusing on the effect of the EFQM model enablers on stakeholder satisfaction (Balbaa, 2010; Tarí & Molina-Azorín, 2010) and there is a void on matters of vocational education (Sütőová et al., 2022). Consequently, the premise that the enablers of the model can increase satisfaction level is rarely investigated.

Moreover, educational institutions normally run in a public or private sector context and have different purposes. In a public sector context, flexibility in change implementation is usually low and inclusivity of different stakeholder interests is usually high (Kuipers et al., 2013). Therefore, public sector educational institutions should take into consideration multiple stakeholder perceptions in order to prioritize their decisions for performance change meanwhile fulfilling multiple interests. Presumably, stakeholder satisfaction could serve as a compass to guide organisations in improving performance management, in an economical, inclusive and effective way, on time and with quality.

Considering the importance of stakeholder perceptions (EFQM, 2020), this research aims to investigate the relationship between the EFQM enablers and satisfaction under the different perspectives of teachers and students in the context of Greek public vocational education. Specifically, the objectives of the paper are: a) determining the EFQM enablers that could be examined by this organization, and b) investigating the link between the aforementioned enablers and stakeholder satisfaction. In order to address these objectives this study a mixed-method approach, i.e. focus group consisting of three teachers for the validation of the survey instrument and the PLS-SEM method for the statistical processing, the confirmatory analysis and the structural and measurement model testing.

This paper contributes to the literature since there are few papers that investigate the relationship between EFQM enablers and stakeholder satisfaction from the viewpoints of both students and teachers. Furthermore, on a practical level, this research aids Vocational Education and Training (VET) institutions in focusing on critical areas and future challenges, and it motivates companies to build plans that take into account key stakeholders.

2. Literature Review

2.1 *EFQM in education*

Education enables students to work as competent professionals by having good knowledge while living as good people in a social environment. The quality of education requires three basic conditions: ensuring the actual development of the learner's personality and behaviour, adaptation to the needs of society and the professional environment, and the availability of quality resources and skills of the educational institution (Anastasiadou et al., 2014). Continuous assessment of the quality of education creates an opportunity for quality measurement and awareness and provides the background for improving processes, products and services (Evans & Lindsay, 2002) in order to achieve sustainable development through a management framework.

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A popular tool that assists organizations to evolve in the field of quality is the European Foundation for Quality Management Model (EFQM). The EFQM is based on the fundamental concepts or characteristics of excellence which are: results orientation, customer focus, leadership and stability of management by process and facts, development and involvement of individuals, continuous learning, innovation and improvement, collaboration for development and public accountability (Anastasiadou et al., 2014). The EFQM could serve as a guide, helping organizations to understand the gaps by measuring where they are on the path to excellence and then guiding them to take corrective and stimulating actions. It can be used as a template for self-assessment for all types of organisations, large or small and in the public or private sector, as well as a tool for comparative assessment and for obtaining a quality award.

In an educational context the EFQM could reflect on many issues, in particular on teaching and learning processes and also on the roles and responsibilities of management, teacher employees and student customers. Nanidal (2015) stresses that the advantages of the European Standard of Excellence lie in that it can serve as a powerful tool with an objective diagnosis for an educational institution based on facts and evidence, and that it is able to improve the efficiency of the institution and eventually improve all of the institution's processes on a continuous basis. Tóvölgyi (2009) and Tarí & Molina-Azorín (2010) show that EFQM systems in higher education not only help to identify strengths and weaknesses, but also support the development and implementation of improvement strategies. The more staff from different departments - administrative and teaching staff - are involved in analysing the process and implementing changes through an EFQM-based system, the higher the commitment and recognition of staff and the higher the participation in quality improvement. In the long run, this awareness leads to a change in values and culture in the institutions. Tóvölgyi (2009) also describes the implementation of a quality-based EFQM management system as a tool to promote sustainable and objective decision-making based on facts, indicators and not subjectivity. In the context of implementation, an EFQM system not only helps to improve management processes, but can also improve the quality of educational services, which can increase student satisfaction.

2.2 EFQM enablers

EFQM draws on Total Quality Management theory (Sadeh and Garkaz, 2015) and it includes nine excellence criteria broken down into five enablers, which reflect the level of quality management in different organizational areas (Dijkstra, 1997), and four result factors. It assumes that excellent results are enabled by effective leadership, policy and strategy, people-related practices and policies, management of partnerships and resources, and process management. According to Bou-Llusar et al. (2005, 2009), it is necessary to examine whether the full set of enabling factors explains the results, but social research is context dependent and therefore we also take into account the Greek public sector environment. In this case certain enablers like “policy and strategy”, “partnerships and resources” are not exactly “internal factors” of the public organization since they are affected by the state. Therefore, this research focuses on the enablers of leadership, people and processes that are considered most relevant and applicable in the context under study.

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By addressing the most relevant enablers research allows tailoring the assessment and guiding practitioner improvement efforts. The criterion of “Leadership” assesses an organization’s ability to provide effective leadership at all levels. It recognizes the pivotal role of the leader in establishing a clear vision and a culture of excellence, and in promoting innovation (European Foundation for Quality Management, 2012; Suárez et al., 2016; Bou-Llugar et al., 2009). Moreover, the criterion of “people” evaluates the degree of a supportive and engaging work environment that attracts, develops and retains individuals who contribute their best in the organization’s overall performance and success meanwhile reaching their full potential (EFQM, 2012; Suárez et al., 2016; Bou-Llugar et al., 2009). Lastly, the criterion of “processes” evaluates the organization’s core and supportive processes that are crucial for delivering products, services and value to stakeholders so as to optimize operations, enhance customer satisfaction and drive continuous improvement (European Foundation for Quality Management, 2012; Suárez et al., 2016; Bou-Llugar et al., 2009). Presumably, by aligning the EFQM enablers with the Greek public sector specific needs and priorities, organizations can derive greater value from the model and drive meaningful improvements in their performance.

2.3 Stakeholder satisfaction

Service quality models like EFQM are customer-oriented and satisfaction of the customer is a key driver of organizational success. In an education context though this could not be directly applicable since what a student desires is not always what the school should offer (Cervai et al., 2013). Instead of the customer approach, a stakeholder approach is closer to an educational context (Cervai et al., 2013). Stakeholders are individuals or groups of individuals who have an interest or stake in an organization and can affect (Brugha and Varvasovszky, 2000) or be affected (Freeman, 1984) by its objectives, decisions, and actions. They can also influence the outcomes of the organization’s policies and objectives (Freeman, 1984; Crosby, 1992; Mason and Mitroff, 1981; Walt, 1994).

Education stakeholders have an interest in the education sector (Adebayo, 2013). Head-teachers, teachers, parents, community members, parent-teacher associations, non-governmental organizations, school management committees, elected officials, students and boards of governors could all be regarded as education stakeholders that aim to the progress of a school system and to the development of high quality graduates (Ibrahim et al., 2017).

Nowadays, governments across the globe have increasingly acknowledged the importance of involving stakeholders in decision-making processes and policy development. This recognition stems from the understanding that engaging stakeholders could lead to more effective and inclusive governance, improved policy outcomes, and enhanced public trust and legitimacy (Geurtz & van de Wijdeven, 2010). This makes the case for national education as well which is no longer the sole responsibility of the government, yet stakeholder involvement could contribute in achieving a number of objectives, including attaining quality (Ibrahim et al., 2017). But stakeholders identify and prioritize areas for quality improvement with different criteria. For instance, Iacovidou et al. (2009) reported in their study a discrepancy between students’ and teaching staff’s perceptions of the importance of factors that constitute a quality higher education experience. Therefore, by recognizing and addressing the varying

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perspectives and priorities in research, educational institutions could be facilitated towards creating an environment that meets the needs and expectations of various stakeholders. In our study we take into consideration the students and teachers perceptions so as to investigate their different perspectives on how satisfied they are.

3. Research methods

This research aims to investigate the relationship between the EFQM enablers and satisfaction under the different perspectives of teachers and students in the context of Greek public vocational education. We employed a mixed research methods case study methodology using focus group for research model development and structured on-line questionnaire with a 5-degree Likert scale (from 1: I strongly disagree to 5: I strongly agree), suitable for quantitative analysis.

3.1 *Case description*

In Greece, Vocational Education and Training (VET) is offered by both public and private institutions. Public technical training can be provided by various educational structures: secondary schools, vocational schools, post-secondary structures (which also include lifelong learning centers), institutes and higher education structures. At the secondary education level, vocational education is provided by Vocational Lyceums. To date, all the institutions of secondary education in Greece undergo evaluation processes that address quality and performance of schools as entities. In this context, the present research was designed to analyze the potential impact of Total Quality Management principles, practices and tools on secondary education. Therefore, this study adopted purposive and convenience sampling to collect data. In particular, the vocational education sector was selected for the purpose of this study, and, conveniently, the students and teachers of an Evening Vocational Lyceum (VET unit) in Northern Greece participated in the sampling process.

3.2 *Data analysis*

To begin, we used a focus group method to determine the EFQM enablers that may be studied in this case. The focus group was made up of three people who are teachers at this VET unit and have prior expertise with administrative and instructional processes in this institution. Data was gathered during the academic year 2021-2022. We created the questionnaire following the focus group analysis. The questionnaire structure is the following:

- 10 questions for “Leadership” (EFQM, 2018)
- 10 questions for “Human Resources” (EFQM, 2018)
- 10 questions for “Processes” (EFQM, 2018) and
- 1 question for “Stakeholder Satisfaction”.

The above-mentioned questionnaire was delivered separately (student and teacher versions) to 226 active vocational school students and 90 teachers during the academic year 2021-2022. We collected 216 full responses from students and 90 from teachers.

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To analyze the data, we used the SmartPLS software for the assessment of the structural model, and tested the hypotheses by means of partial least squares (PLS) structural equation modelling (SEM) (Ringle et al., 2014). In our structural model, “Leadership”, “Human Resources”, “Processes”, and “Stakeholder Satisfaction” were operationalised as “reflective-formative” higher-order components. The hierarchical component measurement model was created by using the “repeated indicators approach” combined with the “two-step approach” (see Hair et al., 2017, pp. 230-233; Lowry and Gaskin, 2014, p. 135).

For reflective indicators, convergent validity and reliability were estimated with the use of AVE, Cronbach α and composite reliability (CR) (Hair et al., 2017). For discriminant validity we used the Fornell-Larcker criterion, and the Heterotrait-Monotrait ratio (HTMT < 0.85 or 0.9). Finally, the bootstrapping procedure was applied (5000 randomly drawn samples) for the structural model analysis and hypotheses testing. To calculate the model’s predictive relevance, we used the Stone-Geisser Q-square test (Hair et al., 2017: 167) and performed two separate analyses with 7 and 25 omission distances (blindfolding technique in SmartPLS) to test the stability of the findings (Q-square > 0).

4. Results

4.1 *Focus group analysis*

Firstly, the profile of the focus group members is as follows:

- Member A: Teacher of the VET unit with experience with administrative works
- Member B: Teacher of the VET unit with experience with administrative works
- Member C: Teacher of the VET unit with experience with administrative works

Following the focus group action and documentation evaluation, the focus group determined that the EFQM enablers that can be considered for organizational assessment in the case of this public vocational are: a) Leadership, b) Processes, and c) Human Resources. The focus group members agreed to exclude the "strategy & policy" and "resources and partnership" dimensions of the EFQM model since the corresponding activities are carried out by the Greek Ministry of Education and Religious Affairs. In order to obtain more trustworthy results, it was necessary to study the EFQM enablers that are part of the VET unit responsibilities. It is critical that the choice was homophone and that there were no disagreements among the members.

4.2 *Hypotheses development*

The research hypotheses are:

- 1) H1: Leadership has a positive impact on stakeholder satisfaction
- 2) H2: Leadership has a positive and indirect impact on stakeholder satisfaction
 - H2.1: Leadership has a positive impact on processes
 - H2.2: Leadership has a positive impact on Human Resources
- 3) H3: Human Resources have a positive impact on stakeholder satisfaction

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- 4) H4: Human Resources have a positive and indirect impact on stakeholder satisfaction
 H4.1: Human Resources have a positive impact on processes
- 5) H5: Processes have a positive impact on stakeholder satisfaction

4.3 Descriptive statistics – The comparison between students and teachers’ perspective

The mean scores of each EFQM enabler, i.e. Human Resources, Processes, and Leadership, are presented in Tables 1, 2 and 3. As we can observe, there are similarities between students and teachers’ perspectives for all items. This indicates convergence of opinions between the two most important stakeholders of the VET unit.

Table 1: Human Resources-Mean scores

	Teachers	Students
There is dissemination of information and transfer of good practices throughout the educational unit on a regular basis.	3.32	3.32
Opportunities are sought and actions taken so that individuals and groups can learn and function better as members of the educational unit.	3.37	3.39
Reward and recognition procedures and care for the members of the educational unit are applied on a regular basis.	3.28	3.29
School management draws feedback from the members of the educational unit on a regular basis.	3.29	3.15
The creative ideas of the members of the educational unit are sought, evaluated and implemented to improve its performance on a regular basis.	3.17	3.29
An effective evaluation system is used for all members of the educational unit.	3.09	3.26
The needs for training and development of the members of the educational unit are regularly assessed, educational gaps are identified and training actions are chosen to cover them.	3.04	3.23
Members of the educational unit are encouraged and supported as individuals and as groups to engage in activities aimed at improvement.	3.34	3.36
Equal opportunities in employment conditions are given to men and women and to people of different religious beliefs and nationalities.	3.31	3.41
Human resource policies actively support the strategic planning of the educational unit.	3.12	3.21
Total	3.233	3.291

Table 2: Processes-Mean scores

	Teachers	Students
The processes of the school unit are systematically planned and monitored so that its strategy and policies are implemented.	3.16	3.14
The school unit manages the needs and expectations of all current and future stakeholders in the school's activities in a coordinated manner.	3.29	3.45
Processes include measurable performance targets, which are monitored, reviewed and improved continuously.	3.00	3.24
Staff members are trained, work to established procedures and are empowered to introduce change.	3.06	3.32
Procedures are in place to investigate, monitor and enhance customer satisfaction on a personal basis.	3.07	3.13

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The development of educational "products" is based on the systematic re-information that exists about the needs and expectations of all those involved in the school's activities.	3.03	3.25
The development of the "products" utilizes the creativity and innovation of everyone involved in the school's activities.	3.18	3.21
Educational "products" are promoted to all those involved in the school's activities through a coordinated service and feedback process.	3.17	3.31
There are procedures for managing and improving the quality of the educational unit.	3.20	3.26
The procedures are systematically reviewed and improved with the aim of better serving everyone involved in the school's activities.	3.20	3.42
Total	3.136	3.276

Table 3: Leadership-Mean scores

	Teachers	Students
The management works with everyone involved in the school's activities to understand their needs and expectations.	3.26	3.48
In the context of the dedication to the standards of quality and excellence in education, you consider that the management actively participates in matters concerning the protection of the environment and the social environment.	3.31	3.28
You believe that through two-way communication, school management ensures that everyone has an understanding of the school's mission, vision, values and strategies.	3.40	3.40
Procedures have been provided by the management to hear, recognize, evaluate, reward and reward all members of the educational unit accordingly.	3.22	3.29
The cooperation of the members of the educational unit is encouraged by the management.	3.43	3.45
Learning and innovation are encouraged by the management and the creativity of the members of the educational unit is stimulated.	3.39	3.41
School management ensures that the necessary systems are in place to develop strategy and measure key performance outcomes.	3.22	3.39
The school leadership supports the involvement/participation of the members of the educational unit in quality improvement activities by providing the necessary resources and assistance.	3.26	3.38
Ways of informing about quality standards and approaches to excellence in education that apply globally have been developed at the initiative of the directorate.	3.20	3.25
Behaviors and practices, based on the standards of quality and excellence in education, are adopted by the management of your school unit and their effectiveness is judged according to those standards.	3.04	3.37
Total	3.273	3.37

4.4 The research model

For the purpose of this case analysis, the structural model is depicted in Figure 1. This model is tested for both students and teachers' samples.

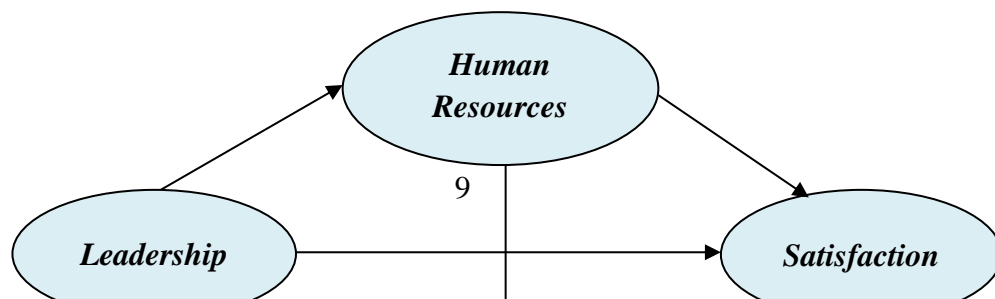


Figure 1: Research model

4.5 Model validation-Student perspective

As observed in Table 4, Cronbach α , AVE and CR scores were found within the acceptable range (Cronbach $\alpha > 0.7$, AVE > 0.5 , CR > 0.7).

Table 4: Construct validity and reliability

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Human Resources	0.945	0.946	0.668
Leadership	0.949	0.950	0.685
Processes	0.946	0.946	0.673

Additionally, discriminant validity (HTMT) criterion was met as shown in Table 5.

Table 5: Discriminant validity-HTMT criterion

	Satisfaction	Human Resources	Leadership
Human Resources	0.722		
Leadership	0.704	0.906	
Processes	0.700	0.947	0.890

Furthermore, the values of item loadings are presented in Table 6. All loading values are over the threshold value of 0.7.

Table 6: Item loadings

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	Satisfaction	Human Resources	Leadership	Processes
There is dissemination of information and transfer of good practices throughout the educational unit on a regular basis.		0.824		
Opportunities are sought and actions taken so that individuals and groups can learn and function better as members of the educational unit.		0.832		
Reward and recognition procedures and care for the members of the educational unit are applied on a regular basis.		0.811		
School management draws feedback from the members of the educational unit on a regular basis.		0.851		
The creative ideas of the members of the educational unit are sought, evaluated and implemented to improve its performance on a regular basis.		0.819		
An effective evaluation system is used for all members of the educational unit.		0.788		
The needs for training and development of the members of the educational unit are regularly assessed, educational gaps are identified and training actions are chosen to cover them.		0.834		
Members of the educational unit are encouraged and supported as individuals and as groups to engage in activities aimed at improvement.		0.834		
Equal opportunities in employment conditions are given to men and women and to people of different religious beliefs and nationalities.		0.775		
Human resource policies actively support the strategic planning of the educational unit.		0.801		
The processes of the school unit are systematically planned and monitored so that its strategy and policies are implemented.				0.845
The school unit manages the needs and expectations of all current and future stakeholders in the school's activities in a coordinated manner.				0.807
Processes include measurable performance targets, which are monitored, reviewed and improved continuously.				0.804
Staff members are trained, work to established procedures and are empowered to introduce change.				0.809
Procedures are in place to investigate, monitor and enhance customer satisfaction on a personal basis.				0.830
The development of educational "products" is based on the systematic re-information that exists about the needs and expectations of all those involved in the school's activities.				0.792
The development of the "products" utilizes the creativity and innovation of everyone involved in the school's activities.				0.819
Educational "products" are promoted to all those involved in the school's activities through a coordinated service and feedback process.				0.838
There are procedures for managing and improving the quality of the educational unit.				0.814
The procedures are systematically reviewed and improved with the aim of better serving everyone involved in the school's activities.				0.844
The management works with everyone involved in the school's activities to understand their needs and expectations.			0.868	
In the context of the dedication to the standards of quality and excellence in education, you consider that the management actively participates in matters concerning the protection of the environment and the social environment.			0.830	
You believe that through two-way communication, school management ensures that everyone has an understanding of the school's mission, vision, values and strategies.			0.839	
Procedures have been provided by the management to hear, recognize, evaluate, reward and reward all members of the educational unit accordingly.			0.842	

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	Satisfaction	Human Resources	Leadership	Processes
The cooperation of the members of the educational unit is encouraged by the management.			0.842	
Learning and innovation are encouraged by the management and the creativity of the members of the educational unit is stimulated.			0.827	
School management ensures that the necessary systems are in place to develop strategy and measure key performance outcomes.			0.821	
The school leadership supports the involvement/participation of the members of the educational unit in quality improvement activities by providing the necessary resources and assistance.			0.828	
Ways of informing about quality standards and approaches to excellence in education that apply globally have been developed at the initiative of the directorate.			0.766	
Behaviors and practices, based on the standards of quality and excellence in education, are adopted by the management of your school unit and their effectiveness is judged according to those standards.			0.812	
I am satisfied by the organization services.	1.000			

Additionally, regarding the separate analyses with 7 and 25 omission distances (blindfolding technique in SmartPLS) the values were stable for both omission distances and three out of four of the Q2 were greater than zero except for Leadership which is equal to zero.

Regarding the hypotheses testing, bootstrapping test results (Fig. 2) indicated that the all hypotheses are supported except for H4.1 and H5.

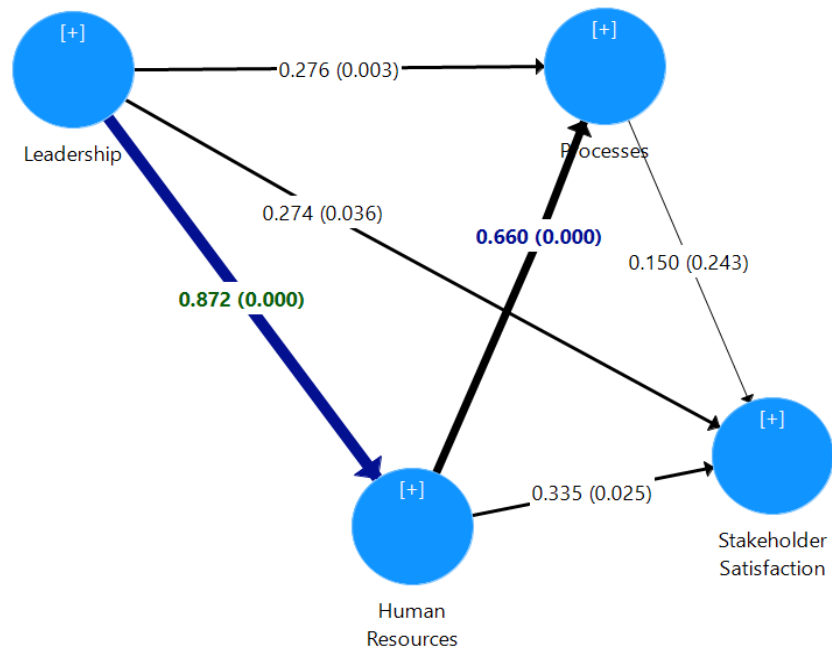


Figure 2: Students bootstrapping test results

4.6 Teacher perspective

The loadings values of each item are presented in the Table 7. All loadings are over 0.7 value which are accepted.

Table 7: Loadings of each item

	Human Resources	Leadership	Processes	Satisfaction
There is dissemination of information and transfer of good practices throughout the educational unit on a regular basis.	0,886			
Opportunities are sought and actions taken so that individuals and groups can learn and function better as members of the educational unit.	0,863			
Reward and recognition procedures and care for the members of the educational unit are applied on a regular basis.	0,880			
School management draws feedback from the members of the educational unit on a regular basis.	0,894			
The creative ideas of the members of the educational unit are sought, evaluated and implemented to improve its performance on a regular basis.	0,902			
An effective evaluation system is used for all members of the educational unit.	0,763			
The needs for training and development of the members of the educational unit are regularly	0,832			

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	Human Resources	Leadership	Processes	Satisfaction
assessed, educational gaps are identified and training actions are chosen to cover them.				
Members of the educational unit are encouraged and supported as individuals and as groups to engage in activities aimed at improvement.	0,905			
Equal opportunities in employment conditions are given to men and women and to people of different religious beliefs and nationalities.	0,864			
Human resource policies actively support the strategic planning of the educational unit.	0,898			
The processes of the school unit are systematically planned and monitored so that its strategy and policies are implemented.			0,858	
The school unit manages the needs and expectations of all current and future stakeholders in the school's activities in a coordinated manner.			0,882	
Processes include measurable performance targets, which are monitored, reviewed and improved continuously.			0,794	
Staff members are trained, work to established procedures and are empowered to introduce change.			0,831	
Procedures are in place to investigate, monitor and enhance customer satisfaction on a personal basis.			0,808	
The development of educational "products" is based on the systematic re-information that exists about the needs and expectations of all those involved in the school's activities.			0,891	
The development of the "products" utilizes the creativity and innovation of everyone involved in the school's activities.			0,872	
Educational "products" are promoted to all those involved in the school's activities through a coordinated service and feedback process.			0,881	
There are procedures for managing and improving the quality of the educational unit.			0,887	
The procedures are systematically reviewed and improved with the aim of better serving everyone involved in the school's activities.			0,874	
The management works with everyone involved in the school's activities to understand their needs and expectations.		0,907		
In the context of the dedication to the standards of quality and excellence in education, you consider that the management actively participates in matters concerning the protection of the environment and the social environment.		0,866		
You believe that through two-way communication, school management ensures that everyone has an understanding of the school's mission, vision, values and strategies.		0,879		
Procedures have been provided by the management to hear, recognize, evaluate, reward and reward all members of the educational unit accordingly.		0,908		
The cooperation of the members of the educational unit is encouraged by the management.		0,906		
Learning and innovation are encouraged by the management and the creativity of the members of the educational unit is stimulated.		0,865		
School management ensures that the necessary systems are in place to develop strategy and measure key performance outcomes.		0,878		
The school leadership supports the involvement/participation of the members of the		0,884		

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	Human Resources	Leadership	Processes	Satisfaction
educational unit in quality improvement activities by providing the necessary resources and assistance.				
Ways of informing about quality standards and approaches to excellence in education that apply globally have been developed at the initiative of the directorate.		0,804		
Behaviors and practices, based on the standards of quality and excellence in education, are adopted by the management of your school unit and their effectiveness is judged according to those standards.		0,824		
I am satisfied by the organization services.				1,000

As observed in Table 4, Cronbach α , AVE and CR scores were in the acceptable level (Cronbach $\alpha > 0.7$, AVE > 0.5 , CR > 0.7).

Table 8: Construct validity and reliability

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Human Resources	0,964	0,969	0,756
Leadership	0,965	0,970	0,762
Processes	0,960	0,965	0,737

Additionally, discriminant validity was achieved as show in Table 9 (HTMT criterion).

Table 9: Heterotrait-monotrait ratio (HTMT) - Matrix

	Human Resources	Leadership	Processes
Leadership	0,984		
Processes	0,994	0,962	
Satisfaction	0,838	0,860	0,788

Additionally, regarding the separate analyses with 7 and 25 omission distances (blindfolding technique in SmartPLS) the values were stable for both omission distances and three out of four of the Q^2 were greater than zero except for Leadership which is equal to zero.

Regarding the hypotheses testing, the Figure 3 indicates that the all hypotheses are supported except for H2.1 and H5.

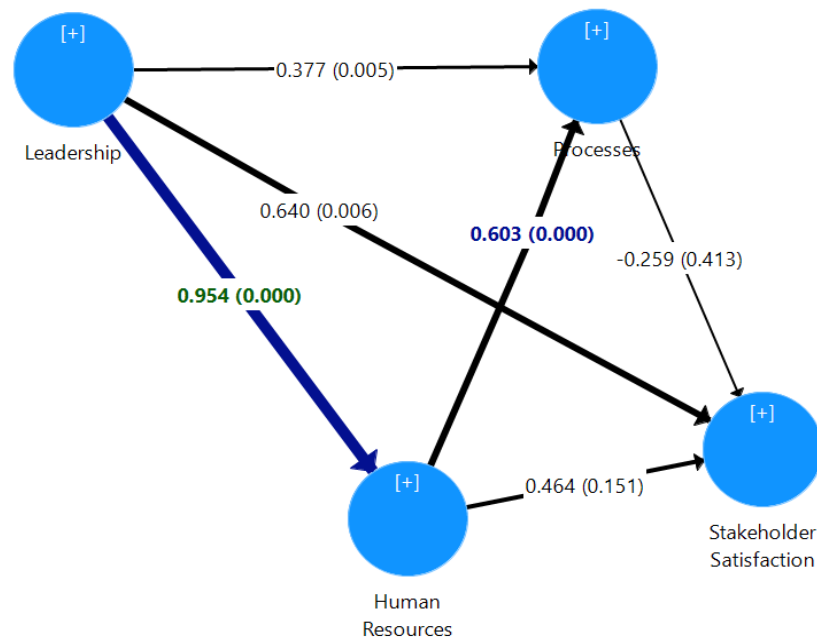


Figure 3: Teachers bootstrapping test results

5. Discussion and Conclusion

The present study investigates the relationship between the EFQM enablers and satisfaction under the different perspectives of teachers and students in the context of Greek public vocational education. Results indicated that in this case the leadership, human resources and processes are the EFQM enablers that operate practically. In addition, it is worth noticing that both students and teachers perspectives are similar. Specifically, the EFQM-enablers of Leadership and Human Resources have a positive and significant relationship with Stakeholder Satisfaction (both of student and teacher), whereas the relationship between Processes and Stakeholder Satisfaction is not confirmed neither from the student’s perspective nor from the teacher’s perspective.

Furthermore, the research adds to the body of knowledge in the field of vocational education quality and performance management, as there is a dearth of studies focusing on the effect of the EFQM model enablers on stakeholder satisfaction in vocational education. (Sütőová et al., 2022). The EFQM Model under the perspectives of two important stakeholders (students and teachers) assists vocational schools in focusing on strategic areas and future difficulties, and it encourages organizations in developing strategies take into account the important stakeholders (Sütőová et al., 2022). Specifically, the participation of teachers and students in EFQM application or any quality management approach in educational institutes is essential for promoting transparency, accountability, and a culture of continuous improvement. It ensures

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that the voices of those most directly impacted by educational practices are heard and valued, ultimately leading to a higher quality educational experience for all stakeholders. The study, however, had certain drawbacks. The key drawback of this study is the small size of the sample. Consequently, the model needs to be validated with a bigger sample size to boost its generalizability. Another disadvantage of this study is that data was gathered from only one vocational school. As a result, our findings were limited to a specific geographical setting and organizational structure and culture. Moreover, since the respondents in this study were from Greece, their views may have been influenced by the cultural, organizational, and professional milieu of that country as opposed to other vocational education institutions worldwide. Further research with increased participation from more VET organizations around the world is required to enhance the validity and generalizability of the findings and to draw out more managerial implications.

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