

STUDENT LEARNING EXPERIENCE AND COMPETENCE DEVELOPMENT: A COMPREHENSIVE STUDY AT USAMV BUCHAREST*

Sorin Iulian MERLUSCA¹, Adrian TUREK-RAHOVEANU²

DOI: 10.52846/AUCPP.2024.1.17

Abstract

This study conducted at USAMV Bucharest aimed to assess the satisfaction levels of students and alumni regarding their learning experiences and competence development within undergraduate programs. The research objectives included analyzing perceptions of learning quality and acquired competences, identifying success factors within the programs, hierarchizing acquired competences, and evaluating participation in extracurricular activities and services. A questionnaire-based approach was employed, gathering insights from 582 students and alumni. Findings revealed nuanced satisfaction levels across various facets of the educational experience, with participation in extracurricular activities significantly impacting overall perceptions. The study underscores the importance of continuous evaluation and improvement in delivering high-quality learning experiences and fostering competence acquisition. Recommendations include fine-tuning curriculum design, expanding extracurricular offerings, and strengthening career counseling services.

Key words: Learning experience, Competence acquisition, Student satisfaction, Alumni.

1. Introduction

The pursuit of academic excellence and student satisfaction is a milestone of higher education institutions worldwide. University of Agronomic Sciences and Veterinary Medicine of Bucharest (USAMV Bucharest) recognizing the importance of delivering high-quality learning experiences, embarked on a comprehensive research endeavor to evaluate student satisfaction levels and the effectiveness of competence acquisition within its undergraduate programs. In a context where

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¹PhD student University of Agronomic Sciences and Veterinary Medicine of Bucharest, Bucharest, Romania, e-mail address: sorinmerlusca@gmail.com, corresponding author, ORCID ID: 0009-0000-5971-4890

²PhD Professor, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Bucharest, Romania, e-mail address: turek.adrian@managusamv.ro, ORCID ID: 0000-0002-8787-3685

education is rapidly evolving, universities face the challenge of not only imparting knowledge but also ensuring that students develop the competencies required to succeed in a competitive and dynamic job market. The feedback from students and alumni plays an important role in shaping educational policies and practices. USAMVB seeks to integrate student perspectives into the decision-making process to foster an environment that promotes academic and professional growth.

To achieve this, a questionnaire was distributed among students and alumni, gathering responses from 582 individuals. This sample size provides a significant dataset that can yield both quantitative and qualitative insights into the student experience. The quantitative data helps in identifying trends and measuring satisfaction levels across various aspects of the university's offerings, while the qualitative responses provide deeper understanding and context to the numerical findings.

The analysis of this data is pivotal for several reasons. Firstly, it allows the university to measure the effectiveness of its teaching methods and curriculum structure. By understanding which areas excel and which need improvement, USAMV Bucharest can implement targeted strategies to enhance educational quality. Secondly, the feedback regarding competence acquisition is essential for aligning academic programs with the labour market requirements, ensuring that graduates are well-prepared for their professional careers.

Moreover, the study's findings have broader implications for the university's strategic planning. Insights drawn from the research can guide initiatives to improve student services, extracurricular activities, and overall campus life, contributing to a more holistic educational experience. Additionally, such comprehensive evaluations demonstrate the university's commitment to accountability and continuous improvement, which are critical components of institutional reputation and student trust.

This research underscores USAMV Bucharest's dedication to academic excellence and student satisfaction. By systematically assessing and responding to the needs and feedback of its students and alumni, the university aims to create an environment conducive to learning and personal development. The outcomes of this study will not only enhance the current educational framework but also set a precedent for future evaluations and improvements.

1.1. Aim and Objective of the Research

The research objectives were multifaceted, reflecting a holistic approach to assessing the quality of learning experiences and competence acquisition:

- Analyzing perceptions of learning quality and acquired competences among students and alumni.
- Identifying success factors within USAMV Bucharest's undergraduate programs across nine key analysis factors.
- Hierarchizing acquired competences to prioritize areas of focus for curriculum development and enhancement.
- Evaluating the degree of student/alumni participation in extracurricular activities, services, and opportunities provided by USAMV Bucharest.

1.2. Hypotheses

The research hypotheses revolved around the influence of various factors on student and alumni perceptions:

Hypothesis 1: Differences in perceptions exist based on the degree of participation in extracurricular activities, services, and opportunities offered by USAMV Bucharest.

Hypothesis 2: Variances in perceptions are observed between students/alumni working within the field and those employed in other domains or not working.

2. Methodology

This exploratory research leveraged a questionnaire-based approach to gather insights from a diverse sample of 582 students and alumni. The questionnaire comprised three sections:

- Key demographic information such as age, gender, residence, educational status, field of study, program completion status, and current employment status.
- Perceptions of learning quality and acquired competences: Utilizing Likert-scale ratings to assess satisfaction levels across nine factors of quality learning, including course content, teaching quality, practical orientation, knowledge acquisition, skill development, career counseling, employment opportunities, and university facilities. The second item relates to the type of competences acquired during the undergraduate program, classified as follows: Knowledge of the field of study, ability to practice in the field, specific digital skills related to the field, creativity and technical innovation, management skills, teamwork ability, communication in a foreign language, entrepreneurial competences
- Participation in extracurricular activities and services: Investigating respondents' engagement with various university offerings, such as job fairs, professional training, student association involvement, career counseling, mobility programs, internships, CV development, and job platform utilization.

3. Sampling

The sample structure of 582 respondents consists of undergraduate students, minimum 3rd year, master's and doctoral students, as well as graduates of the undergraduate program at USAMV Bucharest, who were requested to complete the questionnaire with 17 main items on an online platform (iSondaje.ro). Data processing was carried out by analyzing correlations between variables:

- In terms of age, the sample is distributed into two major categories:
 - respondents aged between 20 and 23 years, accounting for 47%
 - respondents over 23 years old, accounting for 53%.
- From a gender perspective, the sample maintains its balanced nature, with 45% of respondents being male and 55% female, a balance attributed to study programs that do not have a gender-focused representation in the job market.

- In terms of residence, the research sample includes 63% of respondents from urban areas, while 37% come from rural areas.
- Taking into account the educational status, an uneven distribution is observed within the sample. It is noted that 49% of the sample consists of undergraduate students, at least in the 3rd year, within USAMV Bucharest programs, while 29% represent graduates of USAMV Bucharest undergraduate programs, 16% are graduates and master's students, and 6% are graduates of USAMV Bucharest undergraduate programs and doctoral students. Cumulating the percentages, the sample structure is balanced, comprising two major categories:
 - undergraduate students, at least in the 3rd year, at USAMV Bucharest, accounting for 49%,
 - graduates of USAMV Bucharest undergraduate programs, accounting for 51%.
- From the perspective of employment status, 36% of respondents work in the studied field or a related one, while 30% are engaged in a completely different field in the job market, and 34% are unemployed.

The analysis of the research sample is refined by introducing items from the third part of the questionnaire, which address the degree of respondents' participation in activities, opportunities, and services offered by USAMV Bucharest outside of the study program. The results underline the following profile of the sample group of participants:

- only 38% of the total 582 USAMV Bucharest students/alumni participated in the annual job fairs.
- Regarding participation in professional training courses organized outside of the study program, courses accredited by the Ministry of Labor and the Ministry of Education, the percentage of respondents who participated in at least one course is 38%.
- Only 12% of the total respondents held membership in a Student Association within USAMV Bucharest. Thus, only 71 students and graduates of undergraduate programs at USAMV Bucharest were involved in student association activities, despite the fact that each university already has established student associations: AS - USAMV Bucharest Student Association; Agriculture Student Association, ASH - Horticulture Faculty Student Association, Zootechnics Student Association-USAMV Bucharest, Veterinary Medicine Student Association Bucharest, ASIF - Land Improvement Student Association, Biotechnology Students Association, Management Students Association.
- Participation in the career counseling and guidance services offered by USAMV Bucharest accounts for 27% of the total sample, comprising 160 students and alumni involved in the center's activities.
- Student participation in internships within USAMV Bucharest is low, with approximately 13% of those interested.

- 47% of the sample respondents have a professional CV created during their studies, with USAMV developing a web tool for this purpose, available to students at www.cv.usamv.ro.
- Related to the job market and employability, 33% of the respondents, students, and alumni of USAMV Bucharest, follow the USAMV Jobs job platform, which includes a job search engine based on desired criteria for a job.

4. Results and findings

4.1. Student learning experience

The level of satisfaction of students/graduates regarding the learning experience within the undergraduate programs is the first element analyzed, closely related to the research objective. The analysis including 9 factors:

- Content and structure of courses
- Quality of teaching
- Reputation of USAMVB towards employers
- Practical orientation of courses
- Level of knowledge acquired
- Level of skills and competences developed
- Usefulness of career counseling and guidance services provided
- Employment opportunities available during studies at USAMVB
- Quality of university facilities (campus conditions: accommodation, cafeteria, sports activities, etc.)

The results obtained from the processing of responses from the 582 students/graduates indicate a general average of 3.7 as an indicator of the level of satisfaction regarding the quality of the learning experience within the undergraduate study program. The analysis of each item leads to scores ranging from 3.4 to 3.8, with response options on a Likert scale from 1 to 5 (1 - very dissatisfied; 5 - very satisfied).

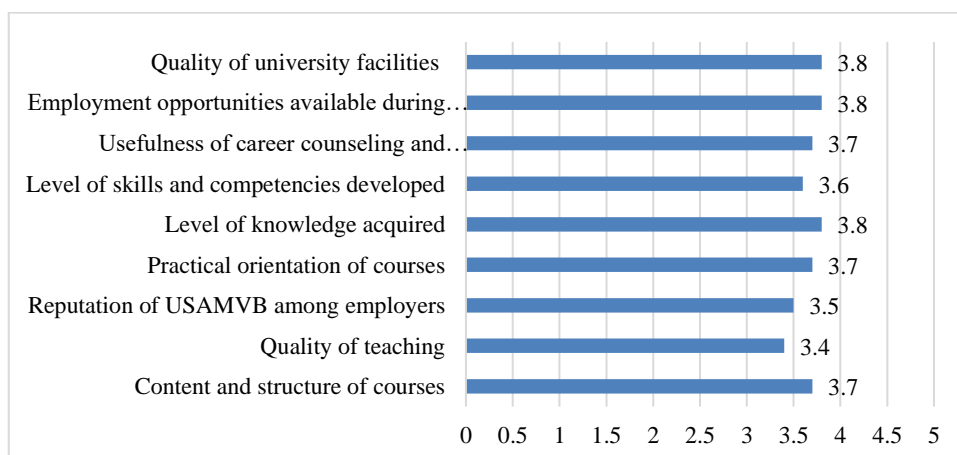


Figure 1. The level of satisfaction of USAMVB students/graduates regarding the quality of the learning experience

Refining the analysis of satisfaction level reported for the learning experience on each item in relation to the employment status of the students/graduates, the results indicate similar scores, with a smaller difference of one point, ranging between 3.3 and 4.1 on average. As for the overall average score, the rating obtained from respondents with employment is similar to the score provided by the category without employment (average 3.6), with the highest score given by the category of employees in a related, similar field (3.9).

The analysis of differences in perception regarding the satisfaction of students/graduates concerning the learning experience based on educational status (student, undergraduate graduate, master's student, doctoral student) indicates the same conclusion, with a unified opinion reflected in averages ranging between 3 and 4 on the Likert scale. As for the overall average score, the rating given by students is similar to the score awarded by graduates (average 3.6), with the highest score provided by the category of master's students (average 3.9).

The analysis of differences in perception regarding the satisfaction of students/graduates concerning the learning experience based on the faculty they are enrolled in/graduated from indicates a minimum score of 3.4 (Faculty of Veterinary Medicine) and a maximum score of 3.9 (Faculty of Engineering and Animal Production Management). At the level of factors, the minimum score as an average of 3.1 is assigned to employment opportunities by students and graduates of the Faculty of Horticulture. The maximum score (4.1) is awarded to the level of knowledge acquired by students and graduates of the Faculty of Engineering and Animal Production Management.

The analysis of satisfaction level reported on the learning experience across age categories indicates an intriguing distribution of means across the age groups of 20-23 years, 24-26 years, 27-35 years, 36-45 years, and 46+, wherein the evaluation score increases progressively from one category to another within a range of 0.1-0.2. Thus, the older the age, the higher the evaluation score of the learning experience.

The analysis of mean distribution by gender and residence among the respondent students/graduates indicates a similar evaluation score ranging between 3 and 4, with no significant differences between the female and male categories, as well as between urban and rural categories.

The introduction of variables targeting the degree of participation in events and services offered by USAMV nuances the analysis and provides new perspectives for reflecting on the factors influencing the evaluation of the learning experience by students/graduates. Thus, participation in career counseling and guidance services, as well as undertaking professional training courses offered by USAMV outside the curriculum, become the elements that positively influence the evaluation of most factors related to the quality of the learning experience.

4.2. Competence development

The evaluation of the learning experience within the undergraduate programs at USAMV Bucharest is complemented by the analysis of the perception of students and graduates regarding the level of acquired competences. These competences encompass:

- knowledge of the study field
- the ability to work in the study field
- digital skills
- creativity and technical innovation
- management skills
- teamwork
- communication in a foreign language
- entrepreneurial skills.

The analysis of students' perception of the level of acquired competences was conducted by calculating the mean scores provided on a Likert scale ranging from 1 to 5, where 1 indicates a very low level and 5 indicates a very high level. Thus, the competences were ranked, with the highest mean score obtained for teamwork (score 4.0), followed by knowledge of the study field (score 3.9), the ability to work in a field, digital skills, creativity and technical innovation, management (score 3.7), communication in a foreign language (score 3.6), and entrepreneurial skills (score 3.5).

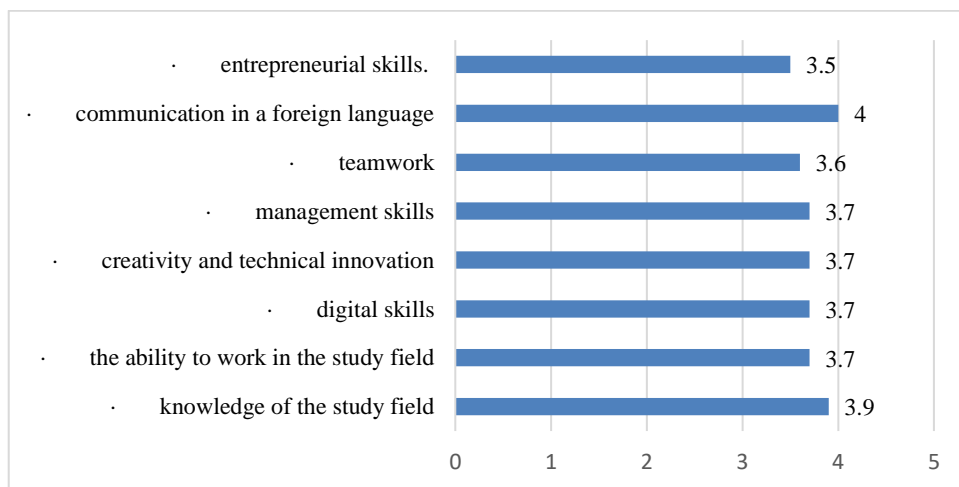


Figure 2. The level of acquired competences of USAMVB students/graduates

The employment status is a key element in analyzing the results. The distribution of scores obtained for each competency from respondents classified into 4 categories based on their employment status illustrates differences in perceptions between those employed in the field and those without employment across all competences. Thus, the hypothesis that employment status influences the perception of acquired competences is validated, as respondents with employment tend to assign a higher score to the level of competences acquired during their study programs.

The second variable analyzed is the educational status of the respondents, using the same 4 categories for differentiating the scores. The analysis of the results indicates that the averages remain within the same range of scores between 3 and 4,

with the perception of students being similar to that of graduates, and the perception of master's students being similar to that of doctoral students, with a difference of 0.1 between the two subgroups.

The profile of the faculty as a variable introduces new elements of analysis regarding the assessment of the degree to which students and graduates acquire the eight competences. The Faculty of Management and Rural Development offers an overall maximum score of 3.9, while the Faculty of Veterinary Medicine scores at the opposite end with a score of 3.5. All students and graduates rate teamwork competency with the highest score.

Refining the analysis based on gender, age, and residency indicates that the scores provided are similar among the respondent categories, with no significant differences observed.

Introducing variables related to the degree of participation in events and services offered by USAMV provides an extended framework for analyzing factors conducive to competency acquisition. Thus, it is observed that participation in professional training courses, membership in student associations, attendance at career counseling services, mobility scholarships, internships, creation of professional CVs, and monitoring of job platforms positively influence the perception of the level of acquired competences across all 8 analyzed elements. These events and educational services offered by USAMV outside the regular curriculum contribute to enhancing the confidence of students and graduates who have benefited from these facilities in terms of their acquired competences.

5. Conclusions

The analysis of perceptions regarding the quality of learning experience within the undergraduate programs at USAMVB was conducted based on the processing of responses from 582 students and graduates of USAMVB Bucharest's undergraduate programs. The key conclusions are related to the following elements:

- **Factors influencing satisfaction:** Factors such as the quality of teaching, course content, practical orientation of courses, and university facilities significantly contribute to the overall satisfaction with the learning experience. These aspects are crucial for creating a conducive learning environment.
- **Impact of employment status:** While employment status does not significantly affect overall satisfaction with the learning experience, it does influence the perception of acquired competences. Employed individuals tend to rate their competences higher, indicating that practical experience gained through employment enhances perceived competency levels.
- **Positive impact of additional educational services:** Participation in additional educational services offered by university such as career counseling, professional training courses, and membership in student associations, positively influences both the perception of the learning experience and the evaluation of acquired competences. These services enhance the overall educational experience and contribute to students' professional development.

Furthermore, the study revealed that continuous feedback mechanisms are essential for maintaining and improving the quality of education. Regularly soliciting and acting on student and alumni feedback ensures that the university remains responsive to their needs and can swiftly implement necessary changes. This proactive approach not only boosts student satisfaction but also fosters a culture of continuous improvement within the institution.

Another significant finding is the importance of practical, hands-on learning experiences. Respondents consistently highlighted the value of internships, laboratory work, and field projects in enhancing their understanding and application of theoretical knowledge. Incorporating more practical components into the curriculum could bridge the gap between academic learning and real-world application, better preparing students for their future careers.

Lastly, the study underscores the role of a supportive academic and social environment in student success. Positive relationships with faculty, opportunities for peer interaction, and a vibrant campus life contribute to a holistic educational experience. These elements not only enrich the learning experience but also promote personal growth and well-being, which are integral to student satisfaction and success.

In conclusion, the findings from this analysis provide valuable insights that can guide USAMV Bucharest in its efforts to enhance the quality of its undergraduate programs. By focusing on key factors such as teaching quality, practical learning, and additional educational services, and by fostering a supportive academic environment, the university can continue to improve its educational offerings and ensure that its graduates are well-equipped for their professional journeys.

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