

Interpretation of data collected on the basis of the Questionnaire for collecting the “FEEDBACK” regarding the doctoral student from CSUD - USAMVBT

1. Introduction

The questionnaires from the Council for Doctoral Studies of the University of Agricultural Sciences and Veterinary Medicine of Banat “King Mihai I of Romania” from Timișoara (CSUD - USAMVBT) regarding the “feedback” of the doctorate from the Doctoral School - Plant and Animal Resources Engineering (SD-IRVA) were completed by PhD students enrolled at SD-IRVA in 2020 and, for comparison, were included in the analysis and data obtained from PhD students of the Doctoral School - Veterinary Medicine (SD-MV) within USAMVBT, in a proportion of 15%. The questionnaires were anonymous, requesting only useful data in processing (part "A"). The questionnaire was then divided into six other parts (parts “B” - “G”) with the questions presented below.

Part A. PROFILE OF RESPONDENTS

1. Field in which he graduated (code “DOM-L”):

- ✓ Agronomy (code “AGR”)
- ✓ Horticulture and Forestry (code “HS”)
- ✓ Food Engineering (code “IPA”)
- ✓ Veterinary Medicine (code “MV”)

2. Field in which he graduated his master's studies (code “DOM-M”):

- ✓ Agronomy (code “AGR”)
- ✓ Horticulture and Forestry (code “HS”)
- ✓ Food Engineering (code “IPA”)
- ✓ Veterinary Medicine (code “MV”)

3. Field in which you enrolled in doctoral studies (code “DOM-D”):

- ✓ Agronomy (code “AGR”)
- ✓ Horticulture and Forestry (code “HS”)
- ✓ Food Engineering (code “IPA”)
- ✓ Veterinary Medicine (code “MV”)

4. Year of doctoral enrollment (code “AN-D”):

- ✓ Year 20....

5. Year of birth (code “AN-N”):

- ✓ <1989
- ✓ ≥1990

Part B. ADMISSION DECISION

6. What is the main reason why you decided to pursue doctoral studies?

- ✓ To obtain the title of doctor (code “T-DR”)
- ✓ For the monthly scholarship (code “B”)
- ✓ To specialize in the field (code “SP-D”)
- ✓ Because it gives me the opportunity for an academic career (code “CR-A”)
- ✓ Other reasons (code “ALT”)

Part C. EXPECTATIONS

7. *To what extent have your expectations regarding doctoral studies been met since you were enrolled in the doctorate?*

- ✓ Not at all (code "0")
- ✓ To a very small extent (code "fm")
- ✓ To a small extent (code "m")
- ✓ Largely (code "M")
- ✓ To a very large extent (code "FM")
- ✓ Completely (code "C")

Part D. OPINIONS ON ADMISSION

8. *To what extent are you satisfied with the information on the conditions and admission criteria?*

- ✓ Not at all (code "0")
- ✓ To a very small extent (code "fm")
- ✓ To a small extent (code "m")
- ✓ Largely (code "M")
- ✓ To a very large extent (code "FM")
- ✓ Completely (code "C")

9. *To what extent are you satisfied with the correctness of the contest?*

- ✓ Not at all (code "0")
- ✓ To a very small extent (code "fm")
- ✓ To a small extent (code "m")
- ✓ Largely (code "M")
- ✓ To a very large extent (code "FM")
- ✓ Completely (code "C")

10. *To what extent are you satisfied with the relevance of the competition for the evaluation of the competencies necessary for the doctorate in the approached field?*

- ✓ Not at all (code "0")
- ✓ To a very small extent (code "fm")
- ✓ To a small extent (code "m")
- ✓ Largely (code "M")
- ✓ To a very large extent (code "FM")
- ✓ Completely (code "C")

Part E. RELATIONSHIP WITH THE DOCTORAL STUDENT

11. *In the last six months, how often have you met with the PhD supervisor to discuss your PhD thesis?*

- ✓ Not at all (code "0")
- ✓ In a few months (code "A")
- ✓ Monthly (code "L")
- ✓ Several times a month (code "SL")
- ✓ Once a week (code "S")
- ✓ Daily or almost daily (code "Z")

12. In the last six months, how often have you communicated by e-mail with the doctoral supervisor about your doctoral project?

- ✓ Not at all (code “0”)
- ✓ In a few months (code “A”)
- ✓ Monthly (code “L”)
- ✓ Several times a month (code “SL”)
- ✓ Once a week (code “S”)
- ✓ Daily or almost daily (code “Z”)

13. So far you have sent the doctoral supervisor a sketch / a written part of your doctoral thesis?

- ✓ NO (code “0”)
- ✓ YES (code “1”)

14. So far, you have sent other scientific texts (papers, articles, reviews, projects, etc.) to the doctoral supervisor?

- ✓ NO (code “0”)
- ✓ YES (code “1”)

15. So far, have you received written comments from the doctoral supervisor on your thesis or scientific texts?

- ✓ NO (code “0”)
- ✓ YES (code “1”)

16. Since you enrolled in your doctorate, you have received support for your research work from professors in Steering Committee?

- ✓ NO (code “0”)
- ✓ YES (code “1”)

17. Since you are enrolled in the doctorate, have you received support for your research activity from other professors from CSUD-USAMVBT / University?

- ✓ NO (code “0”)
- ✓ YES (code “1”)

Part F. RESOURCES AVAILABLE

18. To what extent do you have the necessary financial and material resources to carry out your doctoral research?

- ✓ Not at all (code “0”)
- ✓ To a very small extent (code “fm”)
- ✓ To a small extent (code “m”)
- ✓ Largely (code “M”)
- ✓ To a very large extent (code “FM”)
- ✓ Completely (code “C”)

19. To what extent do you have the necessary time to carry out your doctoral research?

- ✓ Not at all (code “0”)
- ✓ To a very small extent (code “fm”)
- ✓ To a small extent (code “m”)
- ✓ Largely (code “M”)

- ✓ To a very large extent (code “FM”)
- ✓ Completely (code “C”)

20. *To what extent do you receive advice, comments, suggestions regarding your doctoral research?*

- ✓ Not at all (code “0”)
- ✓ To a very small extent (code “fm”)
- ✓ To a small extent (code “m”)
- ✓ Largely (code “M”)
- ✓ To a very large extent (code “FM”)
- ✓ Completely (code “C”)

21. *To what extent do you have access to the bibliography necessary to carry out your doctoral research?*

- ✓ Not at all (code “0”)
- ✓ To a very small extent (code “fm”)
- ✓ To a small extent (code “m”)
- ✓ Largely (code “M”)
- ✓ To a very large extent (code “FM”)
- ✓ Completely (code “C”)

Part G. OTHER PROFESSIONAL ACTIVITIES

22. *He/She studied abroad for at least a week?*

- ✓ NO (code “0”)
- ✓ YES (code “1”)

23. *In the last six months, how often have you read scientific papers?*

- ✓ Not at all (code “0”)
- ✓ In a few months (code “A”)
- ✓ Monthly (code “L”)
- ✓ Several times a month (code “SL”)
- ✓ Once a week (code “S”)
- ✓ Daily or almost daily (code “Z”)

24. *In the last six months, how often have you discussed professional issues with other PhD colleagues?*

- ✓ Not at all (code “0”)
- ✓ In a few months (code “A”)
- ✓ Monthly (code “L”)
- ✓ Several times a month (code “SL”)
- ✓ Once a week (code “S”)
- ✓ Daily or almost daily (code “Z”)

25. *What is your occupation?*

- ✓ PhD student (code “DRD”)
- ✓ Researcher in the field (code “CERC-DOM”)
- ✓ Occupation in the field (code “OCUP-DOM”)
- ✓ Employment in another field (code “OCUP-ALT”)
- ✓ Teacher (code “CD”)

26. *In the last six months, how often have you written your doctoral dissertation?*

- ✓ Not at all (code "0")
- ✓ In a few months (code "A")
- ✓ Monthly (code "L")
- ✓ Several times a month (code "SL")
- ✓ Once a week (code "S")
- ✓ Daily or almost daily (code "Z")

27. *To what extent do you think you have learned to do scientific research since you enrolled in your doctorate?*

- ✓ Not at all (code "0")
- ✓ In a few months (code "A")
- ✓ Monthly (code "L")
- ✓ Several times a month (code "SL")
- ✓ Once a week (code "S")
- ✓ Daily or almost daily (code "Z")

2. Interpretation of data collected from doctoral students on the profile of respondents

The processing of data obtained from doctoral students enrolled in 2020 at SD-IRVA and, for comparison, SD-MV, within IOSUD-USAMVBT, led to the following distribution in terms of previous studies followed by doctoral students, respectively the chosen doctoral field. Thus, the fields evaluated within SD-IRVA represented 28.6% each (with the completion of the Bachelor's cycle in the fields of Food Engineering - IPA, Agriculture - AGR, Horticulture and Forestry - H), respectively 14.3% of the respondents completed the studies of the Bachelor's degree in Veterinary Medicine (VM). Also, the percentages are identical in the case of Master's degree studies, with an equal share for the same fields in the case of PhD students enrolled at SD-IRVA (28.6% each), respectively in a proportion of only half in the case of PhD students enrolled in SD-MV (14.3%) (Figures 1a and 1b).

Regarding the distribution of PhD students according to the chosen doctoral field, 42.9% of the respondents chose the field of Agronomy ("AGR") within SD-IRVA, 28.6% for the IPA doctoral field (within SD-IRVA) and 14.3% each for the fields of Horticulture ("H" within SD-IRVA) and Animal Husbandry ("Z" within SD-MV) (Figure 1c)..

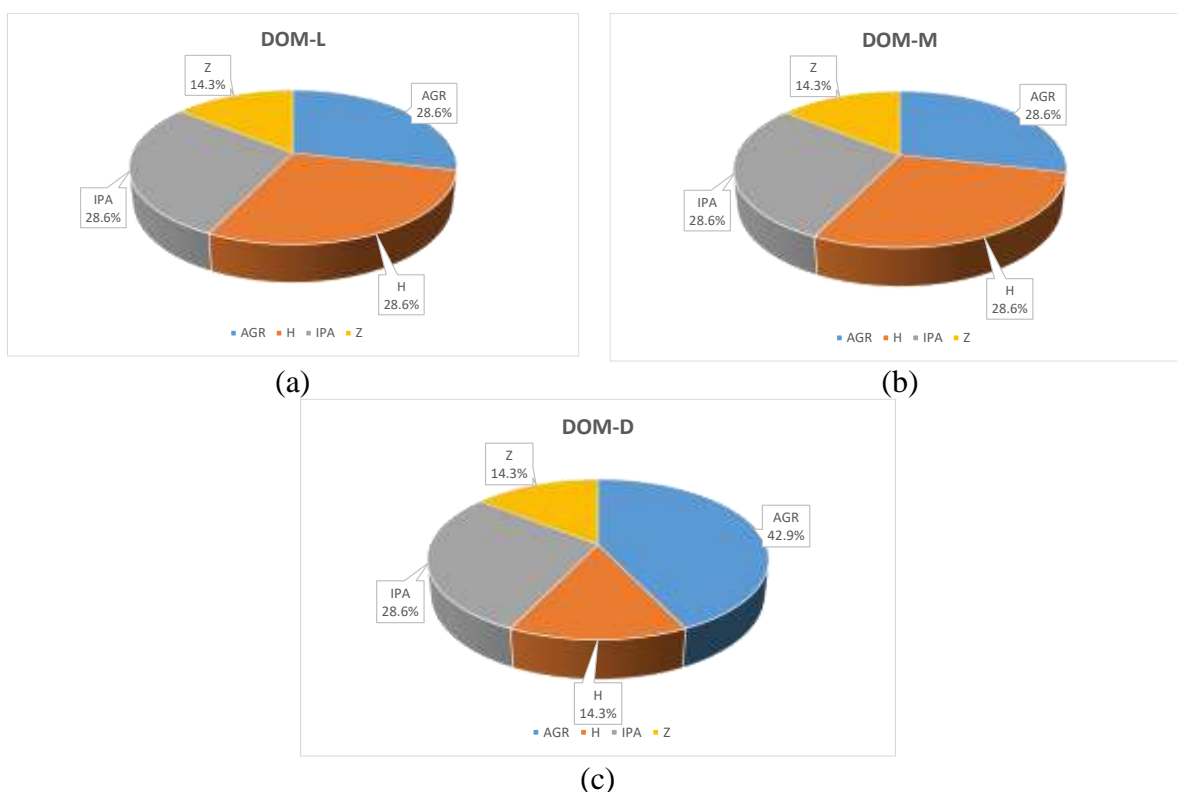


Figure 1. Distribution of doctoral students' response according to the field of undergraduate and master's studies followed (a and b), respectively the field of doctoral studies in which they are enrolled (c)

Most doctoral students enrolled in the doctorate in 2020 were born after 1990 (57.1%) (Figure 2a). The distribution of PhD students born before 1990 is equal for the fields of IPA, Agronomy and Animal Husbandry, while PhD students born after 1990 in the field of Agronomy are in double proportion (50%) compared to those in the fields of IPA and Horticulture (Figures 2b and 2c).

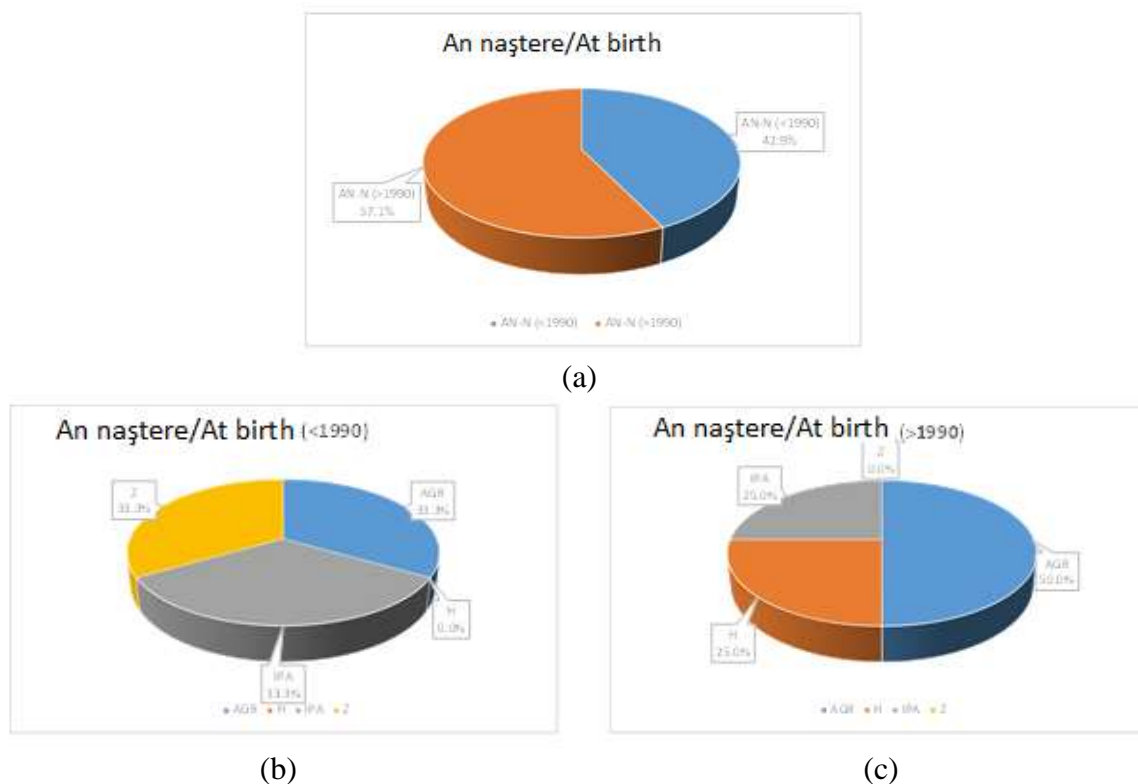
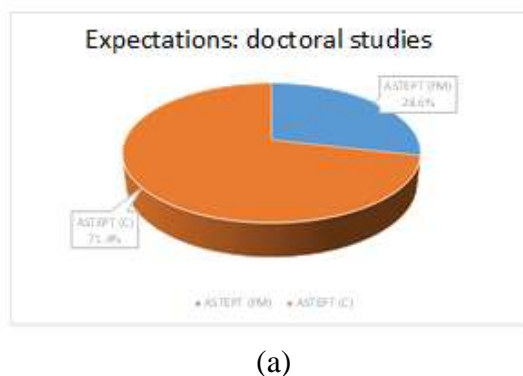


Figure 2. Distribution of doctoral students' response by year of birth (a), respectively distribution of answers by doctoral fields (b and c)

3. Interpretation of data collected from doctoral students on the decision to admit to the doctorate, the level of fulfillment of expectations and opinions about admission

To the question “*What is the main reason why you decided to pursue doctoral studies?*”, All respondents answered “*To specialize in the field*”, although there were two multiple answers related to the aspects “*To obtain the doctorate*” and “*To offering the possibility of an academic career*”.

Fulfilling the expectations of doctoral students regarding the doctoral studies they enrolled in were in all cases very large (equal distribution for doctoral students in the fields of IPA and Agronomy) or were evaluated at the maximum level ("Complete" - "C", double distribution for Agronomy field - 40%, compared to the other three fields - 20% each), the last type of answer being given by almost three quarters of the respondents (Figures 3a-3c).



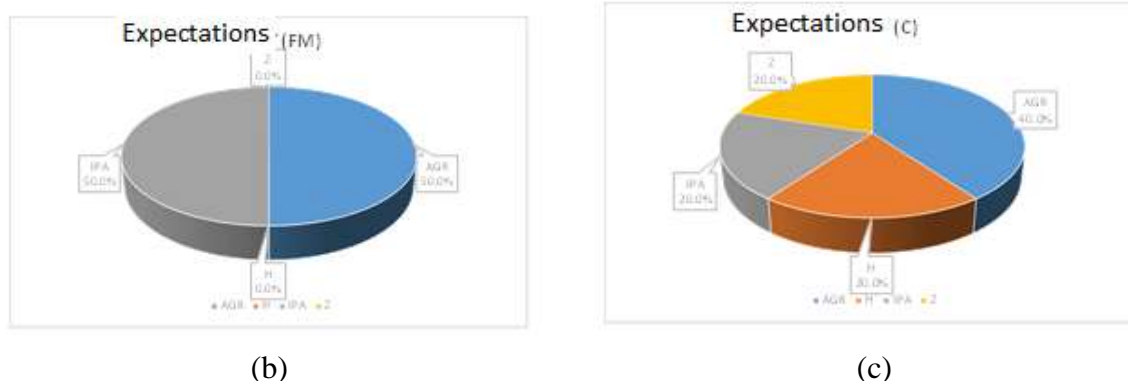


Figure 3. Distribution of doctoral students' response according to the expectations regarding doctoral studies (a), respectively distribution of answers by doctoral fields (b and c)

The assessment of the doctoral students related to the opinions on the conditions and criteria of admission, the correctness of the admission contest, as well as the relevance of the contest for evaluating the competencies necessary for the doctoral student in the approached field were evaluated (Figures 4-6). Thus, all respondents had very good opinions, corresponding to the answers of "very high" and "complete" in proportions of 42.9% and 57.1%, respectively. On the other hand, for the first case the distribution of answers was equal in the case of Agronomy, IPA and Animal Husbandry, and for the answers “C” the respondents from Agronomy were in double number compared to those from IPA and Horticulture (Figure 4).

The correctness of the admission contest was appreciated for the most part excellent (answers "C" in proportion of 85.7%), with a distribution by fields of 50% for Agronomy and 16.7% for the other three fields considered, IPA, Horticulture and Animal Husbandry (Figure 5).

An approximately similar distribution of the answers was obtained for the relevance of the competition for the evaluation of the competencies necessary for the doctoral student in the approached field. Thus, the answers with maximum appreciation were in proportion of 71.4% (60% Agronomy and 20% for the fields of IPA and Horticulture), and those of “very high” in proportion of 28.6%, with an equal distribution on the fields of IPA and Animal Husbandry in the latter case (Figure 6).

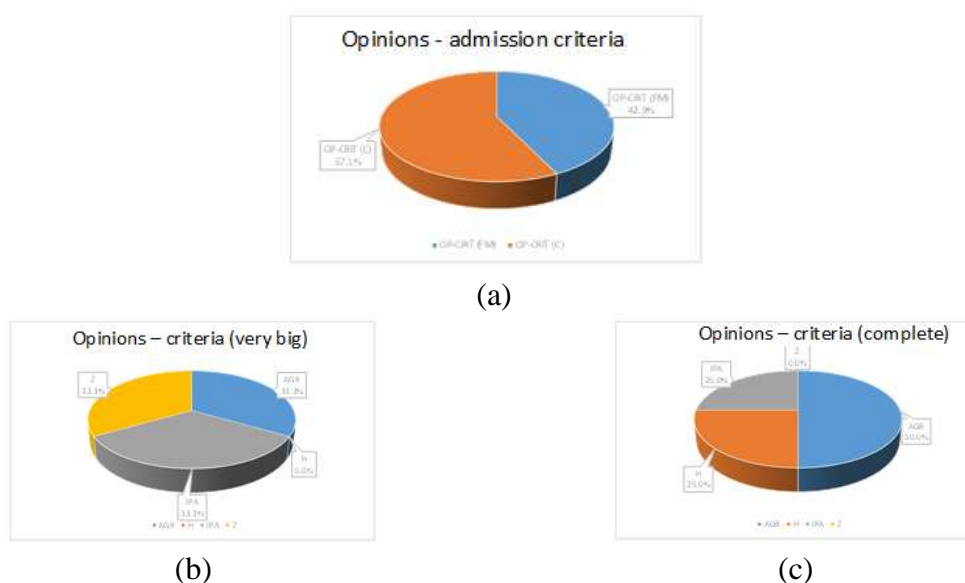


Figure 4. Distribution of the doctoral students' response according to the opinions regarding the admission conditions and criteria (a), respectively the distribution of the answers on doctoral fields (b and c)

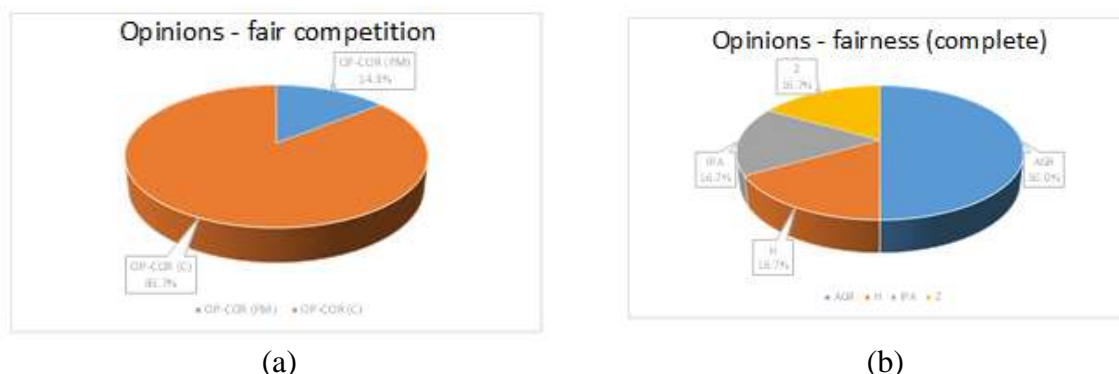


Figure 5. Distribution of the doctoral students' response according to the opinions regarding the correctness of the doctoral admission competition (a), respectively the distribution of the answers with maximum appreciation (“C”) on doctoral fields (b)

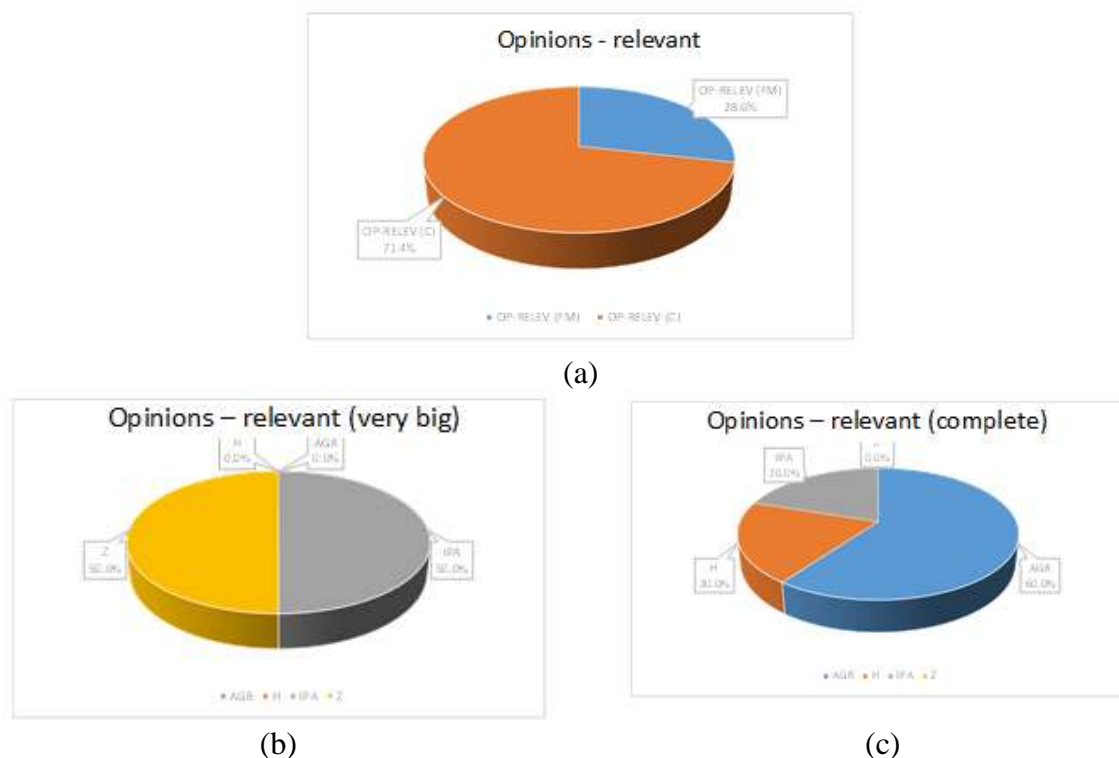


Figure 6. Distribution of the doctoral students' response according to the relevance of the competition for evaluating the necessary competencies in the approached field (a), respectively the distribution of the answers with “Very high” and “Complete” appreciation on doctoral fields (b and c)

4. Interpretation of data collected from doctoral students on the relationship with the doctoral supervisor

Also, the opinions of the doctoral students from the first year of doctoral studies were collected regarding the relationship with the doctoral supervisor, both those related to the frequency of meetings or communication through various systems (e-mail) and the evolution of the doctoral thesis. Most of the respondents had weekly meetings with the doctoral supervisor, half of them from the field of Agronomy, and a quarter from the doctoral fields of Horticulture and Animal Husbandry (Figure 7). The most frequent communications with the doctoral supervisor through online systems (for example, by e-mail) were also weekly (57.1%), with an equal distribution between the evaluated fields (25% each for the fields of Agronomy, IPA, Horticulture and Animal Husbandry, Figure 8).

Regarding the presentation of other scientific materials to the doctoral supervisor, in the field of doctoral thesis, such as papers, scientific articles, reviews, or scientific projects, 85.7% of respondents answered positively, and of these 33.3% were from the doctoral fields Agronomy and IPA, respectively 16.7% from the fields Horticulture and Animal Husbandry (Figure 9).

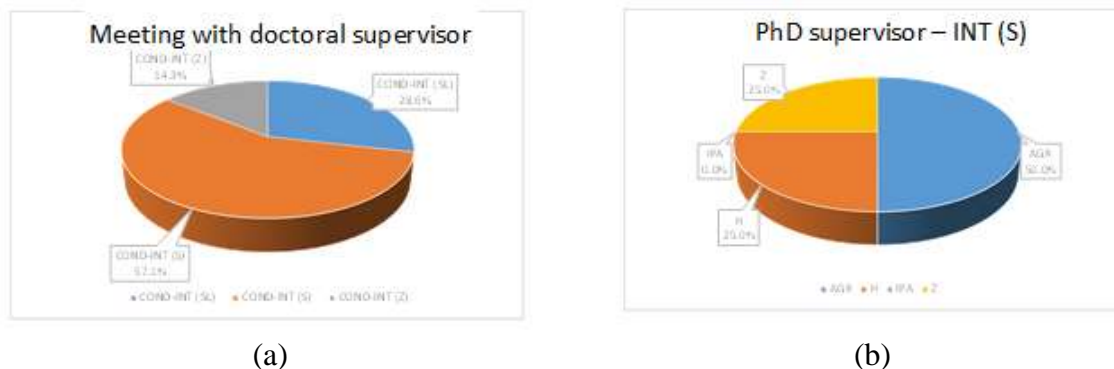


Figure 7. Distribution of doctoral students' response according to the frequency of meetings with the doctoral supervisor (a), respectively distribution of the answers regarding weekly meetings (“S”) by doctoral fields (b)

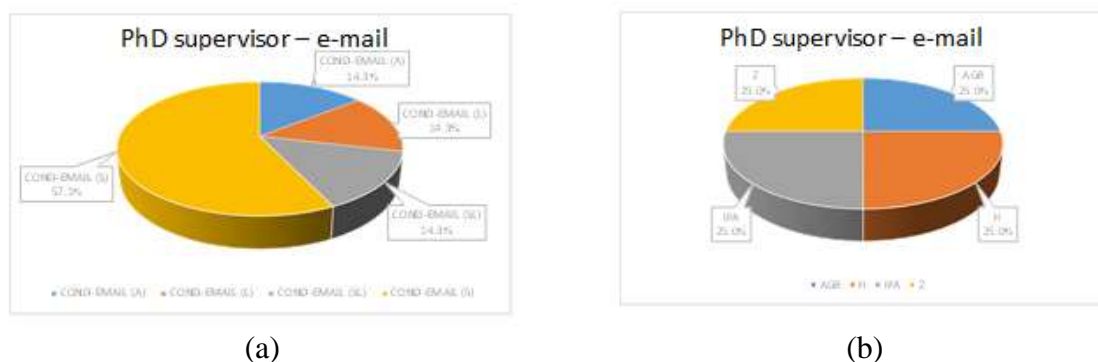


Figure 8. Distribution of doctoral students' response according to the frequency of e-mail message exchanges with the doctoral supervisor (a), respectively distribution of the answers regarding the weekly messages (“S”) by doctoral fields (b)



Figure 9. Distribution of doctoral students' response according to the existence of scientific materials sent to the doctoral supervisor (a), respectively distribution of affirmative answers by doctoral fields (b)

To questions related to the presentation of a sketch for the doctoral thesis or even a written part of it, written comments or scientific texts to the doctoral supervisor, regarding the existence of research

support from the members of the steering committee or from others teachers from the Doctoral School or the university, all respondents answered in the affirmative (100%).

5. Interpretation of data collected from doctoral students on available resources

Material resources and not only are a very important part in carrying out doctoral activities, both the necessary financial / material ones, as well as in terms of time related to these activities, the existence of people in the field to contribute useful advice, comments or suggestions regarding the research activity, respectively the access to the scientific bibliography related to the approached field, the answers of the doctoral students were diverse, with a higher weight for the positive answers (Figures 10-12). Financial and material resources were evaluated positively, with answers as “To a large extent” (“M”, 57.1%) and even “Complete” (“C”, 42.9%). For the “M” answers, half of the respondents were from the field of Agronomy, and a quarter from IPA and Animal Husbandry, while the distribution of “C” answers on the doctoral fields of Agronomy, IPA and Horticulture was equal (Figure 10). Regarding the time required to carry out doctoral studies, 71.4% answered that they have “To a very large extent” (“FM”) of this time, and only 14.3% each answered “Complete” and “To a large extent” (“C” and “M”). In the first case, 40% of the respondents were from the field of Agronomy, and 20% from the doctoral fields of IPA, Horticulture and Animal Husbandry (Figure 11).

The most responses related to advice, comments and suggestions for doctoral research activities were “To a very large extent” and “Complete” (28.6% and 42.9%, respectively, Figure 12a), and regarding the accessibility to the bibliography related to the doctoral field approached, all the answers were positive (42.9% for “To a large extent” and 28.6% for the answers “To a large extent” and “Complete”, Figure 12b) .

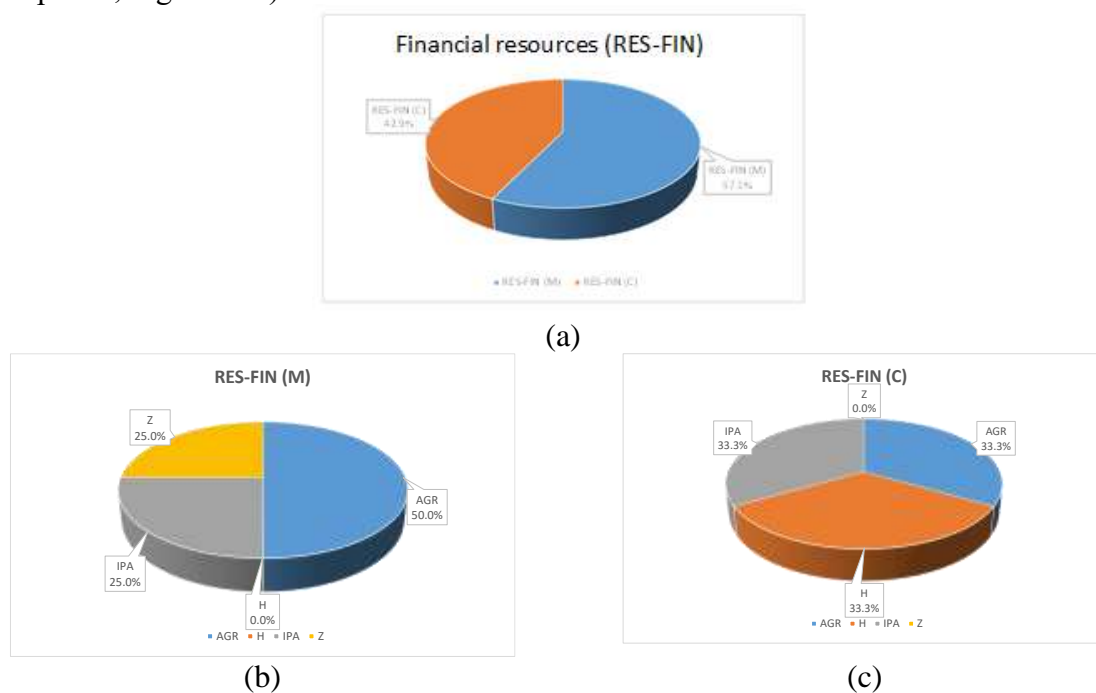


Figure 10. Distribution of doctoral students' response according to the availability of financial and material resources necessary for conducting doctoral research (a), respectively distribution of positive answers (high availability - "M" and complete - "C") by doctoral fields (b and c)

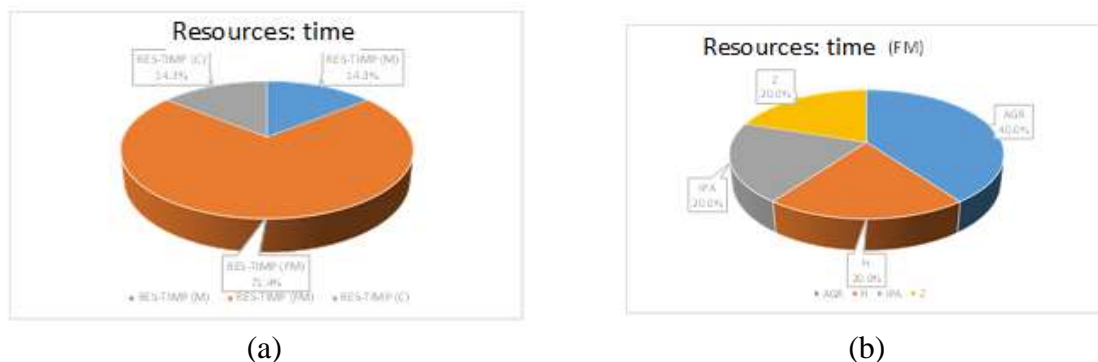


Figure 11. Distribution of doctoral students' response by availability in terms of time required for doctoral research (a), respectively distribution of responses related to a "very high" availability ("FM") by doctoral fields (b)

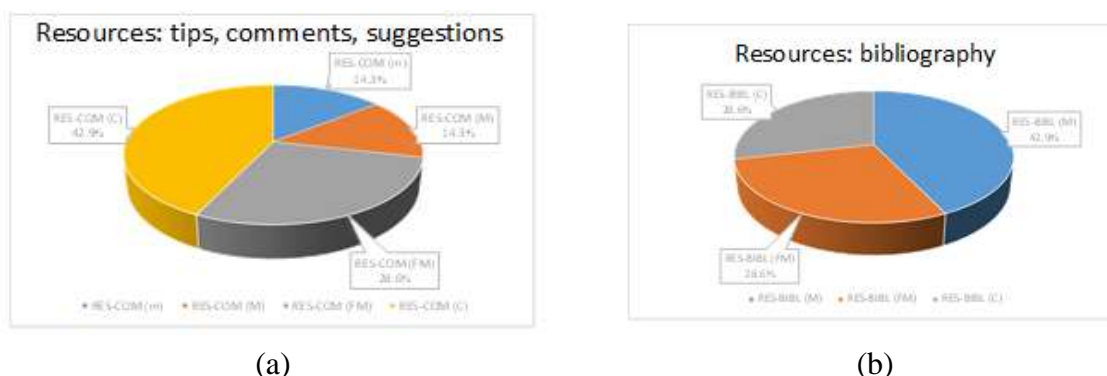


Figure 12. Distribution of the doctoral students' response according to the existence of some advice, comments, suggestions regarding the doctoral research (a), respectively to their response according to the accessibility to the bibliography necessary for the realization of the doctoral research (b)

6. Interpretation of data collected from doctoral students on other professional activities

The evaluation of the proportion of doctoral students enrolled in doctoral studies in 2020 regarding studies conducted abroad revealed that only a little over a quarter of them (28.6%) responded positively; most have not yet benefited from this facility. An explanation could also be related to the current pandemic conditions (Figure 13).

The consultation of scientific papers in the doctoral field approached was carried out mostly daily or weekly, as well as the frequency of consultation with colleagues from the Doctoral School (a total of 57.2%, respectively 71.4% in the latter case, Figures 14a and 14b). Most of the respondents work / study in the field (42.9% each), only 14.3% having a different occupation than the one related to the doctoral field (Figure 14c). Regarding the frequency with which the respondents wrote to the doctoral thesis, the answers "Weekly" ("S") or "Several times a month" ("SL") were the most (28.6% each, Figure 14d). To the last question related to the experience gained in scientific research, all respondents answered positively, with the highest share (71.4%) for the answer "To a large extent" ("M", Figure 15a), and by doctoral fields, IPA having the highest percentage (40%), while 20% of students from Agronomy, Horticulture and Animal Husbandry gave this answer (Figure 15b).

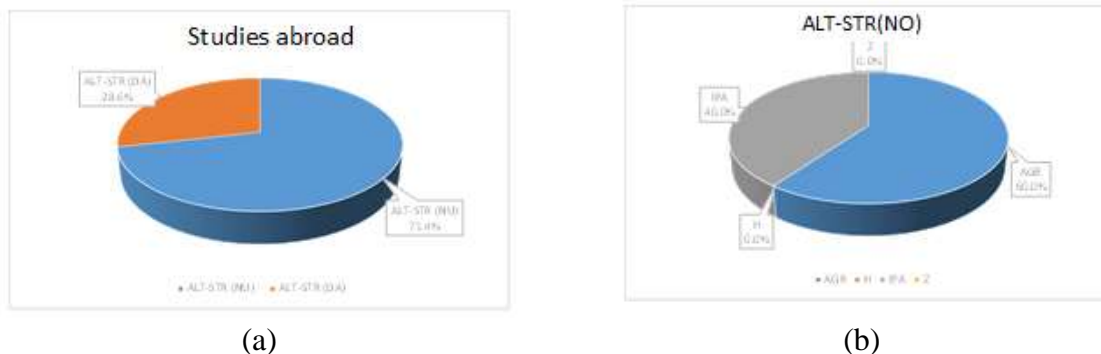


Figure 13. Distribution of doctoral students' response after the existence of preliminary studies abroad of at least one week (a), respectively distribution of negative answers by doctoral fields (b)

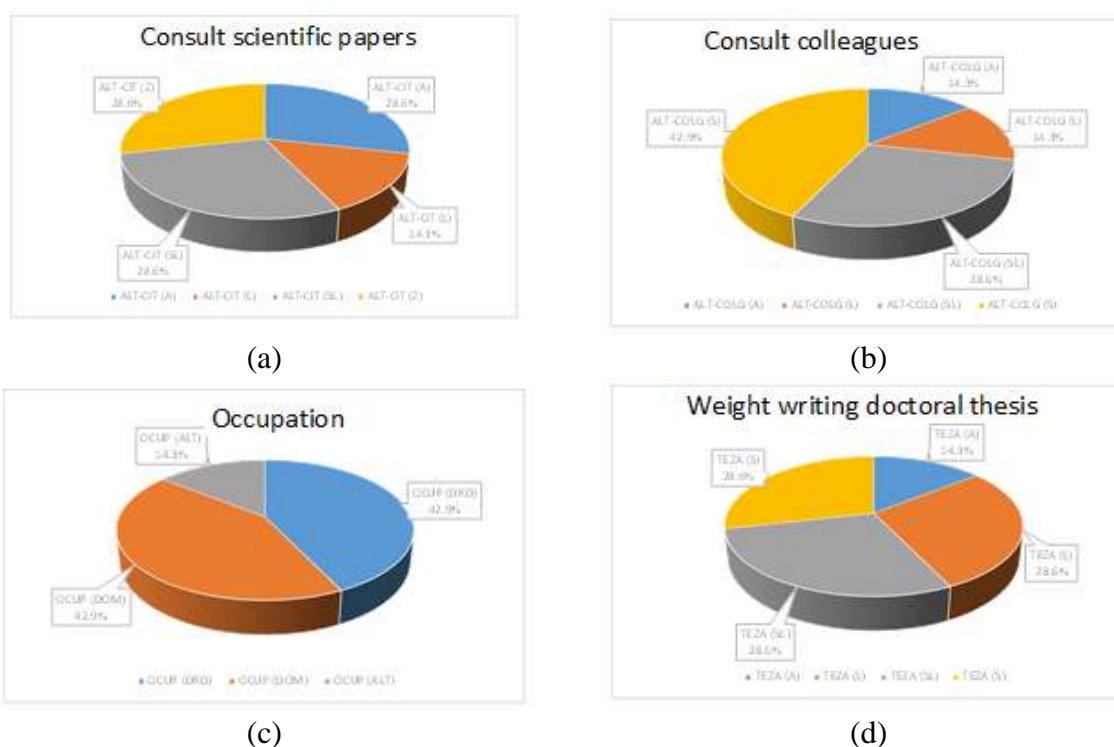


Figure 14. Distribution of doctoral students' response according to the frequency of consultation of scientific papers (a), according to the frequency of consultation of fellow doctoral students on professional aspects (b), by occupation (c), respectively by the frequency of written contribution to the doctoral thesis (d)

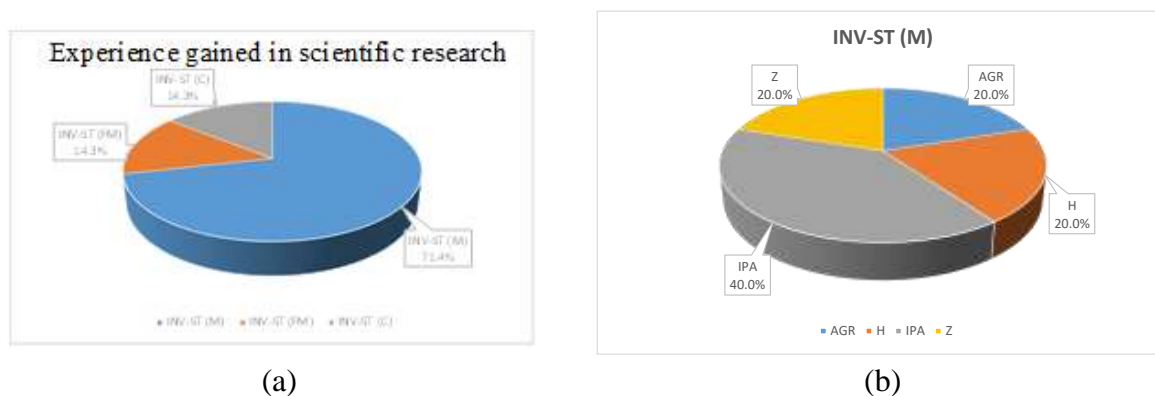


Figure 15. Distribution of doctoral students' response according to the experience gained in terms of scientific research, starting with the moment of enrollment in the doctorate (a), respectively the distribution of answers with “High” (“M”) appreciation by doctoral fields (b)

7. Conclusions

Following the evaluation and processing of data obtained from doctoral students enrolled in 2020 at the Doctoral School - Engineering of Plant and Animal Resources (SD-IRVA) and, for comparison, at Veterinary Medicine, regarding the "feedback" related to the activity of doctoral studies at the University of Agricultural Sciences and Veterinary Medicine of Banat "King Mihai I of Romania" in Timisoara (USAMVBT) can be drawn the following main conclusions:

- The opinions of the PhD students from SD-IRVA / USAMVBT regarding the doctoral activity were collected, based on a questionnaire with 27 questions grouped on seven sections related to the profile of the respondents, the decision to admit to the doctorate, the fulfillment of the expectations regarding doctoral studies, chosen field, admission opinions, relationship with the doctoral supervisor, available resources and other professional activities;
- In general, the interviewed doctoral students completed their studies at the bachelor's and master's courses in fields similar to the doctoral ones, most of them being young people up to 30 years old;
- From the processing of the collected data, the doctoral students have high expectations from the doctoral studies, and the admission conditions were appreciated as being very good, correct and relevant for the evaluation of the competencies necessary for the approached field;
- Regarding the relationship with the doctoral supervisor, this is very good in the vast majority of cases, with weekly or even daily meetings and communications, but also through the scientific materials made available to the doctoral supervisor for evaluation;
- Both the financial and material resources, including the access to the bibliography, as well as the availability of time related to the development of the doctoral activities were positively appreciated by all the respondents from the evaluated Doctoral School; there are also frequent activities in terms of consulting scientific papers in the field, consulting with researchers in the field and contributing to the doctoral thesis;
- In conclusion, there is a positive approach regarding the scientific and organizational activity of the doctoral students from the Doctoral School within USAMVB-Timișoara.