Smooth Transition from Academia to a Career in AgroBiotechnology:

Designing Carrier Plan

2023-1-SK01-KA220-HED-000160349

SURVEY REPORT

Reported by MELLIS ED-TECH

Co-funded by
the European Union

SUA Slovak University of Agriculture in Nitra
UNIVERSITAS Miguel Hernández
Tomas Bata University in Zlín
IDEA Education Agency for Development and Innovation
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Introduction

General Survey Application

The project partners held an online meeting to revise project activities together. After the kick-off meeting, they began undertaking their assigned tasks.

Responsibilities and Tasks

- UMH was the leading partner of Work Package 2. SUA took the lead in developing the initial survey content. The partners based this on 4 different topics in career development in line with the contemporary requirements.
- All the partners participated in survey question preparation and data collection through questionnaires, literature reviews, and teamwork.
- After the question preparations and arrangements, partners applied the surveys to their students, agrobiotech academicians and other relevant experts.
- Partners prepared their survey reports, including survey results and highlighting 5 important outcomes at the end.

Date of Evaluation

16.06.2024

Author(s):

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Aims and Objectives of the Survey Application

The survey is designed to gather valuable insights from individuals interested in pursuing careers in the field of agrobiotechnology. The responses of the questions would directly contribute to the

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development of five key modules that will equip agrobiotech students and graduates with the knowledge, skills, and strategies necessary to navigate their professional pathway.

Overall Objective:

Understand the aspirations, challenges, and needs of individuals in order to enter the agrobiotechnology industry.

Section-Specific Objectives:

Section 1: Demographic Information

- Identify the current position of the participants
- Determine the participants' seniority in sector/years of study in university

Section 2: Self-Assessment and Goal Setting

- Encourage self-reflection and analysis of personal strengths and weaknesses.
- Help individuals visualise their ideal work environment within agrobiotechnology.
- Develop an understanding of the skills and qualities valued in the industry.

Section 3: Networking, Job Search Strategies, and Interview Tips

- Highlight the importance of networking in building successful careers.
- Inquire about job search strategies within the agrobiotechnology sector.
- Reveal the strategies for preparing and excelling in job interviews.

Section 4: Professional Development and Training

- Identify obstacles faced by individuals seeking professional development opportunities.
- Analyse the ideal balance between theoretical knowledge and practical experience.
- Showcase examples of effective training programs within agrobiotechnology.

Section 5: Career Advancement, Mentorship, and Coaching

- Define the qualities individuals seek in a mentor within agrobiotechnology.
- Identify key leadership qualities for aspiring managers in the industry.
- Explore strategies for fostering collaboration and innovation in team settings.

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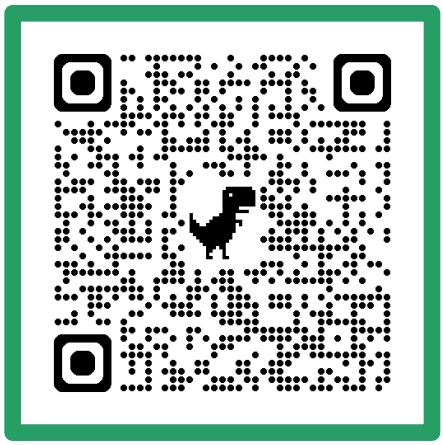

We invite interested researchers and educators to see the survey questions on an anonymous survey form whose QR code is provided above and share their opinions with us as well.

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Methodology

Evaluation Methods

Participants filled in a survey form including 4 multiple choice questions and 20 with checkboxes.

Sample

25 responders participated in the survey applied in Çanakkale, Türkiye. 3 of them were academicians, 4 were sector representatives, 15 students, and 3 in the “other” section including an environmental foundation representative, 2 municipality biotech-lab representatives.

Data Analysis Procedures

For all questions the frequencies of the answers were calculated.

The open-ended questions asking participants to specify their answer if they marked “other” provided an insight into the opinions of participants. And their evaluation was made through content analysis.

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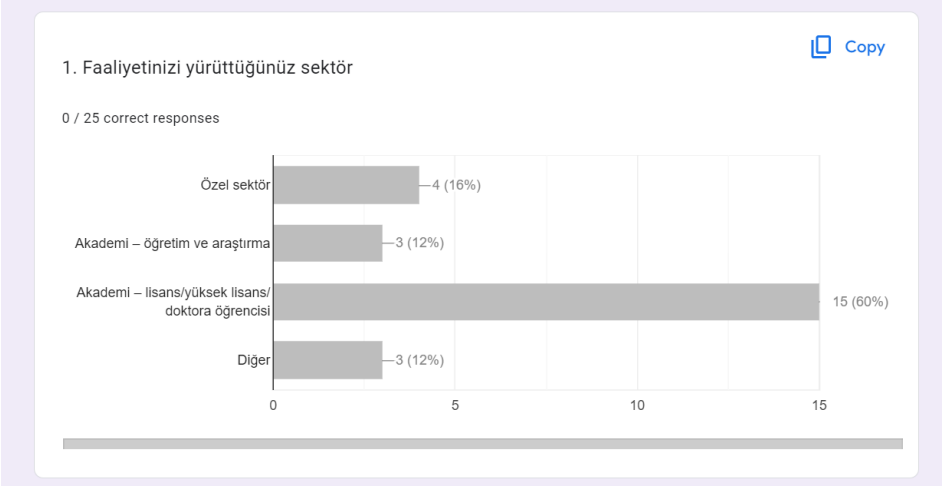
Results

Results by Section

Section 1

The data collected in this section includes the demographic information and participants' experiences.

Q1



25 responders participated in the survey applied in Çanakkale, Türkiye. 3 of them were academicians, 4 were sector representatives, 15 students, and 3 in the "other" section including an environmental foundation representative, 2 municipality biotech-lab representatives.

Q2

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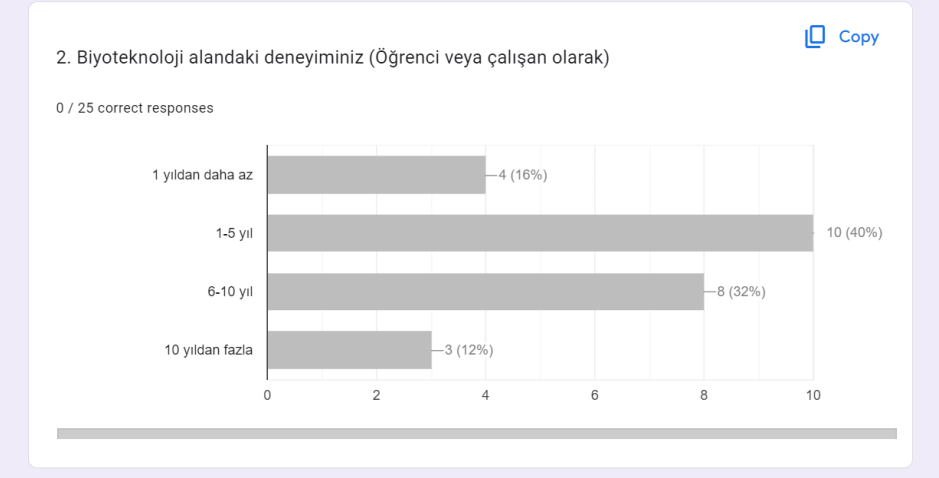
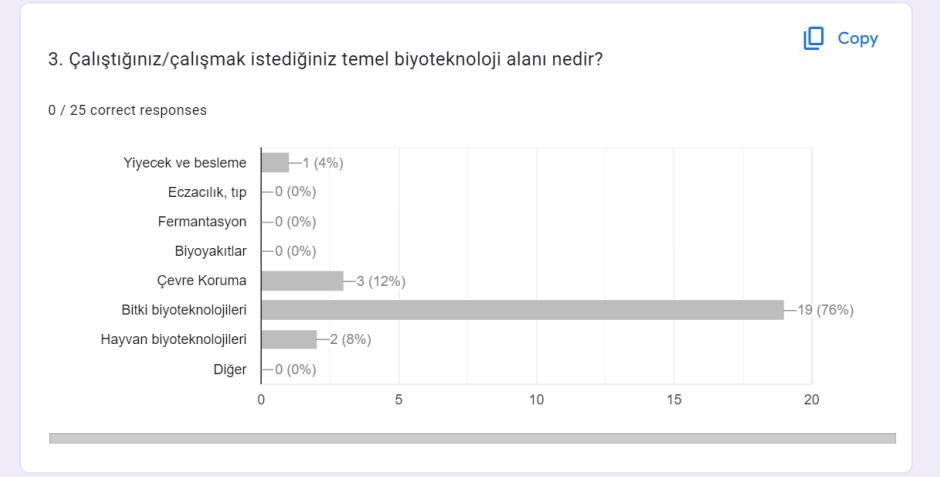


The most of the participants had experience in their field between 1-5 years, which is 10. 8 participants with 6-10 years of experience followed them.

Q3



19 participants declared that they worked or wanted to work in plant biotechnology field which is 76% of the responders.

Q4

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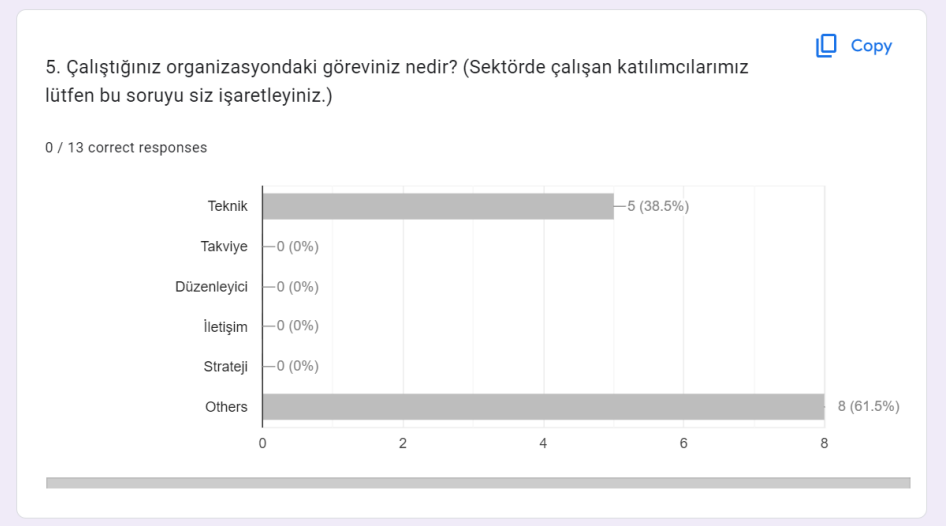
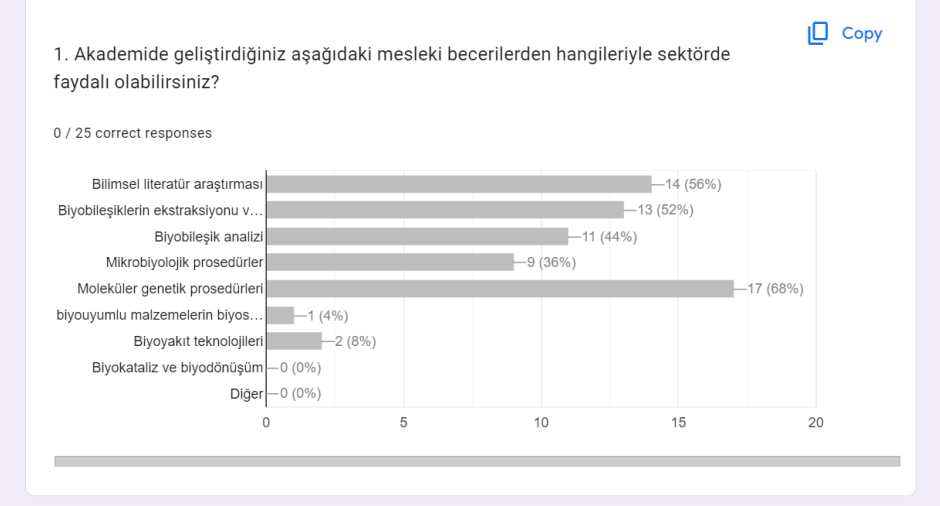


13 participants replied this question although we were waiting for 10 of them to reply to it. 3 of them were students and 2 of them declared this in the next question inquiring the answers of the participants who marked the answer “other”. Other 3 participants replied to the question declared two of them were academician s, one of them was a manager in a biotech company.

Section 2 – Self-Assessment and Target Specification

Q1



The most marked skill was molecular genetics procedures with 68 percentage. Other preferred skills were respectively; scientific literature research (56%), extraction of bio compounds (52%), bio compound analysis (44%), micro-biological procedures (36%).

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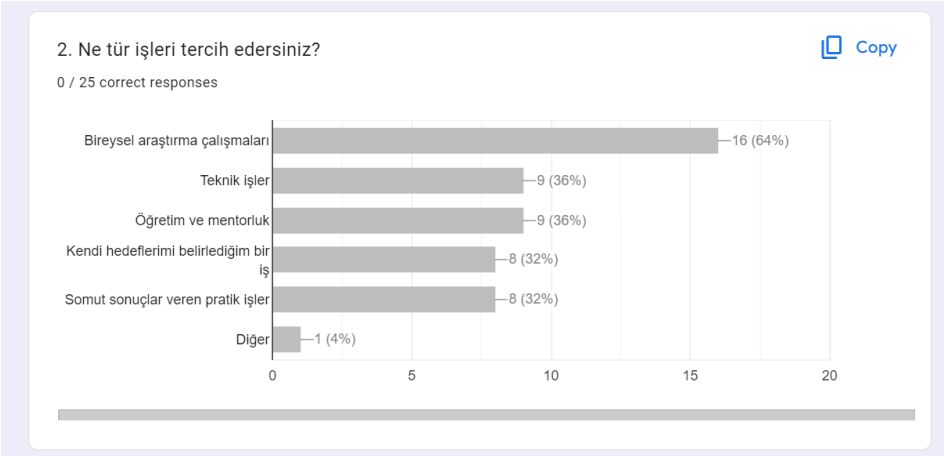
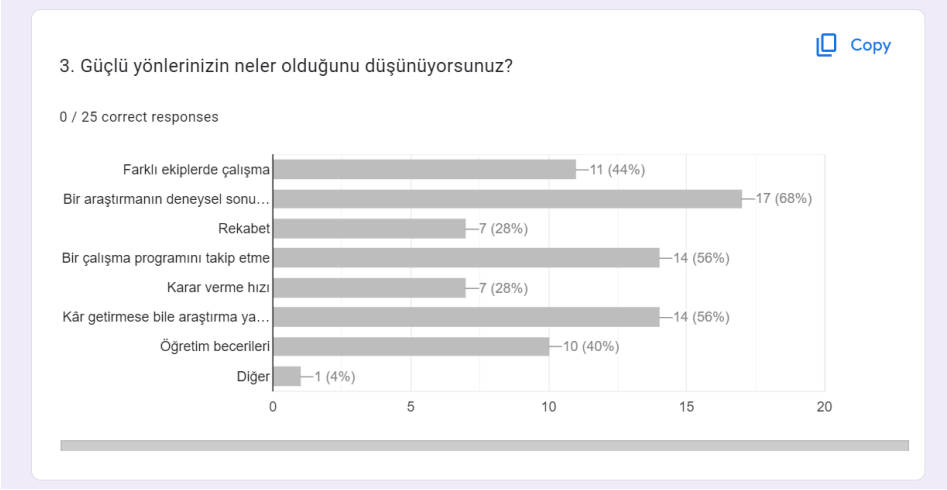
Q2



Individual research activities were stated by most of the participants (64%). Considering sector companies pay attention to the employees' soft and communication skills as much as their technical skills, we understand that students and sector employees must adapt themselves to teamwork and other soft skills.

Q3



The prominent strengths of the strengths perceived by the participants were working in different teams (44%), designing, conducting and analysing experimental results of a research activity (68%), following a research programme (56%), the ability to make research even if it doesn't bring any profit (56%), and teaching skills (40%).

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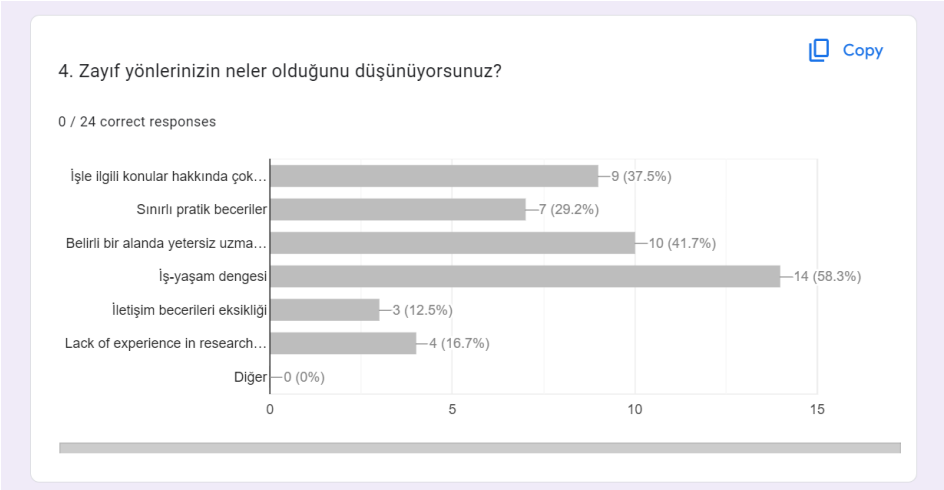
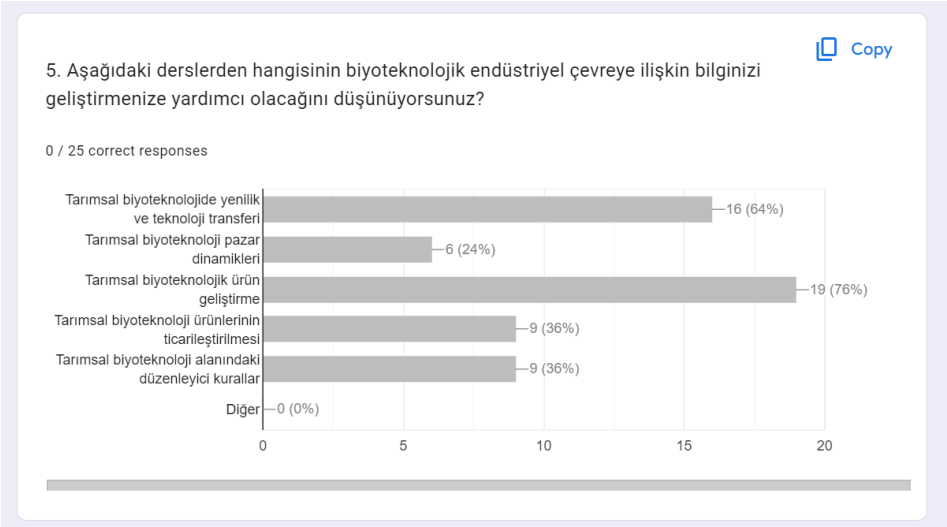
Q4



The most stated weakness that the participants perceive in themselves was the balance between work and daily life 58,3%).

Q5



The participants mostly dwelled on two courses that would be instrumental in their professional development, which are Innovation and Technology Transfer in Agricultural Biotechnology (64%) and Production Development in Agricultural Biotechnology (76%).

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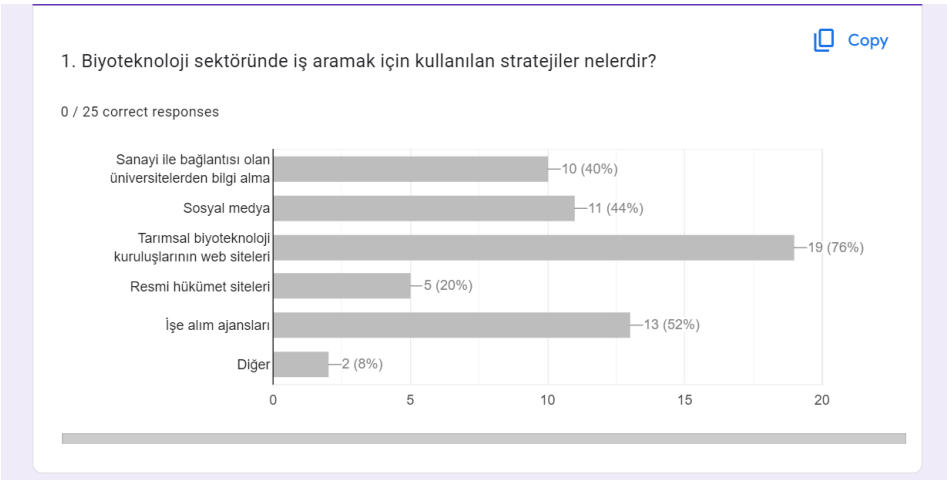
Section 3

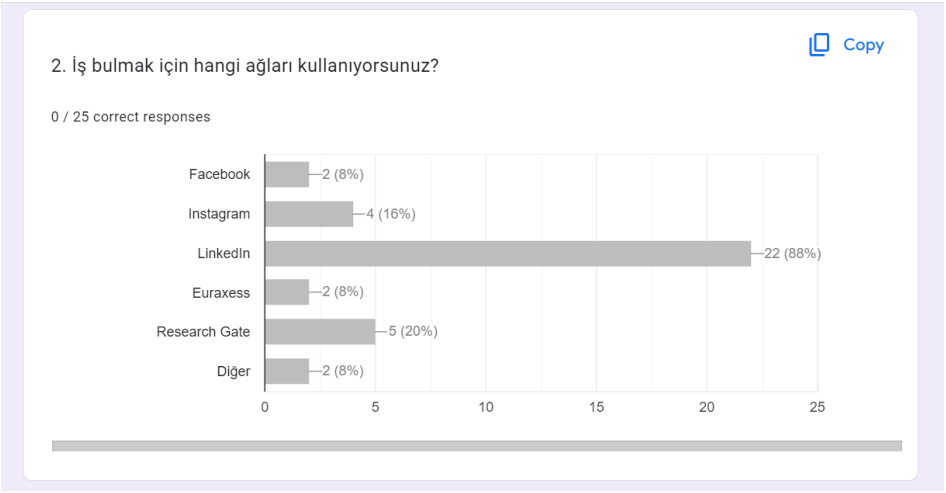
This section is dedicated to the networking and job search strategies.

Q1



We inquired about the participants' knowledge about the job search strategies in biotechnology sector. The answers gathered mostly on 4 strategies which are getting information from the universities connected with industry (40%), using social media (44%), using websites of the agricultural biotechnology institutions (76%), and learning from recruitment agencies 52%).

Q2



Participants declared that they mostly use LinkedIn for job search (88%).

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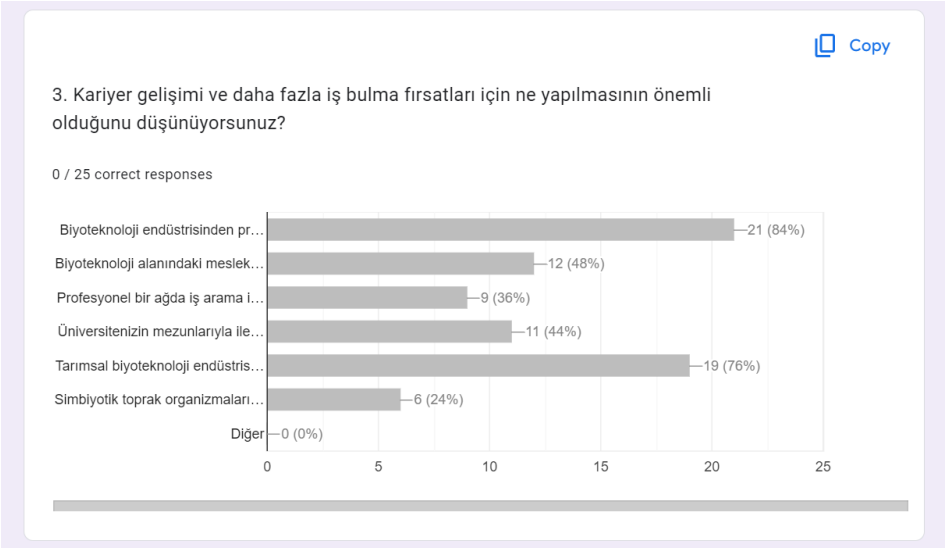
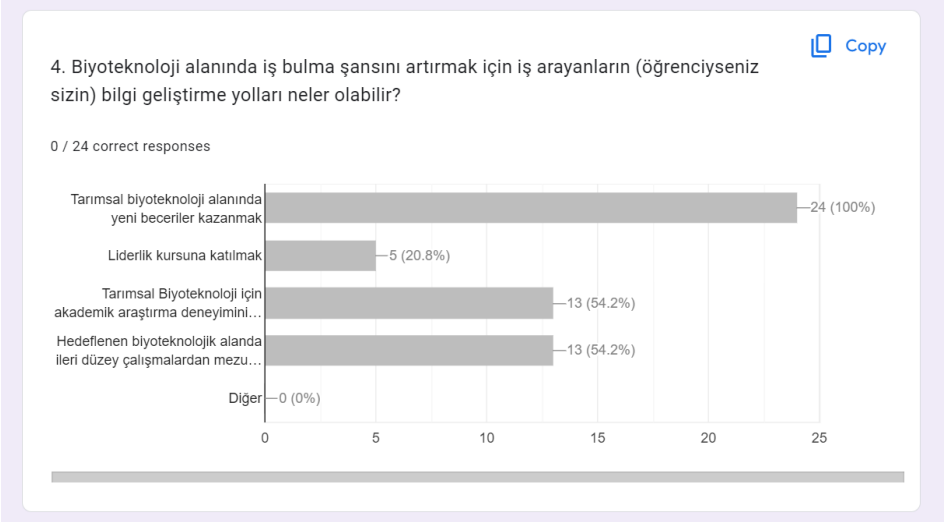
Q3



Participants valued many of the choices provided to declare their opinions about what is important to create opportunities for career development and job finding. The most marked choices were meeting with professionals from biotechnology sector in workshops or other events (84%), being volunteer for the activities related to agricultural biotechnology industry (76%).

Q4



All participants who answered this question correctly (24) declared that gaining new skills in agricultural biotechnology field is a way to develop knowledge for job seekers to increase their chances in agricultural biotechnology.

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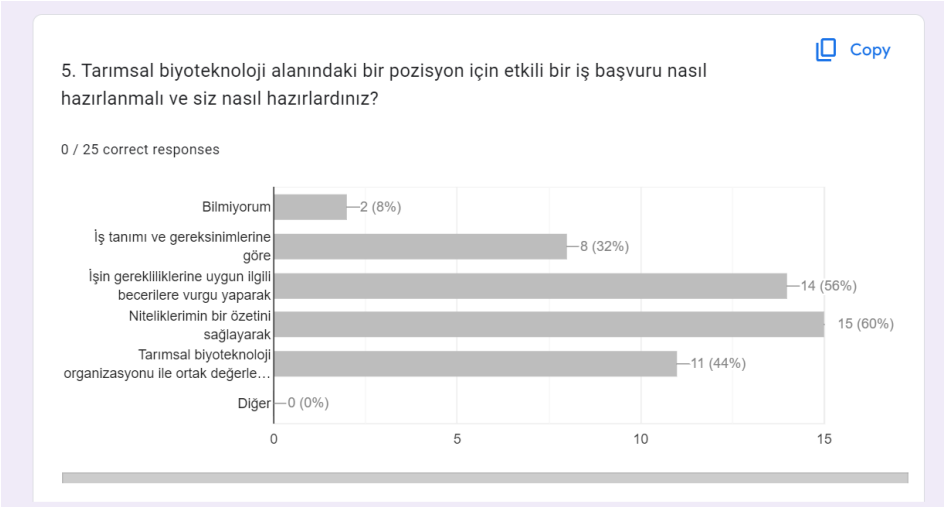
Q5

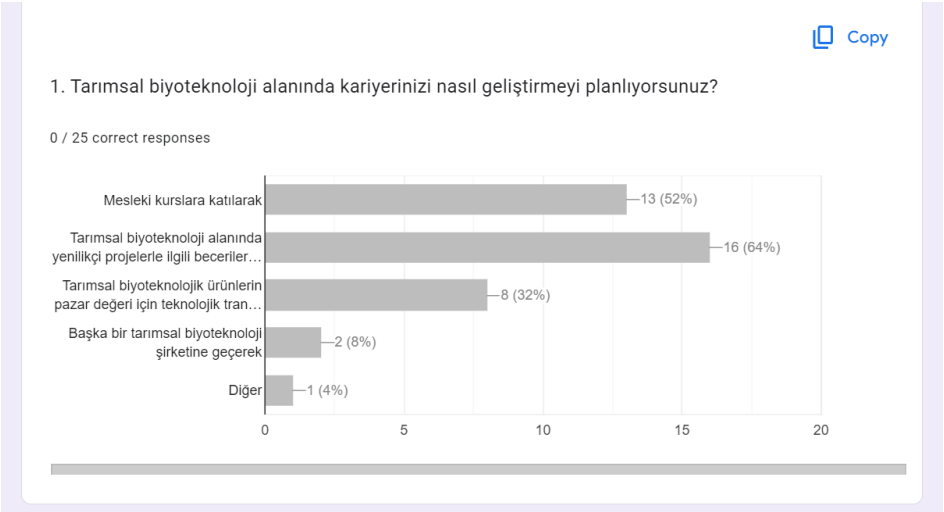


The most emphasised choices were emphasising my skills necessary for the requirements of the job (56%), giving a summary of my skills (60%), indicating common values that I share with the recruiting biotech firm (44%).

Section 4

This section is about professional development and training opportunities.

Q1



To the question “how do you plan to develop your career in agro-biotech?” 52% of the participants gave the answer “by participating in professional training courses” and 64% declared that by gaining skills related to the innovative projects in the agro-biotech field.

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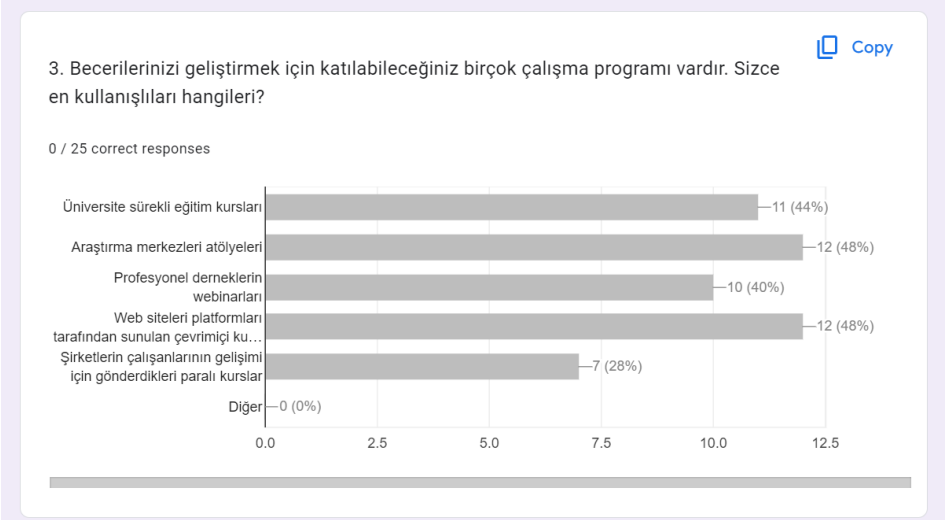
Q2

It is observed that participants use a diversifying range of resources to learn about the new trends in agro-biotechnology. The most used way was “reading the scientific publications about the new trends in agro-biotechnology (84%).

Q3



Universities’ training courses (44%), research centre workshops (48%), webinars of professional associations (40%), online courses of website platforms (48%), and paid courses that the companies sent their employees (28%) were declared by the participants.

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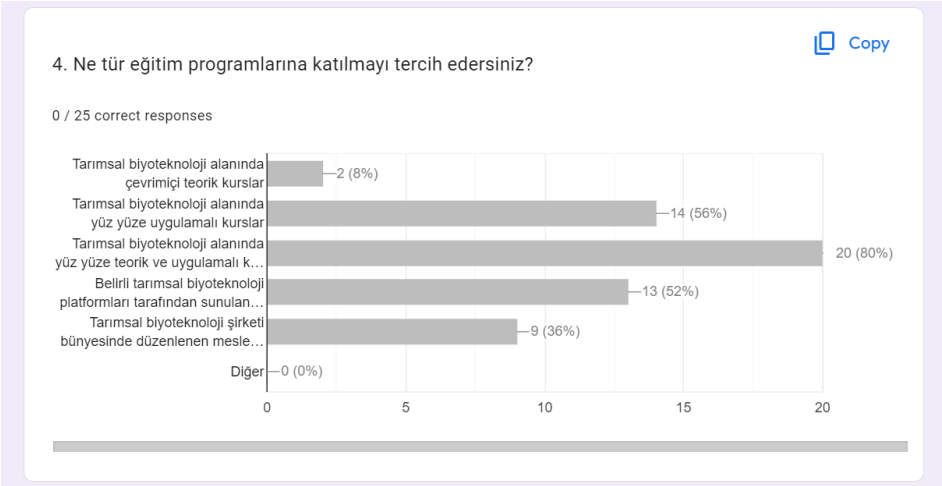
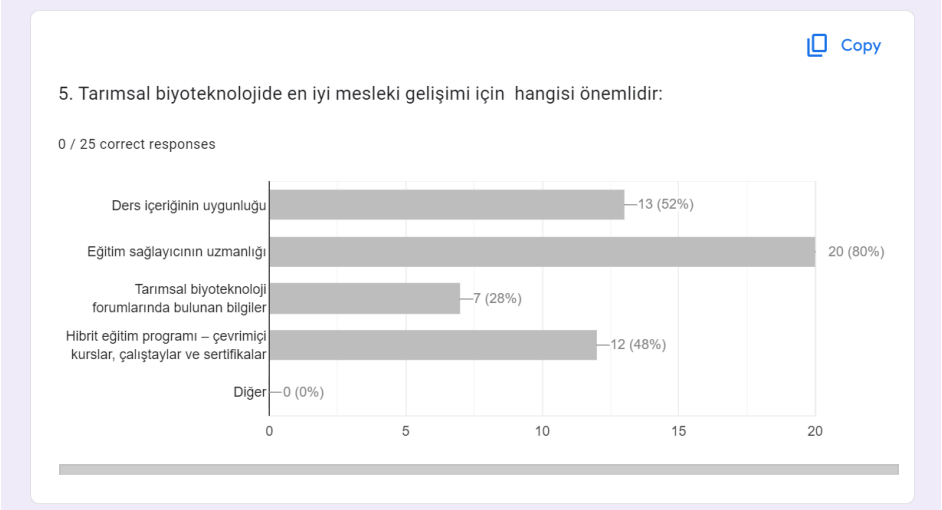
Q4



For professional development, face-to-face theoretical and applied courses were the most attractive to the participants (80%).

Q5



For the best professional development, 80% of the participants declared that the expertise of the trainer mattered.

Section 5

This section is dedicated to career development and mentorship.

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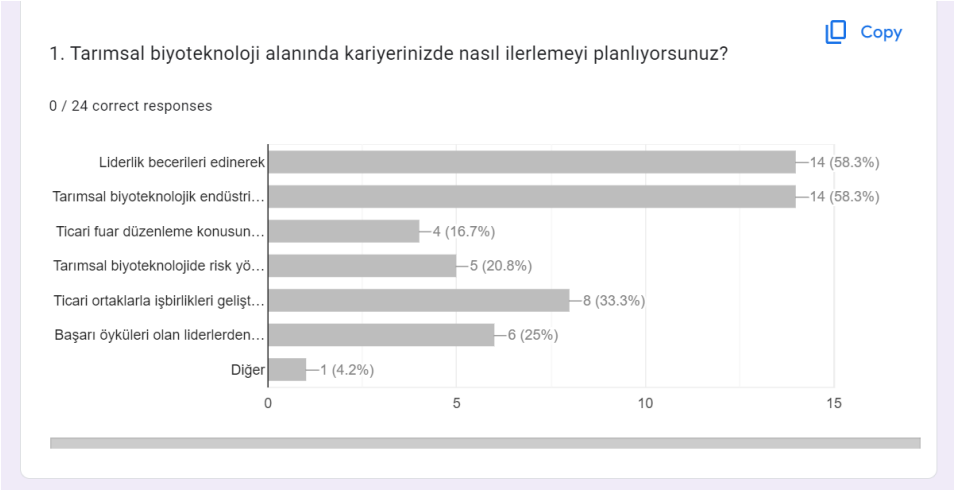
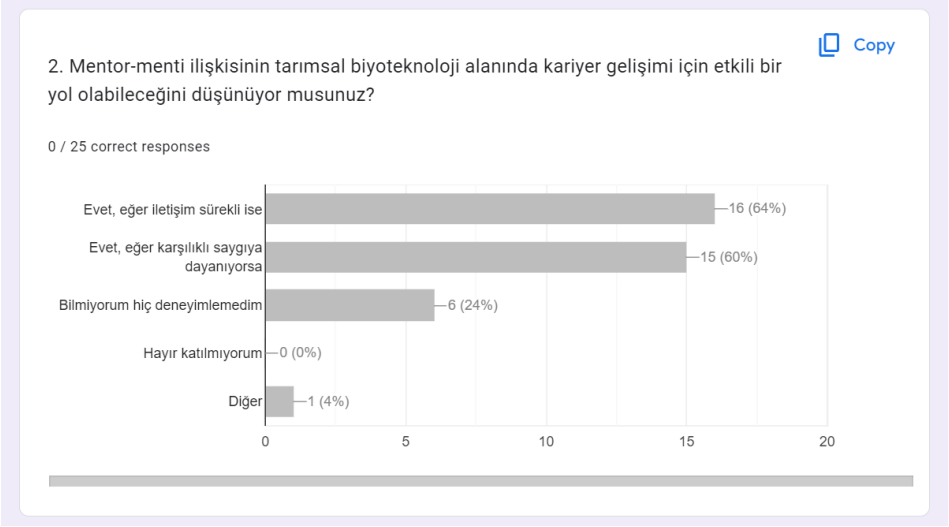
Q1



To the question “How do you plan to make progress in your career?”, 58,3% of the participants gave an answer “by gaining leadership skills” and “by gaining skills to organise works in agro-biotechnology field”. 33.3% stated that they would like to collaborate with other trading partners.

Q2



The participants declared that they considered mentor-mentee relationship could be effective for career development in agro-biotechnology if the relationship is sustainable (64%), and if the relationship depends on mutual respect (60%).

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Analysis and Discussion

Conclusion

5 main takeaways from the analysis.

In Türkiye sample:

1- The most of the participants were agro-biotech undergraduate students 15 people (60%).
2- 19 participants declared that they worked or wanted to work in plant biotechnology field which is 76% of the responders.
3- LinkedIn was the most preferred social platform (marked by 88% of the participants) for job seeking and networking.
4- All participants declared that gaining new skills in agricultural biotechnology field is a way to develop knowledge for job seekers to increase their chances in agricultural biotechnology.
5- Participants use a diversifying range of resources to learn about the new trends in agro-biotechnology. The most used way was “reading the scientific publications about the new trends in agro-biotechnology (84%).

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