



D 1.2 Combined report from project's Summer Schools July/2023

**WP 1 Upscaling the capacity of Early-Stage Researchers
(ESRs) and Experienced Researchers (ERs)**



Funded by
the European Union

PROJECT SUMMARY

FOOD SENSORY SCIENCE RESEARCH.

The project aims is to improve the knowledge, skills, and competencies of the research and admin staff of UPWr in the field of the sensory evaluation of food and consumer behaviour with special attention to newly designed innovative processed food products with healthrelated properties. The project also aims to establish an international network among leading universities and centres in food sensory analysis to prepare competitive research applications/proposals within the EU and global challenges (UN SDGs).



The project aims to establish an international network of leading universities, centres in food sensory analysis and innovation consultants (SDU, UMH, BCC, REDINN) to step up in science and research, improving managerial and administrative capacities, networking skills and strategies to engage society and citizens as well as public authorities and private businesses, and regional and European institutions. SEASONED will enable FBFS and its partners, leading research institutions from Spain, Denmark, and Italy, to co-develop a capacity building programme to share and integrate expertise and skills to access new research avenues and develop new approaches to prepare competitive research applications within the EU and global challenges (Green Deal, UN SDGs). Implementing Gender Balance Monitoring, Open

Science, Citizen's Engagement, FAIR data research principles, and monitoring of Key Performance Indicators project will create short-to long-term societal, scientific, and economic impacts. Ultimately, UPWr's ambition is to develop and reach the top of the sensory evaluation centres' competencies and become the leading centre of excellence in Central and Eastern Europe (CEE). As a result, at the end of the project and far beyond the project duration, UPWr wants to establish a Consumer Behaviour Centre (CBC). SEASONED CBC will be a unique platform dedicated to scientists (ESRs including the MSc and PhD students, ERs, other scientists from national and international units), business partners and consumers from this part of Europe.

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SEASONED Consortium			
Participant Number	Participant Organisation Name	Short Name	Country
1	UNIwersytet Przyrodniczy we Wrocławiu	UPWr	PL
2	Syddansk Universitet	SDU	DK
3	Universidad Miguel Hernández de Elche	UMH	ES
4	Basque Culinary Center Fundazioa	BCC	ES
5	REDINN - SRL	REDINN	IT

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¹ PU – Public, fully open (Deliverables flagged as public will be automatically published in CORDIS project's page), SEN – Sensitive (limited under the conditions of the Grant Agreement Consortium and the EC)

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List of Abbreviations and Acronyms	
FBFS	Faculty of Biotechnology and Food Sciences
UPWr	Wrocław University of Environmental and Life Sciences
CEE	Central and Eastern European
GA	Grant Agreement
CA	Consortium Agreement
BCC Inn	Basque Culinary Center - Innovation
WP	Work Package
EU	European Union
CSA	Coordination and Support Actions

1. Introduction

The SEASONED project aims to optimize the knowledge, skills, and competencies of the administrative and research staff of the Faculty of Biotechnology and Food Sciences (FBFS) of Wrocław University of Environmental and Life Sciences (UPWr) in the areas referring to the sensory evaluation of foods and consumer behavior, specifically in those newly designed processed food products with characteristics linked to health.

The present deliverable is a summary report that describes the activities developed during the Summer Schools organized by UMH as a part of work package WP1: Upscaling the capacity of Early-Stage Researchers (ESRs) and Experienced Researchers (ERs). The main objective of WP1 is to create a high-performing community, public awareness of the project and increase the visibility and impact of the consortium, UPWr, FBFS, SEASONED project and CSA program in the EU. One of the actions deployed to achieve that general aim objective was to develop two Summer Schools within project, which served as a tool to enthuse the food-related community to consider sensory science in any research activity.

2. First Summer School (July 2023)

In this activity, participants were taught which are the basic sensory tests (discriminative, descriptive and affective) that are applied when carrying out sensory studies, whether with a specialized panel or for consumer studies.

The Summer School was held at the facilities of the Miguel Hernández University of Elche, in Orihuela-Alicante (Spain) on July 10th, 11th, 12th, 13th and 14th, 2023. The participants had theoretical classes to then be applied in practical cases such as tasting sessions for different food products on the market, including olive oil, almonds, and wine, or for new products developed such as bio-snacks.

During the event, professional opportunities were also held where very important companies such as *Carmencita*, *Calconut* and *Chocolates Valor* participated.

2.1. First Summer School – activity program

The summer school was held in 5 days with a total duration of 26 hours. The program of activities for the event was developed as follows:

- ❖ Registration and Welcome to the Summer School: Welcome and opening words; introduction of the SEASONED project and mentors; presentation of the Summer School activities.
- ❖ Work sessions: Time for participants to work on the proposed activities. Mentors and speakers were available for guidance and support during these sessions.
- ❖ Career opportunities companies: Talks and sessions from experts that provided participants with valuable insights.
- ❖ Closing Ceremony: Recognition of the participants and closing words.

The activities developed during the 5 days were divided into work sessions as shown below (**Table 1**): During the day there was coffee, drinks and food so that the participants could interact with each other.

On the first day, parallel to the Summer School, a General Assembly was held. The schedule is shown below (**Table 2**).

Table 1. *First Summer School activities program*

Day 1: 10th July 2023 (Monday)		
Theory and Practical sessions (Tudemir building, rooms 1.6 & 1.7)		
9.00 – 9.30	Registration and welcome to UMH (30')	[UMH], Àngel Carbonell & Esther Sendra
9.30 – 11.00	Organoleptic attributes and PROPERTIES (90')	[UMH], Àngel Carbonell
11.00 – 11.30 (30')	Coffee break in Oriol building, cafeteria	
11.30 – 12.30	Objective methods, DISCRIMINATIVE Case study, vegan ice-creams (60')	[UMH], Luis Noguera
12.30 – 13.30 (60')	Objective methods, DESCRIPTIVE Case study, pomegranates + juice (60')	[UMH], Àngel Carbonell
13.30 – 15.00 (90')	Lunch Break in Tudemir building, cafeteria	
15.00 – 16.30	Case study, OLIVE OIL (90')	[IRTA], Agustí Romero
16.30 - 17.30	Consumer study, ALMONDS (60')	[IRTA], Leontina Lipan

Day 2: 11th July 2023 (Tuesday)		
Theory and Practical sessions (Tudemir building, rooms 1.6 & 1.7)		
9.30 – 11.00	Subjective methods, ACCEPTANCE, PREFERENCE (90')	[UMH], Luis Noguera
11.00 – 11.30 (30')	Coffee break in Oriol building, cafeteria	
11.30 – 12.30	Beyond liking – EMOTIONS (60')	[BCC], Maria Mora
12.30 – 13.30	ONLINE studies (60')	[SDU], Christina Rune
13.30 – 15.00 (90')	Lunch Break in Tudemir building, cafeteria	
15.00 – 16.30	Dissemination (90')	[UMH], David López
16.30 - 17.30	Students, quest. design, potential application Summary of the day (60')	[All], students + Researchers

Day 3: 12th July 2023 (Wednesday)**Theory and Practical sessions (Tudemir building, rooms 1.6 & 1.7)**

9.30 – 11.00	Sensory in NEW PROD DEVELOPMENT Sensory in QUALITY CONTROL (90')	[BCC], Laura Vázquez
11.00 – 11.30 (30')	Coffee break in Oriol building, cafeteria	
11.30 – 12.30	Case study ALMOND and TURRÓN (comparison of "in company" versus PDO/ENAC) (60')	[BCC], Laura Vázquez [UMH], Leontina Lipan & Ángel Carbonell
12.30 – 13.30	Case studies, bio-snacks, bio-spreads & bio-beverages, part I (60')	[UPWr], Agnieszka Kita, Malgorzata Korzeniowska, Anna Michalska [UMH], Ángel Carbonell [BCC], Laura Vázquez
13.30 – 15.00 (90')	Lunch Break in Tudemir building, cafeteria	
15.00 – 16.30	Career opportunities (90')	[SDU], Christina Rune
16.30 - 17.30	Round table with companies* (60')	[UMH], Ángel Carbonell

*Carmencita, Chocolates Valor, Calconut

Day 4: 13th July 2023 (Thursday)

9.30 – 12.00	Travel to Alicante by bus (Casino de Orihuela) Central market	[All]
12.00 – 14.00	Quality control in PDO Alicante Wine (120')	[UMH], Luis Noguera, Hanán Issa Issa, Ángel Carbonell
14.30 – 16.30 (120')	Lunch Break (paid by UMH within SS activities) Rice & Bones (https://ricebonesbar.com/), restaurant in Alicante Chef David Ariza	
17.00	Travel to Orihuela by bus (meeting point to be announced)	

Day 5: 14th July 2023 (Friday)**Theory and Practical sessions (Tudemir building, rooms 1.6 & 1.7)**

9.30 – 11.00	Case studies, bio-snacks, bio-spreads & bio-beverages, part II (90')	[All], Students + Researchers
11.00 – 11.30 (30')	Coffee break in Oriol building, cafeteria	
11.30 – 12.00	Summary of previous case studies (30')	
12.00 – 13.30	Discover WINES OF ROMANIA (90')	[Romania], Marinela Ardelwan
13.30 – 15.00 (90')	Lunch Break in Tudemir building, cafeteria	
15.00 – 16.15	Summary, doubts (60') Closing session (15')	[UMH], Ángel Carbonell & Esther Sendra

Table 2. Program of activities of the General Assembly

Day 1: 11th July 2023 (Tuesday) -		
Executive Board meeting (Oriol building: Conference room)		
9.00 – 9.30	Registration and welcome to UMH	[UMH], Esther Sendra
9.30 – 10.15	Executive Board (EB) meeting Task 6.5 (45')	[EB members only]
10.15 – 11.00	General Assembly – part I Welcome by the host (15 ') WP status update, WP leaders 2 × 15' (30')	[ALL] [UMH], Esther Sendra WP1: SDU WP2: UMH
11.00 – 11.30 (30')	Coffee break in Oriol building, cafeteria	
11.30 – 12.30	General Assembly – part II WP status update, WP leaders 4 × 15' (60')	WP3: BCC, first results by UPWr WP4: REDINN WP5: UPWr WP6: UPWr
12.30 – 13.30	WP3 update and planning (60')	UPWr + all members
13.30 – 15.00 (90')	Lunch Break in Tudemir building, cafeteria	
15.00 – 16.30 (90')	Dissemination	[UMH], David López
20.00 – 22.30	Gala dinner, Orihuela (paid by UMH within GA activities)	

2.2. Participants profile

The first Summer School had the participation of 35 among students from the different universities and companies participating in this project. There were 21 students in total distributed as follows: 10 from the UPWr (Poland), 1 from the SDU (Denmark), 2 from the BCC (Spain) and 8 from the Miguel Hernández University (Spain). Representation between genders was balanced. In addition, certificates of attendance were given to participants at the end of the Summer School.

Personal details of attendees that are omitted can be obtained upon request.

2.3. Invited Speakers

The whole event was advised by the different members of the SEASONED consortium team, who have extensive experience in the areas of sensory science or food science: **Agnieszka Kita, Ph.D. (UPWr); Małgorzata Korzeniowska, Ph.D. (UPWr); Anna Michalska, Ph.D. (UPWr); Laura Vázquez-Araújo, Ph.D. (BCC); Davide Giacalone, Ph.D. (UDE); Luis Noguera-Artiaga, Ph.D. (UMH); and Ángel A. Carbonell Barrachina, Ph.D. (UMH).**

Additionally, the Summer School had the participation of Dr. Agustí Romero from IRTA (Institute of Agri-Food Research and Technology) and representatives of the companies: *Carmencita*: Pablo Jurado and Alejandra Martínez, of *Chocolates Valor*: Nuria López, and of *Calconut*: Nerea Ruano; which gave inspiring presentations on various topics and at the same time offered mentoring to the participants.

2.4. Description of activities

The topics and activities developed during the Summer School are described below:

- ❖ Day 1. Introduction to the senses and sensory properties. Explanation of discriminative and descriptive sensory tests, examples of application and processing of the results. Application of these tests in different practical cases. Specifically, the descriptive sensory test was used for olive oil carried out by Dr. Agusti Romero from IRTA and the affective sensory test in this case for almonds.



- ❖ Day 2. Explanation of the sensory-affective test, design of the questionnaires, explanation of the different scales and processing of the results.

Relationship between the food industry and emotions and online studies. Methods used to measure emotions and understand the drivers of consumption to develop online studies. Explanation of a practical case and analysis of results.

A practical session called PECHAKUCHA was held where participants had to make a short presentation explaining the lines of work. One of these presentations was by doctoral student Alan Gasiński whose line of work was: "Technological parameters influencing quality of the special malts from the legume seeds and potential of their use in the food industry".



- ❖ Day 3. Explanation of some methods generally used for quality control in the food industry. Sensory analysis methods used for the development of new products. Case study: implementation of a quality control program in the brewing industry. Likewise, these methods were discussed for the creation of three food categories: bio-drinks, bio-spreads and bio-snacks that will be developed during the SEASONED project.



Almond and nougat case study application. Comparison between companies Vs PDO (Protected Designations of Origin) / ENAC (National Accreditation Entity), differences in the application of sensory science for quality control.

Participation of three companies belonging to the food industry in Alicante (Spain). The representative of each company shared his experience on the use of sensory evaluation that they apply in quality controls. These companies were *Chocolates Valor*, the largest Spanish company that works with chocolate; *Carmencita*, the largest Spanish company that works with spices; and *Calconut*, a very distinguished company in the supply of nuts.



- ❖ Day 4. All participants visited the central market of Alicante to learn about the diversity of food products and matrices.



Then, researchers visited the regulatory council of the Alicante protected designation of origin, where a wine tasting session was held. The participants were explained how the wines are evaluated by the tasting panel (this panel was selected, trained, and validated by the UMH team), and the protocols that must be followed for said evaluation.



- ❖ Day 5. All participants had the opportunity to apply all the knowledge acquired during the sessions developed in the Summer School to develop strategies to carry out the studies with bio-snacks, bio-spreads, and bio-drinks. A tasting of wines from the 7 regions belonging to Romania was held, which took place at the facilities of the Miguel Hernández University, this tasting session was directed by Marinela Ardelean.



2.5. Conclusions

During the first Summer School, participants were explained the different basic sensory methods used in sensory analysis and their applications with practical cases. Therefore, participants are prepared to participate in the next Summer School which will be focused on advanced sensory methods.

3. Second Summer School (June 2024)

The second Summer School focused on advanced sensory methods as a well as on novel, whether with a specialized panel or for consumer studies.

The Summer School was held at the facilities of the University of Southern Denmark, in Odense (Denmark) between 24-28 June 2024. The Summer School included a mix of lectures and practical sessions facilitated by SEASONED partners, as well as guest lectures from other sensory experts and visits to companies working with sensory science.

3.1. Second Summer School – activity program

The summer school was held over 5 consecutive days with a total duration of 27,5 hours (35 including lunch and coffee breaks). The program of activities for the event was developed as follows:

- ❖ Registration and Welcome to the Summer School: Welcome and opening words; introduction of the SEASONED project and mentors; presentation of the Summer School activities.
- ❖ Lectures and practical sessions: Lectures and practical sessions on specific sensory methods and/or case studies. Mentors and speakers were available for guidance and support during these sessions.
- ❖ Field trip: Visits to nearby companies to provide participants with valuable insights into industrial applications of sensory and consumer science.
- ❖ Closing Ceremony: Recognition of the participants, feedback and closing words.

The activities developed during the 5 days were divided into work sessions as shown below (**Table 3**): During the day there was coffee, drinks and food so that the participants could interact with each other.

Table 3. *Second Summer School activities program***Day 1: 24th June 2024 (Monday)**

Day 1 – Analytical methods		
Theory and practical sessions (Rooms U170, U177)		
9.00 – 10.00	Registration and welcome to SDU	
10.00 – 11.00	Mutual presentation and Introduction to the Summer School	[SDU], Davide Giacalone
11.00 - 11.30	Coffee Break	
11.30 - 13.00	Discrimination testing Data analysis – power of sensory discrimination testing, signal detection theory	[UMH] Luis Noguera
13.00 – 14.00	Lunch break	
14.00 – 15.30	Descriptive analysis Rapid sensory methods CATA, RATA, Projective mapping, PSP, Flash profiling, Word association, etc.	[SDU] Davide Giacalone
15.30 – 16.00	Coffee Break	
16.00 – 17.30	Descriptive analysis Practical case studies using CATA and PM	[SDU] Davide + Christina + Nazarena

Day 2: 25th June 2024 (Tuesday)

Day 2 – Affective methods		
Theory and practical sessions (Rooms U170, U177)		
9.30 – 11.00	Affective Beyond liking (emotions, conceptualizations, situational appropriateness)	[SDU] Davide Giacalone
11.00 – 11.30	Coffee Break	
11.30 – 13.00	Affective Product optimization methods	[SDU] Davide Giacalone
13.00 – 14.00	Lunch break	
14.00 – 15.30	Affective Extrinsic vs intrinsic products aspect Individual differences, clustering and preference mapping	[SDU] Nazarena Cela (UNISG)
15.30 – 16.00	Coffee Break	
16.00 – 17.30	Research <u>presentation</u> Practical case studies how to use sensory in research <ul style="list-style-type: none"> - New product development - (SEASONED T 3.1) - Part 1: product development - Part 2: consumer study 	[Part 1: <u>UPWr</u> , Part 2: BCC] <u>UPWr: Joanna Kolniak-Ostek</u> BCC: Maria Mora

Day 3: 26th June 2024 (Wednesday)

Day 3 - Field trip		
Field trip – Visit to nearby companies working with sensory and consumer <u>science</u> MEETING POINT 8.30 IN FRONT OF THE MAIN ENTRANCE ENGINEERING BUILDING		
08.45-10.00	Travel to Vejle	[ALL]
10.00-12.00	Visit at Food Innovation House, Dandy Business Park A/S	[ALL]
12.00-13.00	Lunch break (paid by SDU within SS activities)	
13.30-15.00	Visit at <u>Fertin</u> Pharma A/S	[ALL]
15.00-16.15	Travel to Odense	[ALL]

Day 4: 27th June 2024 (Thursday)

Day 4 - Advanced topics and research presentations		
Theory and practical sessions (Rooms U170, U177)		
9.30 – 11.00	Advanced topics Food pairing and context effects	[BCC] Maria Mora
11.00 - 11.30	Coffee Break	
11.30 - 13.00	Advanced topics Practical planning of sensory and consumer tests	[SDU] Christina Rune
13.00 – 14.00	Lunch break	
14.00 – 15.30	Research <u>presentation</u> Sensory and consumer approaches to valorization of food side-streams to improve sustainability of food systems	[Guest lecture] Nazarena Cela (University of Gastronomic Science, <u>Pollenzo</u> , Italy)

Day 5: 28th June 2024 (Friday)

Day 5 – Advanced topics and research presentations		
Theory and practical sessions (Rooms U170, U177)		
10.00 – 11.15	Advanced topics Novel technologies and digital sensory science	[Guest lecture] Francisco Barbosa Escobar (Copenhagen Business School)
11.15 - 11.45	Coffee Break	
11.45 - 13.00	Advanced topics Temporal methods in sensory science	[Guest lecture] Vladimir Vietoris (Slovak University of Agriculture)
13.00 – 14.00	Lunch break	
14.00 – 15.00	Summary of summer school <u>Feedbacks</u> and closing remarks	[SDU] Davide Giacalone

3.2. Participants profile

The second Summer School included 30 participants which included both students, staff from the different partners in SEASONED, and guest lecturers.

The students were 17 in total (11 women, 6 men), including 10 from UPWr (Poland), 3 from UMH (Spain), 3 from SDU and one participant from University of Porto (Portugal). Personal details on the attendees are omitted can be obtained upon requested.

Certificates of attendance were given to participants at the end of the Summer School.

3.3. Invited Speakers

The summer school lectures and training sessions event were facilitated by different sensory and consume experts withing seasoned, specifically (in order of appearance): **Davide Giacalone (SDU)**, **Luis Noguera (UMH)**, **Maria Mora (BCC)**, **Joanna Kolniak-Ostek (UPWr)**, and **Christina Rune (SDU)**.

In addition, the summer school as well as by three guest lecturers: **Nazarena Cela (University of Gastronomic Science, Pollenzo, Italy)**, **Francisco Barbosa Escobar (Copenhagen Business School, Copenhagen Denmark)**, and **Vladimir Vietoris (Slovak University of Agriculture, Nitra, Slovakia)**.

Finally, the company visits were facilitated by company representatives, COO Gyda Bay for Food Innovation House, and Principal Scientist Pia Ingholt Hedelund for Fertin Pharma.

3.4. Description of activities

The topics and activities developed during the Summer School are described below:

- ❖ Day 1. The first day had a focus on advanced topics in analytical sensory methods (discriminative and descriptive). It started with a mutual introduction and presentation of the summer school to the participants. This was followed by a lecture on advanced topics in discrimination testing covering e.g., signal detection theory and practical case studies on how to decide the correct sensory discrimination testing method based on different use context. The day continued with a lecture on rapid descriptive methods. Faster/cheaper alternatives to conventional descriptive analysis were discussed both theoretically and with regards to practical considerations. The day closed with a practical exercise where the students tried two fast sensory methods in practise: projective mapping and check-all-that-apply, followed by a discussion of the results and of the differences between the two methods.



- ❖ **Day 2.** The theme for the second day was advanced topics in affective sensory methods. The lectures focused on affective responses beyond liking, such as emotions, conceptual associations and product-to-context fit, as well as on how to use sensory methods to optimize products that maximize consumer acceptance using tools such as conjoint analysis, response surface methodology, penalty analysis, and more. The afternoon continued with a session on extrinsic vs intrinsic aspects in consumer tests and one focused on individual differences in sensory and consumer studies and how to account for that heterogeneity analytically using tools such as clustering and preference mapping. The day ended with a session on how to use sensory science in a new product development context where the students also tried some of the products developed in SEASONED WP3 (potato chips enriched with apple pomace, mushroom and bee pollen).



- ❖ **Day 3.** In day 3 we took a break from traditional lectures and took a field trip to visit two companies near SDU to meet with companies representatives and get a feeling for how to use sensory and consumer in the real world. The first visit was at Food Innovation House (FIH) whereas the second visit was at Fertin Pharma A/S. Both companies are located in the municipality of Vejle in the Southern Denmark Region. FIH is a business innovation hub focusing on food containing a number of specialized facilities (e.g., a demo supermarket, an experimental kitchen, a research restaurant, a sensory lab, a photo studio) that can support an innovation process from product idea to commercialization. There, we held a workshop on alternative proteins and on how to increase consumer acceptance of more sustainable protein sources such as pulses, insects and cultivated meat, facilitated by COO Gyda Bay from FIH. In the afternoon, we visited Fertin Pharma where lead sensory scientist Pia Hedelund gave a presentation about how they use sensory science in their work, which focuses oral and intra-oral delivery systems for nutraceutical and pharmaceutical products. This was followed by a Q&A session and a visit to their sensory laboratory.



- ❖ Day 4. Day 4 focused on food pairing and other context effects in sensory science, followed by a session on practical planning of sensory and consumer tests. After lunch, we had a guest lecture from Nazarena Cella (from University of Gastronomic Science in Pollenzo, Italy) who gave a presentation from her own research on how to use sensory and consumer approaches to valorise different food side-streams to improve sustainability of food systems.



- ❖ Day 5. The last day was dedicated to additional advanced topics with two additional guest lecturers. The first one was Dr. Francisco Barbosa from Copenhagen Business School, who gave a lecture on novel technologies in sensory science, such as virtual/augmented/extended reality and biometric measurements. The second guest lecture was by Associate Professor Vladmir Vietoris from Slovak University in Agriculture in Nitra (Slovakia) who taught a class about temporal methods in sensory science, such as Temporal Dominance of Sensation, Temporal-CATA, Time-Intensity and others. The students also got to try the method in practice and were introduced to ad-hoc software tools for data collection and analyses. The day concluded with a session with feedbacks from the participants about the summer School (Appendix 2) and closing remarks from the organizers, after which the participants were given their certificate of attendance.



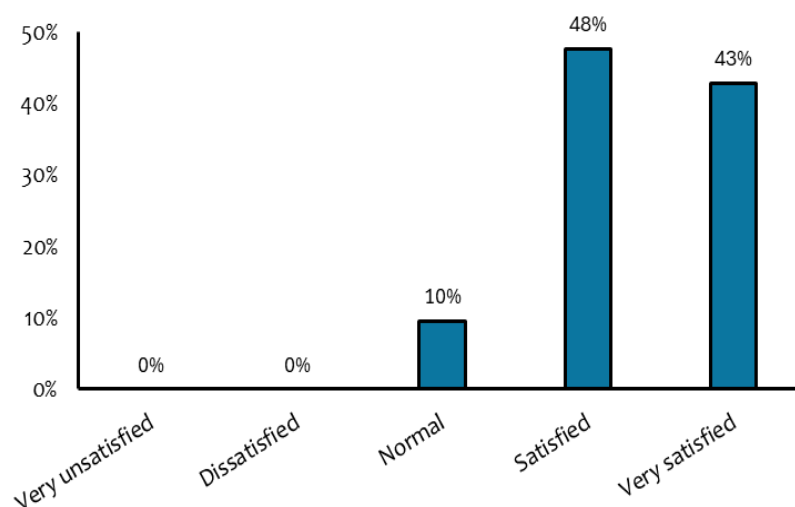
3.5. Conclusions

The second summer school build on the experience of the first one and introduced the students to a range of advanced topics in sensory and consumer science. The feedback was generally very positive, and the students felt it broadened their knowledge and skills in sensory science.

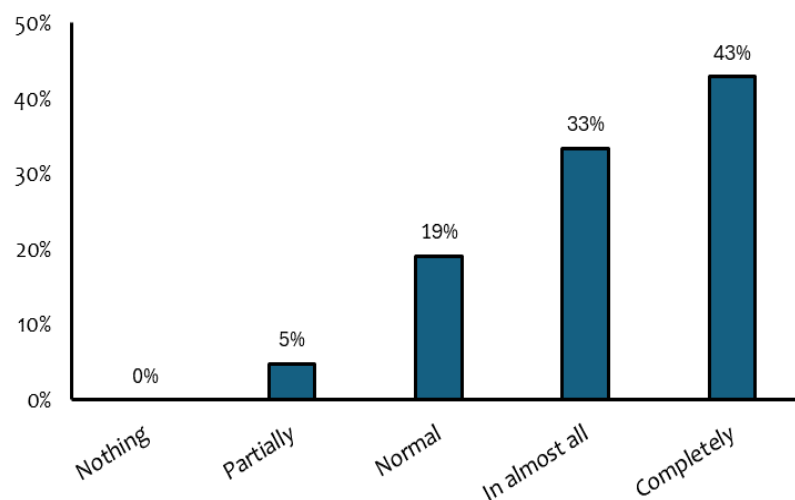
APPENDIX A – Participants' feedback on the first Summer School (n=21)

OVERALL EXPERIENCE

How would you rate your overall satisfaction with the summer school?

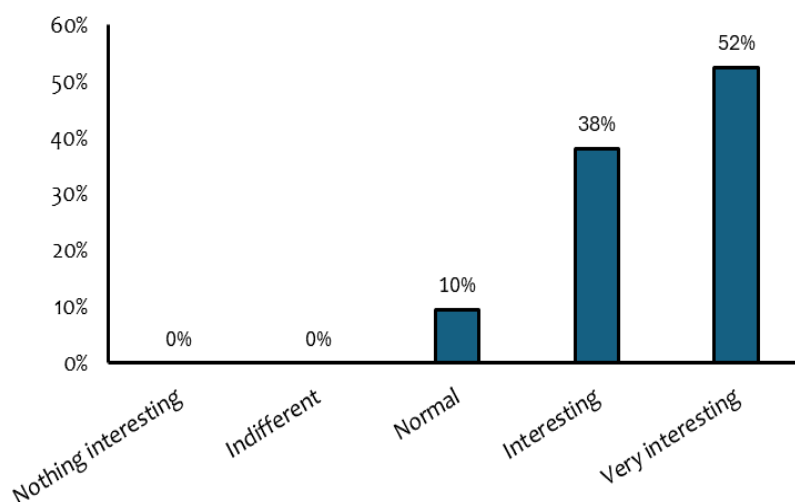


Did the course meet your expectations?

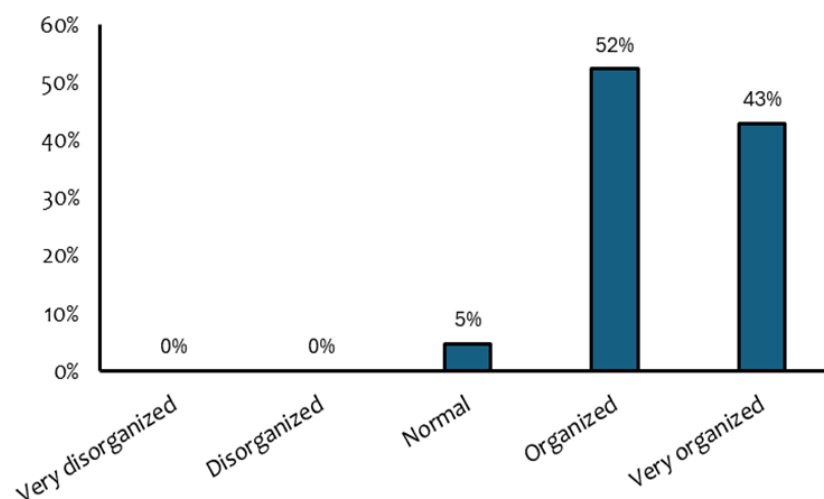


COURSE CONTENT

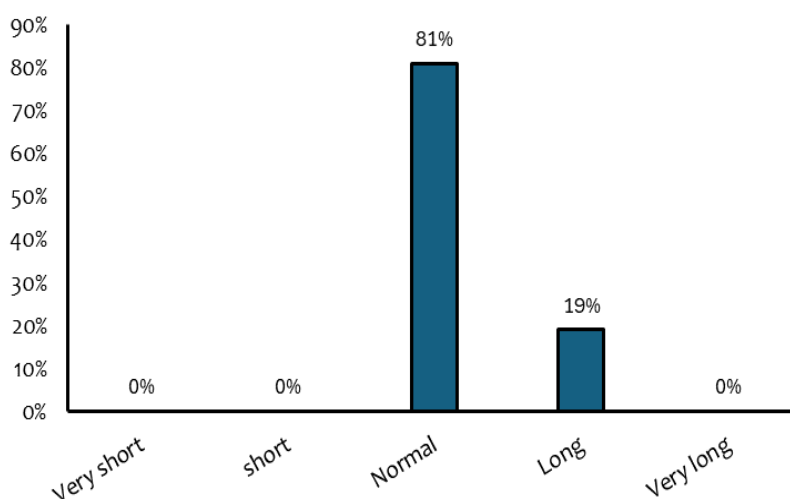
Was the course content important and useful for your needs?



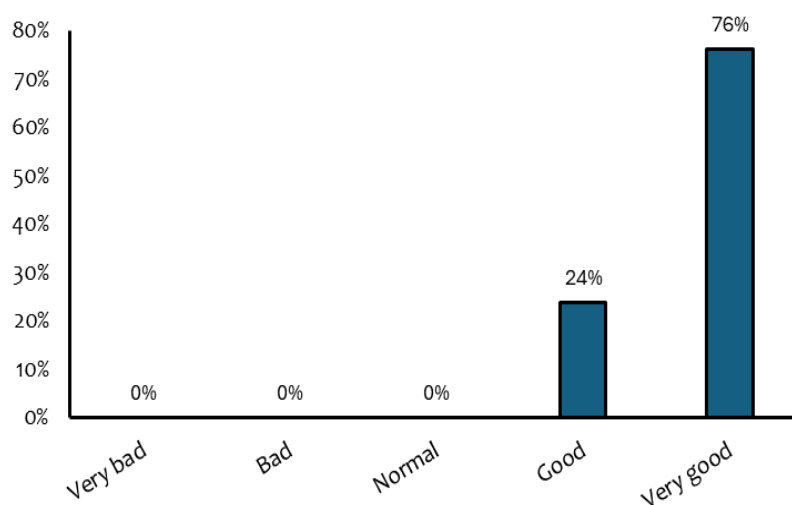
Was the course material well organized and easy to follow?



Were the duration of each of the sessions taught during the course adequate?

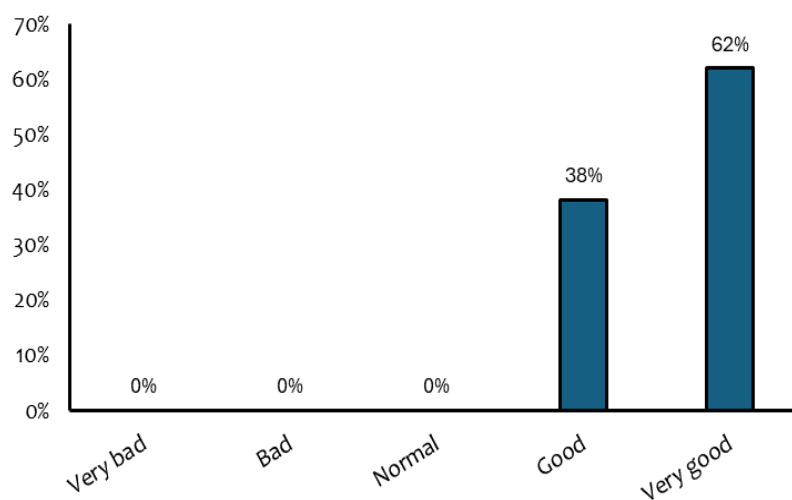


How would you rate the tutors' ability to explain the course topics?

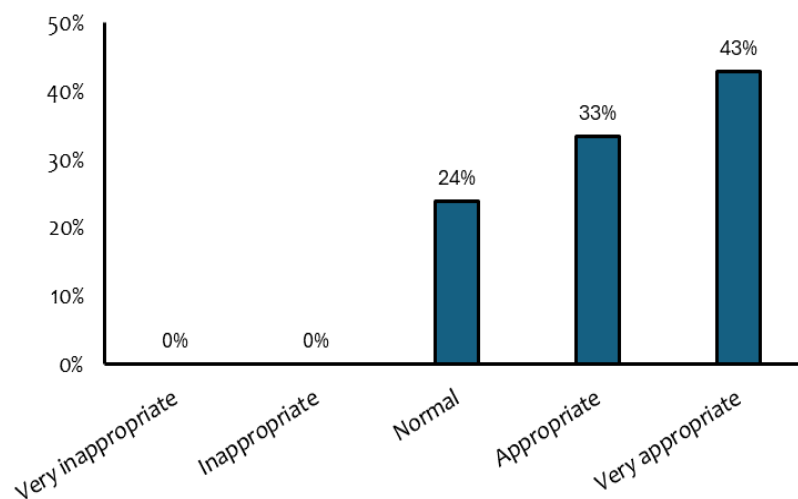


ORGANIZATION AND INSTALLATIONS

How would you rate the overall organization of the course? (registration, communication, etc.)



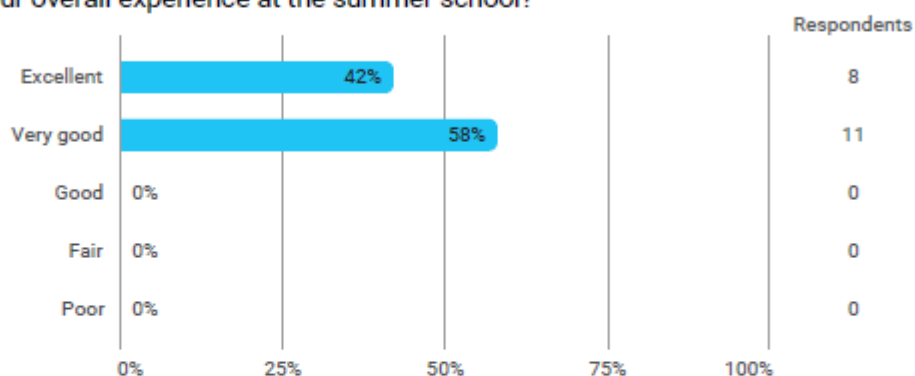
Were the installations and resources provided appropriate?



APPENDIX B – Participants' feedback on the second Summer School

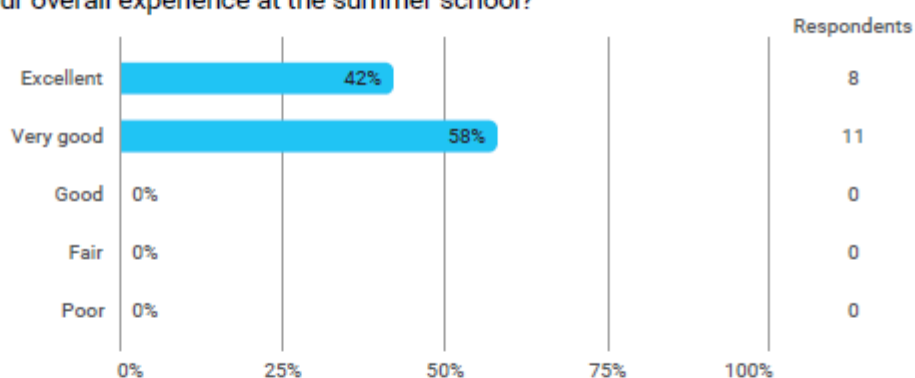
OVERALL EXPERIENCE

How would you rate your overall experience at the summer school?



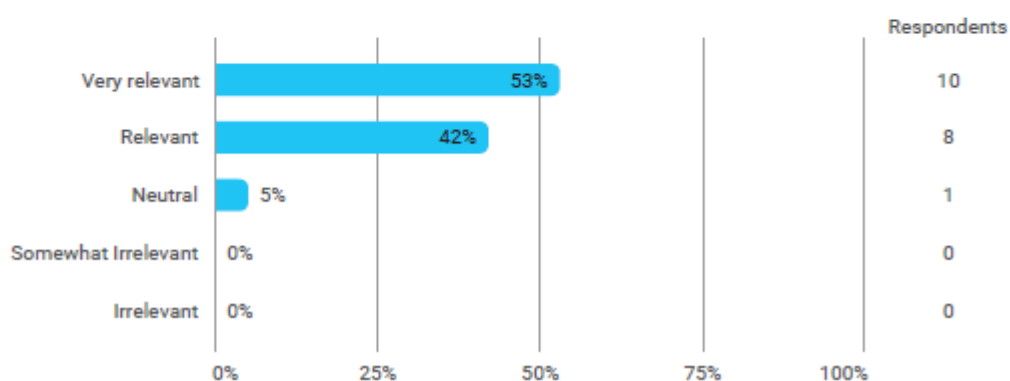
OVERALL EXPERIENCE

How would you rate your overall experience at the summer school?

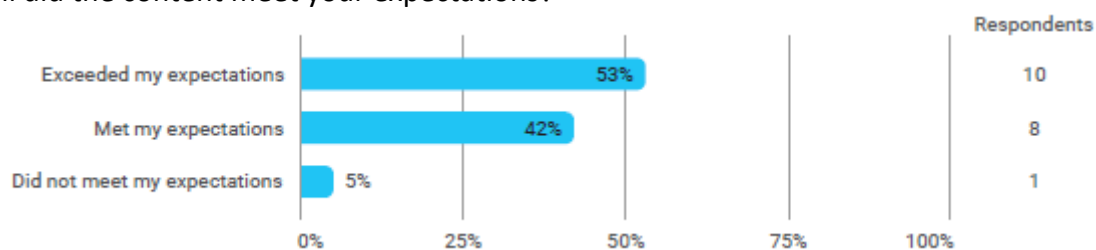


CONTENT AND CURRICULUM

How would you rate the relevance of the topics covered during the summer school?

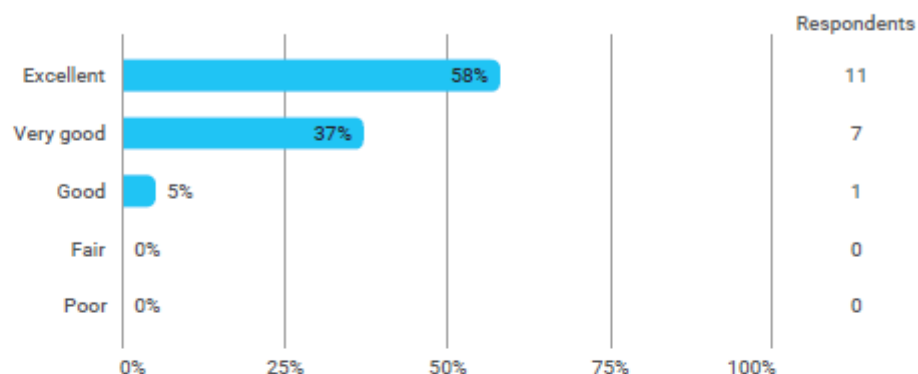


How well did the content meet your expectations?



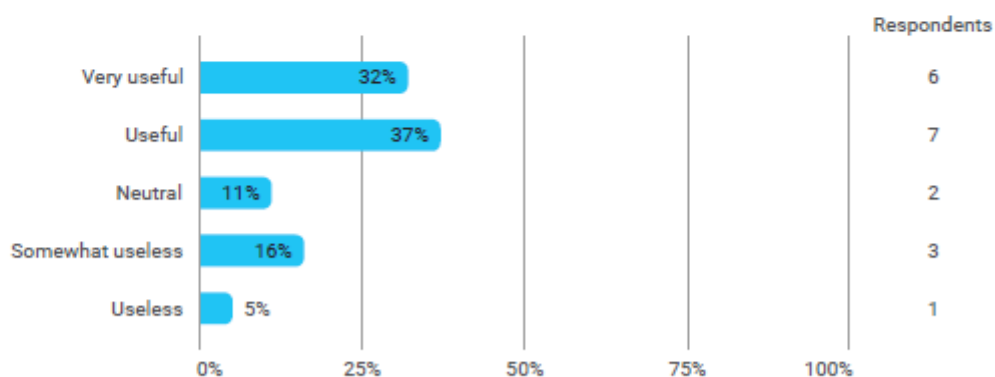
INSTRUCTORS AND PRESENTERS

How would you rate the effectiveness of the instructors and presenters?



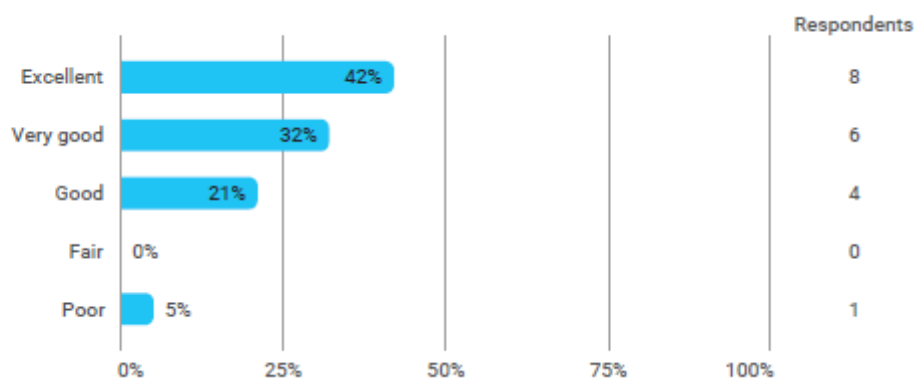
PRACTICAL SESSIONS AND FIELD TRIP

How useful were the practical sessions and the field trip to complement the theory?



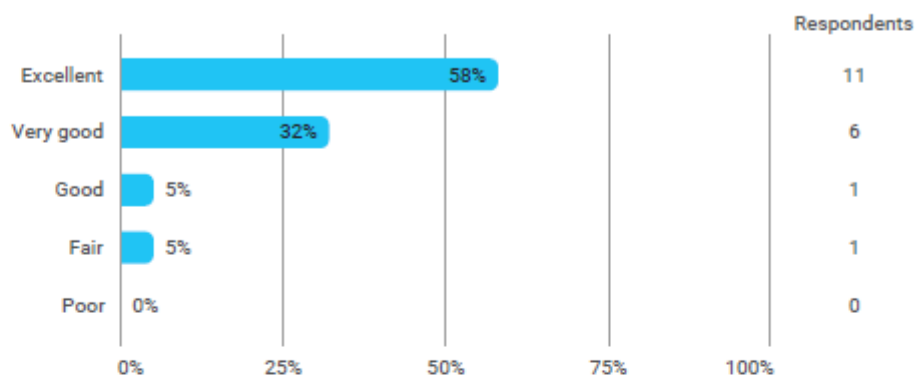
NETWORKING AND INTERACTION

How would you rate the opportunities for networking and interaction with peers and instructors?

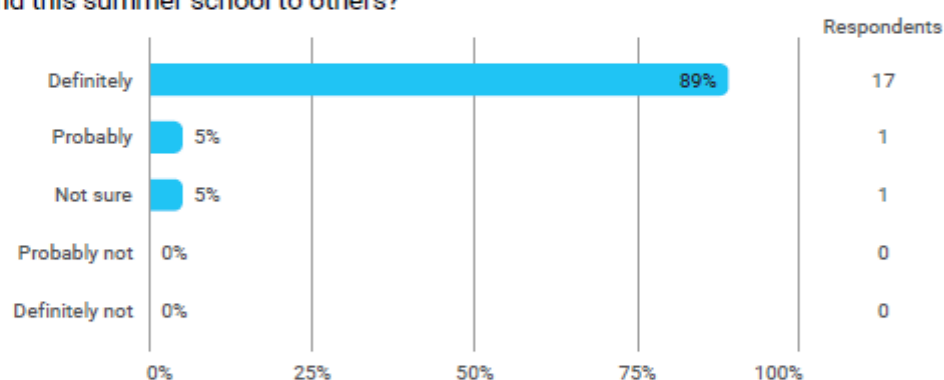


LOGISTIC AND ORGANIZATION

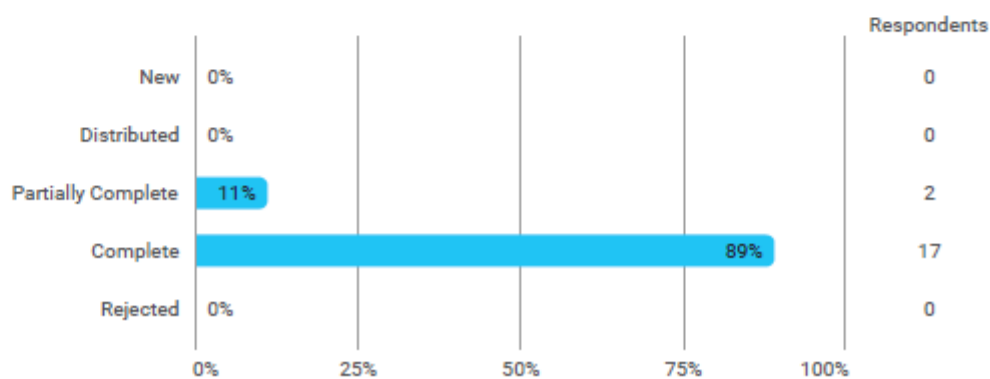
How would you rate the organization and logistics of the summer school?



Would you recommend this summer school to others?



Overall Status



What were the most valuable aspects of the summer school for you?

- Lectures
- Practical exercises
- Quality of professors
- New methodologies
- To learn more about sensory methods
- Lectures were very accurate with the topic of the Summer School
- Topic about sensory perception, topic about temporal methods
- Advanced methods in sensory analysis,
- Practical exercises
- I can use the sensory techniques that I have learned here in the summer school for my PhD work.
- Lots of interesting people with different backgrounds.
- Explore more about different sensory methods with theoretical and practical approaches.
- The theory of different methods
- I have learned a lot, the context is very interesting
- The guide for use of the different statistical and method tools in sensory affairs
- The most powerful aspects are learning new methods, e.g. CATA
- CATA and RATA methods and partly as temporary methods (useful)
- The combination of theory and case presentations that illustrate how the theory is utilized in real life
- The good topics

Were there any aspects of the summer school that you found less useful or enjoyable? If so, please explain.

- Everything was ok
- Food. I miss more food in experiments
- No
- No
- No
- Food, not enough of the practical work
- Nope
- I preferred more practical sessions. And the industry visit could be made better.
- Maybe too many hours per day. Could have been 2-3 more days with less hours per each
- N/D
- I enjoyed the novel technologies presentation, but I am not sure how to use it myself
- No
- Probably the new technologies, not for being useless, but it is a new methodology that needs to be more studied
- -
- Too much sandwiches :),
- I think that everything was fine, I really enjoyed this course
- As a Master's graduate, I haven't had any particular project to discuss when needed, so at times I wasn't sure what to talk about
- No

Were there any topics you felt were missing or should have been covered in more detail?

- No
- ..
- A bit more about practical applications in research
- Statistical analysis
- Emotional response
- No
- Information about products typically analysed in Denmark
- No
- No. Everything was clear.
- No
- I would add a little bit more of statistics and sensometrics to reinforce the practical knowledge of performing a sensory test
- No
- No
- About the uses of the different statistical and sensory evaluation method, it should be a good idea to include at the end a table
- with the cases where it is advised to be used and where they are not recommended, as a resume
- -
- It's hard to say, but I think that we need to learn more practical aspects of sensory science, more data evaluation and
- interpretation of the data
- Not sure, I don't think so
- No

Were the instructors and presenters knowledgeable and engaging?

- Yes
- Yes
- Very much
- Practical sessions were especially valuable
- Absolutely yes
- Yes, totally
- Yes, not if they had a lot of knowledge
- Yes
- Yes, all the instructors and presenters were knowledgeable and engaging.
- Yes very much.
- Absolutely
- Yes, it was nice with different presenters and topics. All seemed very qualified.
- Of course
- I think when they make the participant to do dynamics where they can practice the theory just presented
- Yes
- Yes, everyone to this really professional
- Yeah, I was very happy with the knowledge I gained from hearing both about the theory behind sensory methods and about the
- cases and project related to the topic of sensory
- Yes, very

What improvements could have been made to the practical sessions and/or the field trip?

- More practical point of view during field trip
- There no practical sessions
- Field trip could be more practical in the first part
- More practical activity during the field trip
- Nothing
- More could be seen, more practical work should be applied
- Idk
- Could have included some more practical sessions, especially in the first company.
- More practical sessions would be appreciated
- I would say more practical stuff on the performance of a sensory test. It would be funny to perform one test in a business environment.
- The time at Dandy food house could have been filled out. More practical session would be good as well.
- For me, it is importante add práctico session because the student learn quickly
- Since it was more about tools and products and not about laboratory technics or organization I think this area can be improved.
- I don't have idea
- Sorry but first part of field trip was boring, you can think about more excited factories of place to visit
- The time schedule was a bit odd in practice
- Field trip, first session was short

Did you make valuable connections during the summer school?

- Yes
- Yes
- Yes
- Yes
- Sure, it's interesting meeting people that works in the same topic as you do, or in a very related one
- Yes
- Not many
- Yes.
- Instructos excellent. Peers were communicating more in groups so interaction was not that eaay
- Absolutely
- Yes
- Yes
- Not now but it was more about my way of being and not about the dynamic
- Yes
- Yes, with pleasure
- I haven't really, but that is primarily due to being a bit of an outsider both as someone with not much experience within the area
- and no ongoing project to talk about.
- YeS

How could the networking opportunities be improved?

- Different people setting during dinner
- .
- More common activities in the afternoon bringing people together
- Students' challenge
- I don't really know
- More of the out-of-the-university sessions
- Better interaction between people from another groups, maybe some non formal extra activities for making friendships
- between students
- More group works, and thus more communication with different persons.
- Equal amount of participants from each university. Or maybe a social gathering before we begin
- Trying to organize the groups on experimental activities in a more randomised way to avoid groups of the same organisations
- Maybe groups with people from different countries to interact more with people we don't already know
- I don't know
- Maybe doing dynamics like hide in the places color tokens and form teams with the participants of the same color to promote
- integration during practical exercises
- -
- Maybe more games or works in pairs but mixed pairs
- Maybe mixing groups beforehand, so there will be more opportunities for the students to be outside of their usual groups.
- Yes

Was the duration of the summer school appropriate?

- Yes
- Yes
- Yes
- Yes
- Yes, time was enough to deliver a lot of interesting knowledge
- Ok
- Yes
- Yes.
- Yes
- Very appropriate
- Yes. The breaks could be shorter so the days are shorter as well
- 1 week
- Yes
- Yes
- Yes
- Yep, I enjoyed it, even with the long days it felt like the time flew past quite fast
- Yes

Were the facilities and resources provided adequate?

- Of course
- Yes
- Yes
- Yes
- Totally yes
- No fridges in the rooms, uni far away from the place of stay, no transport from and to the airport
- Yes
- Yes
- Absolutely
- Very adequate
- Yes
- Yes
- Yes
- Yes
- -
- I think so
- Very good

OVERALL IMPACT**How has this summer school impacted your knowledge and skills in sensory science?**

- A lot
- .
- Very much, good basen for more in-depth selfstudy and practice
- Yes
- I've learned a lot about theorical and practical aspects related to sensory analysis that I'm sure I'll implement in my projects
- I learned some new things
- Improved my skills
- It made me realize the new possibilities of sensory analysis which I can incorporate in my work.
- I got some very interesting knowledge. I am definetely going to use all that i learned in the future
- It allows me to to gain depper knowledge on different themes and explore a bit further some sensory methods
- I have gained new knowledge to use in the future and to further investigate
- I am learn a lot of interenting things that I could use in my work
- A lot, since I feel more secure about what I did in my work by havien the chance to compare my work with the work done by
- others
- I gained new knowledge
- Improve very well, I can't wait to put this knowledge into practice in the future
- I definitely feel less out of depth in relation to the ares of sensory science and ai gained some additional insights which would
- be very useful if I find a job related to sensory science and/or testing
- Yes