

Supplement 1 Presentation of the needs analysis based on Checklist for Reporting Results of Internet E-Surveys (CHERRIES)

Item Category	Checklist Item	Explanation
Design	Describe survey design	Dentistry students of a German university of all semesters, all students were eligible to participate. It is not a convenience sample.
Institutional Review Board (IBR) approval and informed consent process	IRB approval	Application registered by the Ethics Commission of the Saarland Medical Association under the identification number 228/23.
	Informed consent	Consent to participate is requested at the beginning of the survey. By clicking a button, the participants may provide their responses to be used for scientific purposes.
	Data protection	Anonymous survey, no storage of personal data. Tracing responses to individuals is not possible.
Development and pre-testing	Development and testing	LimeSurvey Version 5.6.62 (LimeSurvey GmbH, Umfragedienste & Beratung, Papenreue 63, 22453 Hamburg, Deutschland)
		Development in interdisciplinary, interprofessional exchange (Otolaryngologists, didactics, statisticians, oral and maxillofacial surgeons, dentists, radiologists, dentistry students)
		Based on the current literature and learning objectives catalogues as well as recommendations from specialist societies
		Trial run with a small group (n = 10) of volunteers: 3 dentistry students, 2 dentists, 4 medical doctors, 2 medical students
		Optimization of the questionnaire/structure, spelling and functioning of test platform
Recruitment process and description of the sample having access to the questionnaire	Open survey versus closed survey	Open survey
	Contact mode	Via e-mail lists of the dean's office, social media and during the university lectures in dentistry
	Advertising the survey	Advertising for participation in mails from the dean's office, social media and in the university lectures in dentistry.
		Information text including advertising image as an attachment of an email or on social media as well as a presentation slide during lectures
		Access to survey via QR code or direct link
Survey administration	Web/E-mail	Data is automatically saved by survey programme, links to the query via e-mail, social media or as a QR code
	Context	Survey platform of the Center for Data Processing (ZDV) of the University of Mainz, publication/access only via Link/QR code
		No posting/publication on a website
	Mandatory/voluntary	voluntary

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	Incentives	The development of a specific teaching concept addressing the wishes of the students. No individual advantages/disadvantages by deciding for or against participation.
	Time/Date	From 12th December 2023 to 09th February 2024
	Randomization of items or questionnaires	No Randomisierung
	Adaptive questioning	No
	Number of Items	Page 1: Start
		Page 2: 8 questions
		Page 3: 2 questions
		Page 4: 6 questions
		Page 5: End
	Number of screens (pages)	4
	Completeness check	All questions mandatory to complete the survey
		Answer option “not applicable” for all questions
	Review step	„back” button and participants may print out their answers or save as a file
Response rates	Unique site visitor	IP was not recorded
	View rate (Ratio of unique survey visitors/unique site visitors)	Not relevant as site was only used for survey
	Participation rate (Ratio of unique visitors who agreed to participate/unique first survey page visitors)	Total: 131
	Completion rate (Ratio of users who finished the survey/users who agreed to participate)	2 incomplete surveys:
		2 incomplete, but did send
		129 complete
Preventing multiple entries from the same individual	Cookies used	Ratio: 165:190=98%
	IP check	Cookies were set, to avoid multiple completions by one user
		https://www.bfdi.bund.de/SharedDocs/Pressemitteilungen/DE/2017/11_BGH_Breyer.html Were not recorder because of the General Data Protection Regulation (GDPR)

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	Log file analysis	only Cookies
	Registration	Open survey without saving for participants
	Handling of incomplete questionnaires	Yes, only fully completed questionnaires were analysed
	Questionnaires submitted with an atypical timestamp	All questionnaires were included regardless of the processing time
	Statistical correction	No