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RESEARCH ARTICLE

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Trainee doctors' preparedness for clinical work in geriatric psychiatry: A survey on 18 preliminary entrustable professional activities

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Abstract

Background: Research concerning transitions from one rotation to another during medical specialist training is scarce. This study examined trainee doctors' perceived preparedness for core clinical activities, trainee doctors' preparedness levels, and general perceptions of medical specialist training in geriatric psychiatry.

Method: Swiss trainee doctors in geriatric psychiatry were surveyed about their perceived preparedness for 18 preliminary entrustable professional activities (EPAs), curricular support, and general perceptions of their medical specialist training. Closed questions were analysed using descriptive statistics, while open questions were subjected to content analysis.

Results: The participants comprised 48 trainee doctors (30.4% response rate) who differed in their educational experience (years of residency and specialism) and clinical subspecialisation goals. Trainee doctors felt adequately prepared for most EPAs but less prepared for some, including electroconvulsive therapy, psychotherapy, and treating older adults in the home environment or residential facilities. Despite the trainee doctors' diversity, they did not differ significantly in perceived preparedness for most EPAs. The most often offered suggestions for improving geriatric psychiatry training were intensified clinical supervision and a structured induction programme.

Conclusion: Trainee doctors reported that they felt sufficiently prepared for most EPAs, regardless of their backgrounds and professional goals. However, several professional activities in geriatric psychiatry warrant further training. Our findings indicate the need for a higher intensity of clinical supervision (e.g. more direct observation and specific feedback), the introduction of structured induction programmes (e.g. orientation week), and specific teachings (e.g. on neurocognitive assessment).

KEYWORDS
clinical supervision, entrustable professional activities, geriatric psychiatry, graduate medical education, perceived preparedness

Key points

- Clinical activities in geriatric psychiatry, such as electroconvulsive therapy (ECT) and home-treatment, may require further training.
- The trainee doctors' backgrounds had no influence on their perceived preparedness for most clinical tasks in geriatric psychiatry.
- Direct observation of and high-quality feedback for trainees are necessary for effective learning in geriatric psychiatry.
- Intensified clinical supervision and structured induction were suggested to improve geriatric psychiatry specialist training.

1 | BACKGROUND

Trainee doctors' preparedness is particularly important for the growing field of geriatric psychiatry, as the world's population is ageing, mental health problems are proliferating, and the older population is more open to seeking help for such issues.[1] Perceived preparedness is crucial for successful clinical workplace learning. However, trainee doctors' preparedness and training needs remain poorly understood.

Geriatric psychiatry is a growing field,[2] on the one hand because the population is ageing and on the other hand because people are more willing to seek support for mental health issues. To take care of geriatric psychiatry patients, qualified personnel in geriatric psychiatry are needed.[3] An option to ensure high-quality and attractive education is a competency-based training approach based on entrustable professional activities (EPAs). Entrustable professional activities are core speciality activities entrusted to trainees once they demonstrate the ability to perform a specialised task well.[4] EPAs have recently been considered suitable for describing graduate training requirements in geriatric medicine across Europe[5] and have also attracted attention in the context of graduate psychiatry training and curriculum development. In curriculum development, constructive alignment is an important framework. Constructive alignment describes the alignment of learning objectives, teaching methods, and assessments regarding content and methods.[6] EPAs are well-suited to improve constructive alignment in clinical learning environments by focusing on the actual tasks that trainees need to master in the workplace.[7]

A systematic review of EPAs in psychiatry identified several studies focusing on graduate training in psychiatry that primarily concerned the development, assessment, and implementation of EPAs. However, no study has been performed regarding the perceived preparedness for EPAs in geriatric psychiatry.[8]

One option for studying EPAs in geriatric psychiatry is perceived preparedness. Perceived preparedness for clinical tasks (e.g. assessing decision-making capacity in geriatric psychiatric patients) is a three-dimensional construct comprising preparedness through academic teaching, domain-specific self-efficacy, and curricular support.[9]. Trainee doctors' preparedness for professional activities upon entering training helps smooth their transition.[10] By contrast, insufficient preparedness for clinical work can have negative consequences for both patients and medical staff, jeopardizing patient safety and elevating costs.[11–13] It further causes stress and anxiety for medical professionals who feel insufficiently prepared,[12,14–16] thereby negatively impacting their learning.[17] In clinical training, perceived preparedness for entering residency is influenced by three sub-ordinated factors: duration and type of education, individual characteristics,[12–14,18] and the working environment.[13]

Studies indicate that trainee doctors are generally prepared to enter clinical work, with the exception of several specific tasks such as psychopharmacologic treatment of geriatric psychiatry patients or performing handovers of a multimorbid geriatric psychiatry patient.[10,19,20] Trainee doctors who studied in the US feel better prepared for several core EPAs than those who studied elsewhere.[20] Preparedness is influenced by trainee doctors' previous experiences: trainee doctors felt more or less prepared for specific EPAs depending on which type of clerkship they had completed (e.g., family medicine, emergency medicine).[19,20] Trainee doctors who had attended boot camps as undergraduates subsequently felt more prepared for professional activities.[19] Perceived preparedness for professional activities depended on which specialization trainee doctors chose for their first rotation.[10] Similar findings apply to perceived preparedness for entering independent practice: preparedness levels differ depending on the fields in which trainee doctors chose to specialize.[21] What is not yet well understood is how well trainees in geriatric psychiatry feel prepared for their professional tasks using formulated EPAs as surrogates for the needed qualifications and competencies. Further, it is not known whether trainee doctors in Switzerland with often different background characteristics differ in their perceived preparedness, as reported for other countries and speciality fields. Furthermore, it is relevant for training centres to know how adequate training is perceived and to collect trainee-doctors' perspectives and ideas for improvement when using an EPA framework. In order to achieve learning, basic

needs such as psychological safety[22] and social needs[23] need to be fulfiled. Therefore, studying the perception of interaction with supervision and the learning climate is also important. This study's purpose was therefore to examine trainee doctors' perceptions of their preparedness for EPAs in geriatric psychiatry, to examine the resident's perceptions of their training (i.e., supervision, feedback, learning climate), and to offer recommendations for improving the clinical curriculum in geriatric psychiatry. In this sense, our results might be helpful for residency training directors, clinical educators, and trainees in geriatric psychiatry. The study was guided by the following three research questions:

1. To what extent do trainee doctors feel prepared and supported in undertaking geriatric psychiatry EPAs?
2. Do trainee doctors with different characteristics differ with respect to perceived preparedness?
3. How do trainee doctors perceive the adequacy of their supervision, feedback, and learning climate, and what are their suggestions for improvement?

2 | METHOD

2.1 | Study design

We chose a cross-sectional mixed-methods design to investigate the research questions. Cross-sectional designs allowed a broad assessment of trainee preparedness and training experiences at this particular point in time and ensured an actual snapshot of how training in geriatric psychiatry is perceived currently. Using both closed and open questions allowed for richer and detailed data, which aligns with our aim to better understand preparedness, supervision, feedback, the learning climate, and suggestions for improvement. We developed a bilingual (German/French) online questionnaire that was distributed among trainee doctors in geriatric psychiatry in Switzerland between 26 July 2021 and 21 September 2021. According to the responsible ethics committee, the study was exempted from further formal ethical approval (Req-2021-00442).

2.2 | Participants

Trainee doctors working in geriatric psychiatry during the survey period were invited to participate in this cross-sectional study and recruited via e-mail through their teaching hospitals' administrations.

2.3 | Sampling

Our aim was to receive an exhaustive sample: We invited all trainee doctors in a geriatric psychiatry rotation in Switzerland to participate to reach as many trainee doctors as possible and achieve a nationally representative sample. In order to be able to invite all trainee doctors in geriatric psychiatry training, we contacted all training sites for geriatric psychiatry in Switzerland. Out of 30 geriatric psychiatry training sites in Switzerland, 26 provided us with their trainee doctors' official e-mail addresses. This included 158 trainee doctors' contacts. The four training sites not providing contacts had eight trainee doctors in total. We sent out the invitation to all trainees repeatedly.

2.4 | Data collection

The trainee doctors (n = 158) were invited to complete an online questionnaire, followed by two reminders. Each reminder was sent out after 2 weeks of the previous e-mail. Data collection started on July 26, 2021, and was completed on September 21, 2021. Switzerland implements a mandatory 6-month rotation in geriatric psychiatry, which is a requisite for obtaining specialism recognition in psychiatry and psychotherapy.[24] Subsequently, for a subspecialist title in geriatric psychiatry, up to 1 year of a geriatric psychiatry rotation during psychiatry specialist training can be accredited later.[25] A rotation in geriatric psychiatry is also mandatory for obtaining a subspecialist title in geriatrics. This rotation is also at least 6 months in duration and can be accredited up to 1 year. This rotation can be completed during internal medicine specialist training and can later be accredited to subspecialist training in geriatrics.[26] The rotation is voluntary for other speciality fields, such as neurology.

2.5 | Questionnaire

2.5.1 | Identification of entrustable professional activities

We compiled a list of 18 specialism-specific EPAs in geriatric psychiatry. These EPAs were identified based on published articles and educational policy documents[27–29] and by contacting regulatory bodies.[30,31] The literature reviewed covered graduate EPAs from geriatric psychiatry,[30] basic graduate psychiatry EPAs,[27] and EPAs from geriatrics.[31] Overlapping or similar definitions and EPAs not specific to geriatric psychiatry were eliminated. Following several rounds of discussion among the research team (including medical education and geriatric psychiatry experts), 18 EPAs were selected for the survey. The selection process is described in more detail in supplement 1. We call these EPAs preliminary as these EPAs are not yet officially implemented in Switzerland.

2.5.2 | Survey development

Our study was informed by the seven-step approach to survey development in educational research.[32] The survey content was informed by Kern's second step in targeted needs assessment for medical education curriculum development.[33] We defined the

following measures: perceived preparedness and curricular support, entrustment, supervision feedback, learning climate, demographic questions, and occupational self-efficacy. We included self-efficacy in the survey considering the three-dimensionality of perceived preparedness.[9] The survey included both closed and open-ended questions. For the closed options, we used a five-point Likert scale that included a "not applicable" option. The scale's allocated codes are detailed in Supplement 3. A forced choice was applied for closed questions but not for open-ended questions. Table 1 and supplement 2 details the questionnaire's measures and pilot testing. In accordance with Messick's Validity Framework,[34] we ensured content validity using the current literature on EPAs in medical education to develop the survey and asked several consultants in geriatric psychiatry for feedback (Supplement 1). The response process was investigated with members of the targeted group through think-aloud interviews and pilot testing to ensure understanding as intended (Supplement 2). Minor adaptions have been made after the think-alouds and pilots for improved clarity.

TABLE 1 Content of the survey.

Theme	Questions	Explanation	Research question	Analysis
Perceived preparedness and curricular support	Questions 1–4	The first question included a matrix for all 18 clinical activities (EPAs) (e.g., "how well prepared did you feel by clinical training or medical studies to conduct the following clinical activity?").	Research question 1 (quantitative) and 2 (quantitative)	Descriptive statistics (question 1) and Man-Whitney-U Test (question 2)
Entrustment	Questions 5–8	Entrustment frequency was measured in a matrix for all 18 EPAs.	Research question 3	Descriptive statistics
Supervision	Questions 9–13	We asked a general question regarding how adequate residents perceived their supervision to be (from too little to too much) and how this impacted their work and patient safety. We asked which EPAs residents wished to have more or less supervision for.	Research question 3 (quantitative and qualitative)	Descriptive analysis (quantitative aspects) and summative content analysis (qualitative aspects)
Feedback	Questions 14–17	We assessed feedback quality and frequency using two closed questions. We used two open-ended questions to assess how feedback could be improved and what residents perceived as valuable in the feedback they had received to date.	Research question 3 (quantitative and qualitative aspects)	Descriptive analysis (quantitative aspects) and summative content analysis (qualitative aspects)
Learning climate	Questions 18–20	Residents were asked to offer a general judgement of the learning climate in their current geriatric psychiatry training and given the opportunity to provide general feedback in writing.	Research question 3 (quantitative and qualitative aspects)	Descriptive analysis (quantitative aspects) and summative content analysis (qualitative aspects)
Demographic questions	Questions 21–35	We asked demographic questions to assess the diversity of residents in geriatric psychiatry, including educational, demographic, cultural, work experience, and linguistic background; their current workplace situation; and their future goals. The questions were either open-ended, single-choice, or in a matrix (to assess the residents' linguistic skills with respect to Switzerland's four national languages).	Description of sample, research question 2 (quantitative data)	Descriptive statistics and Man-Whitney-U (question 2)
Occupational self-efficacy	Questions 36–41	The brief occupational-self-efficacy scale consisting of six items was used to assess the residents' occupational self-efficacy.[35]	Research question 2 (quantitative) and explorative analysis)	Descriptive statistics, Man-Whitney-U Test (question 2) and Spearman's Rho (explorative analysis)

2.6 | Data analysis

Statistical analyses were performed using Statistical Package for Social Sciences 26 (SPSS, Inc., Chicago, IL). Descriptive statistics were used for all quantitative research questions. For perceived preparedness for EPAs (research question 1), we used the mean as a descriptive measure. The mean is usually accepted if data shows few outliners,[36] which was given in our sample for most EPA-perceived preparedness items. We used QQ plots and histograms to check the distribution.

Group differences were examined using the non-parametric Mann- Whitney U test (MWU). As our hypotheses for research question 2 were non-directional and we aimed to explore whether there were differences between the groups without predicting the direction, we employed the two-tailed MWU. Non-parametric data (ordinal and continuous) can be analysed using the MWU.[37]

We used Spearman's rho to conduct explorative analysis. A p-value of $\alpha < 0.05$ was considered significant. We analysed free texts using a summative content analysis approach.[38] To assess sampling bias, we compared respondents' demographic characteristics with data from a national residency database.[39]

3 | RESULTS

3.1 | Participants' characteristics

A total of 48 trainee doctors completed the questionnaire (response rate = 30.4%). Most respondents were female (61.9%, n = 26). Thirteen (27%) trainee doctors were of Swiss nationality, and 11 countries in total were represented. Most trainee doctors had studied medicine in Switzerland (29.1%, n = 14) or in the European Union (29.1%, n = 14). On average, trainee doctors were 32 months into their medical specialist training, with experience ranging from 1 month to 7 years. In total, 34 (70.8%) trainee doctors planned to specialize in psychiatry and psychotherapy, followed by 9 (18.8%), who pursued specialization in internal medicine. Few (8.3%, n = 4) had already specialized (neurology, internal medicine, surgery) and had begun pursuing additional board certification and/or a subspeciality in psychiatry. Most trainee doctors worked full-time (68.6%, n = 33), while those in part-time employment worked at a full-time equivalent of 50%–80%. Table 2 and supplement 3 details the trainee doctors' characteristics. We compared the characteristics of the final sample to available data from a national trainee database. While we could not rule out sampling biases in terms of over- or underperforming trainee characteristics, we concluded that we had achieved sufficient respondent diversity in terms of age, previous training, and gender. In order to explore potential missed perspectives, we will conduct a follow-up interview study using a purposive sampling strategy.

Compared to the national trainee doctors database,[39] the respondents' characteristics were similar with respect to gender and employment level. In this sample, 61.9% of participants were female, compared to 60.8% female trainee doctors in the national database. Furthermore, 68.8% worked full-time, compared to 66% in 2021. The comparison can be found in supplement 4.

3.2 | Preparedness and curricular support for entrustable professional activities in geriatric psychiatry

The survey focused on 18 specialism-specific EPAs (Table 3). Most trainee doctors (83.3%) agreed that all listed EPAs are relevant for clinical practice in geriatric psychiatry.

Trainee doctors felt most prepared for EPA 5 (present geriatric psychiatric patients; mean on Likert scale for preparedness (M = 3.96, SD = 0.884), EPA 11 (psychiatric patients presenting with typical medical problems; M = 3.88, SD = 0.981), EPA 12 (discharge and arrange for follow-up treatment for geriatric psychiatric patients; M = 3.75, SD = 0.934), and EPA 1 (clinical examination, initial diagnostic assessment, and acute measures on geriatric psychiatry patients; M = 3.75, SD = 0.934 (Figure 1). They felt least prepared for EPA 10 (informed consent for ECT; M = 2.76, SD = 1.479), and EPA 14 (assessment in home environment and facilities; M = 3, SD = 1.195). Most EPAs had a mean between 3 and 4, including EPA 13 (geriatric psychiatry consults; M = 3.04, SD = 1.086), EPA 15 (supervise medical students; M = 3.09, SD = 0.1.178), EPA 16 (provide induction for new trainee doctors; M = 3.18, SD = 1.114), EPA 9 (psychotherapeutic intervention; M = 3.25, SD = 1.120), EPA 7 (neurocognitive disorders; M = 3.27, SD = 1.162), EPA 18 (interdisciplinary team rapports; M = 3.37, SD = 1.062), and EPA 6 (assess decision-making capacity; M = 3.38, SD = 1.104), indicating a perception between 'somewhat prepared' and 'well prepared'. Most trainee doctors (31, 64.6%) felt well or very well supported at the beginning of their rotations. Supplement 5 shows the Likert scale distribution for this question. The mean occupational self-efficacy score was 3.82 (SD = 0.68).

3.2.1 | Answers to open-ended questions

The most frequently perceived beneficial curricular support was regular supervision (mostly weekly) by a department head, senior attending physician, or consultant (27.1%, n = 13) and availability to respond immediately to questions at least over the telephone (18.8%, n = 9). Some trainee doctors (16.7%, n = 8) responded that a structured induction process supported by other trainee doctors (10.4%, n = 5) and supervisors' provision of literature (10.4%, n = 5) would be helpful. Details of responses to open questions are provided in Supplement 7.

3.3 | Differences between subgroups

Male trainee doctors felt better prepared for EPA 10 (U = 99.000; p = 0.022). No gender-based differences were observed for any other

TABLE 2 Characteristics of trainee doctors.

Respondents' demographic data	Characteristics	N and percentage (%)
Gender (Male, *n* = 15; 36%)	Male	*n* = 15; 36%
	Female	*n* = 26; 62%
	26	61.9
	Others/No information	*n* = 7; 15%
Nationality	Swiss	*n* = 13; 27%
	European countries[a]	*n* = 18; 38%
	Others (outside Europe/No information)	*n* = 17; 35%
Mother language	Swiss main languages (German, French, Italian)	*n* = 24; 50%
	Others[b]/No additional information[c]	*n* = 50%
Place of undergraduate study	Switzerland	*n* = 14; 29%
Switzerland	European countries (EU) [d]	*n* = 14; 29%
Germany (EU)	European country (non-EU)[e]	*n* = 5; 10%
Italy (EU)	Others (Asia, North America, Africa[f]/No information)	*n* = 15; 29%
Age *M* = 33.2 Md = 31.5; min = 25; max = 58; SD = 5.7)		
Years of residency *M* = 2.9; Md = 3; min = 0; max = 7; SD = 1.6)		
Specialism goal	Psychiatry and psychotherapy	*n* = 34; 71%
	Internal medicine	*n* = 9; 19%
	Others[g]/No information	*n* = 5; 11%
Subspecialty goal	Geriatric psychiatry and psychotherapy	*n* = 13; 27%
	Geriatrics	*n* = 11; 23%
	Not aiming for specialism	*n* = 10; 21%
	Others/No information	*n* = 14; 29%
Previous work experiences	≥3 months psychiatry (no geriatric psychiatry)	*n* = 28; 58%
	≥3 months internal medicine (no geriatrics)	*n* = 25; 52%
	≥3 months others[h]	*n* = 12; 25%
	≥3 months geriatric psychiatry	*n* = 12; 25%
	≥3 months geriatrics	*n* = 10; 21%
	≥3 months neurology	*n* = 9; 20%
Previous work experience in geriatric psychiatry	Outpatient	*n* = 13; 27.1%
	Inpatient	*n* = 36; 75%
	Others/No information	75.0 *n* = 5; 10%
Work setting	Non-university but public hospital	*n* = 20; 42%
	University hospital 14	*n* = 14; 29%
	Others (private clinic/practice)/No information	14.6 *n* = 12; 25%
Level of employment	Full-time	*n* = 33; 69%
	Part-time	*n* = 14; 29%
Total	48	100.0

[a]German, French, Italian, Ukraine, Romania, Lithuania, Russia, Hungary, Spain.

[b]Spanish, Serbo-Croatian, Serbian, Romanian.

[c]Other than German, French, Italian, Rhaeto-Romance but not stated which other language.

[d]Germany, Italy, Romania, Latvia, Lithuania, Spain, Hungarian.

[e]Russia, Serbia, Bosnia, Ukraine.

[f]Iran, Tunisia, Mexico.

[g]Neurology, Aims for subspeciality board certification in geriatric medicine; already obtained board certification in internal medicine.

[h]Surgery, pathology, intensive care, emergency medicine, radiology, neurorehabilitation.

TABLE 3 Specialty-specific Entrustable Professional Activities (EPAs) used for the survey.

EPA 1	Perform clinical examination, initial diagnostic assessment, and acute measures, as needed, on geriatric psychiatry patients
EPA 2	Review medication and prescribe psychopharmacological medication for geriatric psychiatry patients
EPA 3	Conduct geriatric assessment (e.g., internal medicine-neurology examination, nutritional status, mobility status, and fall risk) for diagnosis and treatment planning in geriatric psychiatric patients and initiate appropriate interventions
EPA 4	Assess acute risk of self-harm and harm to others in geriatric psychiatric patients and arrange and carry out appropriate treatment interventions
EPA 5	Present geriatric psychiatric patients (e.g. as part of a ward round) and manage their electronic health records
EPA 6	Assess decision-making capacity in geriatric psychiatric patients
EPA 7	Diagnose (including neurocognitive testing) and treat geriatric psychiatric patients with typical neurocognitive disorders
EPA 8	Lead round-table discussions with geriatric psychiatric patients and their relatives including psychoeducational elements
EPA 9	Perform psychotherapeutic brief interventions with geriatric psychiatric patients
EPA 10	Obtain informed consent from geriatric psychiatric patients for non-invasive stimulation therapies (including electroconvulsive therapy (ECT))
EPA 11	Examine and treat geriatric psychiatric patients presenting with typical medical problems
EPA 12	Discharge and arrange for follow-up treatment for geriatric psychiatric patients
EPA 13	Conduct geriatric psychiatric consults
EPA 14	Diagnose, assess, and treat geriatric psychiatric patients in the home environment or in residential facilities
EPA 15	Supervise medical students
EPA 16	Provide induction[a] support for new geriatric psychiatric trainee doctors
EPA 17	Lead a ward round with geriatric psychiatric patients
EPA 18	Lead and moderate interdisciplinary team rapports

Note: EPAs 1–18 used for the survey.

[a]By induction we mean a "structured integration as new employees to the new work environment".

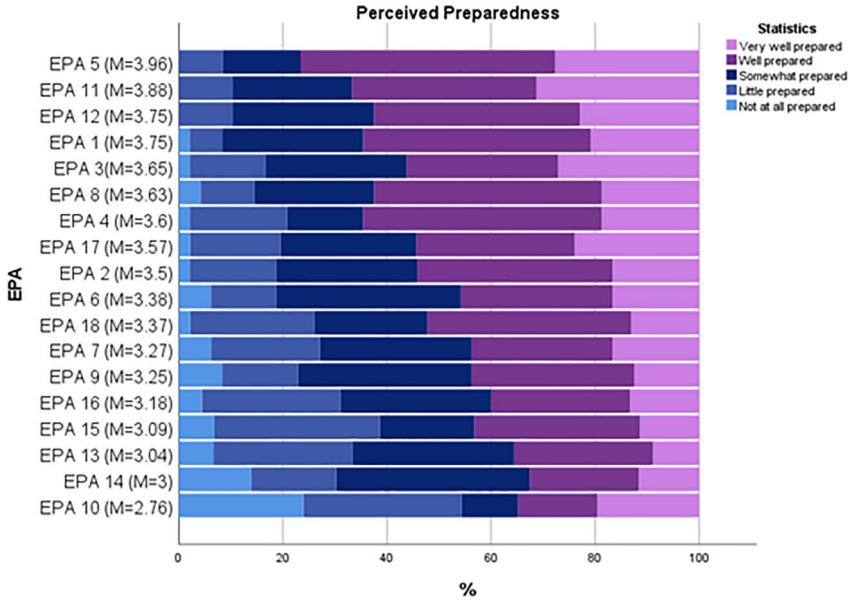

FIGURE 1 Preparedness for each entrustable professional activitie (EPA). *Note*: The figure shows the perceived preparedness for each EPA from most to least prepared, sorted by mean (*M*). Supplement 6 shows the corresponding table.

EPA. We observed no statistical gender-based difference regarding perceptions of curricular support ($U = 176.000$; $p = 0.901$) or occupational self-efficacy ($U = 183.000$; $p = 0.911$).

Trainee doctors who studied in Switzerland or in a country where one of the main Swiss languages was spoken felt significantly better prepared for EPA 16 than trainee doctors who studied elsewhere ($U = 87.000$; $p = 0.048$). No significant differences emerged regarding other EPAs. No statistical differences emerged between trainee doctors who studied in countries that spoke one of the national Swiss languages and those in other countries for perceived curricular support ($U = 111.000$; $p = 0.314$) or occupational self-efficacy ($U = 131.000$; $p = 0.346$).

Trainee doctors obtaining board certification in psychiatry felt better prepared for EPAs 4 ($U = 109.500$; $p = 0.028$), 10 ($U = 88.500$; $p = 0.024$), and 13 ($U = 94.500$; $p = 0.045$) than trainee doctors pursuing other board certifications (e.g. in internal medicine, geriatrics, neurology). Trainee doctors whose goal was to specialize in psychiatry showed significantly higher self-efficacy ($U = 100.000$; $p = 0.021$).

Trainee doctors who had been in graduate training for three years or more also felt significantly better prepared for EPA 14 ($U = 106.000$; $p = 0.025$) than those who had been in training for less than 3 years. We identified no other experience-based differences in perceived preparedness for clinical activities or other variables.

3.4 | Perception of supervision, feedback, and learning climate

Most trainee doctors (52.1%, $n = 25$) stated that the amount of supervision was just right ($M = 2.52$, SD = 1.148) (Supplement 7). Where trainee doctors perceived supervision as excessive, it was mostly for EPAs 1, 2, and 15 (each 6.3%, $n = 3$), while desiring more for EPAs 6 (39.6%, $n = 19$), 2, 3, 7, 9, and 13 (each 25%, $n = 12$). In total, 22 (45.8%) stated that a lack of supervision possibly or certainly caused significant clinical errors. A total of 7 (14.6%) responded that significant errors had negative consequences for patients (a significant error here is an error that would at least not provide the best care for the patient. This would not necessarily lead to an investigation.), 11 (22.9%) said such errors potentially had negative consequences for patients.

Regarding feedback, 26 (54.2%) trainee doctors stated that the amount of feedback they received was just right ($M = 2.7$, SD = 0.749). By contrast, 16 (33.4%) said that they either had too little or far too little feedback. For 28 trainee doctors (58.3%), the quality of the feedback was helpful or very helpful, while 13 (27.1%) found the feedback to be moderately helpful ($M = 3.82$, SD = 1.093) (Supplement 7).

Regarding the learning climate, 26 (54.2%) of the trainee doctors found it to be good or very good. For 13 (27.1%), it was mediocre, and for 8 (16.7%), it was bad or very bad ($M = 3.64$, SD = 1.112) (Supplement 7).

3.4.1 | Answers to open-ended questions

Feedback was perceived as helpful if the communication style was constructive, benevolent, appreciative, honest, direct, and specific (20.8%, $n = 10$) and when they had sufficient time to discuss their own errors and opportunities for improvement (14.6%, $n = 7$). Trainee doctors desired feedback more often and regularly (16.7%, $n = 8$), with content tailored to specific topics, such as medical knowledge (14.6%, $n = 7$). Some trainee doctors desired a communication style that was professional, honest, direct, and specific (10.2%, $n = 5$).

Trainee doctors perceived the learning climate as educationally valuable if it included specific teaching on geriatric psychiatry. For some trainee doctors (25%, $n = 12$), interactions with their coworkers were an important learning factor. Some stated that clinical supervision (8.3%, $n = 4$) and structured induction processes (6.3%, $n = 3$) should be improved. Details regarding trainee doctors' feedback and learning climate can be found in Table 4.

3.5 | Explorative analysis

Learning climate correlated with perceived curricular support (Spearman's $\rho = 0.714$, $p > 0.001$), perceived quality of supervision (Spearman's $\rho = 0.687$, $p > 0.001$), perceived feedback frequency (Spearman's $\rho = 0.357$, $p = 0.015$), feedback quality (Spearman's $\rho = 0.642$, $p > 0.001$), and self-efficacy (Spearman's $\rho = 0.386$, $p = 0.007$). Reported mistakes (Spearman's $\rho = -0.325$, $p = 0.031$) and significant disadvantages correlated negatively with feedback frequency (Spearman's $\rho = -0.412$, $p = 0.033$).

4 | DISCUSSION

Our survey reveals that, while trainee doctors feel prepared for most EPAs in geriatric psychiatry, several specific professional activities warrant further educational attention. Despite the trainee doctors' diversity, they did not differ significantly in perceived preparedness for most EPAs. Regular feedback and supervision were perceived as key factors for effective graduate training and safe patient care. Our findings indicate the need for a higher intensity of clinical supervision, the introduction of structured induction programmes, and specific teachings.

Trainee doctors felt particularly prepared for examination and diagnosis assessment of geriatric psychiatry patients (EPA 1), ward rounds and documenting health records in geriatric psychiatry (EPA 5), examination and treatment of typical medical problems of gerontopsychiatric patients (EPA 11) and their discharge and follow-up care (EPA 12). These activities are partly taught in undergraduate medical education as general competencies or geriatric medicine competencies.[31,32] However, some clinical tasks merit increased attention in geriatric psychiatry training, such as capacity assessment

TABLE 4 Responses to open-ended questions regarding feedback and learning climate.

	Received and perceived as helpful	Additionally wished

Feedback	• Communication style (n = 10, 20.8%)
	  ○ Constructive
	  ○ Benevolent
	  ○ Appreciative
	  ○ Honest but direct
	  ○ Specific and concrete
	• Time and discussion of own mistakes or where there is potential for improvement (n = 7, 14.6%)
	• Feedback for specific tasks (3, 6.3%)
	• Positive reinforcement (n = 3, 6.3%)
		• Frequency (n = 8, 16.7%)
		  ○ More frequent and continuous
		• Content: (7, 14.6%)
		  ○ Specific medical knowledge and clinical tasks
		• Communication style (5, 10.4%)
		  ○ Professionalism
		  ○ How it is formulated
		  ○ Open and honest (for problems as well)
		  ○ Detailed
		  ○ Individual
		• Setting (2, 4.2%)
		  ○ Feedback should not be given "on the run"
		  ○ Official appointments
		• Person who gives feedback (2, 4.2%)
		  ○ Leading and attending physicians should give feedback as well

Learning climate	• Clinical teaching (n = 9, 18.8%)
	  ○ Specific geriatric psychiatry teaching
	  ○ Interdisciplinary colloquia
	  ○ Case presentations
	  ○ Training where active participation is required
	• Interaction with others (n = 12, 25%)
	  ○ Collaboration with qualified and experienced supervisors
	  ○ Discussion with supervisors (e.g., about own activities, diagnoses, comorbidities)
	  ○ Discussion of patient cases
	  ○ Support for concrete clinical activities
	• Gaining experience in caring for geriatric psychiatric patients (4, 8.3%)
	• Close supervision by superiors (e.g., attending physician, other trainee doctors) (4, 8.3%)
	• Working environment (n = 3, 6.3%)
	  ○ Positive working environment
	  ○ Supportive team
	  ○ Constructive feedback
	  ○ Direct communication
		• More clinical supervision (n = 4, 8.3%)
		• Structured induction programme (n = 3, 6.3%)
		• Better opportunities to prepare for the subject (integration of adult psychiatry and internal medicine, interviewing, dealing with difficult situations, working in residential homes, psychopharmacology, capacity assessment, end-of-life treatments) (n = 3, 6.3%)
		• More subject-specific (geriatric psychiatry) continuing education (n = 3, 6.3%)
		• Progress meetings throughout the clinical rotation (n = 2, 4.2%)
		  ○ Goal setting in an initial conversation followed by progress meetings
		  ○ Implementation of progress tests
		• Graduate training by qualified personnel (psychiatrist with subspeciality in geriatric psychiatry) (n = 2, 4.2%)
		• Better didactic concepts (n = 2, 4.2%)
		• More treatment guidelines and policies (n = 2, 2.1%)
		• Inform and control clinical supervisors about educational obligations (2, 2.1%)

Note: In brackets is the overall number of comments on this topic and percentage of overall number of comments of the topic compared to the total amount of trainee doctors filling out the survey (n = 48).

(EPA 6), diagnosis and treatment of neurocognitive disorders (EPA 7), psychotherapeutic interventions for older adults (EPA 9), ECT (EPA 10), geriatric psychiatry consults (EPA 13), treating patients at home and in residential facilities (EPA 14), supervising medical students on geriatric psychiatry wards (EPA 15), providing induction for other trainee doctors in geriatric psychiatry (EPA 16), and leading interdisciplinary geriatric psychiatry team rapports (EPA 18).

EPA 6, 7, and 18 represent typical clinical activities, and it is concerning that trainee doctors felt only somewhat prepared for them. This finding corroborates other researchers' conclusion that capacity assessment warrants greater emphasis in undergraduate medical education.[40] While good curriculum development (junior doctor training) can ensure or improve constructive alignment for all EPAs,[7] the alignment of objectives, teaching methods, and assessments should especially be further investigated and improved for EPAs 6 (capacity assessment), 7 (neurocognitive disorder), and 18 (interdisciplinary team rapports). EPAs 9, 10, 13, and 14 are apparently not performed in all teaching hospitals we surveyed. Teaching hospitals with no opportunities to perform such EPAs should consider other clinical training options, such as expert clinical workshops or supplementary digital learning formats.

Other studies' findings indicate that previous educational experiences prepare medical students sufficiently for residency[9,10,20,21,41]. Our findings also support overall preparedness for medical specialist training in geriatric psychiatry but may help determine which clinical activities require further attention during medical specialist training. Surprisingly, little to no difference emerged in association with trainee doctors' different educational backgrounds and experiences. Previous studies identified differences regarding gender,[9] place of study,[19,20] and experience.[19,20] One possible explanation for this discrepancy is that, for most EPAs, our study identified no differences between more and less experienced trainee doctors. We hypothesize that the relevance of experience depends not on the duration of training but on the quality and type of experience accumulated. We are currently exploring this hypothesis through qualitative interviews.

Our results indicate a moderate correlation between feedback frequency and errors leading to significant disadvantages for patients. Other research groups found that trainee doctors require frequent, content-specific feedback that is delivered appropriately in line with general recommendations.[42,43] Feedback processes and pre-transition preparation are known to support "good" transitions from one rotation to another.[44]

The top three suggestions for improving geriatric psychiatry training were more frequent and high-quality clinical supervision, a structured induction programme, and better opportunities to prepare for geriatric psychiatry. The first finding is in line with the theories of Edmondson[22] and Maslow,[23] indicating that psychological safety needs to be ensured and basic human needs fulfiled to be able to learn. Therefore, a psychologically safe environment with a good learning climate and supervisors who can give appropriate feedback are needed. The last suggestion emphasizes the need for instructional designs that incorporate the specific context of geriatric psychiatry. This includes the different presentations of mental illness in old age, dealing with multimorbidity and polypharmacy as well as specific psychosocial challenges in old age such as stigma, cognitive dysfunction, and end-of-life questions. These findings corroborate studies of medical specialist training in other specializations[45,46] and a summary of faculty development initiatives in clinical supervision and feedback (e.g., dedicated training sessions).[47]

Our study has several strengths. A strength is, that we developed the national bilingual survey according to established guidelines. Further, we incorporated EPAs in investigating preparedness, which is timely and appropriate, as EPAs are being introduced in many graduate medical education contexts.[48]

Our study also has limitations. First, the 30.3% response rate is low. However, this is comparable to other medical education surveys.[9,41,49] This is tolerated in medical education, as survey distributed via e-mail typically have a response rate of around 30%.[50] Surveys can include non-responder bias, which we cannot exclude. However, we compared our study's respondents to a national database and identified no major deviations. The EPAs used in this survey are preliminary, which may represent an additional limitation. Currently, no EPAs are officially used for geriatric psychiatry specialist training in Switzerland. However, we adopted a systematic approach and included different perspectives to determine which EPAs to include.

5 | CONCLUSIONS

This study shows that trainee doctors in geriatric psychiatry feel sufficiently prepared for most clinical activities and that few to no differences exist between trainee doctors with different demographic characteristics. However, several clinical activities, such as obtaining consent for ECT, providing psychotherapy to geriatric psychiatric patients, and treating older adults at home or in residential facilities, merit further attention. Evidence-based feedback strategies and clinical supervision represent high-yield approaches to providing safe patient care and achieving the intended educational outcomes. Geriatric psychiatric trainee doctors expect more intense clinical supervision, structured induction programmes, and customized teaching activities. Future studies should also explore the experiences and needs of international medical graduates in European countries specializing in geriatric psychiatry.

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CONFLICT OF INTEREST STATEMENT

All authors declare that they have no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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