

Opinions matter: Career outcomes and educational preferences of psychiatric rehabilitation graduates

Chiara Quilici¹, Sara Catellani², Luca Pingani^{2,3}, Silvia Ferrari^{2,3}, Gian Maria Galeazzi^{2,3}, Giulia Ferrazzi³

¹Scuola di Scienze della Salute Umana, University of Florence, Florence, Italy; ²Dipartimento ad Attività Integrata di Salute Mentale e Dipendenze Patologiche, Azienda USL – IRCCS Reggio Emilia, Reggio Emilia, Italy; ³Department of Biomedical, Metabolic and Neural Sciences, University of Modena & Reggio Emilia, Italy

Abstract. *Background and aim:* Graduates' perspectives on bachelor's degrees are crucial to enhance the Quality Assurance System in Italian Universities. This study aimed to gather data on the employment status of graduates from the Psychiatric Rehabilitation Technique bachelor's program at the University of Modena and Reggio Emilia and to collect insights for monitoring and innovation of the formative plan. *Research design and Methods:* A cross-sectional study including all graduates until November 2022 (N: 247) was conducted, utilizing an online survey related to employment status and educational experiences. Data analyses involved categorizing subjects into two groups based on graduation year (Group 1: 2004–2012, Group 2: 2013–2022) for comparative analyses, considering the impact of Ministerial Decree No.270/2004, which overhauled the formative plan. *Results:* Of 247 graduates, 183 (74,1%) were tracked, 145 questionnaires were collected and 136 were deemed valid (74,3%). Significant differences emerged in initial recruiting timelines (Group 2: 2,3 months, Group 1: 5,6 months – P=0,02) and in the first employment contracts (Group 1: more stable arrangements at the onset of career, Group 2: increase in freelance agreements – P=0,000). Group 2 graduates expressed higher satisfaction with the educational program related to the first and the second job performed duties (P=0,038 and P=0,010). Qualitative analyses revealed weaknesses highlighted by Group 1, including inadequate representation of Psychiatric Rehabilitation Technicians (TeRPs) and deficient teaching content. Group 2 reported improvements in these areas but noted issues such as exam fragmentation and insufficient workshops. *Conclusions:* The study identified significant differences in employment status and educational opinions between the groups. Survey administration helped assess employability and attractiveness of TeRP profile, leading to suggestions for curriculum enhancement. (www.actabiomedica.it)

Key words: psychiatric rehabilitation technique, bachelor's degree, employment status, mental health professional, psychiatric rehabilitation technicians, quality assurance system, survey

Introduction

The profession of Psychiatric Rehabilitation Technician (TeRP) emerged in Italy after Law No.180/78, which triggered new perspectives for individuals with mental health challenges (1,2). Subsequent Health Reform Law No. 833/78 further defined these needs, establishing the National Health Service and

Territorial Psychiatry Services and aiming at the gradual transition from the asylum structure to a person-centered therapeutic approach to mental suffering (3). TeRP qualification is reached through a bachelor's degree. The specific educational path has undergone deep evolutions over time. A major curricular transformation realized concretely since A.Y. 2008/09 with Ministerial Decree No. 270 /2004. The Decree specified

the structure of the bachelor's program, defining the European Credit Transfer and Accumulation System (ECTS), with the specification for internships and professional laboratories, and introducing the roles of Course Coordinator and Internship Tutor, pertaining to the specific professional profile (4). Currently, the educational path emphasizes professional internships (5) and experiential workshops. Over years, the profile of TeRP has acquired an increasingly clear identity, focused on core competencies and use of specific intervention strategies and methodologies (2,6). Moreover, the graduates in Psychiatric Rehabilitation Technique have access to postgraduate paths and opportunities, including managerial and administrative roles, teaching (lectures, tutoring), and research (7,8). The evolution of the educational path of TeRP occurred parallel to the Healthcare Professions (PPSS) reform, culminating in Law No. 3/2018, which recognized and established the Orders of Healthcare Professions (9). The continuous monitoring process of students' educational quality is supported by a Quality Assurance System (QAS), a set of systematic actions enabling Universities to produce adequate confidence about the effectiveness of processes for teaching, research, and the third mission for their intended purposes (10). Students' and graduates' opinions on bachelor's degree programs are essential information for QAS in Europe (11). In Italy, the collection of students' opinions is mandatory (Law n. 370/1999) (12). A significant contribution in their gathering comes from Alma Laurea, an Interuniversity Consortium with the aim of evaluating study performance (13). Though, there are concerns regarding the reliability of information collected on the employment status of Psychiatric Rehabilitation Technician graduates. Firstly, the number of alumni surveyed is typically small. Additionally, since participation to the Alma Laurea survey is voluntarily, there is a risk of low response rates, leading to cohorts with very few respondents. This could result in insufficient or incomplete data, failing to accurately represent the real employment situation. The general aim of this study is therefore to collect quantitative and qualitative data about the employment status of graduates of the University of Modena and Reggio Emilia bachelor's program in Psychiatric Rehabilitation Technique:

- recruitment timelines for the first and subsequent jobs;
- employment situation and overview of contracts;
- evaluation of the academic educational path related to job tasks.

A secondary objective is to highlight differences (strengths and weaknesses) in the bachelor's degree program over years in order to acquire elements for innovation for the Formative Plan (ex.: identify potential new contexts in which the internship could be conducted or define possible organizational-structural aspects).

Participants and Methods

An online survey was administered. The questionnaire included forty questions with different answering options (closed-single or multiple-choice questions (28), 5-point Likert Scale questions (10) and short-answer questions (2)). For some items, an "other" or "I prefer not to answer" response option was provided, so as to encourage completion by as many subjects as possible. The following areas were investigated:

1. Socio-demographic;
2. Academic qualifications;
3. Employment status information concerning first and second employment and current job;
4. Perception of the relevance of the skills used in professional assignments to the TeRP profile, on the adequacy of the academic educational path according to the performed job duties, level of professional satisfaction;
5. Opinions with respect to the most significant strengths and weaknesses of the academic educational path.

(For more details, please refer to Annex).

All questions were mandatory in order to ensure complete data collection. This approach aimed to gather both quantitative and qualitative information efficiently, enabling the monitoring of opinions on the bachelor's degree and identifying potential areas for its improvement. Furthermore, response options

for questions pertaining to graduation year and grade were categorized into classes, to maximize anonymization of the collected data. The questionnaire was created using the Research Electronic Data Capture (REDCap) software (14,15), a web-based platform that enables the creation and management of online surveys and databases in a secure manner with maximum protection of sensitive data and provides tools for electronic data capture and management. In preparation, the survey was assessed several times by researchers to verify and improve its clarity, consistency, timing of completion and functionality as much as possible. Three researchers took part in its construction: one junior researcher (a student of the master's degree in "Rehabilitation Sciences of the Health Professions" at University of Florence) and two senior researchers (the Didactic Tutor and the Director of Teaching Activities of the bachelor's program at University of Modena and Reggio Emilia). The questionnaire link was sent via email by the Coordination of the bachelor's program at University of Modena and Reggio Emilia to all the subjects of the population who had provided an email address during enrollment in the bachelor's degree and had consented to receive communications from the University. Support was provided to address any doubts during online self-completion. Out of 247 TeRP graduates within the timeframe under

consideration, only 199 had provided an email. Those who had not (48 students enrolled before 2011-66 of these had only a phone number and an unsuccessful attempt was made to contact them) were excluded from the study. The survey was launched on January 18, 2023 and a kind reminder was sent to participants three weeks later. On March 6, 2023 the link was closed. The participation was voluntary, no incentive or compensation were provided/offered.

Study design

A cross-sectional study was conducted, analyzing variables associated with employment status and perceptions of the TeRP bachelor's program at University of Modena and Reggio Emilia. In order to ensure the accuracy and comprehensiveness of the study report, the STROBE Statement (16) was consulted.

Samples

To conduct the survey, all graduates of the degree program were involved, spanning from the inaugural graduation session (A.Y. 2003-2004) until the one of November 2022. This was done by accessing enrollment records from the first Academic Year of its activation (2001-2002) and verifying the number of actual graduates (Table 1).

Table 1. Samples.

Academic Year of Enrollment	Graduates (N)	Enrolled in the TeRP Register (N)
From 2001-2002 to 2008-2009	100	66
2008-2009	10	9
2009-2010	11	10
2010-2011	11	7
2011-2012	12	10
2012-2013	7	6
2013-2014	11	10
2014-2015	12	12
2015-2016	11	11
2016-2017	14	12
2017-2018	18	18
2018-2019	21	19
2019-2020	9 (Nov. 2022)	5 (Jan. 2023)
Total	247	195

Ethical considerations

To ensure the survey could be used for research and potential publication of data and results, preliminary advice was sought from the Ethics Committee of Modena and Reggio Emilia – Reggio Emilia. section regarding the need for evaluation. It was determined via email on October 21, 2022, that valuation was not necessary as the survey was structured to maximize data anonymization, adhering to current privacy legislation.

Data analysis

Statistical analyses were conducted through the use of Statistical Package for Social Science (SPSS). For all quantitative variables absolute frequency, valid percentage frequency, cumulative frequency, mean, standard deviation, minimum and maximum value were measured. Additional analyses were made based on graduation year, dividing the population into two subgroups. It was chosen to separate 2012 from 2013 to highlight differences related to Law No. 270/2004, which came into effect at University of Modena and Reggio Emilia starting from the Academic Year 2010-2011. Group one (2004-2012) and Group two (2013-2022) were compared regarding the following variables:

- recruitment timelines for employments;
- type of contract;
- adequacy of academic educational path according to the job tasks performed.

To assess statistically significant associations, the Chi-Square Test was used for categorical variables, while The Mann-Whitney U Test with independent samples was used when one variable was categorical and the other ordinal (this specific test was chosen because the distribution of some variables in the samples was not uniform). A significance level of less than 0,05 was applied.

Qualitative variables were reported by highlighting most frequently represented reflections and filtering comments by graduation year, aiming to assess different opinions before and after the Degree Plan Reform.

Results

To allow participation, 199 emails were sent out. 16 bounced back, probably due to outdated addresses, resulting in a final 74,1 % rate of involved people (N: 183). Out of the total number of compilers, which was 145, 5 filled out just the informed consent section while 4 filled out both the informed consent and socio-demographic data. It was decided to disregard these answers to prevent statistical analysis bias. Instead, partially completed surveys pertaining to the variables “educational qualifications/employment status/closing questions” were included in the data processing. Therefore, the total number of analyzed questionnaires amounted to 136, representing 74,3% of graduates. Concerning the recruitment timelines (Figure 1), 94,1 % (N: 128) of subjects answered the question related to the first job. Cumulative percentages show that 78,9% (N: 101) of people started their first job experience within 4 months and 92,2% (N: 118) within 1 year of graduation. The average time to employment was 3,46 months, with a standard deviation of 5,79, ranging from 1 to 36 months. None of the respondents remained unemployed 36 months after graduation. 5,9% (N: 8) are missing data.

71,3% (N: 97) of the population filled the question regarding the timeline for obtaining a second occupation. Among respondents, 68% (N: 66) secured a second employment before leaving the previous one, while 28,9% (N: 28) left their first job before obtaining the next one. The average time taken to get the second job was 13,79 months. 28,7% (N: 39), including people who retained their first job, did not respond. Regarding current employment, 30,9% (N: 42) of the original sample answered the related question, while 69,1% (N: 94), including 52 individuals who were still in their second employment, did not provide responses. 14% (N: 19) are missing data. 66,7% (N: 28) of graduates received new job opportunities before leaving their previous positions, while 28,5% (N: 12) left their second job before securing the next one. The average recruitment time was 12,25 months, with a standard deviation of 14,75, ranging from 1 to 36 months. A small percentage of subjects, 2,4% (N: 1), were still waiting for occupation.

Table 2 displays results relative to the type of employment contract. As observed, the prevalence of stable

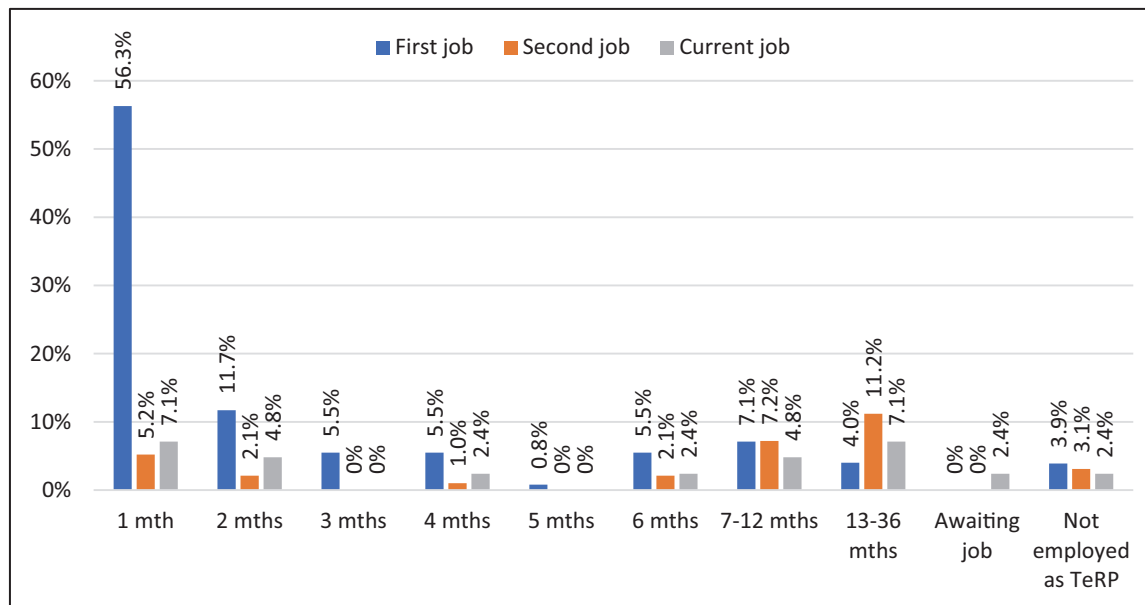


Figure 1. Recruitment Timelines.

Table 2. Type of employment contract.

Type of contract		First employment		Second employment		Current employment	
		N	Valid Percentage	N	Valid Percentage	N	Valid Percentage
Type of contract	<i>Coordinated and continuous collaboration contract</i>	10	8,1	2	2,1	0	0,0
	<i>Fixed-term contract</i>	73	59,3	37	39,4	9	22,5
	<i>Permanent contract</i>	13	10,6	31	33,0	29	72,5
	<i>Freelance/Vat contract</i>	19	15,4	16	17,0	2	5,0
	<i>Interim contract</i>	7	5,7	7	7,4	0	0,0
	<i>Research activities contract</i>	1	0,8	1	1,1	0	0,0
	Total	123	100,0	94	100,0	40	100,0
Missing data	13		42		96		
Total	136		136		136		

contracts, such as permanent contracts, increases as careers stabilize, while certain precarious contract types, such as coordinated and continuous collaboration contracts and interim contracts, are phased out over time.

Results about the opinions on the academic program are displayed in Table 3. For the first employment, it's notable that 57% (N: 69) of respondents out of 121 who answered the question considered the adequacy of their university education to be good or excellent according to the job tasks, while concerning the second

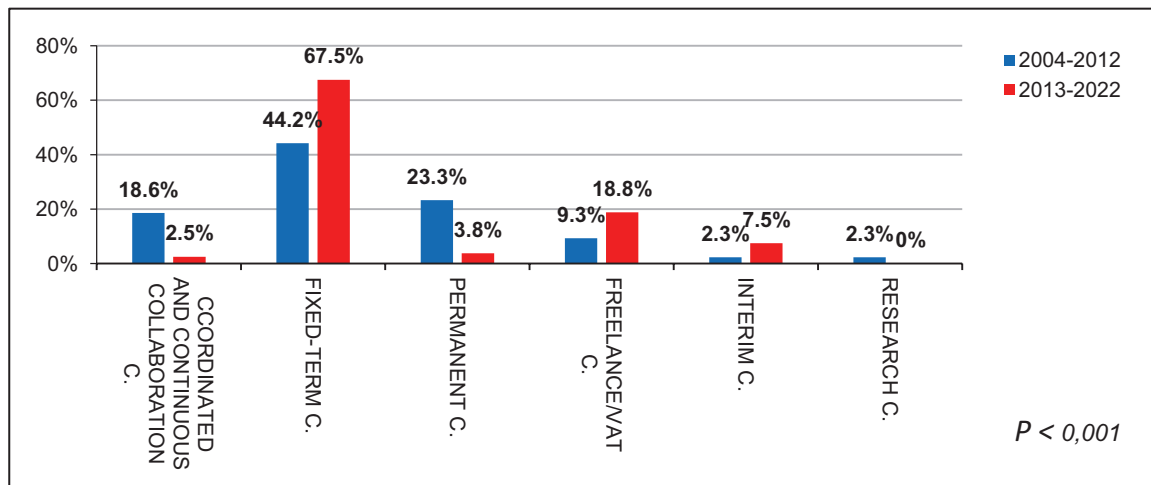
job (94 respondents), the cumulative percentage of 4 and 5 at Likert scale was 66% (N: 62). Instead, out of 40 individuals responding about their current job, despite 57,5% (N: 23) deemed the suitability of their education as good or excellent, 15% (N: 6) considered it poor.

Comparison between Groups

Statistically significant differences were found in hiring timelines between Group 1 and Group 2 for the

Table 3. Bachelor's program suitability according to job tasks.

		First employment		Second employment		Current employment	
		N	Valid percentage	N	Valid percentage	N	Valid percentage
Adequacy of academic educational path	1 (not at all adequate)	6	5,0	5	5,3	1	2,5
	2 (poor)	16	13,2	8	8,5	6	15,0
	3 (moderate)	30	24,8	19	20,2	10	25,0
	4 (good)	41	33,9	36	38,3	11	27,5
	5 (excellent)	28	23,1	26	27,7	12	30,0
	Total	121	100,0	94	100,0	40	100,0
Missing data		15		42		96	
Total		136		136		136	

**Figure 2.** Type of Contract – First Employment.

first employment ($P=0,02$, Mann-Whitney U Test), with Group 2 having an average recruitment time of 2,3 months (standard deviation 7,56) compared to 5,63 months (standard deviation 4,17) for Group 1. Differences in recruitment timelines for the second and current jobs were not significant ($P=0,073$ and $P=0,286$, respectively). Regarding the type of employment contract, significant differences were identified between groups in relation to the first job, and near-significant differences for the second job (Figure 2 and 3). However, no relevant differences were observed concerning the current occupation ($P= 0,930$).

Finally, there are significant differences between the groups with respect to opinions on the educational program (Mann-Whitney U test) related to the first

and the second job performed duties (Figure 4 and 5). In contrast, differences are not significant in relation to the current employment tasks ($P= 0,277$).

Qualitative analysis

As previously mentioned, answers to the two open-ended questions were sorted by year of graduation, maintaining the distinction between the two groups: 2004-2012 (Group 1) and 2013-2022 (Group 2). Among subjects included, 77,8% (N: 35 out of 45) in Group 1 and 81,3% (N: 74 out of 91) in Group 2 responded to both questions, totaling 109 individuals (80,1% of graduates). Table 4 presents the findings for each group. The results reveal diverse

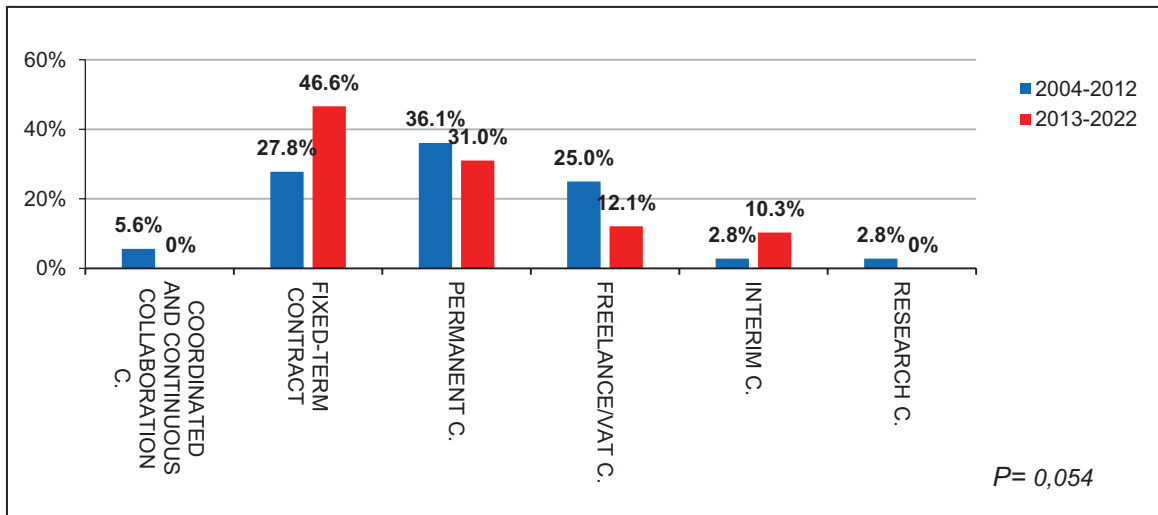


Figure 3. Type of Contract – Second employment.

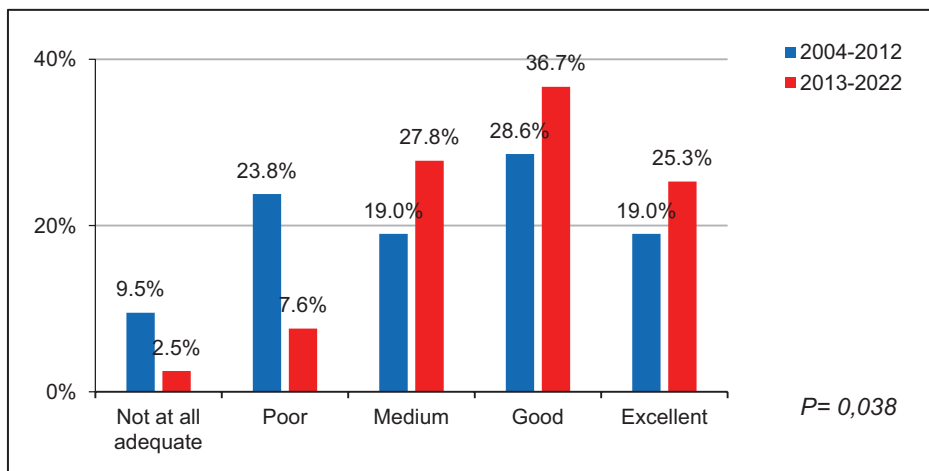


Figure 4. Adequacy of educational path – First employment.

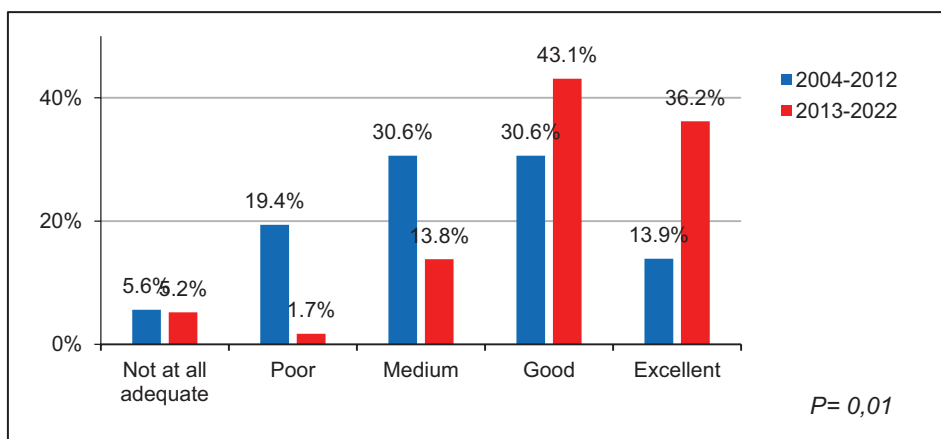


Figure 5. Adequacy of educational path – Second employment.

Table 4. Opinions of graduates on academic path.

Group 1 (2004-2012)	<i>Strengths of the bachelor's program</i>	Professional internships allowing immediate hands-on experience	
		Educational proposal rich in interesting and challenging content	
		Presence of helpful Tutors and numerous opportunities for discussion/ supervision	
		Small class groups, facilitating in learning, sharing experiences, managing organizational aspects (e.g.exam scheduling, internships, workshops)	
		Discrete job prospects	
	<i>Weaknesses of the bachelor's program</i>	Limited representation of TeRPs among the faculty, the Teaching Tutors and the Clinical Internship Tutors of the bachelor's program	
		Insufficient/superficial training content on some specific areas of psychopathology and rehabilitation (e.g.Child Neuropsychiatry)	
		Limited availability of specific educational tools and materials for Psychiatric Rehabilitation (e.g.dedicated manuals) and lack of practical workshops	
		Predominantly theoretical educational content, sometimes overlapping with those related to other PPSS	
		Limited number of internship sites, resulting in the inability to vary the contexts of professionalizing experiences	
		Overlapping of classes and exams/classes and internships, disabling in terms of managing the study/workload	
		Inability to pursue educational experiences abroad	
	Group 2 (2013-2022)	<i>Strengths of the bachelor's program</i>	Well-organized Internships: varied rehabilitation areas, Tutor supervision through debriefing sessions, good number of TeRPs among Clinical Internship Tutors
			Good representation of TeRPs both in the teaching staff and among Clinical Internship Tutors/ Teaching Tutors
Competent/helpful faculty members and Tutors, with frequent opportunities for supervision/ discussions			
Availability of practical professionalizing workshops (e.g.role-playing, discussions on clinical cases, descalation techniques etc.)			
Small class group, advantageous for the good structuring of teaching activities and for shared learning experiences and discussion			
Well-structured educational path, rich in diverse and stimulating content			
Opportunity to undertake part of the educational program abroad (Erasmus Project)			
<i>Weaknesses of the bachelor's program</i>		Excessive fragmentation of exams into modules with few ECTSs each	
		Overlapping of classes and internships	
		Occasional repetitive teaching content across various courses	
		Insufficient practical workshops, especially concerning more practical and evidence-based rehabilitation techniques and soft skills	
		Limited emphasis on educational content related to research and Evidence-Based Medicine (EBM)	
		Excessive number of topics covered in the three-year program given the limited time available, risking a shallow and non-specific training	
		Imbalance between theoretical educational content and specific and operational rehabilitation practices	
Insufficient focus on post-basic educational pathways/ employment orientation			

opinions, positives and negatives, based on graduation year.

Discussion

The overall aim of this study was to collect data on the employment status of graduates from the bachelor's program in Psychiatric Rehabilitation Techniques at University of Modena and Reggio Emilia, alongside their opinions about the academic curriculum. Comparing the two distinct groups of subjects further enabled a nuanced examination of changes occurred over time. Notably, over half of the respondents (56,3%) found employment within one month of graduation, with an impressive 92,2% securing jobs within a year. The average recruitment process lasted slightly over three months, and none of the respondents remained unemployed 36 months after graduation, indicating a high employability rate and favorable receptiveness of the surrounding context. Moreover, 68% of subjects seamlessly transitioned between their first and second jobs, while 66,7% secured their current positions before leaving their previous ones, demonstrating how the TeRP profile offers good job and career prospects, at least for the population surveyed. These findings underscore the considerable demand for the TeRP profile on addressing mental health needs. This is corroborated by the latest SISM (Mental Health Information System) Report, which reveals a substantial employment of TeRPs within Mental Health Departments of Emilia-Romagna: out of a total of 615 employed nationwide, 27% (N: 166) of Italian TeRPs work in this region (17). The study also highlighted differences in hiring timelines between the two cohorts. This reflects the evolving nature of employment dynamics, influenced by socioeconomic changes occurred in the Country, and are likely impacted by ongoing definition and reforms concerning the TeRP profile and the related educational pathway. The TeRP is among the more recently identified and regulated profiles within PPSS, as demonstrated by Ministerial Decree No.182/2001 (18). Overall, while there were less pronounced gaps in timelines for second and current employment, suggesting a gradual standardization of data, the study emphasizes the strong employability of TeRP graduates and the

importance of ongoing reforms in the field. The data regarding employment contracts illustrates a notable trend towards more stable arrangements over time among graduates, as shown in Table 2. This tendency is characterized by an increase in permanent contracts, representing 33% of subjects for the second job and 72,5% for the current one, accompanied by a gradual decline in precarious contract offers. Notably, certain contract types diminish over time. Comparing the two groups of graduates further validates these findings, with significant differences observed in contract offers for the first employment but less pronounced disparities for subsequent positions. There is a trend towards standardization of contract types favoring more stable arrangements, which reflect the evolving recognition of the TeRP profile and expansion of Mental Health Services and the consequent growth of labor market. Furthermore, the establishment of Health Professions Orders through Law No. 3/2018 has likely played a pivotal role in shaping the employment landscape for TeRP, aiming to ensure their autonomy, independence, and responsibility (2,9). The comparison between the two groups uncovers further intriguing insights: the earlier cohort (2004–2012) demonstrated greater contract stability in the commencement of their professional career, with a prevalence of fixed-term (44,2%) and permanent contracts (23,3%). In contrast, the latter group (2013–2022) experienced a higher proportion of fixed-term contracts (67,5%), a markedly lower percentage of permanent contracts (3,8%), and an uptick in interim contracts (7,5%) and freelance work (18,8%). These differences could be attributed to contextual factors such as recent freezes in public service hiring and increased employment in the social private sector, acting as a stakeholder of the Local Health Authority (AUSL) and providing a range of care services (19). The rise in freelancers may suggest various possible explanations such as an improved perception of the educational path's suitability over time, which fosters a positive inclination towards independent work. Alternatively, it might reflect growing health needs and the necessity to address them when public services fall short. Table 3 highlights improvement in graduates' perceptions of the suitability of their university education for their job tasks over time. However, there is a slight decrease in satisfaction regarding

current employment, with 30% of 40 respondents rating it as excellent, 27,5% as good, and 15% as poor. Significant differences in opinions between groups were observed for both first and second employments, Group 2 graduates tending to rate the adequacy of their university education significantly higher. Although opinions on current employment were more uniform, the overall data suggests that the reforms introduced by Ministerial Decree No. 270/2004 have positively influenced the quality of the educational program and how students perceive it. The qualitative analysis corroborates the evolving nature of the bachelor's program and the continuous refinement of the TeRP profile alongside other PPSS profiles. Early graduates highlighted contextual challenges rather than program deficiencies, such as limited TeRP profile recognition, constrained job opportunities, unspecified employment assignment and marginalization in decision-making processes compared to other professions within Healthcare Programs. Comparing opinions between the two groups reveals changes in the structure of the bachelor's degree. The introduction of Ministerial Decree No. 270/2004 played a crucial role, providing a clearer program organization and more specific regulations for professionalizing educational activities, such as internships and practical workshops. Moreover QAS have contributed to the continuous improvement of educational goals by activating planning, monitoring, and self-assessment processes to promptly identify and address issues (10,20). Furthermore, it is noteworthy that the bachelor's degree increasingly focuses on developing the TeRP's Core Competence, utilizing interactive teaching methods like practical workshops, role-playing sessions and case discussions. These methods align with the goals of the "Permanent Conference of Degree and Master's Degree Classes in Health Professions" (CPCL and LMPS), with ongoing feedback and needs assessment from students and graduates informing systematic improvements to the program's educational and organizational aspects (2,21,22).

Strengths and weaknesses

A limitation of this study could be related to the sampling process. Specifically, 48 out of the 247 graduates from the University of Modena and Reggio

Emilia (19,4%) of the sample could not be located, despite efforts to reach those for whom a phone number was available. Additionally, the email addresses of 16 former students were no longer active, resulting in a valid sample size of 183 subjects, which represents 74,1% of the originally intended population. Nevertheless, response rate within was high, with 136 respondents (74,3%). We consider this a strength of the survey, as it enhances the reliability of both the population surveyed and the results obtained.

Conclusions

The survey employed in this study serves as a valuable instrument for assessing graduates' employment status, offering insights to refine the educational framework of the degree program and to enhance its overall quality and efficacy. Through qualitative analysis, specific areas for improvement have been identified (including optimizing lectures and internships, streamlining exams, revising teaching content to avoid redundancy). This study underscores the importance of continuous professional development, emphasizing the necessity for training programs to evolve alongside advancements in mental health and rehabilitation practices. In this regard, it is appropriate to reflect on some emerging rehabilitative techniques like virtual reality, augmented reality, and artificial intelligence, which show promise in psychiatric rehabilitation (23–29) and educational contexts (30,31), warranting further research and potential integration into academic paths, such as workshop settings. Many national commissions for degree courses in health professions are actively shaping core competencies and curricula, guiding teachers in aligning theoretical teachings and internship objectives. Establishing a shared core competence for TeRPs is crucial for standardizing training paths across universities, and equipping professionals with specialized skills to address evolving health needs. Conclusively, periodic surveys like the one conducted in this study are essential for assessing the employability and the appeal of the Psychiatric Rehabilitation Technician profession, while tracking evolving trends over time. This ongoing evaluation provides guidance to necessary adjustments to training programs, ensuring the continued effectiveness of TeRPs in the healthcare landscape.

Funding: This work received no external funding.

Conflict of Interests: Each author declares that he or she has no commercial associations (ex. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

Authors' Contribution: Each author has read and approved the final manuscript and has contributed significantly to the research and preparation of this article.

References

- Legge n.180 del 13/05/78 (G.U. n. 133 del 16-05-1978).
- Famulari R, Fierro L, Parigi D, Rovito E, Ussorio D. Il core competence del tecnico della riabilitazione psichiatrica. Roma: Alpes Italia; 2019.
- Legge n.833 del 23/12/78 (G.U. n. 360 del 28-12-1978).
- Decreto Ministeriale n.270 del 22/10/04 (G.U. n.266 del 12-11-2004).
- Dall'Aglione R, Virga M, Catellani S, et al. A theoretical guide for the integration of the clinical internships for interns and clinical tutors in the mental health professions. *Acta Biomed Atenei Parm.* 2021 Dec 22;92(S2):e2021510.
- Pingani L, Fiorillo A, Luciano M, et al. Who cares for it? How to provide psychosocial interventions in the community. *Int J Soc Psychiatry.* 2013 Nov;59(7):701–5.
- Legge n.43 del 01/02/06 (G.U. n.40 del 17-02-2006).
- Decreto Ministeriale n.8 dell' 08/01/09 (G.U. n. 122 del 28-05-2009).
- Legge n.3 del 11/01/18 (G.U. n.25 de 31-01-2018).
- Agenzia Nazionale di valutazione del Sistema Universitario e della Ricerca (ANVUR). AVA3 - Linee Guida per il Sistema di Assicurazione della Qualità negli Atenei [Internet]. 2023 [cited 2024 Mar 12]. Available from: https://www.anvur.it/wp-content/uploads/2023/02/AVA3_LG_Atenei_2023_02_13.pdf
- Standards and guidelines for quality assurance in the European higher education area (ESG). Bruxelles: European Association of Institutions in Higher Education; 2015.
- Legge n.370 del 19/10/99 (G.U. n.252 del 26/10/99).
- ALMALAUREA [Internet]. 1994; Available from: <https://www.almalaurea.it/chi-siamo/il-consorzio>
- Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)—A metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform.* 2009 Apr;42(2):377–81.
- Harris PA, Taylor R, Minor BL, et al. The REDCap consortium: Building an international community of software platform partners. *J Biomed Inform.* 2019 Jul;95:103208.
- von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vanderbroucke JP. STROBE Statement: linee guida per descrivere gli studi osservazionali. Traduzione italiana. *Ter Evid Based [Internet].* 2008 [cited 2024 Mar 12];1(1). Available from: <https://www.strobe-statement.org/translations/>
- Sistema Informativo per la Salute Mentale (SISM). Rapporto Salute Mentale - Anno 2022 [Internet]. 2023 [cited 2024 Mar 15]. Available from: https://www.salute.gov.it/portale/documentazione/p6_2_2_1.jsp?lingua=italiano&id=3369
- Decreto Ministeriale n.182 del 29/03/01 (G.U. Serie Generale n.115 del 19/05/01).
- Geddes da Filicaia M. La grande crisi del SSN. *Salute Internazionale [Internet].* [cited 2024 Mar 24]; Available from: <https://www.saluteinternazionale.info/2024/01/la-grande-crisi-del-ssn-2/>
- Decreto Ministeriale n.289 del 25/03/21 (G.U. n.114 del 14-05-21).
- Conferenza Permanente delle Classi di Laurea delle Professioni Sanitarie. Statuto della Conferenza Permanente delle Classi di Laurea e Laurea Magistrale delle Professioni Sanitarie. 2010.
- Saiani L. Storia e obiettivi della Conferenza Permanente delle Classi di laurea e laurea magistrale delle Professioni sanitarie. *Med E Chir - Quad Delle Conf Perm Delle Fac Med E Chir.* 2015;(68):3109–11.
- Tan BL, Shi J, Yang S, et al. The use of virtual reality and augmented reality in psychosocial rehabilitation for adults with neurodevelopmental disorders: A systematic review. *Front Psychiatry.* 2022 Dec 14;13:1055204.
- Novo A, Fonsêca J, Barroso B, et al. Virtual Reality Rehabilitation's Impact on Negative Symptoms and Psychosocial Rehabilitation in Schizophrenia Spectrum Disorder: A Systematic Review. *Healthcare.* 2021 Oct 23;9(11):1429.
- Milne-Ives M, Selby E, Inkster B, Lam C, Meinert E. Artificial intelligence and machine learning in mobile apps for mental health: A scoping review. *Narasimhan P, editor. PLOS Digit Health.* 2022 Aug 15;1(8):e0000079.
- Krzystanek M, Surma S, Stokrocka M, et al. Tips for Effective Implementation of Virtual Reality Exposure Therapy in Phobias—A Systematic Review. *Front Psychiatry.* 2021 Sep 21;12:737351.
- Götzl C, Hiller S, Rauschenberg C, et al. Artificial intelligence-informed mobile mental health apps for young people: a mixed-methods approach on users' and stakeholders' perspectives. *Child Adolesc Psychiatry Ment Health.* 2022 Nov 17;16(1):86.
- Caponnetto P, Triscari S, Maglia M, Quattropiani MC. The Simulation Game—Virtual Reality Therapy for the Treatment of Social Anxiety Disorder: A Systematic Review. *Int J Environ Res Public Health.* 2021 Dec 15;18(24):13209.
- Yellowlees PM, Cook JN. Education About Hallucinations Using an Internet Virtual Reality System: A Qualitative Survey. *Acad Psychiatry.* 2006 Dec 1;30(6):534–9.
- Formosa NJ, Morrison BW, Hill G, Stone D. Testing the efficacy of a virtual reality-based simulation in enhancing

users' knowledge, attitudes, and empathy relating to psychosis. *Aust J Psychol.* 2018 Mar 1;70(1):57–65.

31. Zare-Bidaki M, Ehteshampour A, Reisaliakbarighomi M, et al. Evaluating the Effects of Experiencing Virtual Reality Simulation of Psychosis on Mental Illness Stigma, Empathy, and Knowledge in Medical Students. *Front Psychiatry.* 2022 May 17;13:880331.

Correspondence:

Received: 29 May 2024

Accepted: 19 September 2024

Giulia Ferrazzi, MS

Via Amendola 2, Reggio Emilia, 42122 Italy

E-mail: giulia.ferrazzi@unimore.it

ORCID: 0009-0005-1103-493X

Annex

Dear colleagues,
the psychiatric rehabilitation technique bachelor's program has taken several steps in recent years towards the continuous improvement of its quality. The data we have (AlmaLaurea) shows a very positive situation regarding the employment levels of our graduates. In order to further improve our training standards, we have decided to carry out an 'ad hoc' questionnaire among our graduates on their employment situation. The project will also be the subject of a master's degree thesis in collaboration with the science and rehabilitation of health professions Master's degree at the university of Florence. We therefore kindly invite you to answer a few questions, which will take about 15 minutes of your time. We would like to thank you in advance for any information you may wish to give us and we are at your disposal for any questions you may have. Participation in the survey is completely anonymous and it will not be possible to identify the name of the person completing the questionnaire. The data collected will be processed in full compliance with current data protection legislation. Thank you very much for your time and attention. Coordination of the degree course in psychiatric rehabilitation technique - university of Modena and Reggio Emilia.

Consent for survey participation	I agree to take part in the survey	I don't agree to take part in the survey			
Socio-demographic data	Age	Sex assigned at birth	Gender ID	Marital status	Residence
	<i>22 to 24 years old</i>	Male	Male	Single	Province of Reggio Emilia
	<i>25 to 27 years old</i>	Female	Female	Stable relationship	Province of Modena
	<i>28 to 30 years old</i>		Other (gender fluid, non-binary, agender...)	Married/civilly united	Other province of Emilia-Romagna region
	<i>31 to 33 years old</i>		Prefer not to answer	Separated/divorced	Other region of Northern Italy (Lombardy, Liguria, Piedmont, Valle D'aosta, Friuli-Venezia Giulia, Trentino Alto-Adige and Veneto)
	<i>34 to 36 years old</i>			Widowed	Other region of Central Italy (Lazio, Marche Tuscany and Umbria)
	<i>Greater than or equal to 37 years old</i>			Prefer not to answer	Other region of Southern Italy (Abruzzo, Basilicata, Calabria, Campania, Molise, Apulia, Sicily and Sardinia)
					Prefer not to answer
Academic titles	Qualifications held before graduation in TeRP (more than one answer possible)	Graduation year	Bachelor's degree awarded in/out of course	Degree grade	Qualifications held after graduation in TeRP (more than one answer possible)
	Old-school degree (4 or more years)	2004-2006	In course	110 cum laude	Bachelor's degree
	University diploma	2007-2009	Out of course	110	Master's degree
	Bachelor's degree	2010-2012	Prefer not to answer	106-109	Single-cycle master's degree
	Master's degree	2013-2015		102-105	First level master's degree

Single-cycle master's degree	2016-2018		98-101	Second level master's degree
First level master's degree	2019-2022		94-97	Specialization course
Second level master's degree			90-93	Ph.d.
Specialization course			86-89	No post- graduation qualifications
Ph.D.			82-85	
No previous qualifications			78-81	
			74-77	
			70-73	
			66-69	

You will now be asked some questions about your career path. We ask you to consider only occupations related to the role and competences of psychiatric rehabilitation technician. (based on your answers, you may be directed to the next section by clicking on 'submit')

Employment status-first employment as TeRP	Hiring timeline	Type of contract	Institution of employment	Weekly working time (hours)	Monthly net wage
	1 to 36 months (listed one by one in the original survey-one answer possible)	Coordinated and continuous collaboration contract	Private practice	1 to 6	100 to 400€
	Looking for employment	Fixed-term contract	Private company	7 to 12	401 to 800€
	Decision not to practice as a TeRP	Permanent contract	Conventional private company	13 to 18	801 to 1200€
		Freelance/Vat contract	Social private organization	19 to 24	1201 to 1600€
		Interim contract	Public institution	25 to 30	1601 to 2000€
		Research activities contract (scholarship, research grant, fellowship...)	Other	31 to 36	More than 2000€
				37 to 40	
				More than 40	
	Relevance of professional skills used in the job to the TeRP profile	Professional satisfaction	Opinions on the adequacy of the educational path according to the job tasks	Is the first job/contract the actual job/contract?	
	From "not at all relevant" to "perfectly relevant" (likert scale)	From "not at all satisfied" to "totally satisfied" (likert scale)	From "not at all adequate" to "totally adequate" (likert scale)	Yes	
				No	

You will now be asked some questions about your career path. We ask you to consider only occupations related to the role and competences of psychiatric rehabilitation technician. (based on your answers, you may be directed to the next section by clicking on 'submit')					
Employment status-second employment as TeRP	Hiring timeline after leaving the first job	Type of contract	Institution of employment	Weekly working time (hours)	Monthly net wage
	Already found another occupation before leaving the first one	Coordinated and continuous collaboration contract	Private practice	1 to 6	100 to 400€
	1 to 36 months (listed one by one in the original survey- one answer possible)	Fixed-term contract	Private company	7 to 12	401 to 800€
	Looking for a new employment	Permanent contract	Conventional private company	13 to 18	801 to 1200€
	Decision not to practice as a TeRP anymore	Freelance/Vat contract	Social private organization	19 to 24	1201 to 1600€
		Interim contract	Public institution	25 to 30	1601 to 2000€
		Research activities contract (scholarship, research grant, fellowship...)	Other	31 to 36	More than 2000€
				37 to 40	
				More than 40	
	Relevance of professional skills used in the job to the TeRP profile	Professional satisfaction	Opinions on the adequacy of the educational path according to the job tasks	Is the second job/contract the actual job/contract?	
	From "not at all relevant" to "perfectly relevant" (likert scale)	From "not at all satisfied" to "totally satisfied" (likert scale)	From "not at all adequate" to "totally adequate" (likert scale)	Yes	
				No	
You will now be asked some questions about your career path. We ask you to consider only occupations related to the role and competences of psychiatric rehabilitation technician. (based on your answers, you may be directed to the next section by clicking on 'submit')					
Employment status-actual employment as TeRP	Hiring timeline after leaving the previous job	Type of contract	Category of the institution of employment	Weekly working time (hours)	Monthly net wage
	Already found another occupation before leaving the previous one	Coordinated and continuous collaboration contract	Private practice	1 to 6	100 to 400€

	1 to 36 months (listed one by one in the original survey- one answer possible)	Fixed-term contract	Private company	7 to 12	401 to 800€
	Looking for a new employment	Permanent contract	Conventional private company	13 to 18	801 to 1200€
	Decision not to practice as a TeRP anymore	Freelance/Vat contract	Social private organization	19 to 24	1201 to 1600€
		Interim contract	Public institution	25 to 30	1601 to 2000€
		Research activities contract (scholarship, research grant, fellowship...)	Other	31 to 36	More than 2000€
				37 to 40	
				More than 40	
	Relevance of professional skills used in the job to the TeRP profile	Professional satisfaction	Opinions on the adequacy of the educational path according to the job tasks		
	From “not at all relevant” to “perfectly relevant” (likert scale)	From “not at all satisfied” to “totally satisfied” (likert scale)	From “not at all adequate” to “totally adequate” (likert scale)		
Closing questions	If it were possible to go back in time, would you re-inroll in the bachelor of psychiatric rehabilitation technique?	Describe three significant strengths of the bachelor of TeRP at the university of modena and reggio emilia	Describe three significant weaknesses of the bachelor of TeRP at the university of modena and reggio emilia	Level of fulfillment for having graduated in TeRP at modena and reggio emilia university	
	Yes, at the same university	(open-answer question)	(open-answer question)	From “not at all fulfilled” to “completely fulfilled” (likert scale)	
	Yes, at another university				
	No				
Prefer non to answer					