Doctoral Studies in Romania: Thriving or Surviving?



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Abstract This paper explores the specificities of doctoral studies, focusing on students' well-being. It is part of an ongoing research project analysing doctoral studies in Romania, focusing on three main themes: access, participation and completion. The multiple facets of the doctoral studies within the Bologna Process—seen at a crossroad between EHEA and ERA, and as a cornerstone of the 'knowledge-based society'-reflect onto the various roles assigned to doctoral candidates: students, emerging researchers, teaching and research assistants. While the doctoral cycle tends to prioritise the development of research and academic skills, it appears to be lacking appropriate support mechanisms for students. In order to better understand these mechanisms, the paper is structured on three levels: current context, practices and the students' perspective. This latter level explores internal and external factors of success-among others: motivation, personal/professional development, academic identity, doctoral supervision, research guidance, financial support, career counselling, and societal role. To do so, the paper draws upon a mixed methodology, using data collected from workshops with relevant stakeholders and a questionnaire addressed to Ph.D. students. By superimposing these layers, our paper aims to provide an overview of the current state of doctoral studies in Romania, with a focus on the well-being of doctoral students. Finally, it attempts to shape several proposals for improving both the practices and the policy framework of doctoral studies in Romania while taking into account the future of higher education and research in Europe, as well as European good-practice examples.

Keywords Higher education · Bologna process · Doctoral studies · Students' well-being

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1 A General Overview of Doctoral Studies in the Context of the Bologna Process

The paper refers to doctoral studies in the context of the Bologna Process as the third cycle in higher education and, at the same time, as the first step in the career of an emerging researcher. Advancing knowledge through original research is the main component of this cycle and the main differentiator compared to the bachelor and the master's degrees. The particular role of doctoral studies at the crossroad between the European Higher Education Area (EHEA) and the European Research Area (ERA) offers them a special status, accentuating their role both in higher education as well as in research (EURODOC 2020, p. 5). Following the themes of access, participation and completion, the paper will first focus on a brief overview of these three aspects.

In terms of **access**, according to EUROSTAT, in 2018, in Europe, there were 17.5 million students. Out of the total, 6.8% were enrolled in short-term courses, 59.9% were enrolled at bachelor level, 29.5% at master's level, while 3.8% were pursuing a doctoral degree. In the European Union, there was a 60% increase in the number of Ph.D. holders in ten years—from 72.000 in 2000, to 188.000 in 2011 (Castello et al. 2017, p. 2). An OECD study (2019) indicates that 1.1% of all 25–64-year-old adults hold a doctorate (in OECD member countries). The increase in the number of doctoral graduates at the international level contributes, on the one hand, to the development of knowledge-based economies (an idea promoted by the European Union, the OECD and the World Bank), but, on the other hand, generates criticism regarding the capacity to absorb highly qualified graduates into the labour market in roles outside the academic environment. This leads to increased competition in research and higher education institutions (HEIs)—the preferred option for most candidates, with strong effects on the health of Ph.D. students and graduates, including on their well-being (Hancock 2020).

When it comes to participation, an analysis carried out by the European University Association (EUA) on the European Union practices at the doctoral level underlined a tendency towards developing structured doctoral programs and doctoral schools, which add to the individual training component. Among the strategic priorities for the universities/organisers of doctoral studies identified by the same study, there are topics such as financing of doctoral studies, research ethics and internationalisation, as well as career development, gender equality, open access to resources and doctoral students' well-being. A similar list of priorities was put forward by the European Council of Doctoral Candidates and Junior Researchers (EURODOC), which argues that the role of doctoral studies within the European Higher Education Area (EHEA) context should be re-evaluated in order to be better aligned to the general tendencies in higher education and educational policies. The organisation outlined areas considered important for such an alignment, namely research evaluation, open science, research ethics, mental health, career development and graduate tracking while pointing out the significant differences between the first two cycles (bachelor and master) and the doctoral cycle (EURODOC 2020, p. 1).

Several **aspects influence participation and completion** of doctoral studies. One such aspect refers to the financial support component, which has a direct effect on the process. Public resources are the dominant source of financing in Europe, followed by employment by universities, grants and scholarships. Another important aspect is the coordination of the doctoral student. The support and guidance of young researchers is organised at several institutional levels. The cases where doctoral students carry out their work without any form of institutional supervision are rare, as the advisor continues to play a central role. EURODOC draws attention to the relationship between doctoral students and advisors, exploring options for improvement, such as organising training courses for advisors, conducting doctorates in joint supervision (e.g. dyad/group supervision), implementing structured and confidential feedback mechanisms, or providing greater support from the organising institution (EURODOC 2020, p. 3). The results of the EUA study (2019) indicate a low number of institutional rules and regulations that are in place regarding the training of doctoral advisors, which exist in only 17% of the participating European universities.

Regarding the **completion** of doctoral studies, EUA (2019) indicates that 78% of respondent universities consider that doctoral studies largely prepare the next generation of university professors, while 53% stressed the importance of training highly qualified workers. Only 52% of respondents believe that their doctoral programs prepare graduates for research positions outside academia, while only 29% believe they prepare them for leadership and leadership positions.

Another study conducted under the coordination of the European Science Foundation in 2016/2017 (nine participating organisations, including a university in Romania - University of Bucharest), which aims to monitor the careers of graduates of doctoral programs (2046 respondents), indicates a number of interesting perspectives for the doctoral candidates. Among these, the study indicates that universities and academia are the main destinations for graduates and that the doctorate is more relevant for roles in academia and less for other sectors (where the qualification is generally covered by Master studies). However, there is a need for additional training in transferable skills (e.g. communication, project management, and networking) and more support and career guidance (Boman 2017). EUA (2019) emphasises the importance of monitoring the career of doctoral students as a central element in the development of evidence-based educational policies and the future improvement of the career development component of a doctoral student. In 2019, only 45% of respondents monitored the career of a majority of graduates of doctoral programs. In this regard, the European Commission reiterated its commitment to launching a European graduate monitoring initiative. At the same time, the relative advantage for the insertion on the labour market of doctoral graduates compared to master's graduates varies in OECD countries from 10% in Finland, Hungary and Italy, to only 1% in Iceland and Sweden (OECD 2019), indicating the need for a better contextualisation of the graduates' path according to the national context, as well as for increased international mobility among the young researchers/graduates of doctoral studies.

2 Methodology

Following this theoretical framework and the stages defined as entry, integration and completion, the paper explores the specificities of doctoral studies in Romania, focusing on students' well-being. It does so by drawing upon a mixed methodology, using qualitative data collected from workshops with relevant stakeholders and quantitative data drawn from a questionnaire addressed to Ph.D. students.

The three workshops took place in March 2021 and gathered approximately 100 representatives from public institutions, higher education institutions, quality assurance bodies, academia and student representatives, as well as other interested parties. Their contributions were recorded, transcribed and later included into relevant categories, informed by the existing literature in the field. At a later stage, the initial results were validated with several experts in the field of education and representatives of different stakeholders (academia, students and policy-makers).

The National Students' Survey was developed by UEFISCDI during the second term of the 2019/2020 academic year, and it included 277 responses from doctoral students with regards to their satisfaction towards services provided by the university and the quality of their doctoral program. The questionnaire comprises three sections, one concerning the educational process in the context of the Covid-19 pandemic, the second section is dedicated to students' satisfaction with services offered by their university, and the third section refers to students' satisfaction with the quality of their academic program. For this current analysis, only questionnaires filled in by doctoral students were taken into account, particularly focusing on items falling under these categories: well-being, students' experience and support mechanisms. Out of the 277 respondents enrolled in a doctoral program (115 male and 162 female), 43 reported belonging to a particular social context (disadvantaged background), and 38 reported belonging to another ethnicity. The majority of respondents (109) are first year students, while the rest are registered in other years of study (second year-66, third year—95 and fourth year—7). Out of the total, 20 students have extended their studies, while 13 have postponed the final thesis presentation, and 10 students currently benefit from a grace period.

The methodological limitations of this study derive from two main aspects. First, it should be noted that the particular context in which the questionnaire was administered, namely after the transition to online teaching, learning and research during the Covid-19 pandemic, could have influenced the students' responses and the survey outcomes. Second, the sample is not statistically relevant for the entire Romanian Ph.D. students' body, but it provides one of the few existing opportunities for such an analysis, as it offers the perspective of a group of doctoral students regarding their first-hand experience in the doctoral program.

3 Current State of Affairs—Doctoral Studies in Romania

In Romania, doctoral programs are regulated by the National Education Law no. 1/2011, as well as by Decision no. 681/2011 regarding the approval of the Code of doctoral university studies. According to the National Education Law (art. 159/1), doctoral programs are carried out in doctoral schools under the coordination of a doctoral advisor. They include a training component based on advanced university studies and an individual program of scientific research or creation. Doctorates can

be scientific if their purpose is original scientific knowledge, or professional, in the fields of arts or sports. Doctorates are usually organised in the form of full-time education, but there is also an option for part-time programs.

According to the Romanian Agency for Quality Assurance in Higher Education (ARACIS), in 2018, there were 57 institutions organising doctoral studies (IOSUDs) in Romania (52 state higher education institutions, 4 private and the Romanian Academy) with 210 doctoral schools—respectively 434 doctoral fields (401 doctoral degree subjects). According to the Executive Unit for Financing Higher Education, Research, Development and Innovation (UEFISCDI), data from research carried out at the level of 40 universities in Romania indicates that the number of doctoral students increased by 23% between 2015/2016 and 2019/2020 (a higher increase than that recorded by the number of undergraduate or master's level students) (UEFISCDI, 2021, p. 5).

In terms of **access** to doctoral studies, in 2018 there were 4,541 places available for doctoral admission, of which 1,328 for fee-paying places (including in private HEIs) and 3,213 for budgeted places (1,559 with scholarship and 1,654 without scholarship), the distribution being made by the Ministry of Education (ARACIS 2018). In 2021, compared to the 2015/2016 academic year, in 46 of the Romanian universities where doctoral studies are organised, there was a decrease in the number of budgeted places with scholarship (by 27.21%), an increase in budgeted places without scholarship (by 82.07%) and for fee-paying students (by 37.95%) (UEFIS-CDI 2009, p. 9). According to UEFISCDI, the recruitment pool for doctoral students is usually the universities' own graduates, which makes 'doctoral admission often formal, based on previous discussions between the advisor and the student so that the advisors already know whom they want to work with before the admission process' (UEFISCDI 2009, p. 5). This is just another proof of the spread of academic inbreeding—that starts from the beginning of an academic career—which is not just a local or national problem but also a global phenomenon (Altbach et al. 2015).

Thus, in terms of **participation**, one of the main factors influencing the process appears to be the relation between the Ph.D. coordinator/advisor and the doctoral student. The coordination of the doctoral student can be unique—by an appointed advisor from the higher education institution or co-supervised, when the doctoral student carries out their activity under the simultaneous guidance of two coordinators—one from Romania and another from another doctoral school/IOSUD/country. In 2018, in Romania, there were 4,388 doctoral advisors (of which 34 in private institutions) out of a total of 23,412 professors who would meet the *habilitation* conditions (ARACIS 2018).

In Romania, the doctoral student has a dual status: as a student (from enrolment to taking the final exam or to termination) and as an emerging researcher, by carrying out research activities in relation to the doctoral thesis (generally formalised by monthly activity reports). There is also the option of being employed as a research assistant or university assistant for a limited timeframe. However, 'due to the ambiguous status within the team, the doctoral student is often subordinated to several people and thus ends up doing more administrative work than research' (UEFISCDI 2009, p. 7). This dual status—as student and university employee—has an impact on both the

rights and responsibilities of the doctoral student (which include teaching courses, involvement in research and administrative activities of the department, etc.).

According to the law, the timeframe of doctoral studies is three years, with the possibility of extension for a maximum of two years. One can also obtain a grace period (lasting two years), which leads to the possibility of formally extending the period of doctoral studies from three years to seven years, without including interruption periods. Such interruptions may not exceed, in general, two years; an exception is made in cases of raising/caring for a child, when the interruption may add up to three years but can only be requested once during the doctoral program. These provisions vary depending on the regulations of the doctoral school.

The distribution of students per year of study in the academic year 2019/2020 indicates that 69.77% of doctoral students are in their first three years of study, 3.46% are in the 4th 'legal'¹ year (in the case of 4-year doctorates), while 26.77% benefit of an extension (year 4, 5 or 6)—the latter percentage registering an increasing trend in recent years (3.33% more students than in 2015/2016 continue their studies in year 4, 5 and 6 according to data reported for the 2019/2020 academic year) (Fig. 1). In the first years following the Bologna Process implementation, the three years allocated to these studies were considered 'totally insufficient, even if the doctoral students would only deal with their own research' (UEFISCDI 2009, p. 7). Therefore, a more

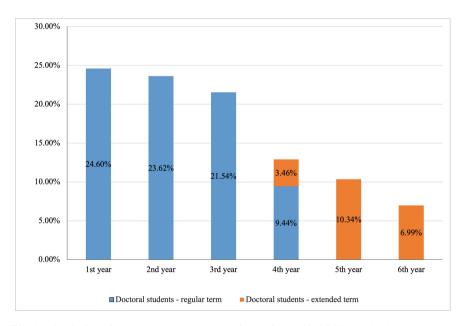


Fig. 1 Distribution of doctoral students on years of study for the 2019/2020 academic year. *Source* UEFISCDI, 2021

¹According to provisions of Art. 39, alin. (2)/HG. no. 681/29 June 2011 regarding the approval of the Code for doctoral studies.

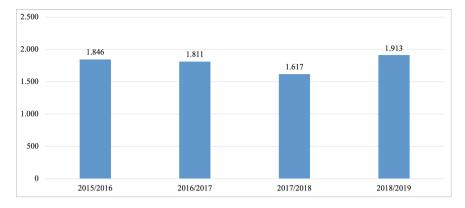


Fig. 2 The evolution of the no of Ph.D. graduates from 2015/2016 to 2018/2019. *Source* UEFISCDI, 2021 (p. 22)

optimal period of 4–5 years could be considered for doctoral studies, in the future, with variations depending on the field of study.

In terms of **completion**, according to the UEFISCDI² data, the number of doctoral graduates has been slightly increasing in Romania (for the period 2015/2016 to 2018/2019) (Fig. 2). There is a need for better monitoring process not only after graduation but also during the doctoral studies, for a better understanding of key moments in the doctoral course and the factors that influence the success/failure of Ph.D. candidates. Also, beyond the quantitative indicators, the definition of success/failure of doctoral studies can be further explored (for example, finishing in the allotted three years' timeframe, publication of articles in co-authorship with the doctoral advisor, participation in conferences, impact of research on field/practice, involvement in teaching, etc.).

The Ministerial Decree (OMEN no. 5110/2018) details the minimum national standards for granting the doctoral degree, which contains a set of standards specific to doctoral fields. Specialised committees of the National Council for Attestation of University Degrees, Diplomas and Certificates evaluate each doctoral thesis against these standards before a doctoral degree is granted, but after the doctoral candidate has successfully defended his/her thesis publicly (in front of a commission assigned by the institution where they are enrolled in). For most committees, the standards include the compulsory publishing of articles in internationally recognised journals, with a minimum of articles for which the doctoral student has the status of first author, the relevance of published articles in relation to the topic of the doctoral thesis, writing a minimum of articles in collaboration with the Ph.D. advisor, publication of book chapters, participation in national and international conferences, etc. In addition to these standards, other specific standards can be adopted by higher education institutions and the Romanian Academy.

²The analysis is based on data provided by 40 of the total number of universities in Romania.

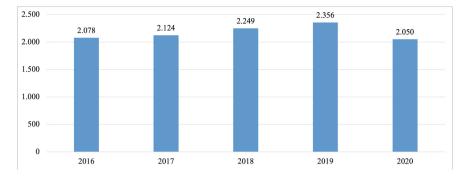


Fig. 3 Number of Ph.D. holders from 2016 to 2020. Source UEFISCDI, 2021 (p. 24)

In recent years (2016–2020), a relatively constant number of Ph.D. titles/year has been granted, totalling 10,857, with a slight fluctuation between 2019 and 2020 (an increase, followed by a decrease of approximately 13%) (UEFISCDI, 2021, p. 24).³ A better understanding of the mechanisms of the graduation process could also be provided by the analysis of the procedures and the institutional calendar (including the time interval between completion of the doctoral thesis and its public defence). This would be relevant particularly when it comes to the differences which appear in reporting doctoral students enrolled each year compared to the number of doctoral degrees granted at the end of a three-year cycle. For example, for doctoral students completing their thesis at the end of an academic year, the public defence could be scheduled at the beginning of the next academic year while the official validation from the Ministry of Education could be issued months later (Fig. 3).

Beyond fulfilling the criteria for Ph.D. graduation, it is important to consider the whole process of Ph.D. entry, completion and the transition to the academic, professional or research environment, also taking into account the challenges encountered by Ph.D. candidates on a personal level. According to a study on mental health in academia/research, Ph.D. students face similar challenges to researchers and teachers in higher education. One such challenge stands out—depression, also caused by the imbalance between academic, professional and personal life, low predictability of their career path, reduced support from the advisor, or exclusion from the decision-making process. Studies indicate that the relevance of the doctoral activity for the career and confidence in one's own research skills can reduce the associated stress (Guthrie et al. 2017). Thus, in order to ensure the most favourable course, as well as to support the graduation of doctoral students and their employability, the reconfiguration of the doctoral cycle must go beyond administrative, institutional or funding aspects and consider redefining the role of the doctoral student and the graduate.

³The analysis is based on data provided by 40 of the total number of universities in Romania.

4 A Perspective on Doctoral Students' Well-Being

Even though at an international and European level the appeal of doctoral programs appears to be on the rise, there are still many factors influencing doctoral students to drop out of their programs. However, most current studies reflect more on the institutional factors and less on the personal ones, which appear to have a greater impact on the decision. Not only that, but it seems that the risk of dropping out is higher for young, female and part-time students (Castello et al. 2017), particularly for students in humanities and social sciences, belonging to a minority group, not benefitting from sufficient funding and who are less integrated in the academic community (Gardner 2009).

Despite most countries reporting on enrolment rates and number of Ph.D. holders, there is still little data on dropout rates. Internationally, the average percentage appears to be around 50% (Castello et al. 2017), varying depending on the discipline and access to funding (Ali and Kohun 2006). Other authors have identified different factors which could be seen as predictors of dropout, such as the relationship with the advisor, institutional factors—departmental structure and efforts to create a community (Stubb et al. 2011), or motivation and mental health (Gardner 2009). As most of the literature in the field points out, some of the main factors related to dropping out of a doctoral program refer to 'personal, institutional and doctoral programs characteristics or research-related work conditions' (Castello et al. 2017, p. 3).

Following a review by Castello et al. (2017), some of the main reasons leading to students dropping out of their doctoral programs refer to them experiencing a feeling of *isolation*, built on several aspects, such as the lack of knowledge regarding what a Ph.D. program would entail, taking on a new role, lack of progress in their work and unfamiliarity with the completion process. A second reason refers to 'inadequate socialisation' (Castello et al. 2017, p. 3), influenced by low integration in the academic community, particularly in their departments. Important factors influencing the decision to drop out are connected to the actual research and writing process, which can cause anxiety, as well as to the decision on the thesis format (where there is such an option), with students writing monographs instead of a collection of published articles being more likely to drop out. Finally, the feeling of isolation is also influenced by the relationship with the advisor. Other studies focus on difficulties in balancing personal life and academic requirements, not only when choosing to pursue other alternatives, but also when there appears to be a mismatch between personal values and departmental/university values (Allan and Dory 2001; Smith et al. 2006; Gardner 2009; Manathunga 2005). The lack of resources also represents an important factor affecting doctoral students' decision to pursue and complete their studies, mainly when it comes to time and funding.

It is also important for the universities to limit as much as possible, or eliminate altogether, the 'culture of institutional neglect' (Castello et al. 2017 apud. McAlpine et al. 2012) by developing networks and supporting academic integration. This also entails more engagement with the doctorate by creating team projects, ensuring more

contact with students' peers and developing their identity as researchers. It is also considered that extensive research training and early appointment of supervisory teams (Tinto 1993) contribute to a better experience for doctoral students.

Another factor that needs consideration when discussing participation and completion of doctoral studies is the type of interest manifested by doctoral students (research interest, instrumental motives, developmental interest, intrinsic/extrinsic motives, etc.). Interest could be manifested from the stage of deciding to enrol in a doctoral program and choosing the research topic, to their resilience in the process and, finally, to the completion of their doctoral program (Pyhältö et al. 2019).

The concept of well-being in the context of doctoral studies has caught traction in the past years. However, Romania appears to be lagging behind, as no research has targeted this component of the doctoral experience. From an international perspective, the topic has been covered by several authors, leading to findings underlining the burnout risk of doctoral students, manifested through either exhaustion or cynicism (Pyhältö et al. 2019). Burnout is strongly connected, on the one hand, to a decrease in research productivity and engagement, while on the other hand, with an increased risk of dropping out or prolonging their studies indefinitely (Pyhältö et al. 2019; Ali and Kohun 2007). In order to better understand the perspective of doctoral students' well-being, this paper considers the definition proposed by Juniper et al. (2012), seen through a lens consisting of several factors, such as happiness, health and success.

As shown in several research studies, factors influencing doctoral students' decision to drop out, as well as their mental state and well-being, can be identified at several stages in the Ph.D. process. Thus, following Gardner's model (2009), the analysis attempts to follow these particular stages in order to generate a more indepth perspective of the different points of intervention and support mechanisms. The stages identified by Gardner are entry, integration and candidacy, with several challenges arising from each: the initial transition, coursework, transition to different expectations (entry); coursework, examinations, changing role (integration); transition to candidacy, the dissertation experience, job search, and transition to a new professional role (candidacy). Moreover, each stage also identifies several support factors, such as orientation, initial relationship with peers and faculty (entry); peer and advisor relationship (integration); the dissertation advisor (candidacy) (Gardner 2009).

5 Results

Drawing from the qualitative data collected through the three workshops where a number of relevant stakeholders participated, several themes stood out, that fall into one of the three stages proposed by Gardner (2009).

Therefore, the themes raised for the *entry stage* are:

• Low degree of attractiveness of doctoral studies, particularly for international students;

- Difficulties in reconciling the status duality of the doctoral student, which can lead to work overload, burnout situations or even advisors' abusing their position of power.
- This duality is also associated with cognitive and socio-emotional ambiguities, as well as with difficulties in transitioning from students' conformity to the independence, autonomy and creativity required by an emerging researcher's role;
- Difficulties in organising doctorates in joint supervision and joint degrees and few opportunities for international mobility.

When it comes to the *integration stage*, the main issues raised by the stakeholders refer to:

- Poor relationship between the Ph.D. advisor and the doctoral student. Currently, the advisor is not seen as a facilitator or mentor, but rather as an institutional representative, overseeing the doctoral students' work;
- Insufficient resources for the doctoral students;
- Lack of transparency in the way in which doctoral grants are spent/ used by HEIs;
- Insufficient time for completing doctoral studies.

Finally, the stakeholders' perspective on the *candidacy phase* reflect the following priorities:

- Uncertainty and difficulties regarding the insertion on the labour market (within and outside the academia);
- Few opportunities and unpredictability for post-doctoral studies.

Attempting to better understand the students' perspective, several items were underlined following the analysis of the students' questionnaire, particularly those connected with well-being and support mechanisms. Therefore, the paper focuses on five main questions, aiming to shape some general trends that could be then used as the starting point for a more in-depth analysis.

When it comes to the doctoral students' feeling of belonging to a community (as defined by the institution they are affiliated to and by the other students), the majority of the respondents expressed complete agreement (43%) and agreement (27%), with 30% reporting disagreement or uncertainty (Fig. 4).

Doctoral students participating in the study report being satisfied with the way in which they were supported to interact with their peers in the learning process, with 34% being in complete agreement with the statement, while a similar percentage reported agreement (34%). Only 4% are in complete disagreement, 7% reported disagreement, while 21% fall in the 'neither agree nor disagree' bracket (Fig. 5).

Moreover, the majority of the doctoral students participating in the survey (44%) are in complete agreement with the statement 'I experienced openness from my professors when I faced challenges', with 37% simply agreeing. Only a small percentage of respondents have expressed complete disagreement (2%) or disagreement (4%) with this statement (Fig. 6).

Similarly, a majority of the respondents consider the university offers them the necessary conditions and a favourable atmosphere for their personal development,

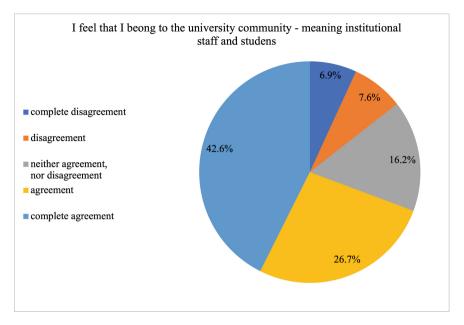


Fig. 4 Feeling of belonging to the university community (Q1.4)

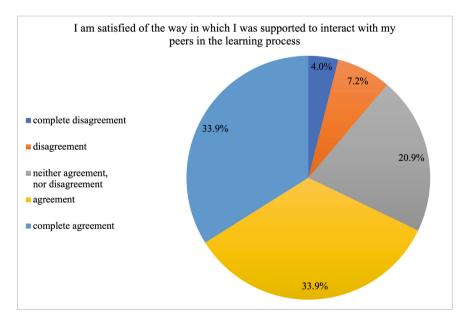


Fig. 5 Satisfaction with support received in interacting with peers in the learning process (Q8.6)

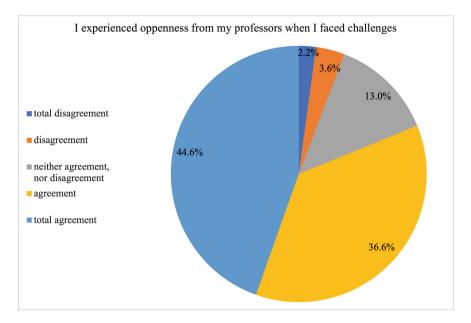


Fig. 6 Openness from professors when facing challenges (Q10.1)

with 40% strongly agreeing to this statement and 31% expressing agreement, while only 13% are in complete disagreement and disagreement (Fig. 7).

In what concerns career and counselling services offered by the university, there is a different perspective than on previously discussed factors, as the percentage of those completely disagreeing (16%) and disagreeing (7%), as well as those falling in the 'neither agree nor disagree' category (38%) indicate increased dissatisfaction with these services (Fig. 8).

Out of these particular items, the highest average (4.16) is reported for Q10.1 (*experiencing openness from professors when facing challenges*), while the lowest average (3.21) is recorded for Q5.5 (*satisfaction with services offered by the Career Counselling and Orientation Centre*). Overall, there does not seem to be a significantly different perspective between different types of respondents, as the averages follow similar tendencies. For example, there does not appear to be a significant difference between **male (M) and female (F)** respondents, even though the latter appears to report a greater level of satisfaction in relation to the items analysed here. The only exception appears in connection to Q1.2 (*favourable atmosphere for my personal development*), for which male students register a slightly higher average (M = 3.96, F = 3.86). Similarly, there are no significant differences with regard to self-reported **socioeconomic status** as those pertaining to a disadvantaged group⁴ registered only slightly lower averages than the general ones, especially for Q1.4

⁴For the purpose of the analysis, all respondents reporting other situations, undeclared, orphaned and belonging to a disadvantaged group were included.

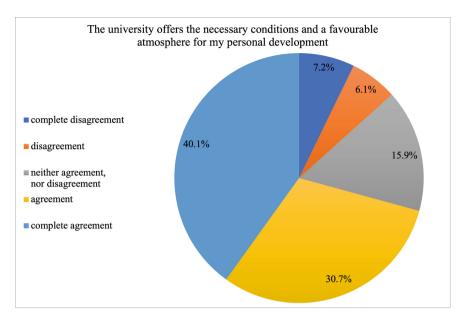


Fig. 7 University conditions and atmosphere (Q1.2)

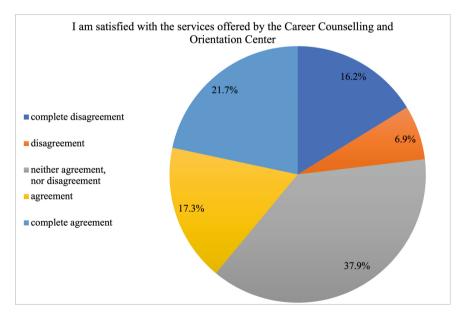


Fig. 8 Satisfaction with the career centre services (Q5.5)

(*feeling of belonging to the university community*; the average was 3.19 compared to 3.91). However, a higher average was registered for Q10.1 (*experiencing openness from professors when facing challenges*; 4.25 compared to 4.16). In terms of **financ**-

ing, doctoral students paying a fee (self-funded Ph.D.) appear to report, on average (4.25), a higher degree of satisfaction as reflected by the analysed items, followed by doctoral students receiving a scholarship (4.12). In what concerns the type of doctoral programs, students participating in full-time programs report slightly higher levels of satisfaction (with an average of 3.85) than their part-time peers (with an average of 3.74), with a greater difference for Q10.1 (4.20 compared to 4.02). Finally, for each of the five items analysed, the averages were higher for doctoral students born before 1990 (3.93) compared to those born after 1990 (3.77)—which might indicate a difference is not statistically relevant.

6 Implications for Policy and Practice

While the international context and best practices in the field of doctoral studies are relevant, it is also important to contextualise potential solutions to the particularities of a specific country, especially when it comes to students' interest with regard to doctoral studies (Pyhältö et al. 2019). Starting from this premise, we will focus on the implications that the literature review, the stakeholders' priorities and the students' perspective have on the different levels of intervention in the Romanian context, starting from the students' experience to institutional and policy changes.

In terms of **students' experience**, research and specialised studies indicate that a decreased risk of burnout and increased potential for students' well-being can be achieved by promoting students' 'sense of belonging, competence and autonomy [...], engagement in research teams, [creating] a more individualised support system' (Pyhältö et al. 2019, p. 13). Therefore, it is important for the students to experience integration into the scientific community and for the institutions to support the development of students' capacity to act as 'active relational agents' (Pyhältö and Keskinen 2012) by being proactive in their academic communities.

Even more so, at the **institutional level**, the universities should further develop scientific writing, communication of scientific results (Castello et al. 2013), integrate doctoral students in research teams (Castello et al. 2017), create a positive atmosphere and offer constructive advice (Pyhältö et al. 2019). An integrated institutional plan for approaching doctoral students who manifest their intention to drop out (discussion with the advisor, revision of research plan and timeline, etc.) could be useful for addressing the completion of doctoral studies, while implementing a new position for an academic and well-being advisor per group of doctoral students could also have beneficial results. Furthermore, several instruments would be valuable for addressing potential conflictual situations, such as mediation or counselling. Stakeholders also consider creating a framework that would increase the percentage of trans-disciplinary subjects, encouraging participation of doctoral students in academic life by organising lectures connected to their Ph.D. topics in order to facilitate the validation of their emerging researchers' status, as well as involving doctoral students in at least one research project at departmental level.

At the **policy level**, several measures could be explored in order to improve the doctoral students' experience and address the needs of a variety of non-traditional Ph.D. students. One such measure could be regulating and redesigning part-time study for a better work-life balance. Similarly, it could prove useful to introduce a 1-year program of pre-doctoral studies in order for the doctoral student to better understand the workload and expectations of pursuing a Ph.D. degree. If the student decides to continue, the 1-year could count towards their degree, whereas if the student decides to pursue other opportunities, there could be an option for an exam leading to a short-term post-graduate certification. Such an exam could potentially allow the graduate to teach at the university level in an associate role, equivalent to an assistant position, particularly for vocational specialisations—arts, theatre, cinematography, music, sports etc. Also, in what concerns improving the relationship between the advisor and the doctoral student, stakeholders recommend developing and implementing training programs for advisors (i.e. during their preparation for *habilitation*). Most changes that appear to have influenced higher participation rates in Ph.D. programs relate to reducing the time needed to complete a Ph.D. program, integrating training on topics such as scientific productivity, focusing on interdisciplinary approaches and promoting international mobility (Castello et al. 2017, p. 2).

When it comes to funding, several options have been suggested by relevant stakeholders: implementing a grant system for research projects, private scholarships/privately funded Ph.D.s, as well as instruments for increasing transparency and traceability in the way the Ph.D. grants are spent. Following the United Kingdom model, a possibility would be to offer doctoral students the opportunity to be financially supported by businesses or charities/NGOs working in their specific research area. The proposals also refer to differentiating between academic and professional Ph.D.s, doubled by flexible routes that would allow doctoral students alternatives in pursuing their studies, which also entails restructuring the doctoral curriculum and offering more autonomy to the student. Following several international examples, another useful measure could prove to be developing and introducing a research career model. This could potentially be based on the Finnish example, namely a four-stage researcher career model, comprising the doctoral degree, post-doctoral fellowship (two-five years), and, finally, professorships and research directorships, including a tenure-track system between stage three and four (Pyhältö et al. 2019, apud. The Academy of Finland, 2010).

7 Conclusions

The main claim of this paper refers to placing the doctoral student in the centre of the doctoral program, thus ensuring a healthy, productive and successful experience, and it only addresses some of the existing challenges and opportunities that could be further addressed in transforming doctoral studies in Romania.

Future research could tackle a wide range of topics concerning doctoral studies, aiming to improve the provision of courses, training, supervision and the doctoral students' transition to the labour market. In the Romanian case, there is no available

public data on past or current dropout rates, partly because of the possibility to extend the duration of the Ph.D. program by using provisions such as the 'grace period', interrupting the Ph.D. program or extending it with the advisor's approval. There is no available data clarifying what percentage of those who extend their program actually end up completing it after the extension. Secondly, when doctoral students decide to drop out, while some do not even inform the university and choose to be expelled at a later date, others fill out a request that has to follow a long institutional process of approval, with the decision being communicated in some cases after more than a year. Moreover, there has been no specific research dedicated to doctoral students' well-being in Romania, nor has there been a comparative study between perceptions or the experience of students who have successfully completed their Ph.D. studies and those who have dropped out or whose contracts have been terminated by the university. These make it more difficult to assess the most efficient intervention in order to better institutional or national practices and policies. Future research could also focus on identifying a better balance between the autonomy and support required by the doctoral students and by understanding the doctoral process at a more granular level by specifically addressing topics such as counselling, publishing or supervision in order to find more targeted solutions.

Therefore, bridging this gap in research and in data collection allows for several directions for future research in the field, which could help shape a better context for improving doctoral studies in Romania, ensuring students and emerging researchers are thriving, and allowing for a better integration within European and international trends in academia and research.

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