Strategies being pursued by Romanian HEIs to support knowledge transfer[*]

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Abstract

Even though the higher education model of universities in Romania corresponds to a Humboldtian model based on harmonizing teaching and research activities, in recent years, under pressure from the knowledge-based economy, research activity has tended towards an increased role. Therefore, the role of universities across Romania is beginning to shift towards an entrepreneurial one. This paper seeks to identify the strategies that universities are currently developing to sustain the process of knowledge transfer. To achieve the above aim, semi-structured interviews were conducted with 14 university managers from research-intensive universities. The data was analysed using a coding system that was developed based on the theoretical framework. The results indicate a tendency among Romanian universities towards a linear model of tackling knowledge transfer, meaning that the primary focus is on establishing networks and partnerships between researchers and other categories of end users and on developing cross-domain research teams among researchers from the same university.

Keywords: knowledge transfer; higher education; researchers; policymakers; Romania

Resum *Estratègies que segueixen les institucions d'educació superior de Romania per donar suport a la transferència de coneixement*

Tot i que el model d'educació superior de les universitats a Romania correspon a un model humboldtià, basat en l'harmonització de les activitats de formació i recerca, en els últims anys, sota la pressió de l'economia basada en el coneixement, l'activitat de recerca ha augmentat el seu protagonisme. El model ha canviat cap a un enfocament més econòmic. Aquest article busca identificar les estratègies que les universitats estan desenvolupant actualment per sostenir el procés de transferència de coneixement cap a la pràctica i la política educativa. Per seguir l'objectiu definit anteriorment s'han fet entrevistes semiestructurades amb 14 responsables acadèmics de les universitats de recerca intensiva. Les dades es van analitzar mitjançant un sistema de codificació que s'ha desenvolupat a par-

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tir del marc teòric. Els resultats indiquen la tendència d'implementar un model lineal per abordar la transferència de coneixement, que apunta cap a la necessitat de crear xarxes de treball entre investigadors i professionals desenvolupant equips interdisciplinaris i de multinivell que contribueixin a millorar les relacions entre els diferents àmbits de la producció i utilització de la recerca.

Paraules clau: transferència de coneixement; educació superior; investigadors; legisladors; Romania

Resumen. *Estrategias que siguen las instituciones de educación superior de Rumanía para apoyar la transferencia de conocimiento*

A pesar de que el modelo de educación superior de las universidades en Rumanía corresponde a un modelo humboldtiano, basado en la armonización de las actividades de enseñanza e investigación, en los últimos años, bajo la presión de la economía basada en el conocimiento, la actividad de investigación ha aumentado su protagonismo. El modelo ha cambiado hacia un enfoque más económico. Este artículo busca identificar las estrategias que las universidades están desarrollando actualmente para sostener el proceso de transferencia de conocimiento hacia la práctica y la política educativa. Para seguir el objetivo mencionado anteriormente, se realizaron entrevistas semiestructuradas con 14 directores universitarios de las universidades con investigación intensiva. Los datos se analizaron utilizando un sistema de codificación que se desarrolló basándose en el marco teórico. Los resultados indican la tendencia de implementar un modelo lineal para abordar la transferencia de conocimiento, lo que significa apuntar hacia la necesidad de crear redes de trabajo entre investigadores y profesionales desarrollando equipos interdisciplinares y de multinivel que contribuyan a mejorar las relaciones entre los diferentes ámbitos de la producción y utilización de la investigación.

Palabras clave: transferencia de conocimiento; educación superior; investigadores; legisladores; Rumanía

Summary

1. Introduction

The mission of universities is generally related to teaching and research, but at present, universities are more frequently focusing on their importance in supporting innovation and science development. That is why universities are

now engaging in research, knowledge production and knowledge dissemination (Dalmarco, Dewes, Zawislak & Padula, 2011; Rathi, Given & Forcier, 2016). From a wider perspective, universities play a crucial role in the process of sustaining the transformation of a society, having the advantage of being recognized as key players that help remodel socio-economic dynamics by not only providing a well-qualified workforce, but also by providing alternatives and solutions to societal problems based on knowledge. To respond to such challenges, universities must invest in building a strong research culture by empowering a new perspective towards knowledge ownership, understanding that knowledge-sharing brings internal satisfaction (Jabbary & Madhoshi, 2014), and promoting themselves as knowledge-transfer organizations (Bodas Freitas, Geuna & Rossi, 2013; Geuna & Muscio, 2009). Not only must universities invest in promoting research production, seeing new problems, imagining new ways of approaching old problems, and deconstructing/reconstructing or constantly exploring beneath surface appearances to respond to a future that cannot be imagined (Waghid, 2002), but they also should seek to develop collaborations with industry by setting up research collaborations and creating start-ups or spin-off companies (Watanabe, 2009).

To fulfil their new mission, universities must be aware of the challenges and must find alternatives to overcome possible barriers that may arise due to the absence of procedures regarding communication protocols or internal disclosure that could slow down the development of university research management (Paez-Logreira, Zamora-Musa & Velez-Zapata, 2016).

Under the premises of the current changes that universities are experiencing, this paper seeks to identify the strategies that higher education institutions (HEI) are currently developing to sustain the process of knowledge transfer. To follow the aim stated above semi-structured interviews were conducted with 14 university managers from the research-intensive universities.

2. Exploring knowledge transfer – a key aspect of universities' knowledge management process

Under the pressure of ongoing changes at the societal level, universities must adapt their roles to go beyond simply producing research, meaning universities must engage deeper in enhancing their impact on the policymaking process and with their relationship with industry in order to maximize the use of research results. This new role requires specialist staff to identify and manage knowledge resources; for example, how best to take a new idea to policymakers and ensure appropriate resources (funding, support services, etc.) to make it occur (European Commission, 2007).

Even though the idea of using research to inform policy or practice is not a common principle in the policymaking process, the literature highlights the advantages of using such a principle. To better understand the concept of knowledge transfer, it is necessary to acknowledge that it is part of a broader approach, that of knowledge management. According to the OECD (2011),

knowledge management is a wide concept that refers to three major processes, namely: *knowledge production*, *knowledge transfer/knowledge dissemination and knowledge utilization*. In what follows, a short description will be provided to clarify the interdependence between these three major processes.

Knowledge production is considered to be "too small, not well organized, and the results are not effectively communicated or shared" (Levin, 2013, p. 13); it is viewed as being based on four interdependent stages in the research impact process, namely: conducting the research; sharing the findings; disseminating the knowledge and evaluating its short-term and long-term impact (Amo, 2007).

In regard to *knowledge transfer*, Bennet and Bennet (2014) see the process as a set of goal-orientated practices aimed at reducing the gap between what we know and what we do, especially in universities, where it is seen as a complex phenomenon involving layers of structures, forces and actors (Perry & Tor, 2008), while Gaudet (2013) presents the concept as being the use of justified beliefs (knowledge) or the borders and limits of knowing (ignorance) towards the achievement of goals (social, cultural, political, professional and economic). Malik (2016) focuses also on the dynamic actions that must be implemented, presenting knowledge transfer as an active and dynamic process whereby stakeholders (e.g., researchers, practitioners, policymakers and community members) share, create and use research evidence to inform programming, policy, decision-making and practice. Moreover, Campbell, Pollock, Briscoe, Carr-Harris & Tuters (2017) talk about knowledge transfer from a different perspective, taking into account only the social interaction and iterative processes of co-creating knowledge through collaboration between and among researchers, decision-makers and practitioners to support the sharing, creating and using of evidence.

Not least, the process of *knowledge utilization* is presented by Rogers (2003) as a specific field of inquiry dating back to the beginnings of social science. Rogers targets the researchers' real interest in wanting to have a direct impact on policy—one that goes beyond the diffuse enlightenment function and consists of abandoning the posture of neutral researchers and embracing the more actively committed role of advocates (Porter & Hicks, 1995).

All in all, looking at the knowledge transfer process as part of a more complex concept, that of knowledge management, raises new challenges for HEIs in terms of further sustaining the investment in developing and implementing a strategic research plan/vision that sustains collaborative relationships between higher education institutions and other sectors to contribute to social innovation.

3. Strategies being pursued by HEIs to sustain the knowledge transfer process

Developing strategies to sustain knowledge transfer implies a debate on what the university must do to bring evidence into practice and vice versa. A wide range of strategies have been presented in the literature to facilitate knowledge

transfer, such as the theory of Lavis, Robertson, Woodside, McLeod & Abelson (2003) that focuses on formulating knowledge-mobilization/transfer strategies, taking into consideration several criteria: what needs to be mobilized, to whom is the knowledge useful, by whom it may be used, in what way will the knowledge be used, and what effect or impact that knowledge may have. Jacobson, Butterill & Goering (2004) also suggest that knowledge transfer can be facilitated in universities through changes in five domains: developing a promotion system to encourage and reward knowledge mobilization; enabling funding and organizational resources such as opportunities for networking, skills training and administrative support; providing different facilities for researchers, such as establishing dedicated offices; enhancing organizational orientation towards knowledge mobilization; and standardizing knowledge-mobilization practices within the institution.

Moreover, Paez-Logreira et al. (2016), attempting to develop a knowledge network for applied education research to mobilize evidence in and for educational practice, presented a case study of a project entitled KNAER, where four categories of interventions were implemented related to knowledge-transfer strategies. These four categories are related to 1) exploiting research – based on knowledge-mobilization strategies that aimed at taking existing research and connecting it to practice, policy or other specific stakeholders in ways that were meant to be useable and accessible; 2) building or extending networks – with a focus on building or extending networks in order to further the reach of existing research; 3) strengthening research brokering – based on finding ways to connect researchers with one another or with policymakers and therefore expand the research's impact; and 4) visiting world experts – which involves inviting experts to share their knowledge with various stakeholder groups and with the larger education sector.

Taking the case presented above, a new idea arises that research institutions must engage in longitudinal research, while building a systematic approach is seen as necessary in order to coordinate efforts and support sustained collaborations, which requires resources committed to collaborative planning for social innovation and knowledge mobilization across sectors.

4. General overview of how the process of knowledge transfer is being internalized within the Romanian higher education landscape

In recent years, the Romanian higher education system has experienced substantial changes in order to align with the European Higher Education Area and European Research Area. Although the changes have been implemented at all levels, Romanian universities are still in the process of shifting their role, becoming more aware that they must play a larger role regarding their impact on society. This fact shows that Romanian universities are still far from Western European trends in knowledge production and transfer.

The following paragraphs offer a general overview of the way knowledge transfer is being internalized by the Romanian higher education landscape. As

a start, it is worth referring to the five research-based universities that form a national structure called the Universitaria Consortium. It represents the basis of this analysis, where the university mission and research strategies are presented and analysed based on the *knowledge transfer* code.

The reason for choosing the Universitaria Consortium as a case study is based on the assumption that it represents the only research-driven university consortium in Romania. At the same time, the member universities are considered the important stakeholders and drivers for change in the higher-education landscape, with the purpose of raising the level of scientific research and teaching to national and international recognition and rankings, including initiation and elaboration of the higher education and research legislative framework. The Consortium is also involved in the dialog for a core definition of university studies and minimal standards for implementation, as well as in what concerns university qualifications (Consortium Universitaria, 2017).

The starting point for the consortium's activity is the National Law of Education, enforced in 2011, more specifically Article 117, which talks about the overall mission of higher education institutions. In general, the article provides recommendations for universities so that they will engage in producing and transferring knowledge to society through *a*) initial and continuing education for personal and professional development of individuals and for socioeconomic environment needs regarding competences and through *b*) research, development and innovation, technological transfer, and individual and collective work in all scientific domains, with a focus on capitalization and dissemination of results (Romanian National Law of Education, 2011).

Looking to determine how the above recommendations are outlined at the Consortium level, we analysed the five universities' research missions, as presented on the universities' official websites, in terms of knowledge production and transfer.

All five universities that have clear specifications on knowledge transfer describe in their Magna Charta the objectives or functions to be followed or applied to assure coherence with the declared mission. Therefore, the documents stated above mention the universities' position as social, economic, and cultural actors that contribute locally, regionally and nationally by engaging in different activities to support the community and other partners; however, the Magna Charta also makes clear specifications regarding universities' involvement in elaborating policy and legislative proposals.

In regard to universities' position regarding research production and transfer, one university assumes the stimulation of knowledge production as a main priority, with international cooperation that must be achieved by applying for national and international funds. Another university goes into further detail and presents itself as being a national research centre that engages in developing relations with the socio-economic environment to assure transfer of knowledge. More specifically, the university provides detailed operational objectives that are operationalized into actions, such as starting up partnerships in private domains so that innovative projects can occur, as well as cultural and techno-

logical transfer, attracting alternative funds and capitalization of research results and academic output. Other strategic objectives with which all universities engage refer to the internationalization of research; specifically, opening up new collaboration and partnerships with other HEIs across the world that will contribute to the development of an innovative research environment for the academic staff and, at the same time, provide opportunities for future financial support. Moreover, the universities declare that it is important to sustain national interdisciplinary research initiatives that identify the needs of the community; more specifically by building a department within universities that can ensure clear communication with end users with the main aim of establishing a common research agenda.

5. Methods

The data presented in this article are drawn from a two-year research project. The project involved four phases: (1) a targeted survey of Romanian academics in the field of education; (2) interviews with academic managers; (3) interviews with a selection of policymakers/experts in the field of education; and (4) focus groups with a select group of academics, university managers and policymakers. The results reported here are based on phase 2 and phase 4 data.

From April 2016 to June 2016, semi-structured interviews were conducted with 14 university managers (identified as I1 – I14) from the research-intensive universities that responded to the survey. The aim of these interviews was to gain deeper insight into the process of knowledge transfer and, more specifically, into how academics engage in disseminating and transferring their research findings, with a particular interest in the barriers they face within this process. The interview guide is based on open-ended questions and focuses on three major criteria that target: 1) the process of research production at the university level; 2) the researcher's context (work dynamics, funding and organizational aspects related to research activity); 3) research transfer and dissemination (obstacles and facilitators, dissemination culture, etc.). The interviews lasted from 40 to 60 minutes and were transcribed and analysed using a coding system that was developed based on the theoretical framework. Examples of codes include research transfer, researchers, research production and the university model. At the start of the analysis, significant fragments were selected, and a code was later assigned to each of them. Quotations from respondents were listed and compared to identify patterns and similarities between different respondents.

The interview profiles of the participants are presented in Table 1.

In addition, four focus groups were carried out from October 2016 to March 2017 in four main university centres. The aim of the focus groups was to provide data on the structural and cultural prerequisites and on strategies likely to assist educational researchers in setting educational policies within the regional and national context. The focus group consisted of open-ended

Table 1. Interviews with academic managers

Profile of interview participants	No.
Heads of departments	9
Vice-rectors responsible for research activities	3
Vice-deans responsible for research activities	2
Total	14

Source: Own elaboration.

questions about the context of research production at the university level and, more specifically, on providing input regarding internal strategies that can sustain and increase the research production process. The second block of questions was related to research transfer, with a focus on identifying key actors that can play a critical role in the process of knowledge dissemination and on the type of training they have previously received to enable them to carry out these activities. Third, questions about the research dissemination (obstacles and facilitators, dissemination culture, strategies developed by HIEs and policymakers to enable better communication and collaboration) were included. The interviews lasted from 60 to 90 minutes and were transcribed and analysed using a coding system that was developed based on the theoretical framework. The profiles of the focus group participants are shown in Table 2.

Table 2. Focus group with key actors in the education field

Profile of focus group participants	No.
Rector	1
Vice-rectors responsible for research activities	1
Vice-dean responsible for research activities	6
Heads of departments	3
Dean	2
University Teachers	12
School Inspectors	1
Headmaster/School Principal	1
Government Organization in charge of R&D&I	1
Government Organization in charge of school education	1
NGO representatives from the education field	3
Total	32

Source: Own elaboration.

6. Results

6.1. General understanding of the concept of research

The core understanding of research revolves around the idea that it must be seen as a "huge potential of knowledge growth" (FGi), and researchers must be aware that if they do not work in pairs and have general guidelines, it will

be very difficult to carry on a longitudinal investigation. In addition, most social scientists interviewed considered that there must be a common language in conducting and reporting their research, with the main objective of gaining a rich and complex understanding of all parties interested in the research results and new findings and how can those results be put into practice or used to influence future education priorities for development.

There appears to be a need for a very clear delimitation of what educational research means that is commonly related to the purpose of providing well-informed input to the educational system in Romania. As one participant put it, "for this, I understand that I am paid from the public money to give my expertise for the benefit of education in Romania" (I4).

6.2. Steps towards the implementation of a research-based university

Building a community of researchers has a strong impact on research production because such a community offers researchers a stimulating working environment. The community of researchers must be seen as an interdisciplinary team, and this trend is followed by universities that support the development of such institutional practices where:

> we have 12-14 teams in the educational sciences, and we have 8 teams on topics that are preponderant in the science of education, and they are formed by their teachers from the educational sciences, psychology and other fields of study that are related to the social sciences. (I11)

Building partnerships between the university, policymakers and practitioners is considered an important strategy that must be pursued by HEIs in order to deeply engage in the process of research production and dissemination:

> We are aware that if we do not work in teams, it will be very difficult to carry out further research, and we also must learn the added value of asking for collegial feedback, and this strategy can be very valuable when trying to build a strong research proposal. (I5)

An important aspect to be considered is building strong communities of researchers that see beyond their own research interests and try to create a shared vision on research. On the one hand, researchers involved in the interview agree that they must engage in developing research groups and research centres, but acknowledged that "we must know each other's research interest, we must try to inform others about our current research and spread the news when a research grant opportunity arises" (I10). On the other hand, university managers involved in the interview and focus groups declare that building research teams is a good strategy that will enable universities to create a specific field of expertise and, at the same time, increase the university's visibility so stakeholders can easily call on their services if needed. On the other hand, university managers state that, especially in the education science field, concern must be increased regarding "finding common research interests that

must lead to the development of 'powerful' research centres/laboratories that will connect researchers and practitioners in the field of education and connect research to the real problems that the education community faces" (I12).

A good practice identified by participants in the interviews and the focus groups, in terms of institutional strategies to foster research transfer, was the existence of the Universitaria Consortium. A vice-rector in charge of research underlined that "I think that throughout this Consortium we could take a firm position on different aspects within our area of expertise and interest" (I2), and in doing so, the university manages to fulfil its role as an agent and contributor to social and cultural life.

6.3. Understanding the challenges of the transition to a research-based university

Considering that most researchers in Romanian universities do not have a full-time research position, but their research career is closely related to or, better said, dependent on their teaching career, it is no surprise that researchers feel the need for the university to open calls for full-time researchers that can work explicitly in universities' research centres. To sustain the above argument, one researcher concluded the following:

> Universities must hire full time researchers – my opinion is, regarding this subject, that universities have a huge backlog – because this strategy will help universities enhance their prestige by publishing strong impact studies that can be seen as a starting point in reforming the education system. (I9)

A concern related to the creation of research centres, and therefore facilitating the development of inter-disciplinary research groups, is that it might limit the academic freedom of the personnel working within the HEIs. The risk is much higher when the potential "waste of human resources by limiting their ideas only to the research centres' priorities" (I4) enters the discussion.

From the university managers' perspective, this risk is minimal because the university can provide support for researchers to conduct individual research without interfering or constraining the researcher from engaging in a specific field of interest. The support, seen as an institutional support mechanism, can offer researchers 'formal' support in terms of certifying the researcher's affiliation with a research centre and can also offer the researcher a space to develop his/her research activity. On this topic, a university manager stated the following:

> The researcher who wants to individually engage in research will receive only minimal support from the university, and by saying this, I mean that he/she will no longer receive access to the facilities provided by the university in terms of space, access to highly recognized databases and other types of resources that we generally provide for our own staff. (I9)

As previously stated, universities are starting to look deeper into the necessity of building coherent internal dissemination strategies by encouraging researchers to coalesce into research teams and centres. However, in regard to

external dissemination processes, universities are still lacking a coherent strategy, as confirmed by one researcher:

> The major problem is that interested parties do not know about research interests and research results because we do not know how to transfer research results and, at the university level, we do not have a department that knows how to properly engage in this activity. (FGi)

The lack of a communication strategy also applies to the dissemination of information among faculties or research centres within the same university: "It is a little chaotic because there is no up-to-date, centralized system to see what research centres are still conducting research or not" (I2).

When talking about the challenges encountered regarding strategies to sustain knowledge transfer, one of the most emphasized ideas is that the social sciences are somehow at disadvantage to other sciences. The identity of educational science lacks consistency and unity and is considered to be "always diminished because in our field, the impact of our research results is not immediate" (I3). Moreover, researchers participating in the focus groups agreed that:

> It is clear that the social sciences, especially the education sciences, are underprivileged when we start comparing with math or physics […] and until you understand that the social sciences have a specific [identity] of their own, you will not truly manage to see the true legitimacy and the usability of the research results. After all, the products that come out of research in education sciences cannot be visible on the spot and cannot be bought, just as in agriculture or other industries. (FGi)

6.4. Strategies being pursued by HEIs to develop research production and dissemination

Regarding research strategies, it is important to discuss three levels at which the strategy must apply: at the university level, at the faculty level and at the department/research level. However, the connection and coherence between the three levels of research is not very clearly identified, and this is caused by a lack of vision in regard to developing and implementing a research strategy within universities:

> It is not very clear to me if there is a strategy specifically related to research. I have read the rector's managerial program, and it contains some ideas related to research and its importance, but I do not remember finding a specific paragraph in this document that refers to the university's research strategy. (I14)

This lack of coherence also has repercussions on the organization and function of some research structures at the university level; "we rather perceive things as somehow atomized, meaning that there are multiple core centres that function more or less independently and [are] unrelated to one another" (I13).

If, at the university level, the research strategy tends to be unclear, at the faculty level researchers portrayed a clearer idea of how and what the focus should be in regard to engaging in research activities. In regard to smaller communities of practitioners, such as faculty departments, the clearer vision on research is strongly related to their own research interest that springs from their teaching activities. Thus, at the faculty level, the research strategy is linked to the existing programmes of study, and the research directions are guided to support further development of these programmes. A good example is the doctoral programme within each faculty:

> Yes, there are such strategies, but they are explicit in the doctoral programmes and they must be presented in an explicit way, meaning that when doing various evaluations, you as a doctoral coordinator have to specify what your strategies are in regard to the doctoral supervision and how these strategies help or sustain a better development of the programme of study under whose umbrella you are working. (I10)

Another example of a strategy at the faculty level identified by researchers is the existing link between research and the labour market:

> The research part that is oriented towards the needs of the labour market and, at the same time, respects scientific rigor must exist in each field. In our faculty, these ideas are stipulated in the strategic plan of the dean, who has just been re-elected, and this strategic plan is built on the previous experience he had in the last four years. (I1)

Hence, the changes that may arise at the level of research strategy are produced by internal and external factors. In regard to external factors, "the changes come from contextual factors […] derived from the Ministry of Education or from other sources of funding and we have to adapt to the funding opportunities that are relatively low in these fields" (I11). The internal factors that influence the research strategy are related to the structure and the dynamics of research teams. On this topic, researchers have divergent ideas on the advantages and limitations of the three types of research groups: individual research, homogenous research groups or interdisciplinary research groups. The reasons to choose to conduct individual research are based on individual professional interests, which are strongly influenced by career promotion criteria: "the choices are rather circumstantial, pragmatically determined by personal interests, and that is absolutely logical and absolutely understandable" (I14). Emphasizing the above idea, one researcher added that:

> I think research is still an individual business, quite atomized and very tightly linked with the promotion and evolution policy promoted at the national level in regard to one's own individual career promotion, and, let's be honest, promotion is kind of a prize for all your individual effort and performance. (I12)

Even if such an approach can be useful for professional promotion at the individual level, at the institutional level, it is seen as a waste of resources and

a lack of systemic coherence that hinders the development at the institutional level. Regarding this, the vice-rector responsible for research stated "that is [career proportion] first and foremost, and everyone should take care of their own career path, but this individual approach compromises the institutional vision on research and therefore stifles institutional development on a long-term basis" (I2).

Seeking to portray a set of core strategies that HEIs pursue in order to support knowledge transfer, we discovered the following four main categories: enabling awards for relevant publications in highly recognized journals, encouraging the development of research teams viewed through an interdisciplinary lens, giving incentives to those involved in research activities that enhance the university's visibility and create a closer connection to policymakers, and reducing bureaucracy in terms of research project implementation. In regard to the mechanisms to support these strategies, university managers brought into the discussion the need to create an audit mechanism for research and considered as valuable the existence of specific tools to reward research activities that will help researchers monitor their involvement and their determination in regard to research activities:

> It encourages and motivates researchers to engage in research activities that can have as a purpose the publication of a scientific article in a recognized journal, and it could create the premises for building joint research studies between our university and other national or international universities. (I1)

In terms of encouraging the development of research teams, the strategy focuses on building a supportive environment that favours the implementation of interdisciplinary research teams:

> The university is taking the responsibility to offer the proper conditions for establishing research centres […] we are not going to state that the university will force a researcher to join a research centre, but what we can do is to inform researchers that the university policy related to this topic is in favour of teams-based research activities (I9).

Other strategies are targeted at giving incentives for those involved in research activities that enhance the university's visibility and therefore help create a closer connection to policymakers. A good practical example is related to the existence of a research gala in which, using internal university funds, researchers with highly recognized results in the field received incentives.

Moreover, one of the most common strategies that universities tend to adopt is related to reducing the bureaucracy in terms of starting and implementing research activities: "I think this is the most important strategy that will boost research and will also give researchers the feeling that the university does its best to support them in their professional development" (I2).

Another important point underlined in terms of research strategies at the university level was the internationalization of research by reversing the brain

drain and attracting researchers who will apply for and eventually conduct research projects using all the university's facilities. This situation is seen as a win-win process: the university can boost its international research collaboration and networking, and the researchers can come back to their country of origin to continue their career development.

7. Discussion and conclusions

The aim of this study was to identify the strategies that Romanian universities have adopted to sustain and implement the knowledge transfer process. Regarding the institutional strategies, the study permitted a deeper understanding of the context in which research is being produced, the strengths and weaknesses of the institutional framework, the priorities that HEIs have assumed and other components that are key elements in the process of developing coherent strategies or strategic objectives in the knowledge transfer process. However, the results provide an understanding of a context in which important instruments are still dysfunctional, and therefore, the knowledge transfer process is still a target to be reached or in progress.

The results show a tendency towards a linear model of tackling knowledge transfer, as detailed in the literature. Therefore, developing actions based on networks and partnerships between researchers and other categories of users seems to be the main direction for the universities to follow, according to the results. Many of the interventions recognized the need for these actions and discussed several action lines in order to move from a normative discussion to effective activities.

There is a similarity between the respondents' perceptions of where to intervene in the institutional framework for knowledge transfer facilitation and what Nelson and Campbell (2017) stated about the need to build or extend networks in order to further the reach of existing research. These perceptions were analysed through a review of the existing literature on how Romanian university research management is done and this pattern can be identified in almost all phases as follows.

The respondents' perceptions about research is still at the normative level. While they recognize the need for a common ground of action and language that gives force to educational research in the public sphere, the existing research is seen as valuable, and researchers seem to understand the principles of knowledge transfer as natural and normal, although there is little evidence of mobilization strategies that support this understanding.

The process of research management underpins the strategical objectives assumed in their institutional plans. Universities' community services are understood as instruments of knowledge transfer strategies to connect with societal needs. Additionally, HEIs are concerned with building research communities and creating connections with other external partners so that networks have a functional base and can start to cooperate on different research projects. Cross-domain research teams are supported, and respondents report

that they acknowledge the need to work together, collegial feedback and the importance of transparency and dialogue among them. These assure the building or extending of networks between researchers.

The Consortium Universitaria is an example of strengthening research brokering such that the institutional collaborations are aware of the impact they could attain, while establishing a context for researchers to make use of their knowledge.

Last but not least, the fourth category presented in the literature concerning visiting world experts is present in HEIs' institutional programs and is interpreted as internationalization of research in order to ensure rich collaboration and access to funds for research projects.

Although these categories are assumed to facilitate the knowledge transfer process, respondents acknowledge the importance of research teams, partnerships and having a common interest in research that could constitute a basis for a coherent university strategy of research management. Fears are also present, mostly regarding aspects that could limit researchers' freedom in the general interest of universities to become national research centres and each researcher's preference in conducting research – in homogenous or interdisciplinary teams or individually. These fears are justified in the context of career promotion. Therefore, it could be said that institutional strategies are not sufficiently aligned to support researchers in their career, allow them to contribute to knowledge transfer processes or ensure they have the necessary time and energy to disseminate their research results. Concerning the institutional structure, respondents recognize the need to have departments that are engaged in the dissemination process, facilitate communication, or at least centralize ongoing research projects so that the academic staff can follow results and processes. Moreover, incentives, support and recognition of researchers' work and reduced bureaucracy have also been mentioned as important mechanisms that engage researchers in fruitful research management at the university level.

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