

## Chapter 3

# Wind of Change: The Recognition and Rewards Movement

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### Abstract

Research excellency has long been the dominant paradigm in assessing academic quality and hence a prime determinant of academic careers. Lately, this approach to academic performance has come under higher scrutiny for its narrow focus on the individual, promoted an exclusive, performance-oriented talent management and inhibiting collaboration, transparency and societal involvement.

As a response to the limitations of the excellency policy, this chapter examines the emergence of open science as a transformative force in the academic world. Open science represents a paradigm shift, emphasizing the importance of transparency, and increased societal engagement in the academic process. It opens up the possibility to include the context dimension, multiple stakeholders and a more diverse set of development and performance indicators.

This chapter stresses the urgent need to realign our system of recognition and rewards with the premise of open science and with talent management. By highlighting the disconnect between current recognition mechanisms and the values of universities, this chapter emphasizes the necessity of transformative changes at institutional and systemic levels.

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To provide concrete insights into the implementation of these changes, this chapter explores a case study of Utrecht University. This specific example showcases how strategic decisions at an institute level allow navigation of the complexities of recognizing and rewarding open science practices. The Utrecht University case study serves as an inspiration for other institutions seeking to embrace open science and adapt their policies and practices accordingly.

*Keywords:* Recognition and Rewards; Open Science; university; talent management; academic performance

## **Introduction**

There is movement in the academic world: developments in open science, change in how we recognize and reward people in academia. These changes come from the urge to rethink what a university is for. In the last few decades, the focus of universities has slowly drifted to a particular kind of research excellence, a kind that leads to economic growth. Today, with the worldwide challenges that we are facing, we are confronted with that we have been slowly diminishing the other domains of what universities are for: provide academic teaching and contribute to society. In this chapter, we explain how we got to this one-sided view on research excellence, the response of open science to restore the balance and what this means for recognizing and rewarding employees, using the theoretical frameworks ‘the Harvard model of Beer and colleagues’ and ‘the AMO model’.

## **Over the Past Four Decades: Research Excellence of a Particular Individual Kind**

There are several cases that have been made in the past 10 years for a change in human resource management (HRM) in higher education and academia. These changes were driven by forces that questioned our perception and ideas about ‘what a university is for’. This implicated several questions related to both external and internal discussions in academia. We will in a brief chronological overview of the past 20 years discuss a few major changes in our thinking about the university (Miedema, 2022). It will be discussed how this has affected the ideas about mission, profile and strategy and subsequently the administration and organization of universities. External debates have induced discussions about policies and internal management of research and education which asked for changes in the composition of the workforce, both academic and non-academic, temporary, and tenured. It was evident that these developments and changes in strategy and mission could only be achieved by a reform of recognition and rewards that supports these activities. This reform based on content, on what

the university wants to achieve with research and education, will be the basis for newly developed HRM.

At the beginning of this century, there was a strong belief that universities and especially research were a major driver of the economy, and that research and innovation was a critical factor in economic growth at the national level and international level. This has developed since 1980 with the neoliberal turn in the United States, the European Union (EU) and the rest of the developed world and has also determined internal developmental policies alike. Investments in academia and its research mainly aimed at intellectual property, knowledge exchange and job creation through start-up companies were seen as the main engine of economic growth and prosperity. This has influenced and determined the policies and management of higher education and universities around the globe (Miedema, 2012; Rip, 1994; Sarewitz, 1996; Van der Meulen, 1997; Whitley, 2000; Ziman, 1994). Increasingly, since the 1990s, indicators were being used to monitor especially and mainly on academic output of Science, Technology, Engineering and Math (STEM). These evaluations became very important for national, but also international, comparisons and rankings of academic and economic competitiveness (Hazelkorn, 2011; Wouters, 1999, 2014).

This has culminated in a major emphasis on quantitative metrics mainly on the number of papers in journals with a high journal impact factor (JIF), on citations and on grants obtained and patents (Wilsdon, 2016; Wouters et al., 2015). Academics who were scoring well on these metrics were seen as the top talents of the university. A quite different but highly important critique of the university system as it had developed came from yet another perspective.

From 2009 onwards, it was felt that in the developments described above, the university and academia in general had focussed her goals and strategy and policies almost totally on research, with no or little attention for teaching and education (Dijstelbloem et al., 2013; Miedema, 2022). Teaching had little to add to the institutional reputation, and thus teaching and teachers were simply not recognized and rewarded as researchers were. Serious problems with the quality and replicability of published work in many fields were demonstrated in many studies since 2012 (Ioannidis, 2005; Nosek et al., 2012). It was made clear that it was caused by the enormous competition between individuals (Dijstelbloem et al., 2013; Wouters, 1999). High pressure to publish a high number of papers yearly was incentivising 'sloddy science' and fraud in unsafe research environments. This called for emphasis on academic leadership, incentivising openness, a safer academic culture and rewarding collaboration rather than competition.

These issues composed a major 'case for change' depicting its various but interrelated issues that can be improved but not without a corresponding change in the recognition and reward system. In that endeavour, professionals in research, teaching and administration need to team up with HRM professionals to design new ways of evaluation, to implement and help the academic community to use it properly and to study its unwanted adverse effects when in use. From 2015 onwards, with a multitude of initiatives, the EU Directorate Research and Innovation took the lead in the first institutional response to

these issues, launching a comprehensive integral programme of Open Science (EU, 2018; Miedema, 2022).

## **Academic Performance: Past and Present**

According to [Guest \(1997\)](#), there is a need for an overarching HRM model if we want to fully understand the added value of employees in organizations. The Harvard model, developed in the early 1980s by [Beer et al. \(1984\)](#), is an HRM model that reflects a developmental humanism approach ([Legge, 2005](#)) that fits academia, Open Science and the Recognition and Rewards transformation. The developmental humanism approach of the Harvard model is reflected in the nature of academia (learning and development, knowledge creation and knowledge sharing). In a modern version of the Harvard model, presented by [Beer et al. \(2015\)](#), also see Chapter 1), there are three components that can be used to understand and transform academia. First, situational factors reflect internal and external contextual factors such as workforce characteristics; specific academic conditions (e.g. rituals, routines, symbols and procedures); labour market conditions; technology and systems installed; and sector-specific regulations, norms and values. For universities, the movement of Open Science, and opening up the university to society, has been a major force to change the focus on the importance and value of human capital in higher education. Second, the Harvard model incorporates a multiple stakeholder perspective, including the financiers, the board of directors, the managers, the employee representatives, the trade unions and the community. As we will show in this chapter, multiple stakeholders at multiple levels outside and inside the higher education institute are involved in Open Science and in the Reward and Recognition movement. According to [Beer et al. \(2015\)](#), both the situational factors and stakeholders affect the HRM decisions in a university, for example, with respect to recruitment and selection, training and development, performance appraisal, promotion opportunities, pay and rewards and work design (e.g. teamwork, employee involvement and job rotation). Third, the long-term consequences or ultimate outcomes are represented in a multidimensional performance construct: (1) individual employee well-being, (2) organizational effectiveness and (3) societal well-being. These three ultimate outcomes are equally important in the Harvard model. However, there are natural strategic tensions between the three. In other words, what is excellent or good in terms of organizational effectiveness (e.g. research grants and (inter)national education rankings of the best bachelor and master programmes) is not necessarily good for individual employee well-being in terms of workload, stress and burn-out risks. The societal well-being outcome is in particular interesting and relevant in the light of recent open science developments, as we will discuss below, because it aims at bringing science and society closer together. [Beer et al. \(2015\)](#) state that the field of HRM itself is too much in search for applying a 'proper science paradigm' with an emphasis on one-dimensional performance indicators (preferably in terms of money or quantitative figures) and a lack of attention to the people component (employee well-being) and big societal challenges (societal well-being). The authors make a plea to restore the balance, a new balance we are also in need of in academia.

## **Open Science as a Reaction to the Lack of Societal Well-being and the Narrow Definition of Organizational Effectiveness**

Since 2000, we have seen several initiatives and actions that aimed for a more productive relationship of science with society to increase the impact and value of research for society (Miedema, 2022) (societal well-being). In the EU in the first decade of this century, a large programme was started on responsible research and innovation with the aim to increase the impact of research on society funded by the EU (Owen et al., 2012). These programmes were started to mitigate the emphasis on science for science, because a self-referential evaluation system had developed and became dominant over time. But they were not yet accompanied by an institutional movement to accordingly change the recognition and reward system.

Open Science is also a movement that attempts to create more room for societal well-being, because it commits to more transparent and accessible knowledge that is shared and developed through collaboration. The Open Science movement includes, not exclusively, the topics of FAIR (Findable, Accessible, Interoperable, Reusable) data, open software, public engagement, preregistration, team science, open access (OA) and open education. Open science experienced its first acceleration in the early 2000s with the push for OA as its main driver. The emergence of the internet had a tremendous effect on the publication cultures in science. But in contrast to earlier predictions, the internet did not herald the end of the subscription scientific journal. Quite contrary, there was a tremendous rise in journals and publications, and publishers were quick to act and build an impressive web of closed access publications. University libraries were the first parties to take issue on the increasingly exploitative business of publishing behind paywalls. After decades of negotiating similar deals on journal packages, librarians backed by their institutions decided to opt for a different negotiating strategy. Therefore, OA became at the core of the strategy of university libraries, to be able to make all scientific knowledge accessible. Besides this enormous rise in the amount of publications, the internet also made it possible to actually openly share knowledge, papers but also data and software on a much larger scale.

In 2010, awareness was created for the fact that much research is not reproducible or difficult to reproduce (Ioannidis, 2005; Nosek et al., 2012). This is of course harmful in many ways, such as the lack of credibility of the scientific knowledge, but also, for example, in the biomedical field, it leads to translation failure to clinical practice. In response, researchers are promoting various open science practices, such as preregistration of research protocols, sharing open data, open methodology, open-source software and code. Also, the encouragement of publishing negative and null findings is part of this response.

With the growth of the Open Science movement in the EU from 2015 onwards, it was clear that to be able to achieve open science, the recognition and rewards system of academia needed to change. Publishing research papers as the sole purpose of academic work needs to broaden to all aspects of what academic work

entails. And a focus on quality rather than on quantity should be restored. In open science practice, time and efforts will be devoted to outreach and stakeholder engagement to improve the research and education agendas. This needs to be explicitly and systemically incentivized and rewarded in academia. One cannot ask for one thing and then judge on something else. To be able to work in accordance with the open science principles, academics should also be incentivized and rewarded for the transparent and accessible way of their research.

Universities are currently taking concrete steps to implement open science, increasing the urgency to change the recognition and reward system. At most institutes, both movements are closely associated, but depending on the context, their relationship varies. Utrecht University (UU) has chosen to make open science its primary objective and to designate a change in the system of recognition and rewards as one of its key drivers (see Fig. 3.1 and text box ‘Case Study: UU’). The strength of this approach is that the ‘why’ of change is very clear, and therefore, the urgency for change is felt, making academics more willing to change. At UU, we have since 2018 worked on an integral approach to implement open science as the way of working in research and education with four interdependent themes (see Fig. 3.1) and with open education. In terms of societal well-being (e.g. in terms of societal impact) and employee well-being (in particular recognizing and rewarding multiple academic domains and not just research), the Open Science movement broadened the performance scope of academia from one-dimensional focus on organizational effectiveness in terms of research output towards a multidimensional performance construct.

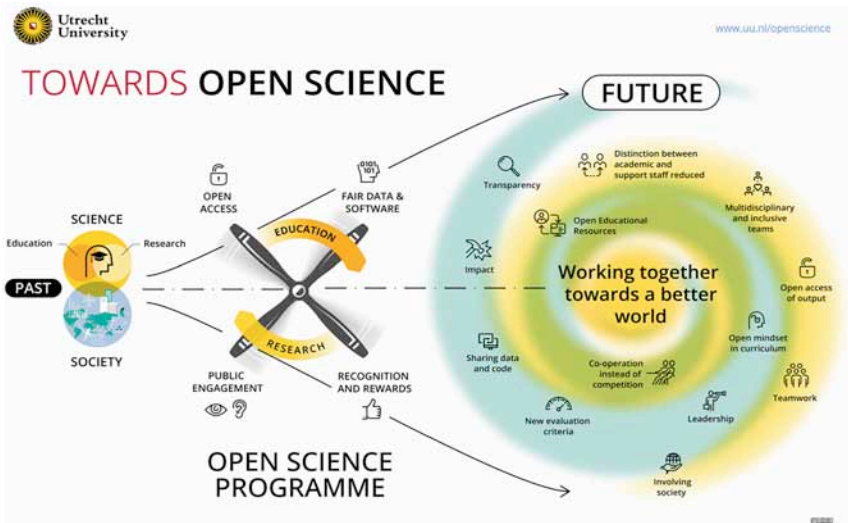


Fig. 3.1. Recognition and Rewards as an Integral Approach to Implement Open Science to Improve Working Together Towards a Better World. *Source:* Provided courtesy of Utrecht University.

## Movement of Recognition and Rewards in Academia

In a collective move of (nearly) all the relevant parties in the Dutch ecosystem, the major organizations agreed on the need of reforming the recognition and rewards system. Five Dutch institutions involved in policymaking and implementation regarding Dutch Higher Education – UNL (the Dutch employers' organization for universities), KNAW (the Dutch Royal Academy), NFU (the Netherlands Federation of University Medical Centers), NWO (the national Dutch research funding institute) and ZonMW (the national Dutch medical research funding institute) – presented a position paper focussed on recognition and rewards in academia with the title: 'Room for everyone's talent' (VSNU et al., 2019). All the Dutch universities fully supported this position paper and its general principles. These principles are:

- Enable the diversification and vitalization of career paths, thereby promoting excellence in each of the key areas.
- Acknowledge the independence and individual qualities and ambitions of academics as well as recognizing team performances.
- Emphasize quality of work over quantitative results (such as number of publications).
- Encourage all aspects of open science.
- Encourage high-quality academic leadership.

Stating that:

Many academics feel there is a one-sided emphasis on research performance, frequently leading to the undervaluation of the other key areas such as education, impact, leadership and (for university medical centres) patient care. This puts strain on the ambitions that exist in these areas. The assessment system must be adapted and improved in each of the areas and in the connections between them. The implicit and overly one-sided emphasis on traditional, quantifiable output indicators (e.g., number of publications, *h*-index and journal impact factor) is one of the causes of a heavy workload. It can also upset the balance between academic fields and is inconsistent with the San Francisco Declaration on Research Assessment (DORA) principles. (VSNU et al., 2019, p. 4)

In addition to deciding on a common framework to work from, the signatories of the position paper agreed to set up institutional committees to 'create support for the system and develop initiatives in a manner suited to the institution in question'. These committees convene at the national level to ensure progress and alignment.

It is important to note that the recognition and research movement is not limited to the Dutch context. Quite contrary: recently, many national and international movements have been launched to implement open science and a

responding practice of recognition and rewards and research evaluation. Here, UNESCO and the EU commission and literally hundreds of diverse agents in the higher education and research domain are joining forces (Coalition for Advancing Research Assessment (CoARA), 2022). CoARA, for example, is an international network of universities and institutions from all over the world that aim for an alternative approach in academia, building on open science and recognition and rewards principles similar to the 2019 position paper described above.

Although many of the major players and advocates have been based in the United States from the onset, a concerted effort beyond signing DORA was lacking. Initially, US institutes seemed less eager to reform the recognition and rewards system through institutional means, and clear action from funders was lacking. The year 2022 marked a period of significant change, with the launch of the Higher Education Leadership Initiative for Open Science (HELIOS), initially signed by 50 (now 90) notable universities. Simultaneously, many funders like the National Institutes of Health have adopted open science policies, and the White House Office of Science and Technology has declared 2023 to be the Year of Open Science.

#### **Text Box: The UU Case**

Adopting an alternative approach to recognizing and rewarding academic work is considered a prerequisite and integral aspect of promoting open science. The multiple practices aimed at improving the quality of academic work and changing the relationship between the university and society require an integrated approach. That is why UU chose to embed recognition and rewards in the Open Science programme, from the very beginning alongside the themes of OA, Open Education, FAIR Data and Software and Public Engagement (see Fig. 3.1). Over the years, open science has become an integral part which in turn is part of the UU strategy highlighted by the motto ‘sharing science, shaping the future’.<sup>1</sup>

To formalize the UU approach to recognition and rewards, a vision was formulated through a deliberative process involving academics, human resource (HR) professionals and other non-academic staff. The content of this vision was based on discussions within the university and on formal policies within the university (e.g. the strategic plan) and developments on sectoral (e.g. the Netherlands National Strategy Evaluation Protocol for accreditation of research programmes) and international levels (e.g. DORA). The vision introduced the TRIPLE model, the UU model describing the multiple domains of academic work according to this acronym: Team spirit, Research, Impact, Professional performance, Leadership and Education.

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<sup>1</sup>Or in Dutch: ‘Open blik, open houding, open wetenschap’.

The letters are in a random order except for the ‘T’ of Team spirit which was deliberately put first to illustrate the departure from the individualistic model of science, towards a strategic, team-based way of working. This approach was also applied within the Open Science programme which includes fellows and theme leads from all disciplines, both junior and senior colleagues and from a wide range of academic and non-academic functions.

In the TRIPLE model Education, Research and Professional Performance are specified as the three core domains where academic outcome is generated. Professional performance captures those activities relating to the academia work that go beyond education and research and are characterized by the fact that they provide a service to academia or to society at large, for example, most notably patient care in medicine or public engagement in general. Impact is defined as the way of working. Starting from the notion that academic work aims to create impact, societal or scientific, but taking into account that the specific impact can be hard to predict on forehand. Its categorization as an outcome rather than a separate activity is deliberate since there can be no impact without education, research and professional performance: it is the outcome of academic work. Finally, Leadership was defined as the facilitator and enabler of academic work.

Next to the TRIPLE model, the following five guiding principles were introduced:

- The collective is our point of departure: With this principle, it is stressed that activities such as evaluation of academics and hiring and promotion decisions should be based on the goals and needs of the team.
- Invest in leadership: Good academic leadership is considered a prerequisite for high-quality work and should have a prominent role in hiring, development, evaluation and assessment procedures.
- Stimulate diversification in profiles and promote dynamic careers. Profiles should become more diverse, but the policies underlying this transition should prevent giving the impression that individuals have to excel in all domains. In contrast, employees are encouraged to focus on selected domains with regard to the communal goals. Naturally this focus can change depending on the context and time period.
- Recognize and reward openness in all domains. To avoid seeing open science as an additional task that is not incentivized, all evaluations of academic work should emphasize transparency, reproducibility and public engagement.
- Recognize and reward quality over quantity. With this principle, the UU calls for a more narrative approach and identifying novel approaches, including meaningful metrics, to assess quality of the process and output of all academic work.

The vision document was formally accepted and adopted by the deans and the Board of the University in 2021 and communicated widely. The presentation did not go unnoticed and sparked a myriad of responses both nationally and internationally. The clear choices made in the UU vision were well received in a general sense. Most notably, an interview with one of the programme leads on the Nature website published focussing on UU's decision to abandon the JIF and *h*-index in individual hiring and promotion decisions triggered the most vocal response. Remarkable, since this controversial point was also the least novel, UU had already signed DORA and basically stated that they would act accordingly. Established academics, mostly from the Life Sciences, voiced their opposition to this 'subjective' approach and warned of the dire consequences of exposing a younger generation of academics to new arbitrary rules (Poot, 2021). Memorably, early career academics swiftly responded voicing their support for the culture change heralded by the new vision (Algra et al., 2021). These and other concerns warrant continuous dialogue and evaluation at the university as well as national and international levels.

## **Talent Management in the Recognition and Rewards Movement**

The dominant approach in academia is very much focussed on individual research excellence with an individual performance focus on one-dimensional indicators as mentioned before. This is a very narrow definition of academic talent, very much focussed on a selective group of employees (researchers), excluding many other employee groups in universities, such as teachers and support staff.

The Harvard model in HRM (Beer et al., 2015) represents a multiple stakeholder- and multidimensional performance approach that can be applied to the recognition and rewards movement. The question that remains is: What is required from a HRM and talent management perspective in the Recognition and Rewards transformation? In other words, if we acknowledge the context dimension (situational factors), multiple stakeholders and multidimensional performance (employee well-being, organizational effectiveness and societal well-being), we need a framework for filling in the HRM or people management gap. As mentioned before, the model of Beer et al. (2015) is based on a developmental humanism approach, focussed on increasing commitment and involvement and moving away from the dominant performance-oriented HRM approach within academia (see Fig. 3.2 for the link between Harvard model and the model of Beer). A popular, and in this case, helpful HRM model is the so-called AMO model (ability, motivation, opportunity) and its related Mastery/Purpose/Autonomy approach (Appelbaum et al., 2000; Jiang et al., 2012).

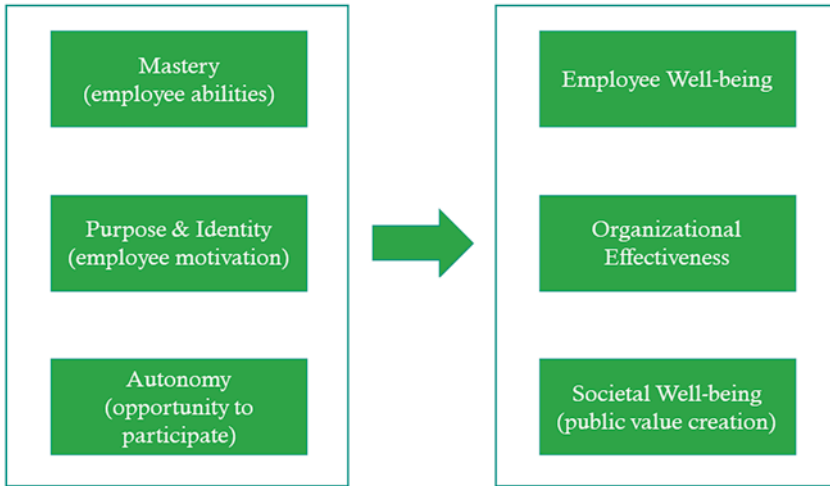


Fig. 3.2. Link Between AMO Model and Harvard Model.

According to the AMO model, employees perform well when (Boxall & Purcell, 2016):

- They are able to do so (they can do the job because they possess the necessary knowledge and skills). Abilities.
- They have the motivation to do so (they will do the job because they want to and are adequately incentivized). Motivation.
- Their work environment provides the necessary support and avenues for expression. Opportunity to participate.

The concept of ‘mastery’ very much links to the Abilities described above and covers the intrinsic drive for personal and professional development. In other words, the academic professional that strives for getting better at doing the work. ‘Purpose and identity’ correspond with Motivation in the AMO model and refers to meaningful work and professional identity in academia. What is it that really motivates employees, in particular employees working in universities? ‘Autonomy’ is called ‘employee influence’ in the Harvard model and considered to be the most powerful HRM domain. It covers employee to manoeuvre, employee involvement in decision-making, agency and autonomous teamwork.

In the contemporary talent management literature a distinction is made between exclusive and inclusive talent management. In the exclusive approach, talents are A-players, best-in-class and/or top performers. In the inclusive approach all employees have talents with the organizational challenge of getting the best out of all the employees. Thunnissen (2016) concluded that an exclusive, performance-oriented talent management system prevails in academia. However, in practice and in academia in particular, a mix of exclusive and inclusive talent

management can be applied, even within the principles of the 2019 position paper ‘Room for everyone’s talent’. Whatever talent management approach is applied, there are two inevitable important components: Leadership and Team spirit.

## **Restoring the Balance Through Talent Management in Recognition and Rewards**

The Recognition and Rewards transformation represents not only a multidimensional but also a more balanced approach taking into account employee well-being (appreciation for the individual talent), organizational effectiveness (optimal use of sources for achieving organizational goals) and societal well-being (public value creation or science for a better world) (Boselie et al., 2022). The academic talent management value chain through recognition and rewards opens up opportunities for a more inclusive work environment through connecting employee well-being, organizational effectiveness and societal well-being into meaningful work. In return, this meaningful work can be the basis for attracting and retaining qualified and motivated talents through mechanisms of organizational identity and purpose.

In a way, the Recognition and Rewards movement represents a shift from ‘productification’ (performance in terms of publications, impact factors, grants and prizes) towards ‘humanisation’ (good employership, healthy work environment and great place to work) and public value creation. In terms of the Harvard model by Beer et al. (2015), the Recognition and Rewards transformation is restoring the balance between employees (the talents in academia), organizational effectiveness (in particular given the basic funding by public money) and public value creation in particular linked to big societal challenges. This new balance also represents what universities are for and that is far beyond the number of article publications, high impact scores and the number of grants.

## **Discussion**

The Open Science and Recognition and Rewards movements have major implications on how we answer the question: ‘what are universities for?’ This represents a shift or rebalancing act from too much focus on research and research output of the individual towards a broad approach that highlights multiple domains. It looks at both the individual and the collective (team spirit), acknowledges multiple stakeholders and builds on a multidimensional performance construct. This in return also affects the mission, vision and strategies of universities. Without a vision and university strategy, any attempt towards open science and a different employee recognition and rewards plan would most likely end up in loose couples and a fad or fashion of a certain era. In Simon Sinek’s (2009) words on the relevance of ‘why’ we are doing things: What if Martin Luther King had started his famous speech with the words ‘I have a plan’ instead of ‘I have a dream’. The dream in this metaphor represents the vision and the strategy of the university. If applied by a university, this automatically affects the way we appreciate, evaluate, appraise, praise, value, motivate and develop the employees of the university: the

talents in academia. Additionally, it is interesting and relevant to mention the multi-actor/multi-stakeholder involvement in the transformation process of open science and recognition and rewards. Academics, and later on also support staff, policymakers from national bodies (research funders and university employers' associations), and policymakers from universities (in particular the HRM functions) got involved in the design and change process through dialogue sessions, platforms, seminars, conferences and media discussions (e.g. on ScienceGuide). This broad involvement increases the sense of ownership and offers insights from different perspectives.

Talent management is often seen as a panacea for the happy few, implying an exclusive approach for A-players. The talent management literature, however, reveals the emergence of both exclusive and inclusive approaches, the latter referring to the idea that everybody has talents. We propose a hybrid approach to talent management combining exclusive and inclusive talent management in academia to start restoring the balance among individual well-being, organizational effectiveness and societal well-being. The starting point is the collective ambition of a group, institute or university. Depending on the collective ambitions, for example, to make the world a better place, different profiles of employees are required. The inclusive talent management approach offers opportunities to optimize the academic human capital, in line with the 2019 paper room for everyone's talent and its notions of diversification and dynamic career paths. The exclusive talent management approach is aimed at key positions that are required to achieve the collective ambitions. These key positions are in themselves not static. Instead, there is a dynamic component. The software engineers and open science project managers we need today and the next couple of years may represent key positions that we require to boost our open science ambitions. Academic leadership is another potential key position required to reach our collective goals. In this approach, inclusive and exclusive talent management can coexist as long as we take the collective and team as the starting point in combination with the acknowledgement that key positions should change over time.

In the past, there was lifetime employment, and in some areas of academia, it still exists. Increased complexity and dynamics have contributed to a shift from lifetime employment in academia to lifetime careers in society. In other words, organizations are expected not to offer a job for life but instead contribute to a career for life. This phenomenon has received a lot of attention under the umbrella of sustainable employability (Van Harten, 2016). The simple definition of sustainable employability is 'creating the right conditions for employees to have a long, healthy and happy career by ensuring someone enjoys working, is healthy and motivated, he or she remains employable for a long time'. This is a joint responsibility of the employer and the employee. The principles of diversification and dynamic career paths of the 2019 position paper room for everyone's talent almost perfectly align with the notions of sustainable employability. The dynamic career paths can be both vertical (hierarchical) and horizontal (enrichment and enlargement). Internal and external mobility are key aspects that can contribute to shaping sustainable employability. Iconic and high-performance organizations in other sectors are known for letting their talent go to other organizations

assuming they will attract other talents and perhaps re-attract the talents that have left in the past and who have grown and developed because they were able to spread their wings to other contexts. Although there is still a long road to go, as we will see in the next chapters, we also see that this is something that is partly already applied to early career academics (in particular PhD candidates and post-doc researchers). This is in line with open science principles to stimulate cooperation across institutes and international borders given the big societal challenges that require multidisciplinary and interdisciplinary efforts.

Leadership plays an essential role in the shaping of talent management in academia. This is also known as line management enactment, focussed on the implementation (actual practices) and the internalization (perceived practices) (Purcell & Hutchinson, 2007). Effective line management enactment implies implementing the talent management policies and taking care of the desired perceptions by those involved. The HR Process Model provides a framework for an implementation strategy for talent management in academia (Wright & Nishii, 2013). In the framework, a distinction is made between intended, actual and perceived practices with a central role for leaders and managers to shape the employment relationship. The research by Knies (2012) shows that leaders and managers can optimize people management in the organization if they are able (manager ability) and willing (manager motivation). The manager's motivation in turn depends on the opportunity or leeway (manager opportunity to participate) that is perceived by the manager. The 'L' in the TRIPLE model of the UU plays a central role in the shaping of an alternative talent management approach aimed at recognition and rewards in academia. Academic leadership in TRIPLE goes hand in hand with the 'T' of Team spirit, because the collective is the starting point.

The future research agenda on talent management and recognition and rewards in academia could focus on the following research themes:

- Academic leadership development of both scientific and support staff.
- The impact of line management enactment on employee well-being, societal well-being and organizational effectiveness.
- Team spirit and team development towards open science ambitions.
- Sustainable employability, different profiles and dynamic career paths inside and outside academia.
- A balanced approach towards performance management and meaningful metrics.
- Strategic alignment of Open Science and Recognition and Rewards transformations with the overall university strategy.
- Effective implementation and the role of different actors involved including employees, line managers and HRM professionals.

The practical implications that we would like to emphasize relate to attention for recognition and reward themes such as leadership development, creating a high involvement culture (team spirit and workforce participation), communication and information sharing, room for pilots and experiments, and creating a platform for collecting good practices and best principles that can be the basis for professional

and organizational development. Many of these practical suggestions can be found in other sectors, strongly related to the foundations of the AMO model discussed in this chapter. If employees are able, willing and involved (employee abilities, employee motivation and employee opportunity to participate), there is a basis for positive effects on employees, society and the organization.

## Conclusion

In this chapter, we have talked about the history of the recognition and rewards system in academia. How this changed over time is because the mission of university was changed. However, this one-sided view of what a university is for and what excellence is has been challenged by the Open Science movement, including the Recognition and Rewards movement. To change the recognition and rewards system in academia, we also need to balance our view on talent management, a combination of inclusive and exclusive talent management, using exclusive talent management for the strategy of a university.

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