

Institutional Engagement in Internationalisation in Finnish Higher Education

Finlandiya Yükseköğretiminde Uluslararasılaşmaya Kurumsal Katılım

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Özet

Bu çalışmada, APIKS anketine dayalı olarak uluslararasılaşma motivasyonları ve yükseköğretim kurumlarının rasyonelitesi tartışılmaktadır. Finlandiya'da iki yükseköğretim sektörü vardır. Uygulamalı bilimler üniversiteleri öğretime önem verir ve bölgesel araştırma, geliştirme ve yenilik sistemi ile yakın bir bağlantıya sahiptir. Diğer üniversiteler, araştırma kaynakları için araştırma ve akademik rekabetin yanı sıra araştırmaya dayalı öğretimi vurgular. Bu nedenle, bu iki yükseköğretim sektöründe uluslararasılaşma koşulları farklı faktörlere dayanmaktadır. Her iki sektördeki bireysel kurumlar arasında da önemli farklılıklar vardır. Bireylerin kariyer yolları, yükseköğretim sektörleri ve kurumsal stratejilerle ilgili faktörlere bağlıdır. Uluslararası akademik faaliyetler, bu iki yükseköğretim sektöründe kariyer yollarının üzerine inşa edildiği faktörleri belirlemektedir. Bu iki kariyer yolunun her biri kurumların farklı şekillerde uluslararasılaşmasına zemin hazırlamaktadır.

Anahtar sözcükler: Finlandiya, kurumsal çıktılar, performans yönetimi, uluslararasılaşma, yükseköğretim kurumları.

Abstract

In this paper, we discuss motivations for internationalisation and the rationalities of higher education institutions based on the APIKS survey. There are two higher education sectors in Finland. Universities of applied sciences emphasise teaching and have a close connection with regional research, development, and the innovation system. Universities emphasise research and academic competition for research resources, as well as teaching based on research. Therefore, the conditions for internationalisation in these two higher education sectors are based on different sets of factors. There are also significant differences between individual institutions within both sectors. Individuals' career paths depend on factors related to higher education sectors and institutional strategies. International academic activities determine the factors on which career paths are built in these two higher education sectors. Both pathways lead to internationalising institutions but in different ways.

Keywords: Finland, higher education institutions, institutional outcomes, internationalisation, performance management.

During the 2010s, Finland started to undergo a significant change in internationalisation, and this is due to factors related to both teaching and research. It is in the interest of universities and the growth in numbers of international academic staff for there to be competition for international research funding. The main academic domestic funding channels are also evaluated by international scholars and most of the extensive research programs are related to international financial instruments. According to OECD statistics, there are about 40,000 full-time researchers in Finland and 58% of them working in business enterprises and 34% working in higher education, and 8% in diverse other organisations, mostly in public research institutes (OECD, 2021).

The scholarly reporting language indicated by the publications has become global in recent years. This is also supported by the National publication forum practice under the Federation of Finnish Learned Societies, and ranked scholarly publications are mainly international and increasingly target those in English (Mathies, Kivistö, & Birnbaum, 2020; Pölönen, 2018). In teaching, international joint degrees and changes in education funding practices have led to the development of academic units which are more international, as the construction and evaluation of research and teaching follow international practices. The qualifications requirements also take more account of international publications and international research funding.

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This paper benefits from the Analytical Framework for the Fourth Academic Profession in Knowledge-based Societies (APIKS) Conference, which has become an important starting point for the discussion on the changing academic profession. This Analytical Framework supports the matching of diverse questions in the APIKS questionnaire. During the APIKS planning phase, internationalisation was a separate section at first, but the issues related to the theme were eventually placed in different sections. In this way, the variables analysed in this presentation are related to the following core task sections: teaching, research, and external activities.

We have selected four areas from which we have led the analysis to the question of *how Finland's two higher education sectors differ in terms of teaching, research, and external activities in terms of internationalisation*. Finland has a two-tiered higher education system: universities and universities of applied sciences. The closest reference higher education systems in APIKS are Germany, Portugal and Switzerland, because they also have dual systems of higher education with a universities sector and universities of applied sciences sector or equivalent.

Universities of applied sciences are there for teaching and have a close connection with the regional research, development, and innovation system. On the other hand, universities emphasise the research task and academic competition for research resources, as well as teaching based on research. Therefore, the conditions for internationalisation in these two higher education sectors are based on different sets of factors.

The Finnish universities and universities of applied sciences have undergone significant changes in internationalisation over the last ten years. An important factor for these changes is that domestic funding formulas for both higher education sectors now emphasise international competitive funding, change programs, attractivity for students, and publications. In recent years, the Government has emphasised using resources to meet goals of scale, quality, and internationalisation as a core of funding formula for higher education institutions in both sectors. These data are verified in the performance agreement between higher education institutions and Finnish Ministry of Education and Culture (Hansen, Aarrevaara, Geschwind, & Stensaker, 2020).

Under these conditions, what is also common to both sectors is that they implement core functions using the *four Ms*. These are mission, motivation, mechanisms, and management, which determine the performance of internationalisation in Finnish higher education. From this angle, another key concept is formed, which is institutional engagement. By this we mean the tacit understanding of the preconditions behind

internationalisation in higher education institutions, academic staff, and other stakeholders (Götze, Carvalho, & Aarrevaara, 2020; Stilgoe, Lock, & Wilsdon, 2014).

For this paper, we established hypotheses based on the premise that the internationalisation of the core functions of teaching, research and external activities is dependent on motivational factors. From this perspective, universities bring about internationalisation performance and increase the number of international staff in teaching and research. The funding formula between the Ministry of Education and Culture and higher education institutions directs internationalisation in universities more than in universities of applied sciences.

The hypotheses are:

- **H1:** The institutional type determines the practices of internationalisation.
- **H2:** The differences in the management of the two higher education sectors make a difference in institutional funding.

Institutional Engagement in Internationalisation

The key aspect of higher education institutions' institutional engagement in internationalisation is resource dependence, which provides guidance via a performance management system mechanism and higher education policy. Internationality is one of the key factors in determining the public resources of higher education institutions, especially in terms of research and teaching. As in the analytical framework for this conference, internationalisation is seen as a tension between competition and co-operation. Competitive funding is an important factor in funding universities and universities of applied sciences, but competitive funding is also a career-determining factor. These are performance factors, and the APIKS survey was also based on the professional factors that enabled the results. These include international networking, international publishing, and the number of international staff in universities and universities of applied sciences.

The institutional factors presented here are separate as such, but they form a whole by describing the functions of internationalisation in higher education institutions. As the results in ■ Table 1 indicate, institutional engagement for internationalisation is generally high, the attitude to internationalisation is quite positive, and it sustains international activities.

All the data presented in this paper were drawn from APIKS-IDB (2021). In the APIKS data, we assumed that the factors that are directly in the Finnish higher education funding formula rose to the highest rates. This applies to two areas: mobility in exchange programs and international publications. International exchange programs are related to the funding for-

Table 1. Respondents' views on their international efforts in publications and proportion of all their publications.

| What percentage of your publications in the last three years...? | University (UNI) | University of applied sciences (UAS) |
|--|--------------------------------|--------------------------------------|
| Solo authored | <i>n</i> =495 | <i>n</i> =121 |
| Mean | 23.1% | 30.9% |
| Standard deviation | 33.0% | 32.3% |
| 95% CI | 20.1%, 26.0% | 25.1%, 35.7% |
| <i>t/p</i> Effect size | <i>t</i> =-2.35 <i>p</i> =.019 | Cohen's <i>d</i> =0.23 |
| Published in a foreign country | <i>n</i> =556 | <i>n</i> =104 |
| Mean | 67.9% | 27.0% |
| Standard deviation | 39.0% | 32.7% |
| 95% CI | 64.7%, 71.1% | 20.6%, 33.4% |
| <i>t/p</i> Effect size | <i>t</i> =11.4 <i>p</i> <.001 | Cohen's <i>d</i> =1.07 |
| Co-authored with colleagues located in the country of your current employment | <i>n</i> =611 | <i>n</i> =175 |
| Mean | 57.2% | 52.0% |
| Standard deviation | 39.2% | 38.8% |
| 95% CI | 54.1%, 60.3% | 46.2%, 57.8% |
| <i>t/p</i> Effect size | <i>t</i> =1.56, <i>p</i> =.119 | Cohen's <i>d</i> =0.13 |
| Co-authored with colleagues located in other (foreign) countries | <i>n</i> =526 | <i>n</i> =81 |
| Mean | 37.1% | 12.8% |
| Standard deviation | 35.7% | 20.5% |
| 95% CI | 34.0%, 40.1% | 8.3%, 17.3% |
| <i>t/p</i> Effect size | <i>t</i> =8.81, <i>p</i> <.001 | Cohen's <i>d</i> =0.71 |
| Peer-reviewed | <i>n</i> =609 | <i>n</i> =124 |
| Mean | 75.6% | 34.7% |
| Standard deviation | 36.3% | 38.1% |
| 95% CI | 72.7%, 78.5% | 27.9%, 41.4% |
| <i>t/p</i> Effect size | <i>t</i> =11.3 <i>p</i> <.001 | Cohen's <i>d</i> =1.11 |

Source: APIKS-IDB, 2021.

mula in that they provide process elements for degrees and admission to international degree programs. To publish in international journals and books is a factor that is the focus of higher education institutions.

The scale, quality and internationalisation of higher education institutions are key drivers of higher education development, but these factors materialise differently in the two higher education sectors. In this paper, we have also described the conditions under which internationalisation takes place. In universities, collaboration with international colleagues is a key prerequisite for international funding. Research groups often operate as members of international consortia, in which case publication forums have been built in an international context. Universities of applied sciences are not detached from this development, but they place a stronger emphasis on regional factors than universities do. The needs and conditions for internationalisation depend on these regional factors. Both sectors have extensive international cooperation in teaching and

the number of international students has increased steadily since 2008. In the ten-year period before the APIKS study, the total number of international students in universities increased from 6984 to 10698, and in universities of applied sciences from 7113 to 9539 (Finnish National Agency for Education, 2021). In the university sector, 1069 foreigners completed a degree, and at the time of the APIKS study in 2018, the number of degrees awarded was 2368 (Statistics Finland, 2019).

In the case of Finland, we interpret internationalisation as a phenomenon in which national management and higher education policy determine the quantitative and qualitative goals of internationalisation. Institutional engagement can therefore be read from this perspective, and internationalisation is a higher education policy and innovation system issue. In practice, internationalisation is also determined by the internal practices of higher education institutions, which may be different within each national higher education sector. This is also the case in Finland, where performance agreements between universities



and the education ministry can be reflected in the institutions' internal allocation models. However, these internal allocation models are different and fall within the realm of institutional autonomy. We can assume that it is these consequences of allocation models to which survey responses are attached.

Internationalisation of Core Functions

In ■ Table 1, the only result for scholarly publications for which there is not a statistically significant difference ($p>.05$) is “Co-authored with colleagues located in the country of your current employment”. The strongest deviation concerns the variable peer reviewed publications with Cohen’s $d= 1.11$. The second strongest deviation concerns the peer reviewed publications published in a foreign country (Cohen’s $d= 1.07$). The result regarding the answers of the respondents “co-authored with colleagues located in other (foreign) countries” also shows a strong difference (Cohen’s $d= 0.71$).

■ Table 2 indicates respondents’ co-operation with a range of actors. It is essential for hypothesis H1 that most respondents (92.7%, $n=931$) are involved in co-operation with some actors, and in their own unit this is very common. Striking aspects are cooperation outside one’s own discipline and co-operation with international colleagues. Results for both answers of the respondents differ statistically significantly according to type of higher education institution in the control

groups ($p<.001$), the latter being stronger in nature (Cramer’s $V= .21$ vs. $.11$). These include cooperation with other domestic institutions (Cramer’s $V= .14$). The difference in the results is the cooperation with doctoral students (Cramer’s $V= .49$).

The contemporary academy pays attention to networking and the impact of research outcomes, and these are global characteristics of work in the academy. The academic profession works in global labour markets, and there are increasing opportunities to commute between higher education sectors and institutions (Chroni, Ronkainen, Elbe, & Ryba, 2021; Paraskevopoulos, Boldrini, Passarella, & Conti, 2021). Internationalisation has become easier, but also more expected as part of an academic career.

There are scholars from Finland going abroad as well as international scholars coming to Finland, for a period or permanently. Finland offers international career opportunities and open calls for academic posts which are in most cases international. Most of the teaching takes place in either Finnish or Swedish, the official languages of Finland. However, based on higher education regulations, language skills are not required in the case of international candidates for academic posts, as the administrative language is Finnish or Swedish (Universities Act 35§). This is based on regulations, because international and returnee Finnish academics promote the quality of teaching and research by bringing the knowledge base, networks, and capacity building in international research co-operation

■ Table 2. Respondents’ characteristics on their research collaboration.

| | University $n=[701, 705]$ | University of applied sciences $n=[228, 232]$ | All $n= [931, 935]$ | |
|---|------------------------------|---|------------------------|---|
| Collaborators in any of your research projects | Yes=651, 92.6% | Yes=215, 93.1% | Yes=866, 92.7% | $\chi^2(1)=0.057,$ $p=.811,$ Cramer’s $V= .01$ |
| Collaborating with doctoral students | Yes=559, 79.5% | Yes=59, 25.9 % | Yes=618, 66.4% | $\chi^2(1)=221.96,$ $p<.001,$ Cramer’s $V= .49$ |
| Collaborating with scholars / researchers at your institution | Yes=665, 94.3% | Yes=201, 87.4% | Yes=866, 92.6% | $\chi^2(1)=12.20,$ $p<.001,$ Cramer’s $V= .11$ |
| Collaborating with scholars / researchers at other institutions in your country | Yes=491, 70.0% | Yes=195, 84.1% | Yes=686, 73.5% | $\chi^2(1)=17.57,$ $p<.001$ Cramer’s $V= .14$ |
| Collaborating with international colleagues | Yes=574, 81.9% | Yes=140, 60.9% | Yes=714, 76.7% | $\chi^2(1)=42.78,$ $p<.001$ Cramer’s $V= .21$ |
| Collaborating with colleagues outside your discipline | Yes=499, 71.1% | Yes=191, 82.7% | Yes=690, 74.0% | $\chi^2(1)=12.14,$ $p<.001$ Cramer’s $V= .11$ |

Source: APIKS-IDB, 2021.



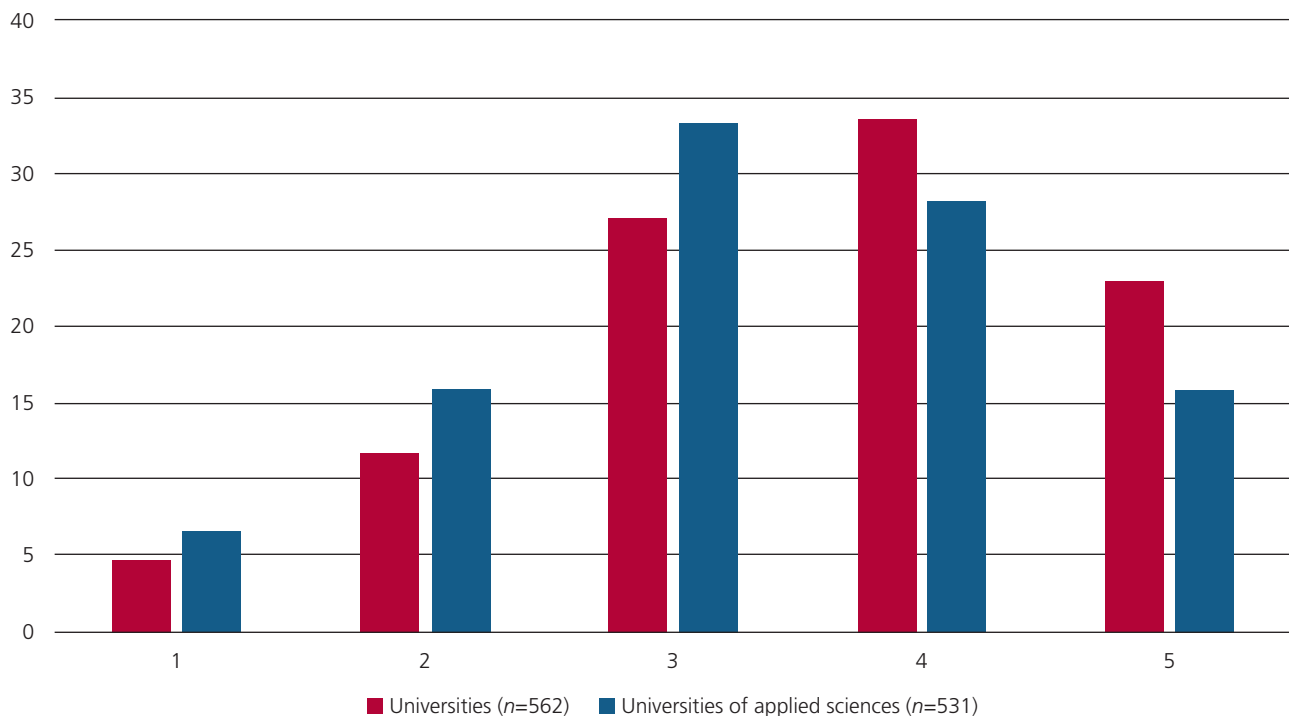
(Melin & Janson, 2006; Teichler, 2006). In the Finnish APIKS data, respondents in the youngest age cohort (<30 years of age) are predominantly university respondents. This is because in the universities of applied sciences, work experience in industry, service or administration is required when filling teaching positions.

As the universities are knowledge-based institutions (Clark, 1983), the management systems of Finnish higher education institutions emphasise international knowledge and global scholarly networks. In addition, knowledge-based expertise promotes the indicators of funding formulae such as international publishing and competitive academic funding for research. Motivation for internationalisation is diverse, and the benefits of internationalisation for higher education institutions legitimate them as knowledge-based institutions, and funding opportunities. For scholars, the benefits are similar, such as avoiding geographical, cultural, and occupational isolation, and it is evident that the scholars achieve academic freedom by taking advantage of international publishing and funding opportunities (Gergen, 2009; Pulkkinen, 2021). The internationalisation of higher education institutions also benefits the students by providing international scholarly knowledge, mobility programs, diversity of learning and competencies for life in the work force. The 2018 APIKS data indicate clearly that internationalisation is valuable

for staff at all stages of their career and is a necessity for early-stage scholars (see also Belkhir et al., 2019).

Because internalisation is emphasised in Finnish academia, there is a motivation for teachers in higher education in the academy to apply international aspects in their teaching. The contemporary internationalisation of the Finnish academic profession is formed not only by the international mobility, researchers' joint efforts to achieve academic results, scholars commuting to and from Finland but also teachers including an international approach in their courses. Half the respondents in the APIKS inquiry in Finland who responded to the question "In your courses, do you emphasise international perspectives or content?" agreed with it. International perspective or content is especially emphasised in teaching at universities (■ Figure 1).

Similar emphasis is evident in the language of teaching. According to the APIKS survey results, most of the teaching at universities and universities of applied sciences is in the official languages of Finland, Finnish or Swedish, but English is an essential language in teaching at Finnish universities. A third of the university respondents in APIKS FIN-survey say they teach primarily in English, and in universities of applied sciences the corresponding figure is around 15%. The proportion of teaching in English in the universities of applied sciences is 14%.



■ Figure 1. Respondents' emphasis in international perspective or content in their courses (1= strongly disagree, 5= strongly agree).



Within the results, the teaching language may be permanent or used only in certain periods, and the courses may be taught fully or partly in a specific language. In addition, the results include teaching in English, as well as teaching English to the students.

As demonstrated earlier, universities encourage publishing internationally and recruiting staff from foreign countries more than universities of applied sciences do, and the findings related to international perspectives or content as well as using English as a teaching language are in line with considering the upcoming career of students. Emphasising international perspectives or content in teaching and using English as a teaching language especially at universities reduces cultural and lingual hindrances between Finnish academics and the international academic community by making the access to international research and academic career easier for students in Finland, who often are not native speakers of the English language. That way, international aspects in teaching serve as a mechanism for internationalisation. However, internationalisation is a component of teaching at Finnish universities of applied sciences as well, but not to the same intensity.

The language in Finnish doctoral thesis and academic research more broadly has also increasingly become English, and that is one way to make the internationalisation of Finnish academia easier. In Finnish society, there is a vivid discussion going on about the role of the English language on Finnish scholarship. The question has been raised as to whether the Finnish language will shrink into a language of everyday life that cannot discuss the content of science because of the increasing usage of English instead of Finnish in Finnish research. That would also complicate the utilisation of the Finnish research results in Finland, as English is not the language of the Finnish majority. Nevertheless, having an internationally common language is crucial in academic research, and that has been recognised in Finnish academia.

The capacity building of research, teaching and service is a necessity for Finnish universities and universities of applied sciences, and they do not differ from any other organisation in this regard (Pfeffer & Salancik, 1978, p. 19). The environment of the academy is international, and its legitimacy is based on international recognition, international level of core tasks, funding opportunities, and review practices as defined in higher education policy and regulations. The role of higher education in the innovation system is regional and national, but also international, because industry and higher education stakeholders are international. From this perspective, the Ministry of Education and Culture emphasises internationalisation in performance of management system and annual performance negotiations between higher education institutions and ministries.

Funding is part of the mechanism supporting internationalisation of teaching and research. The performance funding formula in Finland is different for universities and universities of applied sciences, but internationalisation is an important part of the funding formula for both, related to education, research and development. In addition, higher education policy emphasises external funding (Ministry of Education and Culture, 2021). Universities and universities of applied sciences are dependent on external, international funding, and it is typical for international funding agencies to determine the direction of core tasks by providing funding. For example, investment funding from the European Union is used to identify many areas that fall within the institutional autonomy of higher education institutions. This is a consequence of resource dependence and the orientation of institutional strategies.

Institutional Outcomes

Institutional outcomes in this paper refer to the factors by which higher education institutions legitimise their operations. Regarding internationalisation, this will be achieved through two main instruments. The first of these is the performance agreement between the universities and the Ministry of Education and Culture, which includes goals for internationalisation. The key element in this regard is the funding formula, and internationalisation substantially increases the funding of higher education institutions. Another instrument is the institutional strategy that defines the boundaries of internationalisation.

■ Table 3 describes the relationship between the language used in teaching and the variable measuring and summing the variables of internationalisation. Excluding two variables (F5_7 and F5_9) is justified because they correlate only with each other in the subcategories of language, institutional type, and seniority. When a sum of variables in internationalisation is formed, according to the Cronbach's alpha, a measure of the internal integrity of the sum always gets a value slightly above 0.80. When comparing languages in both groups, alpha=0.83.

When the teaching language is English, the value of the language is clearly higher than when the language of instruction in teaching is Finnish. The Cohen's $d=0.41$ (small) measuring the effect size, is the second largest of the variables considered. Only for the increased brain gains variable is the effect size larger: 0.53 (medium).

Internationalisation by type of higher education institution can also be compared using the variables in ■ Table 4 according to higher education institution type. As stated earlier, the overall picture can be formed using sum variables. All but

Table 3. Respondents' view of the extent to which they observe the outcomes of internationalisation at their institution according to language.

| | <i>N</i> (All, Eng, Fin) | Mean | Std. dev | 95% CI | |
|--|--------------------------|------|----------|------------|------------|
| Enhanced prestige (Observe internationalisation) | 886 | 3.32 | 1.05 | 3.25, 3.39 | |
| | 246 | 3.47 | 1.06 | 3.33, 3.60 | |
| | 640 | 3.26 | 1.04 | 3.18, 3.34 | |
| Cohen's <i>d</i> = 0.20 | | | | | |
| Enhanced academic quality | 884 | 3.06 | 1.07 | 2.99, 3.13 | |
| | 246 | 3.35 | 1.12 | 3.21, 3.49 | |
| | 638 | 2.94 | 1.02 | 2.86, 3.02 | |
| Cohen's <i>d</i> = 0.39 | | | | | |
| Increased revenue | 854 | 2.87 | 0.98 | 2.81, 2.94 | |
| | 235 | 2.98 | 1.10 | 2.84, 3.12 | |
| | 619 | 2.83 | 0.93 | 2.76, 2.90 | |
| Cohen's <i>d</i> = 0.15 | | | | | |
| Enhanced research networks | 881 | 3.52 | 1.01 | 3.45, 3.58 | |
| | 250 | 3.76 | 1.03 | 3.63, 3.89 | |
| | 631 | 3.42 | 0.99 | 3.34, 3.50 | |
| Cohen's <i>d</i> = 0.34 | | | | | |
| Increased mobility of students | 892 | 3.75 | 0.91 | 3.69, 3.81 | |
| | 246 | 3.87 | 0.87 | 3.76, 3.98 | |
| | 646 | 3.71 | 0.92 | 3.64, 3.78 | |
| Cohen's <i>d</i> = 0.18 | | | | | |
| Increased mobility of academics | 889 | 3.48 | 0.94 | 3.42, 3.54 | |
| | 250 | 3.64 | 0.96 | 3.52, 3.76 | |
| | 639 | 3.42 | 0.93 | 3.35, 3.49 | |
| Cohen's <i>d</i> = 0.23 | | | | | |
| Weakening cultural identity | 872 | 2.13 | 1.05 | 2.06, 2.20 | |
| | 248 | 2.23 | 1.12 | 2.09, 2.37 | |
| | 624 | 2.09 | 1.02 | 2.01, 2.17 | |
| Cohen's <i>d</i> = 0.13 | | | | | |
| Increased brain gains | 882 | 3.13 | 1.12 | 3.06, 3.21 | |
| | 242 | 3.55 | 1.06 | 3.42, 3.69 | |
| | 640 | 2.97 | 1.10 | 2.89, 3.06 | |
| Cohen's <i>d</i> = 0.53 | | | | | |
| Increased costs associated with internationalisation | 856 | 2.88 | 1.00 | 2.81, 2.95 | |
| | All | 237 | 2.84 | 2.70, 2.98 | |
| | University | 619 | 2.89 | 2.82, 2.97 | |
| UAS Cohen's <i>d</i> = 0.05 | | | | | |
| Sum F5 | 820 | 3.30 | 0.71 | 3.25, 3.35 | |
| | Cronbach's alpha | 229 | 3.51 | 0.73 | 3.41, 3.60 |
| | All | 591 | 3.22 | 0.69 | 3.16, 3.27 |
| | UNI | 0.83 | | | |
| | UAS | 0.83 | | | |
| Cohen's <i>d</i> = 0.41 | | | | | |

Source: APIKS-IDB, 2021. 1= not at all, 5= very much. UAS: universities of applied sciences; UNI: universities.

answers of the respondents about “weakening cultural identity” and “increased costs associated with internationalisation” are moderately strongly correlated with each other. They both have a moderately strong connection, but not with others, other than a very weak one. The other seven variables offer a good opportunity to form a sum variable, with Cronbach's alpha being just over 0.80 in both the university and university of applied sciences staff groups.

The mean of the sums by universities and universities of applied sciences has a clear difference, giving Cohen's *d*= 0.65 (medium). Except for the “Increased revenue” variable (mean of all respondents= 2.93 and *s*=1.00) and the “Increased mobility of students” variable (mean of all respondents= 3.76 and *s*=0.89), the 95% confidence intervals do not intersect, and university averages are higher than those of universities of applied sciences staff. The most significant differences are in the variable



Table 4. Respondents' view of the extent they observe the outcomes of internationalisation at their institution according to higher education institution.

| Question F5 | N (All, UNI, UAS) | Mean | Std. dev | 95% CI | |
|--|-------------------|------|----------|------------|------------|
| Enhanced prestige (Observe internationalisation) | 1230 | 3.40 | 1.04 | 3.34, 3.46 | |
| | 662 | 3.51 | 1.00 | 3.43, 3.59 | |
| | 568 | 3.29 | 1.07 | 3.19, 3.38 | |
| Cohen's <i>d</i> = 0.21 | | | | | |
| Enhanced academic quality | 1230 | 3.18 | 1.07 | 3.12, 3.24 | |
| | 662 | 3.56 | 0.99 | 3.48, 3.63 | |
| | 568 | 2.74 | 0.98 | 2.66, 2.82 | |
| Cohen's <i>d</i> = 0.83 | | | | | |
| Increased revenue | 1181 | 2.93 | 1.00 | 2.88, 2.99 | |
| | 619 | 2.88 | 0.96 | 2.81, 2.96 | |
| | 562 | 2.99 | 1.04 | 2.90, 3.08 | |
| Cohen's <i>d</i> = 0.11 | | | | | |
| Enhanced research networks | 1231 | 3.61 | 0.98 | 3.55, 3.66 | |
| | 672 | 3.93 | 0.85 | 3.87, 4.00 | |
| | 559 | 3.21 | 0.99 | 3.13, 3.29 | |
| Cohen's <i>d</i> = 0.79 | | | | | |
| Increased mobility of students | 1239 | 3.76 | 0.89 | 3.71, 3.81 | |
| | 659 | 3.79 | 0.86 | 3.73, 3.86 | |
| | 580 | 3.73 | 0.92 | 3.65, 3.80 | |
| Cohen's <i>d</i> = 0.07 | | | | | |
| Increased mobility of faculty | 1236 | 3.49 | 0.94 | 3.43, 3.54 | |
| | 664 | 3.58 | 0.90 | 3.51, 3.65 | |
| | 572 | 3.37 | 0.97 | 3.28, 3.45 | |
| Cohen's <i>d</i> = 0.23 | | | | | |
| Weakening cultural identity | 1211 | 2.15 | 1.05 | 2.09, 2.21 | |
| | 653 | 2.28 | 1.10 | 2.19, 2.36 | |
| | 558 | 2.00 | 0.96 | 1.92, 2.08 | |
| Cohen's <i>d</i> = 0.27 | | | | | |
| Increased brain gains | 1282 | 3.21 | 1.13 | 3.15, 3.27 | |
| | 663 | 3.71 | 0.96 | 3.64, 3.79 | |
| | 562 | 2.62 | 1.02 | 2.53, 2.70 | |
| Cohen's <i>d</i> = 1.10 | | | | | |
| Increased costs associated with internationalisation | 1191 | 2.86 | 1.00 | 2.81, 2.92 | |
| | All | 635 | 2.82 | 1.02 | 2.74, 2.90 |
| | University | 556 | 2.92 | 0.96 | 2.84, 3.00 |
| UAS | | | | | |
| Cohen's <i>d</i> = 0.10 | | | | | |
| Sum F5 | 1134 | 3.36 | 0.71 | 3.32, 3.40 | |
| | Cronbach's alpha | 595 | 3.56 | 0.65 | 3.51, 3.61 |
| | All | 0.84 | 539 | 3.13 | 3.07, 3.19 |
| | UNI | 0.82 | | | |
| | UAS | 0.85 | | | |
| Cohen's <i>d</i> = 0.63 | | | | | |

Source: APIKS-IDB, 2021. 1= not at all, 5= very much. UAS: universities of applied sciences; UNI: universities.

Increased brain gains (Cohen's *d*= 1.10). Also, Enhanced academic quality (Cohen's *d*= 0.83) and Enhanced research networks (Cohen's *d*= 0.79) both indicate a clear difference for higher education institutions.

It is also possible to form the sum of the variables on institutional aspects of internationalisation, particularly in the group of both universities and universities of applied sciences, and in

the whole material, the Cronbach's alpha is slightly higher than 0.80. The average of the sum is still higher among the university staff than among the universities of applied sciences staff (UNI=3.85, *s*=0.64, UAS=3.40, *s*=0.76), Cohen's *d*= 0.65.

For the first four variables in Table 5, the 95% confidence intervals intersect, so there are no significant differences between them. Instead, answers of the respondents to the state-

Table 5. Respondents' views of internationalisation according to higher education institution type.

| | <i>N</i> (All, UNI, UAS) | Mean | Std. dev | 95% CI |
|---|--------------------------|----------------------|----------------------|--|
| Your institution has a clear strategy for internationalisation (Views on management) Cohen's <i>d</i> = 0.07 | 1279 686 593 | 3.39 3.42 3.35 | 1.05 1.02 1.09 | 3.33, 3.44 3.34, 3.50 3.26, 3.43 |
| Your institution provides various international exchange programs for students Cohen's <i>d</i> = 0.12 | 1281 690 591 | 4.09 4.05 4.15 | 0.85 0.84 0.85 | 4.05, 4.14 3.98, 4.11 4.08, 4.22 |
| Your institution provides various opportunities/funding for faculty members to undertake research abroad Cohen's <i>d</i> = 0.15 | 1283 693 590 | 3.64 3.71 3.55 | 1.05 1.01 1.09 | 3.58, 3.69 3.64, 3.79 3.46, 3.63 |
| Your institution provides various opportunities/funding for visiting international students Cohen's <i>d</i> = 0.26 | 1260 677 583 | 3.91 3.80 4.04 | 0.92 0.95 0.87 | 3.86, 3.96 3.73, 3.87 3.97, 4.11 |
| Your institution provides various opportunities/funding for visiting international scholars Cohen's <i>d</i> = 0.37 | 1271 690 581 | 3.69 3.86 3.49 | 1.03 0.93 1.10 | 3.64, 3.75 3.79, 3.93 3.40, 3.58 |
| Your institution encourages the recruitment of faculty members from foreign countries Cohen's <i>d</i> = 1.32 | 1250 673 577 | 3.04 3.65 2.33 | 1.20 0.99 1.01 | 2.97, 3.10 3.57, 3.72 2.24, 2.41 |
| Your institution provides various opportunities/funding for faculty members to attend international conferences abroad Cohen's <i>d</i> = 0.54 | 1286 695 591 | 3.34 3.62 3.00 | 1.19 1.16 1.13 | 3.27, 3.40 3.54, 3.71 2.91, 3.09 |
| Your institution encourages faculty members to publish internationally Cohen's <i>d</i> = 1.39 | 1282 700 582 | 4.04 4.64 3.33 | 1.15 0.68 1.18 | 3.98, 4.11 4.59, 4.69 3.23, 3.42 |
| Sum F6 | 1209 | 3.64 | 0.73 | 3.60, 3.68 |
| Cronbach's alpha | 654 | 3.85 | 0.64 | 3.80, 3.90 |
| All | 555 | 3.40 | 0.76 | 3.33, 3.46 |
| UNI | 0.82 | | | |
| UAS | 0.87 | | | |
| Cohen's <i>d</i> = 0.65 | | | | |

1= not at all, 5= very much. UAS: universities of applied sciences; UNI: universities.

ments in the questionnaire “Your institution encourages academic staff to publish internationally,” “Your institution encourages the recruitment of academic staff from foreign countries” together with “Your institution provides various opportunities / funding for academic staff to attend international conferences abroad” strongly differentiate universities from universities of applied sciences.

Discussion

The research question we set was how the two higher education sectors differ in terms of teaching, research, and external activi-

ties in terms of internationalisation in Finland. We refined the research question with two hypotheses, the first concerning the practices of internationalisation and the second, differences in the management of the two higher education sectors.

Especially universities encourage scholars to publish internationally and for institutions to recruit staff from foreign countries, and one mechanism for making that easier is to include international aspects into teaching the students. Motivation for teaching in English as well as including international aspects and content into courses is evident considering that careers as academic scholars graduated from universities are often internationally oriented. However, internationalisa-



tion is part of teaching at the universities of applied sciences, but it is not as large as at the universities. This is clearly reflected in the fact that two-thirds of university academics are published in countries other than the one they are located in, while at universities of applied sciences, this proportion is less than one-third. In co-authoring in an international context, the difference is smaller because more than half of the academics in vacant senior posts in both sectors have published through international cooperation.

Regarding the first hypothesis, we found that the international performance of institutions supports internationalisation. Underlying this is a policy in the university sector with most of the vacancies for posts being advertised internationally. This is also supported by the fact that international applicants are not subject to the same language skill requirements as domestic applicants. Through institutional action, the number of international staff has almost doubled in the last ten years. Although the instincts for internationalisation are stronger in universities than in universities of applied sciences, the institutions do not have significant differences based on the mechanisms and management questions in the APIKS data. Instead of the type of institution, the more significant factor is the field in which the respondent operates. In universities, a language other than the national languages is used more often as a language of teaching and research than in universities of applied sciences. This may be because there are more international degree programs and internationally funded projects at universities than at universities of applied sciences. However, this form of funding determines this trend, and internationalisation is intense in the research, development, and innovation (RDI) and teaching functions of universities of applied sciences. The funding model clearly motivates universities of applied sciences to internationalisation less than universities. Internationalisation is part of strategic funding, which is 5% of total government funding. At universities, the share of strategic funding is clearly higher (15%), and internationalisation is part of competitive research funding (6%) as well as international corporate funding. Of these incentives, the government emphasises internationalisation as part of the funding formula for funding.

In response to the actual research question, the differences between the higher education sectors are clear in terms of the scope of their activities. The Ministry of Education and Culture guides the performance of higher education institutions in terms of quality and scope, and universities have a longer tradition in international operations of core functions than universities of applied sciences. They benefit from extensive networks that support their internationalisation. In terms

of quality, it is obvious in both higher education sectors that internationalisation is part of the activity and not a separate function. Almost all Finnish APIKS respondents included at least some of the international variables among their tasks. Internationalisation is a mission in Finnish higher education. There are several motivations for internationalisation, one of which is mobility of academics aiming to promote the quality of teaching and research by extending the knowledge base and networks (Melin & Janson, 2006; Teichler, 2006). The 2018 APIKS data indicate that internationalisation is valuable for staff at all stages of their career and for early-stage scholars it is a necessity (APIKS-IDB, 2018; Belkhir et al., 2019).

Therefore, all Finnish higher education institutions seem to have internationalisation as part of their mission. This is supported by the motivation that is built into the performance process of the ministry and the higher education institutions. However, the motivation of the institution is not as such reflected in internal mechanisms such as allocation models in higher education institutions. Internationalisation in terms of the academic unit is explained by management, which directs internationalisation to become part of everyone's work. Taking this into account, these results clearly show that internationalisation is no longer a separate function in universities and universities of applied sciences.

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