JÓZSEF BERÁCS – GÁBOR NAGY

MANAGERIAL ANTECEDENT FACTORS OF EXPORT MARKET-ORIENTED ORGANIZATIONS AND THEIR PERFORMANCE CONSEQUENCES – STUDYING HUNGARIAN HIGHER EDUCATION INSTITUTIONS USING A CONFIGURATIONAL APPROACH

AZ EXPORTPIAC-ORIENTÁLT SZERVEZETEK VEZETŐI ELŐZMÉNYTÉNYEZŐI ÉS TELJESÍTMÉNYKÖVETKEZMÉNYEIK – A MAGYAR FELSŐOKTATÁSI INTÉZMÉNYEK VIZSGÁLATA KONFIGURÁCIÓS MEGKÖZELÍTÉSSEL

The study focuses on the managerial antecedents of export market-orientation and tests the complex interaction of these factors to two outcomes of interest (that is, high export market performance vs. the absence of high export market performance) with a fuzzy-set qualitative comparative analytical approach (fsQCA). Using a combined survey data of twenty five export-orientated higher education institutions based in Hungary the results show that a complex interaction of managerial antecedents factors to export market-orientation and export market-orientation leads to a high export market performance, whereas misfit between these factors yields the absence of a high export market performance; a complex analytical and theoretical approach missing from export market-orientation and strategic human resource management literatures. Results of the study can enrich the understanding of the complex interaction of the managerial antecedent factors to export market-orientation; therefore, providing valuable insights to academic and managerial audiences alike.

Keywords: **export management factors, export reward and training systems, export market-orientation, export market performance, fuzzy-set methods, higher education institutions**

A tanulmány az exportpiaci orientáció vezetői előzményeire fókuszál, és e tényezők komplex kölcsönhatását teszteli két érdekes eredménnyel (vagyis a magas exportpiaci teljesítmény vs. a magas exportpiaci teljesítmény hiányával) egy fuzzy-set minőségi összehasonlító analitikus megközelítéssel (fsQCA). Huszonöt magyarországi székhelyű exportorientált felsőoktatási intézmény összesített felmérésének adatai alapján az eredmények azt mutatják, hogy az exportpiaci orientáció és az exportpiaci orientáció vezetői előzményteényezőinek komplex kölcsönhatása magas exportpiaci teljesítményt eredményez, míg az ezek közötti eltérések. tényezői a magas exportpiaci teljesítmény hiányát eredményezik; egy complex elemző és elméleti megközelítés hiányzik az exportpiac-orientált és stratégiai humánerőforrás-menedzsment szakirodalomból. A vizsgálat eredményei gazdagíthatják a vezetői előrejelző tényezők komplex kölcsönhatásának az exportpiaci orientációval kapcsolatos megértését; értékes betekintést nyújtva a tudományos és vezetői közönség számára egyaránt.

Kulcsszavak: **exportmenedzsment-tényezők, export jutalmazási és képzési rendszerek, exportpiac-orientáció, exportpiaci teljesítmény, fuzzy-set eljárások, felsőoktatási intézmények**

Funding/Finanszírozás:
The authors did not receive any grant or institutional support in relation with the preparation of the study.
A szerzők a tanulmány elkészítésével összefüggésben nem részesültek pályázati vagy intézményi támogatásban.

Authors/Szerzők:
Dr. József Berács[1] (jozsef.beracs@uni-corvinus.hu) professor; Gábor Nagy[2] (gnagy@inseec.com) assistant professor

[1]Corvinus University of Budapest (Budapesti Corvinus Egyetem) Hungary (Magyarország); [2]INSEEC Grande Ecole Paris (INSEEC Grande Ecole Paris) France (Franciaország)

The article was received: 04. 06. 2021, revised: 30. 11. 2021, and 13. 12. 2021, accepted: 16. 12. 2021.
A cikk beérkezett: 2021. 06. 04-én, javítva: 2021. 11. 30-án és 2021. 12. 13-án, elfogadva: 2021. 12. 16-án.

Export market-orientation (henceforth EMO) plays a key role in the international marketing literature. The mechanism through which EMO translates into superior performance have been investigated by numerous studies (see Kirca, Jayachandran, & Bearden, 2005; Katsikea, Theodosiou, Perdikis, & Kehagias, 2008). However, previous research shows that organizational acceptance of EMO can be quite cumbersome. Potential obstacles to EMO adoption relate to sociocultural (Lichtenthal, 1992), management related (Jaworski & Kohli, 1993), process (Harris, 2000; Pulendran & Speed, 1996), and budgeting and training obstacles (Harris, 2000; Morgan & Piercy, 1991). Despite earlier research efforts, knowledge about the complex interaction of antecedent factors and, therefore, the adoption of EMO remains scarce (see e.g., Cadogan, Paul, Salminen, Puumalainen, & Sundqvist, 2001; Kirca et al., 2005; Mostafiz, Sambasivan, & Goh, 2021; Vuorio, Torkkeli, & Sainio, 2020). Apart from Ordanini and Maglio's study (2009), researcher on the antecedents of EMO have almost completely omitted the question of internal fit among managerial antecedent factors and its performance consequences (see Kayabasi & Mtetwa, 2016; Nagy & Berács, 2013; Navarro, Acedo, Robson, Ruzo, & Losada, 2010). The market-orientation literature has relatively few studies which are related to the higher education (see Hemsley-Brown & Oplatka, 2010, Nagy & Berács, 2013). The reason for it is the lack of intensive use of market mechanisms and the controversial judgement of marketisation in higher education. The internationalization of higher education gave a new impetus to developing export marketing activities and EMO as well (James & Derrick, 2021; Németh & Vida, 2021).

An important subject for (strategic) human resources management research is the concept of congruence, or fit, between different sets of organizational policies and practices (Hambrick, 1983; Hrebiniak, 1981; Ketchen et al., 1997; Meyer, Tsui, & Hinings, 1993; Woodside, 2018). Organizational configurations suggest that organizations consist of interconnected structures and practices – not modular and loosely coupled entities whose components can be investigated in isolation – and that fit between these elements that is "whole and complete" leads to high firm performance (Hambrick, 1983; Hrebiniak, 1981; Ketchen et al., 1997). To investigate these complex organizational configurations a fuzzy-set qualitative comparative analysis (fsQCA) (Fiss, 2007; Frösen et al., 2016) is employed. Configurational methods imply that for sets of causal factors there exist combinations of elements that are expected to contribute to organizational effectiveness maximization (Ketchen et al., 1997; Meyer et al., 1993). The study tests the complex interaction of export management factors, export reward and training systems, export organizational demographics, and EMO to two outcomes of interest (that is, high export market performance vs. the absence of high export market performance) using a set-theoretic approach. The results show that fit between these factors leads to high market performance (henceforth EMP), whereas misfit between these elements eventuates in the absence of high EMP.

Theoretical development and research questions

Antecedents of EMO

Top management's emphasis on export market orientation. Top managers can exhibit a wide range of behaviours, and appraisal and compensation to affect individual behaviour are central tenets of (employee) reinforcement, behaviour modification, and motivation (Schuler & Jackson, 1987). Managerial competences include (1) the unique capabilities to articulate a strategic vision, communicate the vision throughout the organization, and empower organizational members to realize that vision (Westley & Mintzberg, 1989) and (2) establish the equilibrium (balance) between the organization and the environment (Hambrick & Mason, 1984; Tushman & Romanelli, 1985). These managerial capabilities determine the acquisition, development, and deployment of organizational resources, how resources are conversed into competitive product/ service offerings and delivered to organizational stakeholders that are potent sources of competitive advantage (Lado et al., 1992).

Management's commitment to exporting. Management's commitment to exporting (being a strategic factor) entails a specific resource allocation to the organization's foreign trade operations, and towards continuous improvement of the organization's products/services in foreign markets (Lages et al., 2008). Commitment to exporting can condition managers' willingness to achieve the organizations' marketing objectives on international markets, and management evolution and reward systems condition employees' motivation and learning towards specific organizational goal attainment (O'Cass & Julian, 2003).

Export market-oriented training systems. Training systems are the mechanisms by which organizational (labor) information is circulated, workers are recruited, and skills are obtained (and shared) (Bailey & Waldinger, 1991). Furthermore, training systems "are structures that reduce the risk of investment in skills or training by increasing the probability that firms and/ or workers will be able to make productive use of the skills in which they have invested" (Bailey & Waldinger, 1991, p. 433). Training of (frontline) employees–both in job-related and behavioral related skills–to improve their capability to deal with varying customer needs is of crucial importance in delivering superior (service) quality (Bettencourt & Gwinner, 1996; Hart, Heskett, & Sasser, 1990). Employees not possessing the requisite job and interpersonal skills fail in providing satisfactory services leading to mediocre organizational performance (Boshoff & Allen, 2000).

Export market-oriented reward systems. An organization's reward structure has a significant impact on organizational goal attainment. If organizational members are rewarded to follow certain goals, they will be motivated to work in this direction. Bagozzi's attitude theory asserts that appraisal leads to emotional response that in turn causes certain behaviour (i.e., appraisal → emotional response → behaviour) (Bagozzi, 1992). Perception of

training and rewards, in turn, will influence employees' job satisfaction and attachment to the organization resulting in higher level of EMO and subsequently higher EMP. These conceptual relationships were proved empirically with significant positive correlation coefficients between market-orientation and top management emphasis (r = 0.44), managerial commitment (r = 0.71), market-based reward system (r = 0.41), market-oriented training (r = 0.54) in different industries (Kirca et al., 2005).

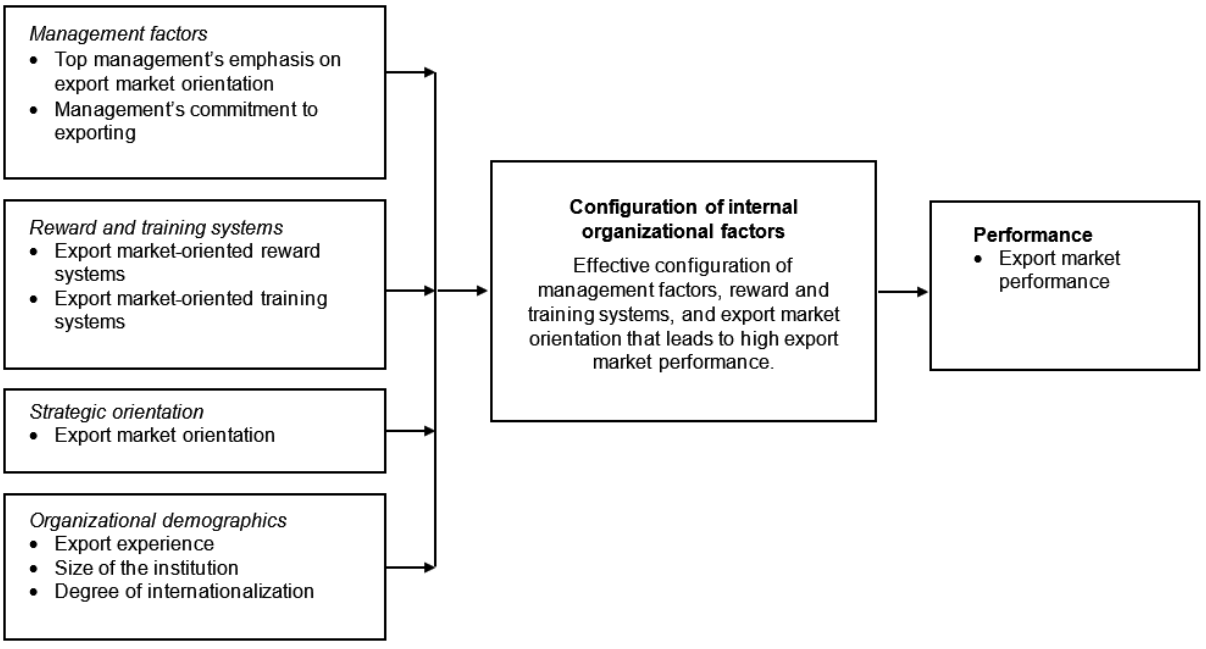
Export market-orientation. A market-orientation is a set of activities associated with the gathering and dissemination of market intelligence, the analysis, and the response to that intelligence (Kohli & Jaworski, 1990). After a one and half decade research Cano et al. (2004) and Kirca et al. (2005) concluded that market-orientation influences business performance in many industries and continents. Hemsley-Brown and Oplatka (2010), Nagy and Berács (2013) and Sukoco et al. (2021) proved the same relationship for the higher education institutions in different national settings. Recently, James and Derrick (2021) compared three higher education institutions from Canada, UK and Hong Kong and showed that differences in export marketing orientations are shaped by national policy frameworks and organisational culture. Export market-orientation (EMO) is defined as an organizational culture that helps a firm to (1) generate market intelligence pertinent to a firm's export operations, (2) disseminate this information to different functional units in the organization, and (3) design and implement strategic responses related to export customers, competitors, and other relevant market actors that can help a firm to create superior value for export customers (Cadogan et al. 2001).

Organizational demographics. The study uses three organizational demographic variables: export experience (see Cadogan et al., 2009), size of the university, and proportion of international students. Export experience denotes an ability to identify information and sales opportunities from foreign markets (Cadogan et al., 2009). Size of a higher education institute marks the number of full-time students. In addition, proportion of international students is a proxy for the degree of internationalization (see O'Cass & Julian, 2003).

Quality assurance and market orientation. The Total Quality Management (TQM) concept is very close to the customer orientation as the key component of EMO. The quality as a scientific construct, is extensively used in practice and broadly discussed in the literature of higher education (Prakash, 2018; Lakal et al., 2020; Tóth & Surman, 2021). From marketing perspectives, the Service Quality literature uses the SERVQUAL for performance measurement (Gregory, 2019; Tóth & Surman, 2021) focusing on students (Kéri, 2021). Most of the higher education institutions in Europe are hiring quality assurance agencies which are accredited by ENQA. The ENQA – European Association for Quality Assurance in Higher Education – published the ESG (European Standards and Guidelines) first in 2005 and later in (Figure 1).

Figure 1

Conceptual framework of the study



Source: own compilation

A set-theoretic approach to study complex interactions of export management factors, export reward and training systems, EMO, and organizational demographics

The strategic context influences individual human resource practices (e.g., employee selection, job design, and appraisal and compensation) (Hambrick, 1983; Keefe & Katz, 1990;

Kerr, 1985). Despite this, scholars know very little about how separate human resource management practices combine to produce "internal fit" (Baird & Meshoulam, 1988), and how antecedents of export performance combine to eventuate in superior performance (Ordanini & Maglio, 2009). Building on the tenet of internal fit in strategic human management and the literature on antecedents of EMO, we test the complex interaction of export management factors, export reward and training systems, organizational demographics, and EMO to two outcomes of interest (high EMP vs. the absence of EMP) with a set-theoretic approach based on fuzzy-set QCA. The study outlines the following research questions.

RQ1. What configuration of export management factors, export reward and training systems, and EMO leads to high EMP?

RQ2. What configuration export of management factors, export reward and training systems, and EMO leads to the absence of EMP?

Methods

Research context

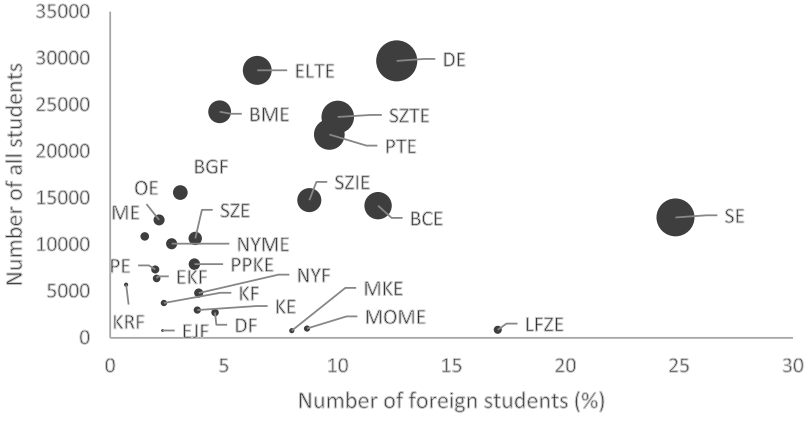
We collected primary data from the Hungarian higher education sector. This sector has undergone major changes during the period between 2010 and 2012. The government pulled out significant amount of resources from this sector (33 percent between 2008 and 2014)) and at the same time forced universities to increase the quality level of their services and become more competitive internationally. A tender for the titles of "University of Excellence" and "Research University" was launched signalling to the universities that, unlike previous years, resource allocation (financial support) to the institutions would be directly bound to performance appraisal (e.g., number of publications in internationally ranked journals, number of incoming international students, partnership and research collaboration with international universities, scoring high in international rankings, seeking external research funding etc.) (Berács et al., 2015). The Hungarian government had a new strategy (a ten-year plan) for internationalization of higher education in 2014. The number of foreign students should increase from 23 000 (2013) to 40 000 as the target value for 2023. This is almost achieved in 2019, with 38 422 foreign students thanks to the Stipendium Hungaricum, a government financed scholarship program.

Study population and data collection method

The population for the study comprised of all the state-owned and two non-state-owned higher education institutions (i.e., thirty-one entities). Mailing addresses, e-mails and telephone numbers of top management, middle management, and management of international offices of the state-owned and the two non-state owned Hungarian higher education institutions (altogether 31) have been collected from the universities' websites. The contact list contained 700 potential respondents covering every potential member in the population. The list was cross-checked with data available from the website of the Department of Education of Hungary. A total of 700 questionnaires were sent out to rectors, deputy rectors, deans, deputy deans and managers of international offices. A ten-page questionnaire was designed using a back-translation process. The preliminary version of the questionnaire was pilot tested to determine the face validity, clarity, and the relevance of measurement items. Following the guidelines of respondents performing the pre-testing some items were revised to reduce potential ambiguity. The on-line survey lasted from 15th January 2012 to 2nd February 2012. Data collection was administered by a professional research agency. The sort of computer-aided survey employed allowed for continuous contact with respondents, for monitoring the stages of completion, for respondents to be segmented by behaviour, and for delivering targeted messages to them. The on-line survey yielded 70 questionnaires. After the on-line query, a mail-based phase was initiated resulting in another 86 respondents. Finally, 156 completed questionnaires were collected eventuating in 22 percent total response

Figure 2

The Number of Foreign Students (Bubble) According to The Proportion of Foreign Students (X axis) and to The Number of All Students (Y axis) in 2013



Note: Main characteristics of the universities included in the study (as of 2013)

Source: The Figure was prepared by Ágnes Somosi

rate. After data cleaning 130 usable questionnaires were available. Managers of 25 different universities responded to the questionnaire. On average, 5.2 (130/ 25) respondents per university answered the questionnaire, enhancing the validity of results.

Figure 2 illustrates the number of foreign students of 25 universities (reflected in the size of bubble) depending on the proportion of foreign students (X-axis) and the number of all students (Y-axis). It shows that the largest universities have the highest number of foreign students. The top eight universities are led by University of Debrecen (DE), followed by Semmelweis University (SE), University of Szeged (SZTE) and University of Pécs (PTE). (The exact numbers and the full names of the universities are shown in Appendix 3.) All of them have faculties of medical sciences, where the proportion of foreign students are around 50%. The next four universities are led by Eötvös Lóránd University (ELTE) and followed by three universities from the Capital city of Hungary.

Methods

Potential non-response bias was assessed through comparing responding and non-responding universities on export related management factors, export market-oriented reward and training systems, EMO, EMP, and organizational demographics. The results showed no significant difference between responding and non-responding universities (*t*-values ranged from 1.35 to 1.03), which suggests the non-response bias was not observed with our data. A Harman one-factor test was conducted to assess the problem of common method bias (Podsakoff & Organ, 1996). A factor analysis of all constructs resulted in a solution with 5 factors, which accounted for 75.41 percent of total variance, and the first factor accounted for only 32.02 percent of total variance. Furthermore, the confirmatory factor analysis (CFA) approach was employed, in which all the items were modelled as the indicators for a single factor representing method effects (Mossholder et al., 1998). The CFA model produced unsatisfactory model fit ($\chi 2(496) = 2238.15$, $p<0.00$; GFI = 0.45; TLI = 0.34; CFI = 0.38; RMSEA = 0.16). Therefore, common method bias was not a serious problem for our data.

Measurement instruments

Except for management's commitment to exporting and top management's emphasis on EMO, all items were measured using a 7-point Likert scale (the former two constructs assessed with a 9-point Likert metric) (see Appendix 1). Management's commitment to exporting was assessed with Gencturk et al.'s (1995) scale. *Management's commitment to exporting* denotes a purposeful allocation of organizational resources to the organization's foreign trade operations that supports continuous improvement of the organization's export products and services (Lages et al., 2008). *Top management's emphasis on export market-orientation* was measured with Jaworski and Kohli's (1993) measurement instrument. Top management's emphasis on EMO is defined as a signal (from managers) about the importance of being responsive to export customer needs and the broader export environment (Cadogan et al., 2001). *Export market-oriented reward systems* and *export market-oriented training systems* were assessed with Jaworski and Kohli's (1993) metric. Export market-oriented reward systems are designed based on export market performance criteria and motivate employees to enhance export market behaviour and related actions. Export market-oriented training systems sensitize employees towards export customer needs, stimulate actions and processes that are in line with value creation for foreign customers (Cadogan et al., 2006; Ruekert, 1992). The measurement instrument for *EMO* was adapted from Cadogan et al. (2009). The outcome variable (EMP) was developed based on previous studies on EMO and includes two items (Cadogan et al., 2001; Kwon & Hu, 2000). In addition, three *organizational demographic variables* were used: export experience (assessed with Cadogan et al.'s (2009) scale), size of the university, and proportion of international students. Measurement instruments are shown in Appendix 1.

Analysis and results

Reliability and validity analysis

Construct measures were refined and their reliability and validity were assessed using confirmatory factor analysis (CFA) (Hair et al., 2006). CFA was estimated including management factors, reward and training systems, EMO, organizational systems, and EMP. The purified model's fit indices suggest good fit to the data ($\chi^2(440) = 525.38$, $p<0.00$; GFI = 0.79; TLI = 0.91; CFI = 0.91; RMSEA = 0.07). Individual items load on their respective latent factors with significant factor loadings ($p<.001$), and there is no evidence of cross loading. Thus, supporting unidimensionality and convergent validity of the constructs. The composite reliability of each construct ranges from 0.77 to 0.93, above the recommended threshold value of 0.70 (Bagozzi & Yi, 1988). *Discriminant validity* of the scales were assessed in two steps. First, the square root of average variance extracted (AVE) for each of the constructs was compared to between-construct correlations (i.e., shared variance). Discriminant validity was supported as the square root of variance extracted for two constructs was greater than the bivariate correlation of the two constructs (Fornell & Larcker, 1981). Second, each possible pair of constructs was combined into a single construct (more constrained model) and compared its fit with that of the model with more constructs (unconstrained model) (Hair, Heskett, & Sasser, 2006). In each case, the chi-square difference tests for the more constrained model provides better fit, showing an adequate level of discriminant validity. Overall, the results suggest that the measurement model fits the data well and the constructs exhibit decent psychometric properties supporting further analyses. Descriptive statistics are shown in Appendix 2.

Fuzzy-set calibration

For proposition testing, the current study employs a set-theoretic approach based on fuzzy-set QCA that

allows for a detailed analysis of how causal conditions contribute to an outcome of interest using Boolean algebra and algorithms. For a conceptual introduction to fuzzy systems see Kóczy and Tikk (2000) in the Hungarian literature. Outcome condition and antecedent conditions were calibrated regarding three substantively meaningful thresholds: full membership, full non-membership, and the cross-over point following Ragin (2008) and Ordanini and Maglio (2009). Set memberships and calibration measures are depicted in Appendix 2.

Fuzzy-set analysis results

Configurations for high export market performance

Table 1 presents the configurations of management antecedent factors and organizational contingencies sufficient to achieve high EMP (/ the absence of EMP). A total of five equifinal configurations leading to high export market performance were found by the fsQCA algorithm (with overall solution consistency ≥ 0.94, overall solution coverage = 0.53, frequency cut-off = 1, and consistency cut-off = 0.95). Configurations leading to the absence of high EMP (i.e., not-high export market performance) form a solution set with four equifinal recipes (with overall solution consistency ≥ 0.79, overall solution coverage = 0.50, frequency cut-off = 1, and consistency cut-off = 0.80). Solution tables mark high on a condition with black circles ("●") and low on a condition with the tilde sign ("~"), while "⊗" denotes absence of a condition (Ragin, 2008).

In *configuration C1* high top management's emphasis on EMO couples with high management's commitment to exporting, EMO training systems, EMO, export experience, large size and a high degree of internationalization achieving high EMP. Here, top management need to commit to export activities and emphasize the importance of a market-oriented culture inside the organization (Cadogan et al., 2006). An effective dissemination of values related to this culture requires an EMO training system that in turn increases the organization's sensitivity towards international higher education markets (Mucsi, Malota & Török, 2020; Boshoff & Allen, 2000; Bettencourt & Gwinner, 1996; Hart et al., 1990).

However, it must be noted that management's emphasis on and commitment to exporting translates into training systems and proper organizational behaviour only when the organization has had sufficient experience with export markets, is large in size, and shows a relatively high degree of internationalization, which aligns well with the knowledge based in international marketing literature (Cadogan et al., 2009; Cadogan et al., 2001; Berács, 2006; Navarro et al., 2010).

Table 1

Management Factors and Reward and Training Systems Sufficient for High vs. Not-High Export Performance: Results of the Configurational Analysis

	High export market performance configurations [1), 2)]					**Not-high export market performance configurations** [1), 3)]			
	C1	**C2**	**C3**	**C4**	**C5**	**C1**	**C2**	**C3**	**C4**
Management factors									
Top management's emphasis on export market-orientation (tmeemo_c)	●	●	●	~	●	~	●	~	~
Management's commitment to exporting (mce_c)	●	●	●	~	~	~	●	●	●
Reward and training systems									
Export market-oriented reward systems (emors_c)	⊗	●	●	~	●	⊗	~	~	●
Export market-oriented training systems (emots_c)	●	⊗	●	●	●	~	~	●	●
Export market-orientation (EMO) (emo_c)	●	●	●	~	●	~	~	●	●
Organizational demographics									
Export experience (eexp_c)	●	●	●	~	●	~	~	~	~
Large size (size_c)	●	●	⊗	●	~	●	~	~	~
Degree of internationalization (int_c)	●	●	●	~	~	~	~	●	~
Goodness of fit									
Raw coverage	0.31	0.30	0.36	0.22	0.17	0.30	0.23	0.12	0.18
Unique coverage	0.02	0.00	0.04	0.05	0.03	0.17	0.07	0.04	0.04
Consistency	0.94	0.97	0.96	1.00	0.95	0.98	0.95	0.96	0.97
Solution coverage	***0.53***					***0.50***			
Solution consistency	***0.94***					***0.79***			

Notes: [1)] *"●" means high on a condition, "~" equals low on a condition, and "⊗" denotes "do not care" (i.e., either high or low).*

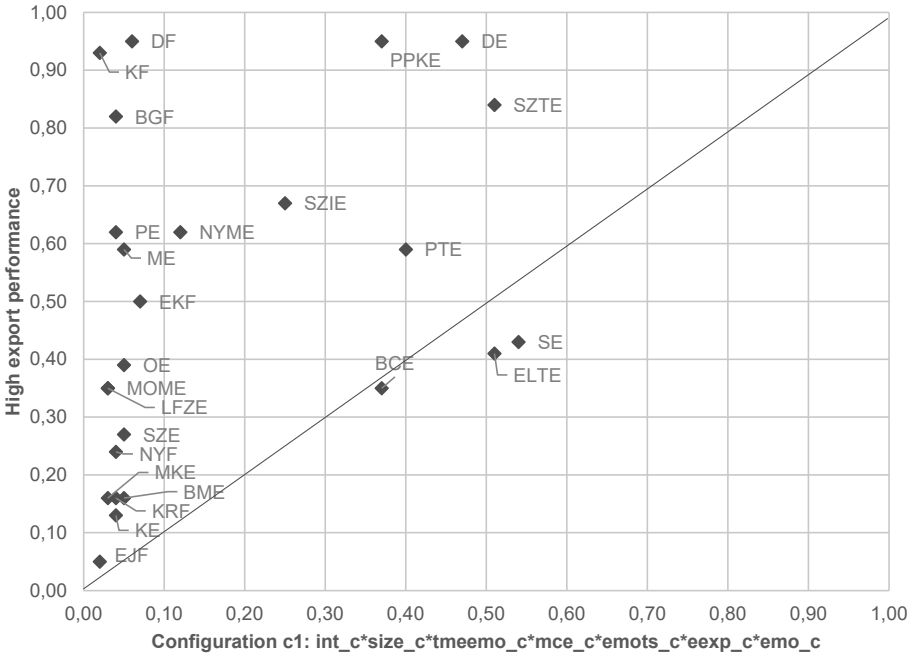
[2)] *Consistency cut-off = 0.95; consistency cut-off = 1*

[3)] *Consistency cut-off = 0.80; consistency cut-off = 1*

Source: own compilation

Figure 3

High Export Performance: Configuration C1



Note: consistency = 0.94, coverage = 0.31

Source: own compilation

We illustrate the first column (configuration C1) in Figure 3 showing the positions of individual higher education institutions. The configuration C1 resembles us to the Figure 2. The top 7 universities regarding the number of foreign students are found here, and only the Budapest University of Technology and Economics (BME) is missing, which is substituted by Pázmány Péter Catholic University (PPKE). The managerial factors' configuration is similar, but still there are many differences of these universities as well. The flagship university of this configuration is University of Debrecen (DE). The DE *recruits* students *on its own*, which has proved to be an efficient marketing strategy (Berács, 2006). The medical faculties of DE developed an advanced *foreign representative and agent system* worldwide (in more than 70 countries), which is used now for other faculties too. DE was the only Hungarian University in 2020 ranked in TOP 200 according to the Ranking in Emerging Economies. The Covid-19 did not stop the internationalization of the university. In the 2020/21 academic year there are 6,297 foreign students, that is 20.9 percent of total 30,194 students.

Configuration C2 is very similar to C1. Here, high top management's emphasis on EMO associates with high management's commitment to exporting, EMO reward systems, EMO, export experience, and large size and degree of internationalization achieving high EMP. The only difference is in the substitution effect of rewards and training systems in achieving high EMP (Table 1). The C1 and C2 configurations show that EMO-related reward systems can be as effective as EMO-related training systems in shaping organizational members sensitivity towards export market operations. Without showing the X-Y plots of configuration C2 we can conclude that most of the universities positioned in Figure 4 are represented in C2 as well. Semmelweis University (SE) as another flagship institute of excellent, elite universities, even though the leadership of Semmelweis University is relatively less satisfied with their export performance. With more than 3,800 international students from 60 countries in 2020, SE has the highest proportion (34.5 percent) of foreign students of large, Hungarian universities.

In configuration C3 management factors, reward and training systems, EMO, and export experience and degree of internationalization take a high value (size does not matter; can take either a high or a low value) and achieve high EMP. This shows that in addition to having either effective EMO reward systems or strong EMO training systems a successful organization can have them both to achieve high export market performance. The Pázmány Péter Catholic University represents mainly the managerial contingencies of this configuration, although most of the top seven universities could be found in the X-Y Plot.

Configuration C4 is the fourth success recipe in the solution set for high performing organizations. Here, only a few components take a high value – namely, EMO training systems and large size – to yield high EMP (the remaining elements take a low value). Hence, organizations do not even need to be export market-oriented (or having complex organizational systems in place that support the creation of this culture). The Western Hungarian University (NyME) is the flagship institute of this configuration.

In configuration C5 top management's emphasis on EMO couples with low management's commitment to exporting, high EMO reward systems, EMO training

systems, EMO, export experience and low size and degree of internationalization achieving high EMP. Organizations with small size have relatively simply organizational structure (Meijaard, Brand, & Mosselman, 2005), their information processing routes are more effective (Huggins & Johnston, 2010), and adapt faster to changing environmental contingencies (Schindehutte & Morris, 2001). This may explain why the importance of being export market-oriented may translate relatively easily into organizational processes, activities, and reward and training systems if the organizational members are able/ willing to comply with these values. The flagship institute of this configuration is the Eszterházy Károly College (EKF). Their efforts in internationalization had their merits because the government positioned their status to the "University of Applied Sciences" in 2016. This change probably could not happen, without "top management emphasis on EMO", "export market-oriented reward system", "EMO" and "export experience", the other four conditions of C5 configuration. The higher education law of Hungary specified the criteria how the previous "Colleges" could be qualified to be "University of Applied Sciences" Among these criteria the internationalization, offering English language programs and courses played an important role (Berács, 2014).

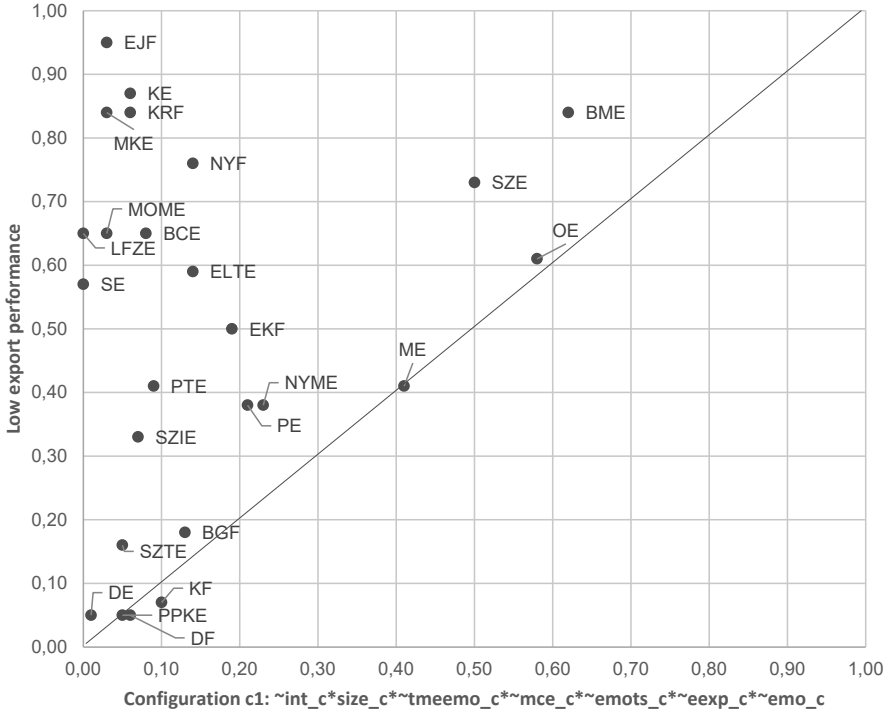
Configurations for the absence of high EMP

In configuration C1 low top management's emphasis on EMO couples with low management's commitment to exporting, EMO training systems, EMO, export experience, large size, and low degree of internationalization leading to not-high EMP. Hence, if large size – and the administrative constraints related to such organizational structure – couples with lack of commitment to and emphasis on export-market related activities and no training and reward is provided to organizational members to pursue export-market related goals, the organization may achieve low EMP. (Here, lack of expert experience and low level of internationalization play crucial roles, as well).

The X-Y Plot of configuration C1, (Figure 4) represents the four technical universities of Hungary. This group creates a special cluster of low performing institutions with relatively high size, but all the other seven conditions are missing. The Budapest Technical University (BME) is the leading institute with Óbuda University (OE) of this group followed by Széchenyi István University (SZE) from Győr and University of Miskolc (ME). The two universities from Budapest are less satisfied with their performance. The dissatisfaction at BME resulted in higher activities of internationalization. The export income from foreign students achieved 1.5 billion forints (close to 50 million Euros) in 2016, which is three times higher than it was 5 years before. This result is the consequence of the following detailed objectives of internationalization specified before: (a) increasing the number of accredited English language programs by 5 percent; (b) increasing the number of available English language courses by 25 percent; (c) increasing the number of foreign students by 100 percent in 5 years.

Figure 4

Not-High Export Performance: Configuration C1



Note: consistency = 0.98, coverage = 0.30

Source: own compilation

Configuration C2 shows a solution where in high top management's emphasis on EMO and management's commitment to exporting couple with low values on the reimaging conditions in the fuzzy-set model. This indicates that commitment to and emphasis on export market related activities are not sufficient to achieve high EMP if the organization does not have EMO-related resources and capabilities and if the latter are not deployed effectively (cf. configurations C1, C2, C3, and C5 for high EMP). The flagship institute of this group is a small private college, the Eötvös József College (EJF) alone. The top managers have visions, but the export capability is missing to fulfil the expectations.

Configuration C3 (not-high export performers) pinpoints a recipe in which low top management's emphasis on exporting couples with low reward systems, lack of experience and low size (on other conditions organizations take a high value) achieving not-high EMP. This may imply that if top management does not emphasize EMO and organizational members are not rewarded to strengthen the organization's international presence, it is challenging to gain international experience which may results in deteriorating EMP (even if other components of the recipe take a high value).

In configuration C4 low emphasis on EMO coupled with lack of export experience, low size, and low degree of internationalization – when other components take a high value – can be sufficient to achieve not-high EMP. Similarly to configuration C3, lack of top management emphasis coupled with low levels on organizational demographics can lead to low EMP. The last two non-high export performance configurations (C3 and C4) are represented only by two art universities in the X-Y Plot graphics: the Liszt Ferenc Music Academy (LFZE) and the Hungarian University of Fine Arts (MKE). It seems to be a contradiction, because these art universities are well-known worldwide and have good international reputation. But why did it happen, that their colleagues declared themselves lower level at export performance. The answer is in the scales, what we used for judging the export performance. It asked: "To what extent are you satisfied with the pace of entering new markets for student recruitment?" These top art schools have high expectations, while their satisfaction level is just the opposite.

This situation is just the reverse/opposite version of what we experienced in case of top performing universities (configuration C1, Figure 3), where the Kecskemét College (KF) and the Dunaújváros College (DF) seem to be outsiders in the group. They have high satisfaction with their performance, but their expectations are low. It is reflected in the low proportion of foreign students, KF (2.36%) and DF (4.61%), while the average is 6.44%. These are examples of situations, where there are differences of feeling the importance of marketing orientation and implementing them.

Theoretical contributions and conclusions

EMO takes a pivotal role in the international marketing literature. Much focus was placed on investigating its performance consequences and the mechanisms through which EMO translates into superior business performance (Katsikea et al., 2011; Kirca et al., 2005; Lages, Jap, & Griffith, 2008). However, only scarce efforts have been taken to investigate what factors lead to the emergence/retreat of EMO. Barriers to acceptance of market-orientation and EMO are manifold and earlier research has done much to improve the knowledge base on this front (Cadogan et al., 2001; Harris, 2000; Jaworski & Kohli 1993; Kirca et al., 2005; Lichtenthal & Wilson, 1992; Mostafiz et al., 2021; Ordanini & Maglio, 2009; Pulendran & Speed, 1996; Vuorio et al., 2020). Although much has been done on this front, we still lack understanding of the complex interactions of the antecedent factors of EMO and their performance effects (Ordanini & Maglio, 2009). To understand causally complex relationships between the antecedents of EMO and their performance outcomes, conventional symmetric analytical methods (that is, "either/or" binary choices) should be complemented with configurational analysis as the former techniques paint an incomplete picture of how EMO organizations navigate complex environments to achieve high performance (or avoid failure) (Du & Kim, 2021; Woodside, 2018). Building upon the above stream of research this study investigates the complex interaction of export management factors, export reward and training systems (i.e., antecedents of EMO), and EMO to two outcomes of interest (i.e., high EMP vs. the absence of high EMP), therefore, contributing to EMO and strategic human resource management literatures.

Managerial implications

Results of the analysis may provide useful insights for practicing managers, as well. First, managers have the status and power to influence organizational actions. If managers are committed to exporting, they allocate resources to the organization's foreign trade operations, and encourage employees to continuously improve the organization's products/services in foreign markets. Furthermore, top managers can induce a wide range of behaviours, and through appraisal and compensation they can influence employee behaviour. Export training systems can translate top management's values, norms, and goals about EMO into EMP, and export reward systems can steer employees' behaviour towards the fulfilment of export marketing objectives (i.e., high performance). Overall, fsQCA results show that fit between export management factors, export reward and training systems, EMO and export organizational demographics can help an organization to achieve high EMP, whereas misfit between these elements eventuates in the absence of high EMP. Most of the public Hungarian higher education institutions change their model of operations and instead of the government, the boards of foundations are responsible for the marketization and internationalization. The constructs of our export performance model might play a great role in their activities. It complements the quality approaches in higher education literature (Prakash, 2018) and the expectations of the European Association for Quality Assurance (ESG).

Future research

There appear to be several areas in need of future research. *First*, following our analysis results, commitment to allocate resources to the organization's foreign trade operations and the notion of continuous improvement of the organization's export products/ services translate into export reward and training systems and ultimately, high export performance. Other potential intervening factors may strengthen (/ hinder) these relationships: such as, uncertainty and risks related to exporting, or the mode, direction, and speed with which the organization advances along the export development path (see Leonidas et al., 1988) might also be taken into consideration. *Second*, it would also worth considering why an organizational climate (/culture) that supports mutual trust, share of export related knowledge and frequent contact between organizational members may promote a reward scheme that sensitize employees to take initiatives to meet (or exceed) export related goals. *Third,* how management's commitment to exporting and top managements emphasis on EMO is translated into values, norms and behaviours through proper reward and training systems may be perceived differently at different levels of the organization. *Fourth*, export strategy formulation may eventuate in clear marketing objectives and these objectives may be translated (and implemented) into behaviours only if resources, power structure, organizational politics and a wide range of individual goals – various organizational members share – are orchestrated towards achieving export market-related strategic objectives. *Fifth*, how the quality management, TQM, service quality in general and the use of the ENQA-ESG specifically, could be combined with the export market-orientation (EMO)? Future studies might want to study the complex interaction of the above factors, as well.

References

Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modelling In Practice: A Review of Recommended Two-Step Approach. *Psychological Bulletin*, *103*(3), 411-423. https://www3.nd.edu/~kyuan/courses/sem/readpapers/ANDERSON.pdf

Bagozzi, R. P., & Yi, Y. (1988). On The Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16, 74-94. https://doi.org/10.1007/BF02723327

Bagozzi, R.P. (1992). The Self-Regulation of Attitudes, Intentions, and Behavior. *Social Psychology Quarterly*, *55*(2), 178-204. https://doi.org/10.2307/2786945

Bailey, T., & Waldinger, R. (1991). Primary, Secondary, and Enclave Labor Markets: A Training Systems Approach. *American Sociological Review*, *56*(4), 432-445. https://doi.org/10.2307/2096266

Baird, L., & Meshoulam, I. (1988). Managing Two Fits of Strategic Human Resource Management. *Academy of Management Review*, *13*(1), 116-128. https://doi.org/10.2307/258359

Berács, J. (2006). Oktatási hub a láthatáron – Logisztikai tapasztalatok tanulságai. (Education Hub on the Horizon – Lessons of Logistics Experiences) *Vezetéstudomány – Budapest Management Review*, *37*(11), 2-11. https://doi.org/10.14267/VEZTUD.2006.11.01

Berács, J. (2014). Mobilitást akadályozó és ösztönző tényezők. In *A felsőoktatási mobilitást akadályozó és ösztönző tényezők Magyarországon* (pp. 53-114). Budapest: Tempus Public Foundation.

Berács, J., Derényi, A., Kováts, G., Polónyi, I., & Temesi, J. (2015). *Hungarian Higher Education 2014. Strategic progress report*. Corvinus University of Budapest-Center for International Higher Education Studies, Budapest. http://unipub.lib.uni-corvinus.hu/7051/1/MF2014_EN.pdf

Bettencourt, L. A., & Gwinner, K. P. (1996). Customization of the Service Experience: The Role of the Frontline Employee. *International Journal of Service Industry Management*, *7*(2), 3-20. https://doi.org/10.1108/09564239610113442

Boshoff, C., & Allen, J. (2000). The Influence of Selected Antecedents on Frontline Staff's Perceptions of Service Recovery Performance? *International Journal of Service Industry Management*, *11*(1), 63-90. https://doi.org/10.1108/09564230010310295

Cadogan, J. W., Cui, C. C., Morgan, R. E., & Story, V. M. (2006). Factors Facilitating and Impeding The Development of Export Market-Oriented Behavior: A study of Hong Kong manufacturing exporters. *Industrial Marketing Management*, *35*(5), 634-647. https://doi.org/10.1016/j.indmarman.2005.06.014

Cadogan, J. W., Diamantopoulos, A., & Siguaw, J. A. (2002). Export Market-oriented Activities: Their Antecedents and Performance Consequences. *Journal of International Business Studies*, *33*(3), 615-626. https://www.jstor.org/stable/3069535

Cadogan, J. W., Kuivalainen, O., & Sundqvist, S. (2009). Export Market-Oriented Behavior and Export Performance: Quadratic and Moderating Effects Under Differing Degrees of Market Dynamism and Internationalization. *Journal of International Marketing*, *17*(4), 71-89. https://doi.org/10.1509/jimk.17.4.71

Cadogan, J. W., Paul, N. J., Salminen, R. T., Puumalainen, K., & Sundqvist, S. (2001). Key Antecedents to "Export" Market-Oriented Behaviors: A Cross-National Empirical Examination. *International Journal of Research in Marketing*, *18*(3), 261-282. https://doi.org/10.1016/S0167-8116(01)00038-6

Cano, C. R., Carrillat, F. A., & Jaramillo, F. (2004). A meta-analysis of the relationship between market-orientation and business performance: evidence from five continents. *International Journal of Research in Marketing*, *21*(2), 179-200. https://doi.org/10.1016/j.ijresmar.2003.07.001

Day, G. S. (1999). *The market driven organization: Understanding, attracting and keeping valuable customers.* New York, NY: Free Press.

Du, Yunzhou, P.H. Kim (2021). One size does not fit all: Strategy configurations, complex environments, and new venture performance in emerging economies. *Journal of Business Research*, 124 (January), 272–285. https://doi.org/10.1016/j.jbusres.2020.11.059

E-4 Group (2020). *E-4 Group statement: The ESG in the changing landscape of higher education*. August 2020, https://enqa.eu/wp-content/uploads/2020/08/E4-statement_The-ESG-in-the-changing-landscape-of-higher-education_Final.pdf

ESG (2015). *ENQA – European Association for Quality Assurance in Higher Education, ESG 2015*. https://www.enqa.eu/esg-standards-and-guidelines-for-quality-assurance-in-the-european-higher-education-area/

Fiss, P. C. (2007). A Set-Theoretic Approach to Organizational Configurations. *Academy of Management Review, 32*(4), 1180-1198. https://www.jstor.org/stable/20159362

Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, *18*(3), 382-388. https://doi.org/10.2307/3150980

Frösen, J., Luoma, J., Jaakkola, M., Tikkanen, H., & Aspara, J. (2016). What Counts Versus What Can Be Counted: The Complex Interplay of Market-orientation and Marketing Performance Measurement. *Journal of Marketing*, *80*(3), 60-78. https://doi.org/10.1509/jm.15.0153

Gregory, J. L. (2019). Applying SERVQUAL: Using service quality perceptions to improve student satisfaction and program image. *Journal of Applied Research in Higher Education*, *11*(4), 788-799. https://doi.org/10.1108/JARHE-12-2018-0268

Hair, J. F., Black, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Hambrick, D. C. (1983). High Profit Strategies in Mature Capital Goods Industries: A Contingency Approach. *Academy of Management Journal*, *26*(4), 687-707. https://doi.org/10.2307/255916

Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *Academy of Management Review*, *9*(2), 193-206. https://doi.org/10.2307/258434

Harris, L. C. (2000). The Organizational Barriers to Developing Market Orientation. *European Journal of Marketing*, *34*(5/6), 598-624. https://doi.org/10.1108/03090560010321956

Hart, C. W. L., Heskett, J. L., & Sasser, W. E. Jr. (1990). The Profitable Art of Service Recovery. *Harvard Business Review*, 68, 148-156. https://hbr.org/1990/07/the-profitable-art-of-service-recovery

Hemsley-Brown, J., & Oplatka, I. (2010). Market-orientation in universities: A comparative study of two national higher education systems. *International Journal of Educational Management*, *24*(3), 204-220. https://doi.org/10.1108/09513541011031565

Hrebiniak, L.G. (1981). The organization and environment research program: Overview and critique. In Van de Ven, A.H., & Joyce, W.F. (Eds.), *Perspectives on organization design and behaviour* (pp. 338–345). New York: Wiley-Interscience.

James, M. & Derrick, G. (2021). Export marketing in higher education: an international comparison. *Journal of International Education in Business*, 14(1), 59-76. https://doi.org/10.1108/JIEB-05-2019-0026

Jaworski, B. J., & Kohli, A. K. (1993). Market Orientation: Antecedents and Consequences. *Journal of Marketing*, *57*(3), 53-70. https://doi.org/10.2307/1251854

Katsikea, E., Theodosiou, M., Perdikis, N., & Kehagias, J. (2011). The Effects of Organizational Structure and Job Characteristics on Export Sales Managers' Job Satisfaction and Organizational Commitment. *Journal of World Business*, *46*(2), 221-233. https://doi.org/10.1016/j.jwb.2010.11.003

Kayabasi, A., & Mtetwa, T. (2016). Impact of Marketing Effectiveness and Capabilities, and Export Market-orientation on Export Performance. *European Business Review*, *28*(5), 532-559. https://doi.org/10.1108/EBR-11-2014-0084

Keefe, J.H., & Katz, H.C. (1990). Job Classifications and Plant Performance in the Auto Industry. *Industrial Relations*, *29*(1), 111-118. https://doi.org/10.1111/j.1468-232X.1990.tb00744.x

Kéri, A. (2021). Külföldi hallgatók elégedettségét és lojalitását befolyásoló tényezők feltárása a Szegedi Tudományegyetemen: Kizárólag az egyetemi tényezők számítanak? *Vezetéstudomány – Budapest Management Review*, *52*(8-9), 48–62. https://doi.org/10.14267/VEZTUD.2021.09.04

Kerr, J. L. (1985). Diversification Strategies and Managerial Rewards: An Empirical Study. *Academy of Management Journal*, *28*(1), 155-179. https://doi.org/10.2307/256066

Ketchen, D.J., Combs, J.G.,Jr., Russell, C.J., Shook, C., Dean, M.A., Runge, J., Lohrke, F.T., Naumann, S.E., Haptonstahl, D.E., Baker, R., Beckstein, B.A., Handler, C., Honig, H., & Lamoureux, S.(1997). Organizational Configurations and Performance: A Meta-Analysis. *The Academy of Management Journal*, *40*(1), 223–240. https://doi.org/10.2307/257028

Kirca, A.H., Jayachandran, S., & Bearden, W. O. (2005). Market Orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance. *Journal of Marketing, 69*(2), 24-41. https://doi.org/10.1509/jmkg.69.2.24.60761

Kóczy, L.T., & Tikk, D. (2000). *Fuzzy rendszerek*. Budapest: Typotex Kiadó.

Kohli, A.K., & Jaworski, B.J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, *54*(2), 1-18. https://doi.org/10.2307/1251866

Kwon, Y-C., & Hu, M. Y. (2000). Market-orientation among Small Korean Exporters. *International Business Review*, *9*(1), 61-75. https://doi.org/10.1016/S0969-5931(99)00029-3

Lado, A. A., Boyd, N. G., & Wright, P. (1992). A Competency-Based Model of Sustainable Competitive Advantage: Toward A Conceptual Integration. *Journal of Management*, *18*(1), 77-91. https://doi.org/10.1177/014920639201800106

Lages, L. F., & Montgomery, D. B. (2004). Export Performance as an Antecedent of Export Commitment and Marketing Strategy Adaptation: Evidence from Small and Medium-

Sized Exporters. *European Journal of Marketing*, *38*(9/10), 1186-1214. https://doi.org/10.1108/03090560410548933

Lages, L. F., Jap, S. D., & Griffith, D. A. (2008). The Role of Past Performance in Export Ventures: A Short-Term Reactive Approach. *Journal of International Business Studies*, *39*(2), 304-325. https://doi.org/10.1057/palgrave.jibs.8400339

Lakal, N., Joshi, K., & Jain, K. (2020). Development of engineering education service quality model from faculty perspective. *Total Quality Management & Business Excellence*, *31*(13-14), 1442-1453. https://doi.org/10.1080/14783363.2018.1473028

Lichtenthal, J. D. (1992). Becoming Market Oriented. *Journal of Business Research*, *24*(3), 191-207. https://doi.org/10.1016/0148-2963(92)90018-7

Meijaard, J., Brand, M. J., & Mosselman, M. (2005). Organizational Structure and Performance in Dutch Small Firms. *Small Business Economics*, *25*(1), 83-96. https://doi.org/10.1007/s11187-005-4259-7

Meyer, A.D., Tsui, A.S., & Hinings, C.R. (1993). Configurational Approaches to Organizational Analysis. *Academy of Management Journal*, *36*(6), 1175-1195. https://doi.org/10.2307/256809

Morgan, N. A., & Piercy, N. F. (2008). Barriers to Marketing Implementation in U.K. Professional Service Firms. *Journal of Professional Services Marketing*, *8*(1), 95–113. https://doi.org/10.1300/J090v08n01_08

Mossholder, K. W., Bennett, N., Kemery, E. R., & Wesolowski, M. A. (1998). Relationships between Bases of Power and Work Reactions: The Mediational Role of Procedural Justice. *Journal of Management*, *24*(4), 533-552. https://doi.org/10.1177/014920639802400404

Mostafiz, M. I., Sambasivan, M., & Goh, S. K. (2021). Antecedents and Consequences of Market-orientation in International B2B Market: Role of Export Assistance as a Moderator. *Journal of Business & Industrial Marketing*, *36*(6), 1058-1075. https://doi.org/10.1108/JBIM-09-2019-0411

Mucsi, A., Malota, E. & Török, A. (2020). Kulturális sokk és pozitív szájreklám – a felsőoktatásban tanuló külföldi hallgatók körében. *Vezetéstudomány – Budapest Management Review*, *51*(2), 23-31. https://doi.org/10.14267/VEZTUD.2020.02.02

Nagy, G. & Berács, J. (2013). Az exportpiac-orientáció előzményei és annak exportteljesítményre gyakorolt hatása a magyar felsőoktatási intézményekben. *Vezetéstudomány – Budapest Management Review, 44*(2). 2-19. https://doi.org/10.14267/VEZTUD.2013.02.01

Navarro, A., Acedo, F. J., Robson, M. J., Ruzo, E., & Losada, F. (2010). Antecedents and Consequences of Firms' Export Commitment: An Empirical Study. *Journal of International Marketing*, *18*(3), 41-61. https://doi.org/10.1509/jimk.18.3.41

Németh, E. & Vida, C. (2021). Higher education in light of change – Competition, Quality, Performance – Summary study of the research project of the State Audit Office of Hungary. *Hungarian Accreditation Review*, 2, 21-25. https://www.mab.hu/en/hungarian-accreditation-review/

O'Cass, A., & Julian, C. (2003). Examining Firm and Environmental Influences on Export Marketing Mix Strategy and Export Performance of Australian Exporters. *European Journal of Marketing, 37*(3/4), 366-384. https://doi.org/10.1108/03090560310459005

Ordanini, A., & Maglio. P. P. (2009). Market Orientation, Internal Process, and External Network: A Qualitative Comparative Analysis of Key Decisional Alternatives in the New Service Development. *Decision Science*, *40*(3), 601-625. https://doi.org/10.1111/j.1540-5915.2009.00238.x

Prakash, G. (2018). Quality in higher education institutions: insights from the literature. *The TQM Journal*, *30*(6), 732-748. https://doi.org/10.1108/TQM-04-2017-0043

Pulendran, S., & Speed, R. (1996). Planning and Doing: The Relationship between Marketing Planning Styles and Market Orientation. *Journal of Marketing Management*, *12*(1/3), 53-68. https://doi.org/10.1080/0267257X.1996.9964400

Ragin, C.C. (2008). Measurement versus calibration: A set-theoretic approach. In Janet M. Box-Steffensmeier (Eds.), *The Oxford handbook of political methodology* (pp. 174-198). Oxford: OUP. https://doi.org/10.1093/oxfordhb/9780199286546.003.0008

Ruekert, R. W. (1992). Developing a Market Orientation: An Organizational Strategy Perspective. *International Journal of Research in Marketing*, *9*(3), 225-246. https://doi.org/10.1016/0167-8116(92)90019-H

Schuler, R. S., & Jackson, S. E. (1987). Linking Competitive Strategies with Human Resource Management Practices. *Academy of Management Executive*, *1*(3), 207-219. https://doi.org/10.5465/AME.1987.4275740

Sukoco, B.M., Choirunnisa, Z., Mudzakkir, M.F., Nasution, R.A., Susanto, E. & Usman, I. (2021). Market-orientation and capacity for change in higher education performance in Indonesia. *Journal of Asia Business Studies*, *16*(1), 80-100. https://doi.org/10.1108/JABS-01-2020-0021

Tóth, Z. E., & Surman, V. (2021). A szolgáltatásminőség mérésének és értékelésének gyakorlata a felsőoktatásban: Főszerepben a hallgatók. *Vezetéstudomány – Budapest Management Review*, *52*(11), 28–44. https://doi.org/10.14267/VEZTUD.2021.11.03

Tushman, M. L., & Romanelli, E. (1985). Organizational evolution: A metamorphosis model of convergence and reorientation. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior, vol. 7* (pp. 171-222). Greenwich, CT: JAI Press.

Vuorio, A., Torkkeli, L., & Sainio, L. M. (2020). Service innovation and internationalization in SMEs: antecedents and profitability outcomes. *Journal of International Entrepreneurship*, 18 (1), 92-123. https://doi.org/10.1007/s10843-019-00266-z

Westley, F., & Mintzberg, H. (1989). Visionary leadership and strategic management. *Strategic Management Journal*, *10*(S1), 17-32. https://doi.org/10.1002/smj.4250100704

Woodside, A.G. (2018). How to Move Away From Using Symmetric Tests, Net Effects, and $p<0.05$: Overcoming Barriers to Good Science Practices. *Journal of Contemporary Marketing Science*, *1*(1), 176-187. https://doi.org/10.1108/JCMARS-09-2018-0012

APPENDICES

Appendix 1

Measurement Items and Factor Loadings

Scale	Loading
Top management's emphasis on export market-orientation (1 = don't agree, 9 = totally agree) CR = 0.88, AVE = 0.71	
1. It is essential to adjust to observed changes in foreign markets.	0.73
2. Our employees must react to the steps of our main competitors in foreign markets sensitively.	0.92
3. All our employees should seek to meet the emerging needs of our international students.	0.84
Management's commitment to exporting (1 = don't agree, 9 = totally agree) CR = 0.87, AVE = 0.69	
1. The management of our higher education institution considers efforts related to the recruitment of foreign students important.	0.72
2. The management of our higher education institution considers an important goal to increase the activity related to the recruitment of foreign students.	0.93
3. The management of our higher education institution is actively seeking international market opportunities.	0.82
Export market-oriented reward systems (1 = don't agree, 7 = totally agree) CR = 0.77, AVE = 0.53	
1. The performance of crew commissioned with foreign student recruitment is measured on how strong connections they build with foreign students.	0.71
2. Performance of our crew commissioned with foreign student recruitment is evaluated on the bases of surveys among foreign students.	0.74
3. With our reward systems we encourage our employees to step up their efforts to meet the needs of foreign students.	0.73
Export market-oriented training systems (1 = don't agree, 7 = totally agree) CR = 0.88, AVE = 0.71	
1. Our management supports training courses that help employees to become more oriented towards foreign students.	
2. We tell to our new colleagues that serving international students is a top priority.	0.96
3. New member of our staff will learn the importance of exploring the needs of foreign students.	0.89
Export market-orientation (EMO) (1 = strongly agree, 7 = strongly disagree)	0.61
Export intelligence generation CR = 0.85, AVE = 0.74	
1. We constantly monitor our level of commitment and orientation to serving foreign student needs.	0.91
2. We collect a lot of information to understand the factors influencing foreign students' needs and expectations.	0.80
Export intelligence dissemination CR = 0.92, AVE = 0.69	
1. Too much information concerning our foreign competitors is discarded before it reaches decision makers. (R)	0.89
2. Information which can influence the way we serve our foreign students takes forever to reach the staff that deals with foreign student issues. (R)	0.87
3. Important information about our foreign students is often "lost in the system." (R)	0.87
4. Information about our foreign competitors' activities often reaches relevant personnel too late to be of any use. (R)	0.79
5. Important information concerning export market trends (regulation, technology) is often discarded as it makes its way along the communication chain. (R)	0.68
Responsiveness CR = 0.87, AVE = 0.69	
1. Our export business strategies are driven by our beliefs about how we can create greater value for foreign students.	0.86
2. Our export strategy for competitive advantage is based on our understanding of foreign students' needs.	0.89
3. Our export business objectives are driven primarily by student satisfaction.	0.71
Export experience (1 = poorly developed skill, 7 = highly developed skill) CR = 0.93, AVE = 0.76	
In our higher education institution, we have developed	
1. … the ability which allows identifying information from foreign markets.	0.90
2. … an information base, which contains 'sales opportunities' on foreign markets.	0.84
3. … an information base, which contains regulations/legislations about foreign markets.	0.91
4. … the ability that would help us to understand how we will be able to prepare the best possible market research on foreign markets.	0.81
Size of the institution	
How many full-time students are studying at your higher education institution in the 2011/2012 school year?	–
Degree of internationalization	
The ratio of international students in full-time students.	–
Export market performance (1 = very dissatisfied, 7 = very satisfied) CR = 0.87, AVE = 0.76	
1. To what extent are you satisfied with the pace of entering new markets for student recruitment?	0.86
2. To what extent are you satisfied with the pace of entering new markets for student recruitment compared to main competitors?	0.88

Appendix 2

Set Memberships and Calibration Measures and Sample Descriptives (n = 131)

		Fuzzy-set calibration			Measures descriptives			
Condition	**Fuzzy-set/ measure**	**Fully in**	**Crossover**	**Fully out**	**Mean**	**S.D.**	**Max**	**Min**
Top management's emphasis on export market-orientation (tmeemo_c)	A signal (from managers) about the importance of being responsive to export customer needs.	8.00	6.00	4.00	6.90	1.74	9.00	1.00
Management's commitment to exporting (mce_c)	A purposeful allocation of organizational resources to the organization's foreign trade operations.	8.00	6.00	4.00	7.46	1.63	9.00	2.00
Export market-oriented reward systems (emors_c)	Export market-oriented reward systems motivate employees to enhance export market behaviour and related actions.	8.00	6.00	4.00	3.59	1.56	6.50	1.00
Export market-oriented training systems (emots_c)	Export market-oriented training systems sensitize employees towards export customer needs.	6.00	4.50	2.50	4.62	1.76	7.00	1.00
Export market orientation (EMO) (emo_c)	A continuous approach on sensing and acting on events and trends in present and prospective export markets.	6.00	4.70	3.00	4.82	1.16	7.00	2.00
Export experience (eexp_c)	The ability to identify information and sales opportunities from foreign markets.	6.00	4.00	2.00	2.85	1.36	7.00	1.00
Size of institution (size_c)	Number or full-time students.	21,015	9,850	4,210	12,019.61	7,522.18	2,4426.00	646.00
Proportion of international students (int_c)	The ratio of international students in full-time students.	0.09	0.04	0.01	0.05	0.05	0.30	0.00
Export market performance (EMP) (expp_c)	Satisfaction with the pace of entering new markets for student recruitment compared to main competitors.	6.00	4.00	2.00	3.72	1.49	7.00	1.00

Appendix 3

The names and main indicators of all institutions analysed in the survey, ranked according to their export performance

Name of the higher education institute	**Abbreviation**	**Number of students**	**Number of international students**	**Proportion of international students (%)**
Debreceni Egyetem	DE	29,714	3,741	12.59
Dunaújvárosi Főiskola	DF	2,714	125	4.61
Pázmány Péter Katolikus Egyetem	PPKE	7,910	293	3.70
Kecskeméti Főiskola	KF	3,733	88	2.36
Szegedi Tudományegyetem	SZTE	23,697	2,369	10.00
Budapesti Gazdasági Főiskola	BGF	15,593	480	3.08
Szent István Egyetem	SZIE	14,772	1,292	8.75
Nyugat-Magyarországi Egyetem	NYME	10,097	273	2.70
Pannon Egyetem	PE	7,335	145	1.98
Miskolci Egyetem	ME	10,882	165	1.52
Pécsi Tudományegyetem	PTE	21,819	2,102	9.63
Eszterházy Károly Főiskola	EKF	6,373	130	2.04
Semmelweis Egyetem	SE	12,920	3,209	24.84
Eötvös Lóránd Tudományegyetem	ELTE	28,698	1,855	6.46
Óbudai Egyetem	OE	12,653	272	2.15
Budapesti Corvinus Egyetem	BCE	14,173	1,668	11.77
Liszt Ferenc Zeneművészeti Egyetem	LFZE	863	147	17.03
Moholy László Művészeti Egyetem	MOME	994	86	8.65
Széchenyi István Egyetem	SZE	10,668	399	3.74
Nyíregyházi Főiskola	NYF	4,808	187	3.89
Budapesti Műszaki és Gazdaságtudományi Egyetem	BME	24,256	1,166	4.81
Károly Róbert Főiskola	KRF	5,698	40	0.70
Magyar Képzőművészeti Egyetem	MKE	764	61	7.98
Kaposvári Egyetem	KE	2,977	114	3.83
Eötvös József Főiskola	EJF	781	18	2.30
The observed 25 institutions together	-	**274,892**	**20,345**	**7.40**
All HE institutions in Hungary	–	320,124	23,208	7.25
Proportion of the 25 universities	–	85.87	87.66	6.44