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Embedded in context: How time and distance affect the convergence of personnel selection practices

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Abstract

The debate on convergence versus divergence or stasis in human resource management (HRM) practices over time is still ongoing. We look at configurations of organisations' personnel selection practices and empirically analyse the role of geographic, cultural and regulatory institutional distance between countries for emerging similarity or dissimilarity in these practices. We also examine whether convergence occurred between 1995 and 2015. Based on the Cranet data of 25,869 organisations from 42 countries and statistical tests using energy distance, we find a pattern over time, moving from stasis to divergence. In addition, personnel selection configurations relate to cultural and regulatory institutional differences in the sense that smaller distances lead to higher similarity. This is not the case, however, for geographic distance. Our study adds to the debate on HRM convergence and offers a new method of analysis for other areas of HRM research where configurations instead of single HRM practices play a role.

KEYWORDS
configurations, convergence, energy distance, selection

PRACTITIONER NOTES

What is currently known

- It is still an ongoing debate whether human resource (HR) practices in different organisations are becoming more similar over time.

What this paper adds

- In our study, we use data from 25,869 organisations collected between 1995 and 2015.
- We find country-specific patterns of selection practices.
- We do not find a worldwide convergence of selection instruments.

The implications for practitioners

- Organisations from countries with similar cultural values and formal institutions choose similar selection instruments.
- Cultural and regulatory institutional context are still relevant for organisations when choosing HR practices.

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1 | INTRODUCTION

Whether human resource management (HRM) practices or systems are becoming more similar over time and across contexts is a classic and ongoing question of comparative and international HRM research (Farndale et al., 2017). Previous research finds partial support for converging developments in some HRM practices, but little evidence for general convergence in HRM (for an overview, see Brewster et al., 2015, pp. 451–469). Overall, no clear answer exists (Al Ariss & Sidani, 2016). This is worrying since a key question of long-term development of HRM in various countries and contexts remains highly contested.

As a way forward, researchers have renewed calls for a better understanding of HRM (non-)convergence and identified three key issues in terms of focus, theory and methodology (Farndale et al., 2017; Kaufman, 2016). First, they suggest concentrating on selected aspects of HRM instead of HRM in general since the evidence for convergence varies across different aspects of HRM. Second, analyses should be grounded in a coherent theoretical framework that explicitly considers contextual factors and points towards major influencing factors for convergence/stasis/divergence. Third, the calls propose a different methodological tack that allows to go beyond single instruments and analyse the simultaneous interplay between various HRM system elements as suggested by configurational approaches in HRM (Delery & Doty, 1996).

Our paper responds to these calls. We focus on one individual HRM practice, personnel selection, that constitutes an important segment within HRM, is crucial for organisational performance and can create sustainable competitive advantage (Kim & Ployhart, 2018). Moreover, this is in line with Farndale et al. (2017) who 'urge future research to continue to focus on individual HRM practices (rather than HRM system bundles)' (p. 1082) since their analyses demonstrate a high degree of variability in practice adoption. We look at different configurations of single selection instruments such as interview panels and assessment centres to gain a more differentiated view, extending the notion that 'the co-occurrence of certain HRM practices as configurations could be an interesting direction for future study' (ibidem). Theoretically, our analysis builds on a comparative contextual framework that draws on economic institutional theory and identifies contextual factors at the country-level influencing HRM (Gooderham et al., 2018). We analyse three contextual factors affecting personnel selection configurations: as a

starting point geographic distance as the frequently used objective measure of physical distance (Beugelsdijk et al., 2018), and cultural and regulatory institutional distance, two well-established distances that represent the informal and formal institutional context (Kostova et al., 2019). Methodologically, we use energy distance to test for equal distributions of configurations of personnel selection instruments in different countries (Székely & Rizzo, 2017). This approach enables us to capture configurations of selection practices instead of single selection instruments.

The analysis, based on organisational-level data from the Cranet project (Parry et al., 2013) that covers 42 countries from four continents between 1995 and 2014, contributes to three debates. The focus on various kinds of distance sheds light on the relative importance of different contextual factors for HRM (Paauwe & Farndale, 2017). Tracking developments over nearly two decades adds to the conversation about convergence, stasis and divergence in HRM (Kaufman, 2016). Finally, using energy distance demonstrates how HRM research can benefit from analytical tools used in other disciplines for simultaneous analyses of various HRM practices in diverse contextual settings (Weller & Gerhart, 2018).

Results from our empirical analyses show that configurations of personnel selection instruments vary across countries and differences are smaller for countries with similar cultures and regulatory institutional contexts. However, a hypothesised convergence of selection practices over time is not supported by our analyses. Instead, we find evidence for stasis (i.e., stable differences) or divergence (i.e., increasing differences) in the use of personnel selection instruments among countries in the study period. These results emphasise the importance of different facets of national context for HRM and indicate that increasing international activities of organisations not necessarily lead to a global convergence of HRM practices.

2 | CONCEPTUAL BACKGROUND AND HYPOTHESES

The respective country context enables and restricts organisations' HRM activities (Gooderham et al., 1999). Gooderham et al. (2018) present a multilevel contextual framework rooted in economic institutional theory (North, 1990) that allows both a snapshot as well as a dynamic view of the relationship between HRM and its context. At the core of the framework is the HRM chain. It comprises HRM strategies and policies as well as practices such as recruitment and selection, training and compensation. Filtered by perceptions of various actors, these practices lead to multilevel outcomes over time, for example individual satisfaction, HRM and organisational performance, and better human capital at the national level. The outcomes feed back to the internal and external context, for example by triggering legislation or changing the employer brand. Both the internal and the external context influence the HRM chain. The former consists of organisational and HRM characteristics such as size, sector as well as internal stakeholders such as owners, management, workforce and representative bodies. The external context contains various regional and global institutions, both formal (e.g., employment legislation) and informal (e.g., cultural values). Within the HRM chain, our focus is on configurations of personnel selection practices and their link to contextual aspects: internally, various organisational characteristics; externally, regulatory institutional distance (formal) as well as cultural distance (informal) and, as a starting point, geographic distance as the most tangible form of distance.

The configurational lens (Delery & Doty, 1996) addresses horizontal fit, our primary angle, as well as vertical fit. Regarding the former, practices can complement each other and specific combinations can yield synergistic effects (Subramony, 2009). Configurations consider that decision-makers rather make choices about a set of suitable and coherent selection instruments. A common approach used in practice is the implementation of a battery of tests rather than individual instruments. It is reasonable that companies avoid using too many testing procedures that are time-consuming and costly and need to thoroughly decide how many and which of the more expensive (e.g., assessment centres) and inexpensive instruments (e.g., application forms) to use. Moreover, this

set of tools should complement each other or have additive effects to assess many different, but relevant qualities of applicants. For example, human resource (HR) personnel and line managers can rely on different combinations of more objective selection instruments such as psychometric tests and more subjective instruments such as one-on-one interviews or references to assess different skills and attitudes (Purkiss et al., 2006). We therefore focus on bundles of selection instruments with configurations understood as 'any multidimensional constellation of conceptually distinct characteristics that commonly occur together' (Meyer et al., 1993, p. 1175). This idea of a horizontal fit, that is the internal consistency, of personnel selection practices follows from configurational reasoning within HRM research (Delery & Doty, 1996). While researchers so far detected that organisations in some countries are more or less likely to use single selection instruments (Farndale et al., 2018), we do not know anything about combinations of different instruments that might jointly be used to respond to the environmental setting.

This leads to the second, subordinate angle of vertical fit. The strategic choice of the right selection instruments needs to be adjusted to the demands of the internal and external context and depends on different considerations such as costs, predictive validity, diffusion and custom, applicants' reactions, ability of HR personnel and/or line managers, time to fill vacant positions and availability/quality of resources on the labour market (König et al., 2010). While these factors can play a tremendous role, we focus on geographic distance as a basis and one specific aspect of formal and informal institutions, that is regulatory institutional and cultural distance, respectively, that influence managers' economic reasoning and strategic choices.

2.1 | Similarities between countries and personnel selection configurations

Vertical fit of personnel selection configurations addresses the link to the external country-level environment. Based on comparative institutional reasoning in HRM (Gooderham et al., 2018), cultural distance is an expression of informal and regulatory institutional distance of formal institutions that influence personnel selection across countries (for an overview of different conceptualisations and operationalisations, see Kostova et al., 2019). Informal and formal institutions as 'rules of the game in a society' (North, 1990, p. 3) constrain economic activities of companies and provide specific opportunities. Informal institutions (e.g., norms and customs) help to coordinate these activities, especially when formal institutions are weak or absent. Formal institutions (e.g., the regulatory environment) determine the rules of economic activities and as such reduce uncertainty and lower transaction costs within societies. To take advantage of these environmental conditions, companies may use different strategies. With regard to personnel selection strategies and in line with configurational thinking outlined above, organisations may weigh different economic concerns that are highly influenced by the institutional setting. Balanced with varying implementation costs, organisations may favour the use of personnel selection tools with high predictive validity considering the country-specifics (e.g., labour market, cultural values etc.; Schmidt & Hunter, 1998). Furthermore, legal considerations are influenced by the regulatory institutional environment and are critical for organisations because legal infractions entail high direct costs such as exemplary damages or litigation, and high indirect costs like damaged reputation, later hiring problems or keeping highly qualified personnel (Klehe, 2004). Geographic distance is broadly discussed and applied in international business research (for a recent discussion, see Beugelsdijk et al., 2018). Some voices argue that geographic distances are objective and probably more powerful than the cognitive complements such as cultural distance (Zaheer et al., 2012).

In the following, we hypothesise that countries display different levels of similarity based on their geographic, cultural and regulatory institutional distance from each other. While these three determinants are linked to national context, the underlying theoretical mechanisms for the (non-)adoption of practices differ. We start with geographic distance as the most basic and tangible of the distances.

2.2 | Geographic distance

Geographic distance is defined as distance between two points on Earth, as given by longitudinal and latitudinal coordinates (Beugelsdijk et al., 2018). Together with space as materialised power relations and as experience, it is a well-established conceptualisation of space in organisation research. Geographic distance is crucial at different spatial scales, ranging from workplace layout to regional agglomeration of firms and emerging networks of individuals and organisations (Scott Taylor & Spicer, 2007). In the International Business Literature, economic arguments (e.g., of gravity models or the literature on transaction costs) suggest that physical distance has long been an impediment for trade and bilateral flows between countries through entry barriers, costs of transportation, managerial coordination and control (Ghemawat, 2001). Geographic distance has thus been a crucial barrier for international operations and led to more similar customs in neighbouring countries. Even though technological advancements have resulted in transportation and communication improvements and made physical distance to become less important also with regard to personnel selection (Ryan et al., 2015), it is still recognised that physical distance harms communication and exchange of knowledge transfer among firms and employees (K. J. McCarthy & Aalbers, 2016). For example, physical proximity facilitates formal meetings and conferences, but also impromptu meetings, face-to-face contact, and trust for open communication that are important for the transfer of knowledge and organisational practices (Leamer & Storper, 2001). Furthermore, empirical research demonstrates that the main actors of geographically proximate organisations interact more frequently and intensely than representatives from geographically distant organisations who are more likely to be excluded from informal and formal interactions (Bouquet & Birkinshaw, 2008). Taken together, this leads to more similar practices that help to coordinate economic activities in neighbouring countries and also influence strategic HR choices and personnel selection configurations. Therefore, we assume that personnel selection configurations are less likely to be similar between geographically distant countries.

Hypothesis 1a *Lower geographic distance between countries is related to higher similarity in personnel selection.*

2.3 | Cultural distance

Cultural distance as another aspect of informal institutions denotes the degree of difference in values, motives and beliefs shared by members of the same societal group (Hofstede, 1993). Based on Hofstede (1993) and GLOBE (House et al., 2004), HR researchers show that the choice of HR practices depends on national culture (Gooderham et al., 2015). Cultural differences are especially important in personnel selection (Ma & Allen, 2009). However, empirical evidence provides inconclusive findings. While some researchers find only little evidence of a relationship between culture and personnel selection practices (Ryan et al., 2017), other study results indicate that some aspects of culture influence the use of individual selection tools (Papalexandris & Panayotopoulou, 2000).

Following economic institutional theorising, we suppose that differences in the use of personnel selection configurations may be the result of dissimilarities in informal institutions (here: cultural values) that constrain organisations' economic reasoning and choices. In the case of personnel selection, culture especially influences the usefulness of certain procedures, organisations' ability, and request for certain methods (Ryan & Tippins, 2009). With regard to usefulness, organisations may use culture-specific selection configurations to identify employees who show the values and behaviours that are encouraged and rewarded by the respective society. For example, candidates' knowledge, technical abilities and work experiences are more important in some cultures, while interpersonal characteristics are more relevant in other cultures (Huo et al., 2002). With regards to ability and request, cultures significantly vary in their preferences for hiring generalists versus hiring specialists which tremendously affects companies' hiring strategy and choice of selection instruments, that is they either focus on detecting the trainability versus the expertise of applicants (Farndale et al., 2018). As a result, some

personnel selection configurations might appear more effective and common in similar cultures, but less effective in others.

Hypothesis 1b *Lower cultural distance between countries is related to higher similarity in personnel selection.*

2.4 | Regulatory institutional distance

Regulatory institutional distance denotes the extent of dissimilarity of the regulatory environment, that is formal institutions, among different countries (Kostova et al., 2019). Such formal institutions constrain managerial agency through rules and regulatory requirements (North, 1990). Countries have established different composite systems of labour regulations comprising laws and institutions that aim to secure the interests of employees and that affect companies', managers', and employees' behaviour (Botero et al., 2004). Related theorising suggests that regulatory institutional environments are major drivers of national differences in HRM (Brewster et al., 2007). Recent empirical evidence highlights that formal institutions at the country-level affect the adoption of other HRM practices (Farndale et al., 2017).

This institutional perspective is particularly relevant in the case of personnel selection configurations. For personnel selection, stricter national labour regulations and stronger labour unions directly limit firms' choices in applying individualised practices (Huo et al., 2002). Differences in legal environments between countries strongly influence personnel selection (for an overview, see Myors et al., 2008). For example, law in some countries places great emphasis on the security of employees' privacy, while law in other countries requires selection mainly to be valid, reliable and free of biases. Furthermore, organisations' set of selection practices needs to consider national labour markets, market growth and education systems that may influence the availability of skilled personnel (Farndale et al., 2018).

Consequently, we assume from economic institutional theorising and selection-specific findings that regulatory formal institutions create the boundaries within which organisations have established country-specific selection strategies.

Hypothesis 1c *Lower regulatory institutional distance between countries is related to higher similarity in personnel selection*

2.5 | Changes in personnel selection configurations over time

The comparative contextual framework also considers that the context of HRM and consequently differences in HRM changes over time. Two opposing views dominate the debate on convergence versus divergence of HRM practices. The universalist paradigm holds that HRM practices become more standardised and move towards a set of universal best practices across firms and contextual settings that increase organisational performance (Budhwar & Sparrow, 2002). It draws heavily on globalisation arguments, in particular that trade barrier reduction, industrialisation, standardisation, cross-national diffusion of work processes, digitalisation, global media and information flows make countries more alike in behavioural patterns, taste and governance systems (Djelic & Quack, 2003). The contextual paradigm emphasises that management methods are embedded in their respective context. Globalisation processes affect some countries, organisations, and practices more than others, and these factors make convergence unlikely leading to stasis or divergence (Farndale et al., 2017). Its advocates build on insights from economics, sociology, political science and law and note the limits of globalisation, varieties of capitalism, the role of nation states and cultural orientations, each distinct in its norms, values and beliefs (Hall & Soskice, 2001; House et al., 2004).

As outlined above, formal and informal institutional environments have led to differences in personnel selection configurations. Nevertheless, globalisation and technological improvements favour convergence, that is reduce these differences. Four factors play a major role. First, multinational enterprises (MNEs) have strong presence in many countries. They drive standardisation towards 'best practice' in management around the world, for example a North-American model of High Performance Work Practices (Pudelko & Harzing, 2007) and function as role models for indigenous organisations. Second, organisations in emerging economies tend to use Western management practices as a blueprint (Zhu & Warner, 2019). Likewise, local companies with global ambitions adopt promising practices from the West (Budhwar et al., 2019). Recruitment and selection are no exception (Ahmad et al., 2019) and they might move, for example, from relationship-based to competence/merit-based selection. The dominance of global business schools, textbooks and other literature and of management consultancies from the West further strengthen these tendencies (Budhwar et al., 2019; Pudelko & Harzing, 2007). In both cases, mimetic and normative isomorphic tendencies (DiMaggio & Powell, 1983) organisations arguably play an important role. Third, globalisation has led to an export of US legal requirements to other countries, for example, requirements for MNEs and a standardisation in legal demands (Starr, 1996). This includes legal policies regarding personnel selection instruments such as laws prohibiting discrimination (Myors et al., 2008). Fourth, globalisation has affected labour markets by increasing mobility of workers across national borders due to lower transportation costs, advanced communication and information technologies and rising income inequalities (Stalker, 2000). Since globalisation and technological advancements diminished the importance of physical distance, companies may be interested in hiring applicants from all over the world and need to adapt selection practices that are standardised and meet similar requirements and preferences (J. M. McCarthy et al., 2017). In sum, these developments lead to diminishing differences in personnel selection configurations around the world.

A reduction of differences is not contradicting the differentiating tendencies addressed in Hypotheses 1a–c, but adds to the picture by arguing that these differences become smaller over time. Overall, we assume that global drivers tend to align formal and informal institutions between countries which, in turn, leads towards convergence in selection practice configurations.

Hypothesis 2 *Personnel selection has converged among countries.*

3 | SAMPLE AND METHODS

3.1 | Sample

Data for our study are from the Cranet survey, a cross-national firm-level study of HRM policies and practices that is conducted about every 5 years by Cranet (www.cranet.org; Parry et al., 2013). We use the five most recent rounds: 1995/1996, 1999/2000, 2004/2005, 2008/2009 and 2014/2015. Note that each round contains a largely representative sample of organisations from the participating countries and the five rounds are therefore not repeated measures of the same organisations (i.e., no panel data). In each round, the questionnaire was sent to the top HR person in organisations with more than 200 (in some countries 100) employees. The number of participating countries and their sample sizes varied between rounds (for a critical assessment of the Cranet project, see Steinmetz et al., 2011). To ensure substantial country samples, we only included countries with answers from 100 or more organisations in the respective round. This approach yielded 106 subsamples from 42 different countries with a total sample size of 25,869 organisations (see Table 1).

T A B L E 1 Country sample sizes and data availability

	1995/ 1996	1999/ 2000	2004/ 2005	2008/ 2009	2014/ 2015	GLOBE data available	Labour index available
Australia		170	259	110	395	Yes	Yes
Austria		135	270	173	226	Yes	Yes
Belgium		200	230	240	129	No	Yes
Brazil					352	Yes	Yes
Bulgaria			157	160		No	Yes
Canada			456			Yes	Yes
China					256	Yes	No
Croatia					149	No	No
Czech Rep		116				No	No
Denmark	500	365	516	342	206	Yes	Yes
Estonia			118			No	Yes
Finland	228	213	293	114	151	Yes	Yes
France	306	283	140	155	131	Yes	Yes
Germany[a]	278	327	347	313	253	Yes	Yes
Greece			180	209	182	Yes	Yes
Hungary				139	273	Yes	Yes
Iceland			114	138	110	No	Yes
Ireland	204	277				Yes	Yes
Israel		104	175		102	Yes	Yes
Italy			117		168	Yes	Yes
Japan		576		364		Yes	Yes
Lithuania				119	145	No	Yes
Nepal			204			No	Yes
The Netherlands	258	127	397		162	Yes	Yes
New Zealand			286			Yes	Yes
Northern Ireland		134				No	No
Norway	321	222	303		196	No	Yes
Philippines					103	No	Yes
Romania					225	No	No
Russia					131	Yes	Yes
Serbia					160	No	No
Slovakia			259	221	262	No	Yes
Slovenia			161	166	170	Yes	Yes

T A B L E 1   (Continued)

	1995/ 1996	1999/ 2000	2004/ 2005	2008/ 2009	2014/ 2015	GLOBE data available	Labour index available
South Africa				145	121	Yes	Yes
Spain	122	139	158			Yes	Yes
Sweden	239	235	383	282	282	Yes	Yes
Switzerland	164	113	311		188	Yes	Yes
Taiwan				226		Yes	Yes
Tunisia		189				No	Yes
Turkey		171			154	Yes	Yes
United Kingdom	1003	874	1101	155	110	Yes	Yes
United States			260	403	415	Yes	Yes
Total	3623	4610	7555	4174	5907		

[a]Labelled as Germany (West) in 1995/1996 and 1999/2000.

3.2 | Selection instruments

We chose six selection instruments that were all assessed in the last five rounds: (1) interview panels, (2) one-to-one interviews, (3) application forms, (4) psychometric tests, (5) assessment centres and (6) references. For each instrument, participating organisations were asked whether they use this instrument in their selection process (e.g., 'Please indicate which of the following selection methods are used in your organisation', followed by a list of selection instruments). The measurement at the organisation level was dichotomous, that is whether they use the instrument (Yes) or not (No). Let us assume that an organisation uses interview panels and psychometric tests. Using the order of the selection instruments above, we can denote the corresponding configuration as YNNYNN—expressed with dummy variables this sequence becomes 100100. We thereby arrive at $2^6 = 64$ different configurations of selection instruments. Note that the three most recent rounds assessed the use of selection instruments for up to four different staff categories (management, professional/technical, clerical and manual). To align this measure with previous rounds, we aggregated these categories; Y indicates that the selection instrument was used for at least one staff category.

3.3 | Distance measures

To assess the *geographic distance* between countries, we used CEPII's distance measures (Mayer & Zignago, 2011). This dataset provides the bilateral distances for all countries in our sample, taking into account the geographic distribution of population inside each country. To measure *cultural distance*, we employed GLOBE data from 2004 (House et al., 2004) that is provided on the project's webpage. Twenty-seven countries from the Cranet survey also took part in the GLOBE study. For these countries, we computed the distance to other countries by adding up the numerical differences between each of the nine cultural dimensions for both practices and values (i.e., 18 differences in total; Beugelsdijk et al., 2018). To capture *regulatory institutional distance*, we employed the Index of Economic Freedom (Miller et al., 2015). The index is copublished annually by The Wall Street Journal and The Heritage Foundation and includes 10 economic freedoms (e.g., labour freedom, financial freedom, government integrity) for about 180 countries in the study period. We obtained data for the corresponding years 1995, 1998,

2005, 2008 and 2014 from The Heritage Foundation's webpage. For each country and year, the 10 indices were graded on a scale of 0–100 with higher values indicating more freedom. To give all indices equal weight in the distance computation, we z-standardised all indices before computing distances between pairs of countries. Data were available for 36 out of 42 countries that participated in at least one data collection period of the Cranet survey (see Table 1). Values for labour freedom were added to the index in 2005 and could therefore not be used for earlier waves. Thus, we computed the distance based on standardised differences from nine indices for the first three waves and from 10 indices for the latest two waves.

3.4 | Control variables

The study period spans nearly two decades from 1995/1996 to 2014/2015, and some changes in country's industry setup occurred during this period. We wanted to rule out that convergence or divergence were falsely attributed to general trends in organisational characteristics, for example because of shifts from manufacturers towards more service firms in 2015 compared to 1995. To account for the internal context, we controlled for industry, organisation size and sector via propensity score matching (Harder et al., 2010). These firm characteristics have been shown to be relevant in the HRM convergence debate (e.g., Farndale et al., 2017; Mayrhofer et al., 2011). We measured industry in 14 broad categories (e.g., agriculture, metal manufacture and education); organisation size was assessed via the number of employees in the organisation; sector was either private, public or mixed. Data were taken from the Cranet survey.

Kaufman (2016) presented a recent advance in measuring convergence–divergence based on earlier work by Kaufman and Miller (2015). His approach essentially looks at the overlap of HRM frequency distributions in different countries or regions. If a country's organisations use an HR practice very often, the peak of the country's frequency distribution will be on the end of the scale that indicates high usage. If the majority of organisations in another country seldom use this HR practice, the peak of the frequency distribution will be on the other end of the scale. The overlap of the two frequency distributions indicates similarity in the two countries' use of the HR practice, and if this overlap increases between measurement points, it indicates convergence. If the two frequency distributions separate, it shows HRM divergence.

While this approach has its merits for univariate data, configurations—which are multivariate by definition—cannot be captured with a univariate frequency distribution. For tests of equal distributions in multivariate data, *energy distance* was introduced (Székely & Rizzo, 2017). This approach has been used in other research domains, for example in multivariate climate model simulations (Cannon, 2018) and for three-dimensional anatomical localisation of neurons (Lau et al., 2015). In management research, Venaik and Midgley (2015) used energy statistics to compare configurations of cultural values in different cultures with data from the World Values Survey 2005 and Schwartz's model of culture. Energy distance measures the statistical distance between two frequency distributions, in our case the distance between the configurations of personnel selection instruments in two countries. It is defined as:

$$\text{Energy}(U, V) = \frac{2}{nm} \sum_{i=1}^{n} \sum_{j=1}^{m} |u_i - v_j| - \frac{1}{n^2} \sum_{i=1}^{n} \sum_{j=1}^{n} |u_i - u_j| - \frac{1}{m^2} \sum_{i=1}^{m} \sum_{j=1}^{m} |v_i - v_j|,$$

where n is the sample size of the first sample, m the sample size of the second sample, U is the first sample data matrix and V is the second data matrix (see Shen & Vogelstein, 2020, Székely & Rizzo, 2017 or for details). For example, let us assume we want to compute the distance between France 2008/2009 and the United States 2008/2009. Accordingly, U is the data matrix from France 2008/2009 measuring the six selection tools of the n French organisations (i.e., a $6 \times n$ matrix) and V is the data matrix from the United States 2008/2009 with m organisations. The test statistic first computes the mean distance of configurations from all pairs of organisations from France and

the United States via $|u_i - v_j|$ and then subtracts mean within-group distances from France via $|u_i - u_j|$ and the United States via $|v_i - v_j|$. Accordingly, high values for Energy(U, V) occur, if the mean distance *between* the groups is larger than *within* each group, which indicates the use of different configurations of selection instruments in the two countries.

We used this test statistic to generate a 106 × 106 distance matrix that captures the similarity in the configurations of selection instruments for each country pair (e.g., France and the United States, both 2008/2009). As described above, each organisation's configuration can be specified by six dichotomous variables, where 1 indicates the use of a selection instrument and 0 otherwise. If we look at a country's configuration distribution, we might find very common configurations, while other configurations might be rare or nonexistent. Energy distance has an important advantage over a simple configuration count. Let us assume that the dominant configuration in Country A is 100100, the dominant configuration in Country B is 100101, and 011011 in Country C. Obviously, the dominant configurations in Country A and B only differ in their use of the sixth selection instrument (i.e., references). By contrast, Countries A and C commonly apply maximally different sets of selection instruments. When simply counting the configurations in the three countries, we classify all three dominant configurations as 'different', disregarding the high similarity of the dominant configurations in Countries A and B. Energy distance takes configuration similarity into account, and the distance between configurations 100100 and 100101 is much smaller than between 100100 and 011011. Accordingly, the energy distance between Countries A and B will be much smaller than between Countries A and C.

Country comparisons were adjusted in two ways. First, differing sample sizes of countries can affect the energy distance. Since we set the minimum sample size in our study to 100, we drew samples of 100 from country samples with $n > 100$ and estimated the test statistic based on the reduced samples. Second, we controlled for industry, organisation size and sector via propensity score matching. Propensity score matching aims at balancing samples based on covariates prior to the actual analysis (Harder et al., 2010). In our analyses, propensity score matching was used to identify for each observation in one sample the statistical twin in the other sample based on similarity with regard to industry, organisation size and sector. Observations with no adequately similar counterpart were dropped from the analyses, thereby removing the least similar observations from the larger sample. For example, the sample sizes for France and the United States in 2008/2009 were $n = 155$ and $m = 403$, respectively. To exploit all information in both samples while at the same time controlling for industry, organisation size, and sector, we first identified the 155 nearest neighbours of French organisations in the sample from the United States and then drew random samples with size 100 (out of 155) from the two samples. Based on 100 drawings, we arrived at a mean test statistic for the two countries' distance (details on this approach are available on request from the first author). We used this distance matrix to test Hypothesis 2, which postulates that personnel selection converged among countries.

To test the relationship of geographic distance (H1a), cultural distance (H1b), and regulatory institutional distance (H1c) among countries and configurations of selection instruments, we applied a Mantel test that is used to compute the correlation of two distance matrixes (Mantel, 1967). It is based on a correlation coefficient but acknowledges that the distances are not independent of each other. If the value for one country changes, it affects all distances of this country to other countries. The Mantel test is not very common in management research, but is widely used in other scientific disciplines to compare distance matrices, for example, to study the similarity of metabolic profiles (Turnbaugh et al., 2009) or animal behaviour in different regions (van Schaik et al., 2003).

All analyses were conducted using the software R for statistical computing (R core team, 2018). We used the *edist* function from the *energy* package (Rizzo & Székely, 2018, pp. 7–5) for distance computation of configurations; the *MatchIt* package (Ho et al., 2011) for propensity score matching; and the *vegan* package for the Mantel test (Oksanen et al., 2017).

TABLE 2 Mean use of selection instruments

	1995/1996	1999/2000	2004/2005	2008/2009	2014/2015	Total
Interview panel	0.75	0.72	0.68	0.65	0.70	0.70
One-to-one interview	0.90	0.90	0.79	0.87	0.84	0.85
Application forms	0.84	0.81	0.63	0.67	0.66	0.71
Psychometric test	0.51	0.58	0.42	0.40	0.46	0.47
Assessment centre	0.29	0.33	0.24	0.24	0.33	0.28
References	0.95	0.89	0.69	0.74	0.80	0.80

Note: Numbers in cells indicate the percentage of organisations that use the respective selection instrument.

TABLE 3 Joint frequency table for configurations in the full sample

			Yes	Yes	Yes	Yes	No	No	No	No	Interview panel
			Yes	Yes	No	No	Yes	Yes	No	No	One-to-one interview
			Yes	No	Yes	No	Yes	No	Yes	No	Application forms
Yes	Yes	Yes	2612	431	375	75	627	171	12	4	
Yes	Yes	No	264	82	39	26	108	45	1	3	
Yes	No	Yes	2883	854	514	272	1199	449	14	8	
Yes	No	No	371	123	71	36	305	76	5	5	
No	Yes	Yes	912	326	152	73	311	117	7	0	
No	Yes	No	158	101	26	40	98	79	5	8	
No	No	Yes	3379	1236	720	405	1660	676	70	41	
No	No	No	584	515	117	273	610	559	42	509	
Psychometric test	Assessment centre	References									

4 | RESULTS

Table 2 shows the mean use of the six selection instruments in the five rounds.

Overall, one-to-one interviews are the most common instrument and 85% of all organisations use this tool to select their employees. Note that direct comparisons between different years to spot development trends are of limited value, as the participating countries in the Cranet survey varied between the years (see Table 1 for details).

Table 3 contains joint frequencies for selection instrument configurations in the full sample.

The most common combination is interview panels, one-to-one interviews, application forms, and references (3379 organisations, denoted as 111001). Other configurations with over 1000 organisations are the use of all instruments except assessment centres (111101; 2612 organisations), all six instruments (111111; 2525 organisations), psychometric tests and assessment centres (110001; 1236 organisations), no interview panels, psychometric tests and assessment centres (011001; 1660 organisations), and omitting assessment centres and interview panels (011101; 1199 organisations), no application forms. Only one configuration, the sole use of assessment centres and references (denoted as 000011), is altogether absent from the sample.

A major goal of our study was an analysis of the degree to which the use of selection instruments is affected by the organisations' country. Thus, we computed the energy distance for each year and country. In total, this yielded a

TABLE 4 Excerpt of the energy distance matrix

Country and year	Denmark 2004/2005	Denmark 2008/2009	Denmark 2014/2015	Germany 2004/2005	Germany 2008/2009	Germany 2014/2015	...
Denmark 2004/2005	0						
Denmark 2008/2009	2.8	0					
Denmark 2014/2015	13.0	3.0	0				
Germany 2004/2005	39.6	60.9	74.6	0			
Germany 2008/2009	39.5	51.1	58.2	13.0	0		
Germany 2014/2015	37.5	39.6	54.2	9.7	3.2	0	

symmetric 106 × 106 matrix. Each cell contains the energy distance for the comparison of the respective pair of countries and years. An excerpt of this matrix is in Table 4, giving data from Denmark and Germany in the last three rounds. High values indicate a different use of selection instruments in the two countries. In this example, values are smaller within countries between years than between countries within years, indicating some stability in the use of selection instruments within countries over time.

Hypotheses 1a–c state that lower geographic/cultural/regulatory institutional distance between countries is related to higher similarity in personnel selection. The energy distance matrix described above assesses the similarity of personnel selection in pairs of countries. For testing H1a–c, we need to correlate this matrix to the matrixes that give geographic, cultural and regulatory institutional distances. While distances of personnel selection instruments between two countries can change over time, geographic distances are obviously stable over time. To avoid multiple accounts of the same distance, we did not allow for comparisons between rounds. For example, the distance between Denmark 2004/2005 and Germany 2004/2005 was a data point, but the distance between Denmark 2004/2005 and Germany 2008/2009 was omitted and treated as a missing value, since the geographic distance was identical in both years. We used the same approach for cultural and regulatory institutional distance, because GLOBE values were assessed only once during the study period and measures of institutional distance were relatively nonindependent in the different waves (in other words, country values for Index of Economic Freedom were relatively stable over time). This approach reduced the sample sizes for these tests.

For Hypothesis 1a, suggesting a relationship between personnel selection and geographic distance, we relate the energy distance matrix to a matrix with geographic distances. Geographic distance was available for all country pairs, but our approach to avoid multiple accounts of the same geographic distance in different rounds reduced the number of observations for the statistical test. The full 106 × 106 matrix has $106^2 = 11,236$ cells (including zeros on the diagonal), but the restricted sample size was 2215. We performed a Mantel test (Spearman's rank correlation coefficient) and arrived at $r = 0.04$ ($p > 0.05$; see Table 5). Hence, H1a is not supported. For cultural distance, we chose a similar approach and did not allow for comparisons between rounds. GLOBE data were available for 27 countries, resulting in a total of 1218 observations. A Mantel test (Spearman) yields $r = 0.18$ ($p < 0.01$), supporting H1b. Lastly, for regulatory institutional distance, a Mantel test (Spearman) indicated $r = 0.11$ ($p < 0.05$) with 2005 observations, thus supporting H1c.

Hypothesis 2 postulates that personnel selection converged among countries. We tested this hypothesis with a stepwise approach comparing the four changes between the five Cranet rounds. For each of the four tests, we used data from countries that were available in both consecutive periods (e.g., 1995/1996 and 1999/2000), as the participating countries in the Cranet survey varied. This ensures that an assessment of convergence/divergence is not biased by the choice of countries in each round. For example, a country with relatively different dominant configurations of selection instruments in a single round might increase the mean energy distance in this year after its inclusion, even though there might not have been any true convergence or divergence. That is, for an analysis of

TABLE 5 Countries' dissimilarity in personnel selection correlated with geographic, cultural and institutional distance

	Hypothesis 1a: Geographic distance	Hypothesis 1b: Cultural distance	Hypothesis 1c: Institutional distance
Full sample (for hypothesis tests)	0.04	0.18**	0.11*
Post-hoc analysis of subsamples[a]			
Clerical and/or manual jobs	0.24***	0.25**	0.14*
Managers	0.09	0.28***	0.14*
Professional/technical jobs	0.13	0.22**	0.10†

Note: Values in cells indicate Mantel correlation coefficients.

[a]Based on data from the three most recent rounds.

*$p < 0.05$.

**$p < 0.01$.

***$p < 0.001$.

TABLE 6 Convergence/stasis/divergence of personnel selection instruments over time

	From 1995/1996 to 1999/2000	From 1999/2000 to 2004/2005	From 2004/2005 to 2008/2009	From 2008/2009 to 2014/2015
Full sample (for hypothesis tests)				
Matrix correlation between rounds	$r = 0.58$***	$r = 0.65$***	$r = 0.60$***	$r = 0.60$***
Mean difference	$M_{95/96} - M_{99/00} = -1.1$	$M_{99/00} - M_{04/05} = -10.3$	$M_{04/05} - M_{08/09} = -4.1$	$M_{08/09} - M_{14/15} = -4.9$
t-Value from paired *t*-test	$t = -0.83$	$t = -10.1$***	$t = -3.07$**	$t = -5.10$***
V-value from Wilcoxon signed rank test	$V = 2557$	$V = 1683$***	$V = 9258$*	$V = 11{,}724$***
Tendency	Indicates stasis	Divergence	Divergence	Divergence
Post-hoc analysis of subsamples[a]				
Clerical and/or manual jobs	(Data not available)	(Data not available)	$r = 0.51$*** $M_{04/05} - M_{08/09} = -0.77$	$r = 0.52$*** $M_{08/09} - M_{14/15} = -1.57$**
Managers			$r = 0.52$*** $M_{04/05} - M_{08/09} = -2.11$**	$r = 0.64$*** $M_{08/09} - M_{14/15} = -4.19$**
Professional/technical jobs			$r = 0.49$*** $M_{04/05} - M_{08/09} = -1.46$*	$r = 0.50$*** $M_{08/09} - M_{14/15} = -4.77$***

[a]Values in cells indicate matrix correlation coefficients and mean differences; significance levels of mean differences based on paired *t*-tests.

*$p < 0.05$.

**$p < 0.01$.

***$p < 0.001$.

convergence/divergence between 1995/1996 and 1999/2000, we generated an energy distance matrix for countries in 1995/1996 and a second matrix with the same countries in 1999/2000. As can be seen in Table 1, data from both waves was available for 11 countries. We then compared the mean energy distance in both subsamples. Each cell in the respective energy distance matrix was treated as a data point and we used paired t-tests for statistical analyses of changes between the rounds. For a robustness check, we added Wilcoxon signed rank tests as a nonparametric approach, because we could not assume that values in the energy distance matrix are always normally distributed. Results are summarised in Table 6. The Mantel correlations show the measurement consistency between rounds.

In the first period, the mean country distance in personnel selection did not decrease but, contrary to our hypothesis, slightly increased from 25.5 in 1995/1996 to 26.6 in 1999/2000, with a net difference of -1.1. The paired t-test ($t = -0.83$, $p > 0.05$) as well as the Wilcoxon signed rank test ($V = 2557$, $p > 0.05$) were not significant, which might indicate stasis in this period. For the three subsequent comparisons, we find decreases in similarity, indicating divergence. For example, from 1999/2000 to 2004/2005, the mean energy distance increased by 10.3 units. Overall, we do not find support for Hypothesis 2 that suggested an increase in similarity.

We conducted some post-hoc analyses to test the robustness of our findings. In the three most recent rounds, the use of selection instruments was assessed for different staff categories in the Cranet study. This allowed us to analyse data from three subsamples, namely selection for (1) clerical and/or manual jobs, (2) managers and (3) professional/technical jobs for the rounds 2004/2005, 2008/2009 and 2014/2015. While we did not hypothesise on staff categories, it offers valuable information on the stability and generalisability of our results. As can be seen in the lower parts of Tables 5 and 6, results are mostly in line with findings from the full sample. Two exceptions are noteworthy. First, geographic distance is significantly correlated with similarities in countries' personnel selection for clerical and/or manual jobs ($r = 0.24$, $p < 0.001$). Second, mean differences between the rounds 2004/2005 and 2008/2009 are not significant for clerical and/or manual jobs ($M = -0.77$), while results for the other two staff categories indicate divergence.

In an additional set of post-hoc analyses, we used the Euclidean distance as an alternative to the energy distance for country comparisons. For this purpose, we computed the percentage of organisations that use each selection instrument for each country and round (see Table 2 for mean values in each round). The Euclidean distance is based on the square root of the sum of squared differences between two countries. Similar to the energy distance, it is high, if two countries differ substantially in their use of the selection instruments. Following this alternative approach, we generated an alternative distance matrix. First, the Mantel correlation of the Euclidean distance matrix with the energy distance matrix was $r = 0.97$. Hence, both approaches result in similar distance matrices. Second, hypothesis tests with Euclidean distances instead of energy distances yield similar results, that is supporting Hypotheses 1b,c and not supporting Hypotheses 1a and 2 (detailed results are available on request).

5 | DISCUSSION

Our study makes four core contributions. First, our results show substantial variation in personnel selection configurations across countries. Both informal and formal institutions have an effect as indicated by the significant correlations between cultural (informal) and institutional (formal) distance and configuration of selection practices. As hypothesised, differences in personnel selection configurations are larger between countries that are less similar in their cultural and institutional context. These findings complement prior research that shows cultural and institutional context matters when analysing HRM in total and/or the use of single HRM practices from different functional areas (Farndale et al., 2017; Gooderham et al., 2015). However, our results do not support the role of geographic proximity to explain similarities in the choice of personnel selection instruments. This surprising finding might partly be explained by some theoretical and methodological choices that we made. To start with, we did not distinguish between different groups of employees in our hypotheses. However, subsample analyses in Table 5

reveal that geographic distance seems to matter for the choice of selection instruments for clerical and/or manual jobs ($r = 0.24$, $p < 0.001$), but not for managers ($r = 0.09$, n.s.) and professional/technical jobs ($r = 0.13$, n.s.). This seems plausible for at least two reasons. On the one hand, for companies operating across national borders, there is a tendency to have similar HRM practices for key groups of employees. Taylor et al. (1996) argue that HRM systems are created differently for different groups of employees and that the similarity between HRM in the headquarters and in subsidiaries depends on the criticality of employee groups for the implementation of the strategic role. Arguably, managers and experts are highly crucial for the success of companies and they adopt personnel selection configurations based on standardised HRM policies irrespective of geographic distance. On the other hand, a global or at least less local job market exists for managers/professionals. Supranational competition for leaders and experts and universal competency models for these positions advocated by consultancies and business schools as well as communities of practice influence how companies design their selection process for these groups. They seem to gravitate towards widely shared (configurations of) selection instruments when looking for suitable candidates. Isomorphic pressure to display professionalism in the selection of key personnel, shared views within the global HR community about the role of managers/professionals, and the expectations of these groups further strengthen these tendencies. For clerical/blue collar workers, job markets are usually rather local and there is a greater global variety in requirements and qualifications. Selection configurations for these positions might thus rather capture local differences. Overall, this may result in a more similar use of selection instruments for managers/professionals.

In addition, we modelled a linear effect of geographic distance in our statistical analyses. It can be argued that the effect might be nonlinear, for example only neighbouring countries affect the choice of selection instruments, but it does not matter much if the distance between two countries is 10,000 or 20,000 km (cf. distance decay functions, Anselin, 2002). To test this idea, we simplified the coding of geographic distance and only distinguished between neighbouring countries (i.e., the two countries share a common border) and nonneighbouring countries. The correlation between this neighbours matrix and similarities in countries' personnel selection was not significant ($r = 0.03$; n.s.), which is in line with our initial test of Hypothesis 1a. However, it might be a fruitful avenue for future research to study the role of geographic distance in international HRM in more detail. Similarly, infrastructure or peculiarities of the terrain (e.g., oceans or mountain ranges between two countries) that are not captured by our measure might matter more than distance in kilometres when predicting similarities in personnel selection based on geographic proximity. Such aspects may have a larger impact on exchange processes at the organisational and individual level and HR strategy. Likewise, travel times between locations might be more important in explaining cross-border activities than absolute geographic distance (Boeh & Beamish, 2012).

Second, our findings further support the viewpoint that research has to go beyond a general convergence/divergence/stasis argument (Farndale et al., 2017; Mayrhofer et al., 2011). Looking for general convergence in HRM without carefully considering the chosen time span and contextual settings runs the risk of oversimplification or false conclusions. In our study, in none of the periods in question convergence is present. On the contrary, stasis or divergence occur for all of the analysed time spans in the study period (1995–2016). At the beginning of the period analysed, globalisation that set in on a broad scale in the 1980s was still in full swing and showing its effects. Likewise, in Europe the establishment of the European Union with its overarching legal framework also strengthened tendencies towards an emerging common model of (HR) management (see for e.g., the discussion on 'Euro-managers', Boldy et al., 1993). Still, in the HRM area that we analysed, divergence occurred. Since prior empirical evidence on convergence or divergence of personnel selection does not exist, it is important to embed this result in the broader HRM discussion. Prior studies on HRM convergence find some evidence of convergence, but also diverging trends depending on the analysed practice (Farndale et al., 2017). Theoretically, our finding is in contrast to the universalist paradigm and globalisation arguments stating that HRM converges through standardisation in legal demands, labour markets or diminishing importance of physical distance. Similarly, our findings contradict the assumption that internationalisation trends of organisations through globalisation and technological advances enhance diffusion and lead to an assimilation of HRM practices (DiMaggio & Powell, 1983; Poutsma

et al., 2006). On the contrary, our results are in line with the contextual paradigm emphasising that HRM is embedded in national context.

Our findings also raise the question of how to explain the change from stasis to divergence. As we have argued above, informal and formal institutions linked with the cultural and regulatory institutional setting for personnel selection differ across countries. In addition, they tend to vary over time, leading to patterned changes in the relative emphasis on different elements of a phenomenon. Such changes, sometimes even part of long-term pendulum swings, have not only been observed in management theory and research (Hoskisson et al., 1999), but also in practice. Examples include the changing HRM roles over time (Farndale et al., 2010) and the search for the optimal degree of (de)centralisation in organisations' global (Arnold, 1999). Theoretically, this points towards concepts that deal with organisational dualities and country-level specialisation.

At the organisational level, classic frameworks that emphasise the necessity of handling dualities include work on integration and differentiation in complex organisations (Lawrence & Lorsch, 1967), delegation and control (Perrow, 1972) and global integration and local responsiveness (Prahalad & Doz, 1987). Following, for example, the latter line of thinking, an explanation of the switch from stasis to divergence would draw on requisite variety as an underlying mechanism that leads organisation to mirror the requirements of their environment. In our case, that would mean that given an overall increase in local responsiveness demands both internationally and locally operating organisations have to put a stronger emphasis on regional and local specifics in personnel selection. For example, skills shortages and limitations of educational systems in some regions (e.g., Middle East) have led to specific challenges for organisations (e.g., difficulties in finding skilled workers) affecting personnel selection. Organisations may have realised that the transfer of HRM practices that are effective in one country to other countries is not always successful (Björkman & Lervik, 2007). Rather, they need to adopt practices proven successful in their local environment and its similar constraints and expectations. This leads to local convergence, but global divergence.

At the level of countries and in line with Kaufman's (2016) economic reasoning, trade theory and location theories predict that in the long run, globalisation leads to HRM divergence. According to trade theories (Heckscher & Ohlin, 1991; Ricardo, 1817), differences in capital, knowledge or technologies lead to specialisation and trade. For example, countries with highly skilled workers would specialise in knowledge-intense goods and services while countries with a higher proportion of lower skilled workers would focus on manufacturing and so on. Consequently, firms within a respective country would also chose specific selection configurations to hire candidates with the required skills and educational backgrounds. Similarly, following location theory (Combes et al., 2008), companies and employees cross borders and increase specialisation in the division of labour, centralisation and a core-periphery structure. This results in divergence across economies reflected in personnel selection configurations.

Of course, applying these theoretical concepts leads us into different directions with varying explanations. However, there seems to be one common denominator: the move from stasis to divergence—and, arguably, before from convergence to stasis—is no coincidence. It follows a pattern triggered by reactions to formal and informal institutions reflecting and shaping the broader economic, cultural and societal developments over the past decades.

Third, our study contributes to the theoretical foundation of the HRM-context debate in general and the convergence debate in particular. By drawing on a contextual framework of HRM (Gooderham et al., 2018) that explicitly links core HRM practices and policies with various layers of context, it helps to identify concrete contextual elements that play a role in the analysis of commonalities and differences in HRM between countries. With regard to the ongoing theoretical debate about a more universalist or more contextual paradigmatic approach towards HRM, our results strengthen the contextual side. Clearly, formal and informal institutions not only play a major role, but also seem to contribute to lasting or even increasing differences between HRM practices, in our case personnel selection, between countries.

Fourth, we contribute to methodology in the HRM convergence and the contextual factors debate. When addressing convergence, the unit of analysis is the country, not single organisations. Energy distance is a *holistic* method to view the HRM composition in a country's organisations. Countries might have a diverse set of predominant but equally effective configurations (cf. equifinality; Meyer et al., 1993). When aggregating country-level

data, this diversity is lost if country mean values are computed or the analyses are limited to single HR practices or instruments.

5.1 | Limitations and future research

Our study has some limitations. First, although the overall sample size at the organisational level was large, we could only include 106 subsamples from 42 different countries, most of them in Europe. This limits our ability to generalise the results. However, we believe the Cranet survey is currently the most extensive cross-country study of selection instruments and other HR practices, but future research might include more countries. Two further limitations of the Cranet survey are noteworthy. First, although we included five measurement rounds, the participating organisations in each round varied, which made it not possible to track organisations over time and analyse changes at the organisational level. Second, item formulations and answering options slightly varied in the different rounds. Therefore, for a valid comparison across the measurement waves, we could only include items that did not or did only marginally change over time. For example, industry classification was varied and we could only control for industry in each round, but not analyse convergence within industries over time. In future research, a closer look at different industries, organisations' degree of internationalisation, and different groups of employees might shed more light on the convergence of HR practices in various settings.

A second limitation pertains to the measure of the six selection instruments, which constitute the configurations in our study. We used the dichotomous measures from the Cranet survey, resulting in only 64 possible configurations. This allows for some descriptive statistics that provided face validity for our method (see Table 3). However, finer-grained measures and an inclusion of further selection instruments might increase the informative value of these analyses. Third, for Hypothesis 2, we used paired *t*-tests and Wilcoxon signed rank test to compare mean energy distances between the five rounds, as specific methods for distance comparisons of mean values were lacking. However, since all four comparisons between the five rounds pointed towards stasis or divergence (see Table 6), not supporting Hypothesis 2, which suggested convergence, seems self-evident. Furthermore, for Hypotheses 1a–c, we used existing data to generate matrixes of geographic, cultural and regulatory institutional distances. While geographic distances were available for all countries and arguably noncontroversial, researchers might employ other measures for cultural or regulatory institutional distance, generating insights on possible other reasons for country variability in HR configurations, as we only found small to medium effect sizes for our hypothesised effects. In addition, we did not analyse the interaction of distance (Hypotheses 1a–c) and time (Hypothesis 2), for example whether cultural distance fosters divergence over time. Overall, we believe that energy distances can be used as an analytical tool to address similar issues, for example other types of HR configurations such as the assessment of HRM systems (Combs et al., 2006).

In terms of future research, we see a number of possibilities. Theoretically, there is a clear need to further develop the comparative contextual framework. In particular, the differentiation between formal and informal institution has to be developed in more depth to provide a greater spectrum of what this means with regard to HRM. Linked to that, further clarifying the mechanisms behind these institutions and their effects on the organisation and the HRM chain. Empirically, our results point towards a number of promising future avenues. These include a broader sample of countries that is theoretically guided, for example by drawing on varieties of capitalism or culture theory. This would allow a sounder theoretical argument for grouping countries together. In a similar vein, clustering countries according to their HRM practices is not rare (e.g., Pedrini, 2016), although a closer look reveals that the empirical basis for this is somewhat fragile. The issue of vertical fit, a secondary angle in our analyses, also provides a rich ground for further analyses. Based on a theoretically well-founded grouping of countries, extending our analyses to other configurations of HRM practices or of instruments within practices would enable us to better understand the interplay between context and HRM activities. Finally, on the methodological side, the use of energy distance and approaches from the spatial sciences open up fascinating new

opportunities for studying HRM in various appearances. For example, instead of focussing on single practices, such approaches allow us to take a more comprehensive look at the interplay between various factors in HRM. Our approach, therefore, provides fruitful avenues for future HRM research.

DATA AVAILABILITY STATEMENT

The main data that support the findings of this study are available with the permission of Cranet (www.cranet.org). In addition, we used CEPII's distance measures for geographic distance (available here: http://www.cepii.fr/CEPII/en/publications/wp/abstract.asp?NoDoc=3877); GLOBE data at country level (available here: https://globeproject.com/); and data from the Index of Economic Freedom (available here: https://www.heritage.org/index/).

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