



People and place research for people and place based policies: a study of professional well-being of alumni of North Kazakhstan with Generalized Q Analysis

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Abstract

This study aimed to show why people and place-based policies should be grounded on people and place research, using Generalized Q Analysis, and shift the focus of the research from the features of observed entities on the study of entities associated with combined and evident features of people and places. For the present study “people and places” were recent alumni from the University of North Kazakhstan. The “people and place-based policies” were programs of English proficiency and international mobility provided by the University. The literature links regional development with human capital and professional wellbeing, as well as English proficiency and international mobility. First, to test this hypothesis we used a regression relating professional wellbeing of 1250 alumni with their places of origin, gender, marks, sector of employment, English proficiency and international mobility, but no major evidence was achieved. Then, to test people and places that have higher professional wellbeing, following a Generalized Q Analysis 1250 alumni from the University of North Kazakhstan were explained analyzed by 10 profiles. On the one hand, directly related with professional wellbeing and, on the other hand, clustered and related with professional wellbeing using differences and differences regression. Results indicated that people with English proficiency did not have higher professional well-being because English was not useful for existing follow-up studies and for more common employment. Alumni with professional wellbeing were male, self-employed, urban or rural that participated in student mobility activities most probably in a Russian speaking language environment. This clearer evidence justifies more attention to people and place-based approaches for people and place-based policies.

Keywords Alumni · High education · Professional well-being · English proficiency · Academic mobility · People and place-based approach · Generalized Q Analysis

1 Introduction

This paper argues that both people and place-based policies should be grounded in integrated research on people and places. While policy frameworks are often organized by sectors of governance—thereby implying a distinction between people-oriented and place-oriented interventions—an expanding body of empirical evidence suggests that this dichotomy is analytically misleading. People’s life trajectories are deeply embedded in environmental, technological, socioeconomic, and institutional spatial contexts (Barca et al. 2012). As such, policies that artificially separate “people” from “place” risk overlooking the complex interdependencies that shape development outcomes.

Human or people’s capital is widely recognized as a fundamental driver of places economic development (Heckman 2006). Some scholars argue that the spatial concentration of people fosters agglomeration economies, thereby enhancing productivity and innovation (Glaeser and Gottlieb 2008; Moretti 2012). However, the capacity to relocate in pursuit of opportunity is unevenly distributed. Low-income families often face substantial barriers to mobility, including high housing costs in more prosperous regions (Chetty et al. 2014), as well as social and institutional obstacles to integration. These constraints, jointly with other changes in the relative competitiveness of people and places, contribute to the persistence of “left-behind” populations (Rodríguez-Pose 2018; McCann 2020), shaped not only by economically declining places (Dorn and Hanson 2013; Chetty and Hendren 2018) but also by the enduring influence of resilient institutional structures (Acemoglu and Robinson 2012; Rodríguez-Pose and Garcilazo 2015; Neumark and Simpson 2015).

Most existing approaches seek to identify the factors that influence the development of people and places. On the side of people, these typically include capabilities related to education (Sen 1999; Alkire 2002), as well as skills, health, and social capital (Heckman and Corbin 2016). On the side of places, relevant contextual factors include housing conditions infrastructure (Dissart and Ricaurte 2023), industrial structure, agglomeration economies, labour market dynamics, and institutional dimensions are also emphasized, particularly the capacities of local governments, the quality of governance, and the degree of policy coordination (Rodríguez-Pose and Garcilazo 2015). Additional attention is given to spatial constraints, such as housing market pressures, geographic proximity and connectivity (Torre 2008), processes of leftbehindness (Perancho et al. 2025) and access to knowledge and information (Chetty et al. 2014). Finally, policy reach—through transfers, incentives, and targeted development programmes—is commonly examined as a determinant of places and people’s outcomes (Barca et al. 2012).

The approach adopted in this paper shares the broader objective of advancing understanding of people and place development. However, rather than concentrating primarily on isolated factors or attributes that may be stimulated through people or place-based policies, it examines people and places as consistent entities, characterized by their complementary features. From this perspective the objective is not necessarily to adjust policy tools to people and places, but rather to generate knowledge that may inform how people and places understand and shape their own development trajectories if needed, requiring suitable policies.

For the present illustrating study “people and places” are the university recent alumni of North Kazakhstan¹ and “people and place-based policies” are the programs of English proficiency, international mobility provided by the University North Kazakhstan. Professional well-being refers to the state of optimal human functioning in the context of professional activity and encompasses an individual’s perception of possessing the qualities needed for professional tasks (Pakhol 2017; Read et al. 2015). It expresses the experience of positive and negative emotions and feelings associated with the profession (Borodkina 2012). Today there are quite a lot of publications that consider the well-being of an individual in terms of professional activity (including at the workplace or in an organizational context). At the same time, there is a significant variety of terminological apparatus that clarifies this term (Seedhouse 1995). It comprises “occupational employee well-being”, “well-being at workplace”, “well-being”, “work/job-related well-being”, “well-being at work” etc. (Pakhol 2017). Such aspects as alumni’s characteristics which could include physiological, psychological and social dimensions are considered important in defining this phenomenon. “It can be measured using a global single-item or a scale covering different domains” (Read et al. 2015) like lifestyles, types of behavior and interests are of great importance (Rattanamethawong et al. 2018; Shepherd and Bolliger 2023; Lavi et al. 2021; Dachner and Makarius 2022). Professional well-being is multidimensional, involving psychological stability, career satisfaction, and institutional support structures and understanding the factors that contribute to their well-being is essential for ensuring sustainable professional engagement. (Zaimoğlu and Dağtaş 2025).

Professional well-being is conceptualized as a multidimensional construct encompassing career satisfaction, and professional integration. Individuals must possess skills that enable them to rapidly adapt to various situations and changes (Maggiore et al. 2013). In this context, the potential of young graduates gains particular significance; it combines the process of receiving a qualified education with the development of skills to conduct professional activities in English, the global language (Goodman et al. 2024). Participation in academic exchange programs and student mobility (Wu and Zhu 2024) can further broaden the horizons of young professionals, influencing their future professional sentiments, expectations, and adaptability.

Although the professional well-being of employees has been widely examined, the role of university experiences in shaping graduation professional well-being remains underexplored. Previous research has addressed the role of the modern educator as a trainer in the formation of future employees’ professional skills and competencies, leading to successful professional well-being (Baroncelli et al. 2022). Other studies have focused on the development of secondary education (Carey and Haralambous 2024) and interaction with stakeholders (Shen and Sha 2020). This process involves the complex and highly relational nature of the educator’s roles, the aims and objectives of practice requiring the provision of support and education to students, and the similarity of responsibilities regarding youth communication (Hine et al. 2022; Pryor

¹ Recent graduates are defined as individuals who completed their university education within one to two years prior to the survey. In Kazakhstan, most students graduate at the age of 20–21. This time frame was selected in accordance with the objectives of the study, because the processes of professional adaptation and the assessment of professional well-being are more clearly manifested at the early stage of a career.

and Nachman 2024). Specifically related to English proficiency (Kim et al. 2024) and Hooli et al. (2023) show that English language proficiency beyond mere linguistic ability; it contributes to professional well-being. English language proficiency is closely associated with global academic mobility-recognized by Altbach et al. (2009) as essential to academic innovation and intercultural exchange, both vital for developing a globally relevant professional identity.

This study examines what factors including English proficiency and academic mobility influence professional well-being among early-career academics in Kazakhstan. Situated within the literature on higher education and human capital, the article tries to explain how globalizing academic structures intersect with professional well-being.

Academic mobility is considered as a mechanism of human and social capital accumulation, enabling exposure to international academic norms, research networks, and labor markets. However, the benefits of mobility are contingent upon English proficiency, which facilitates meaningful participation in transnational academic spaces. Institutional support for English-medium instruction (EMI) and mobility is therefore treated as a key moderating condition.

By focusing on Kazakhstan—a post-Soviet system integrated into the Bologna Process—this study extends higher education research beyond dominant Western contexts and highlights the structural conditions under which internationalization enhances or constrains professional well-being. Specifically analyzing North Kazakhstan the paper looks at a region located in the centre north of the country, close to the Russian Federation, that has GDP levels and growth similar to the country, exactly in the divide between those provinces that are becoming rich due to internationalization and the ones that are staying behind (Rodriguez-Pose et al. 2025). Clearly a good case study where the scrutiny of local alumni can clarify the people's and places paths in an emerging country of Central Asia.

In this vein, the current study aims to evaluate the factors that influence professional perceived well-being of university alumni of North Kazakhstan with a special focus on the role of two external factors: English proficiency and the expansion of academic mobility, international contacts, and exchanges. The research takes two sequential approaches: (1) First, trying to find what factors influence declared professional wellbeing including Students Mobility and English Proficiency; (2) Second, using the Generalized Q Analysis (Dentinho et al. 2023; Nijkamp et al. 2025; Ramazanov et al. 2025) to define consistent groups of people and places related them with Professional Wellbeing.

To achieve this objective, the research is guided by the following research questions:

- (1) What factors, including English Proficiency and Academic Mobility, influence Professional Wellbeing of recent alumni?
- (2) What people and places, combined with English proficiency and academic mobility are associated to Professional Wellbeing of recent alumni?

Overall, by addressing these questions, this study aims to contribute to the understanding of professional well-being as an integral indicator of the professional devel-

opment of young employees. In this regard, the findings are expected to provide insights that could inform improvements in higher education systems and professional wellbeing, particularly by promoting English language acquisition and academic mobility opportunities.

To respond to these two research questions the article presents a literature review on professional wellbeing and on the role of universities to promote it (Point 2). Then the methodology presents the conceptual framework of the paper, linking mobility, English proficiency, and people and places with professional well-being (Point 3). Collected data from the alumni database and from questionnaires is synthesized in Point 4. Point 5 shows the results using regression analysis and Generalized Q Analysis to address the two questions. The discussion of the results appears in Point 6 and Point 7 propose conclusions and recommendations.

2 Literature review

2.1 Professional well-being

Classifications of types of professional well-being of various socio-demographic groups, including students, are widely presented and justified in the literature. Well-being can be categorized into passion for work, job satisfaction, burnout, and workaholism (Bakker and Oerlemans 2011). Transition from the student role to the professional academic role for Ph.D. studies well-being is closely related to employee productivity and efficiency (Schmidt and Hansson 2018; Laudel and Gläser 2008). Semi-structured interviews led by Haynes et al. (2012) to composition of well-being as realistic social, economic and personal expectations of Ph.D. associated during their studies with the best personal balance in private life. These studies demonstrate that, in addition to reflecting working conditions, professional well-being arises because of an individual's expectations, attitudes, and socio-economic situation.

Psychological well-being has been conceptualized as consisting of six key components: autonomy, environmental mastery, positive relations with others, personal growth, purpose in life, and self-acceptance (Ryff 1989; Espinoza et al. 2024). Ryff (1989) proposed a model of professional well-being, according to which the well-being of a person is considered in the context of professional activity, as determined by its conditions and the content of this activity. At the same time, the following primary components are formed in the structure of professional well-being: emotional well-being, the desire for growth and development, autonomy and competence which are then generalized into one integral indicator “general functioning” that characterizes the personality of a professional (Warr 1990; Hockham and Wallis 2024). Thus, professional well-being can be referred to as a multidimensional concept, encompassing emotional states, development aspirations, and the capacity to function effectively within the labor market.

2.2 University experience and professional well-being

Universities are an essential part of the entrepreneurship and innovation system on both the local and global scale. As such, understanding the impact of university alumni is important (Breznitz et al. 2019; Martini 2024; Alsos et al. 2023; Gaier 2005; Politis et al. 2004). Programs to improve professional well-being, especially for young people in the process of their labor adaptation, can be based on various strategies of psycho-physiological recovery after work, which are highlighted by a number of researchers based on the analysis and study of the role of recreation and various types of leisure activity in maintaining professional health (Fritz and Sonnentag 2006; Ambrosino and Rivera 2022; Mannerström et al. 2024). Previous studies also highlight that well-being during the transition to professional life is shaped by optimism, self-care, emotional commitment, and concerns regarding future career uncertainty, which can subsequently influence professional adaptation (Steuber et al. 2022; Diaz et al. 2024; Kara et al. 2024). Taken together, these findings indicate that university environments and early career support mechanisms play a crucial role in maintaining professional health, facilitating adaptation to new working conditions, and strengthening professional well-being among young professionals.

A key element shaping professional well-being is the introduction of training programs for employees, mainly for university graduates, aimed at improving the well-being and job satisfaction of employees through changes in work-related thoughts, attitudes, and behavioral strategies (Proudfoot et al. 2009; Watts and Hetherington 2024; Haza et al. 2022; Salazar and Schelbe 2021). Some studies posit that professional well-being is contingent upon coaching utilized by modern organizations, in addition to traditional mentoring practices (Passmore and Anagnos 2009; Teixeira and Pereira 2019; Bai and Nam 2024; Stromholt et al. 2024; Briody et al. 2022). Consequently, support mechanisms and opportunities for personal development play a crucial role in shaping early professional experiences.

On the other hand, English language proficiency becomes a central requirement for accessing global scientific knowledge and international communication, which is crucial for alumni who have recently completed their studies (Goodman et al. 2024). Therefore, English proficiency facilitates early career adaptation, participation in international activities, and access to broader employment opportunities. Similarly, academic mobility broadens the horizons of young professionals by enabling knowledge exchange, strengthening international ties, and developing professional competencies in diverse environments (Wu and Zhu 2024) critical thinking and digital literacy (Li 2025). Mobility opportunities can enhance optimism, adaptability, and confidence in future professional development by providing exposure to various educational and professional settings (Nasa and Legutko 2022).

Despite these recognized influences, the effect of university internationalization practices on the professional well-being of alumni remains insufficiently explored, particularly in Kazakhstan, where the higher education system is experiencing rapid transformation aimed at integrating into the global scientific and educational space. This scarcity of research highlights a critical need for empirical evidence to understand how English language proficiency and academic mobility can tangibly contribute to graduates' well-being and career development.

3 Methodology

In this study, a multi-stage data analysis process is followed to identify the factors affecting the professional well-being of university graduates and to reveal the relationships between variables. The research design was based on a combination of theoretical and quantitative analysis. The study drew upon scientific literature on professional well-being. The research is grounded in:

1. Human capital theory and the role of education in socio-economic development. In this regard, the study relies on the works of James Heckman.
2. Approaches aimed at identifying factors influencing human and territorial development. Here, the study draws on the works of Sen (1999), Alkire (2002), and Dissart and Ricaurte (2023).
3. Human development theory in relation to territorial and social context. In this aspect, the authors rely on the works of Andrés Rodríguez-Pose.

The survey was conducted using a standardized questionnaire. After the completion of the survey, the collected data were systematized, coded, and prepared for subsequent statistical analysis, including regression analysis, principal component analysis, clustering, and Generalized Q Analysis.

Sampling criteria included:

- Graduation from M. Kozybayev North Kazakhstan University (NKU);
- Belonging to the category of recent graduates;
- Age corresponding to the early stage of professional development;
- Availability of complete information on the factors studied and the resulting indicator.

The Conceptual Framework presented in Fig. 1 explains the logic of the approach to address the two questions highlighted in the introduction.

- (1) To better understand (Question 1) a linear regression is estimated relating professional wellbeing with English proficiency, students' mobility and other control variables (grade, age, gender, and urban or rural origin; and employment sector).
- (2) To investigate who perceives higher professional well-being (Question 2) a Generalized Q Analysis is applied to data along the following steps: (1) Transposing the data set so that observations become variables, and variables become observations, normalized and expanded to all possible combinations of 10 dummies (10 variables leads to $2^{10}=1024$ transposed observations); (2) Second, a Principal Component Analysis is undertaken to collapse the 1250 respondents into 10 components with eigen values higher than 1; (3) Third, the standardized coefficients regression of the extracted scores with the 10 dummies is used to characterization of the 10 components, or 10 virtual alumni with exaggerated features; (4) Fourth, using the varimax rotated scores that relate the 10 components (or the virtual exaggerated alumni) with 1250 alumni it is possible to cluster the respondents in to 12 clusters of people and places, connected with gender, place

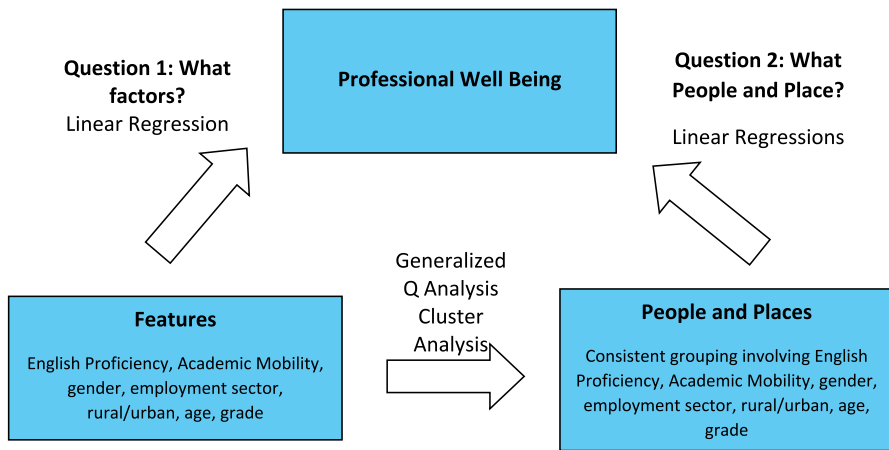


Fig. 1 Conceptual framework of professional well-being

and employment; (5v) Finally, using a differences in differences regression, it is possible to understand how, for each one of these 12 groups of people and place, professional wellbeing relates to English proficiency, students' mobility, students marks and age.

4 Data

This study employs a structured questionnaire survey administered to university alumni of North Kazakhstan University named after Manash Kozybayev. Data was collected through the university's official e-platform using the standard alumni assessment form. A total of 1250 graduates participated in the survey, from a total of 1600 recent alumni of the University of North Kazakhstan. The sample includes alumni who speak English and took part in academic mobility programs during their university studies.

The assessment of professional well-being was carried out using indicators ranked and structured into criteria reflecting three main dimensions: competence (knowledge), motivation, and self-assessment. These indicators were determined in accordance with the approach proposed by van Horn et al. (2004), which enables structuring variables in alignment with essential attributes influencing labor market outcomes.

The variables used in this research included knowledge of English, academic mobility, professional well-being, plus information about marks, age, gender, urban or rural origin, sector of occupation (public, business, master student, or self-employed).² Knowledge of English was evaluated within a score range of 1–4. Academic mobility was assessed within a score range of 1–10, consisting of three components: expanding knowledge horizons (0–3), gaining new knowledge (0–4), and motivation related

²Alumni employed without permanent contract.

to participation in mobility programs (0–3). Professional well-being was measured within a total score range of 1–10 through four subcomponents: employment or self-employment status (0–4), health condition (0–2), timely payment of taxes (0–2), and overall self-assessment of professional realization (0–2).

Table 1 provides an idea of the respondents. They are all 20 and 21 years old, with similar grades from (2.4 to 3.9), 60% male, 47% urban, 35% employed in the public sector, 37% employed in the Business sector, 15% doing their post-graduation as master students and 13% self-employed. Mobility and English Proficiency profiles vary among them more than the perceived Professional Wellbeing.

5 Results

5.1 Question 1: what factors influence declared professional wellbeing

To examine what factors influence more professional wellbeing (Question 1), we estimate a linear regression model relating professional well-being to English proficiency, student mobility, and a set of control variables. The results are presented in Table 2. Overall, the findings do not reveal a robust and expected relationship between professional well-being and either student mobility or English proficiency.

In Model 1.4, the only variables that appear to exert some influence on reported professional well-being are alumni occupational status. Student mobility displays a statistically observable effect, but with a negative sign. By contrast, employment in the public sector, employment in business and enrolment in a master's program have a relative negative impact on professional wellbeing. Implicitly captured in the constant term- self-employment exhibits relatively higher baseline levels of professional well-being. English proficiency, age, gender, and place of residence do not yield statistically significant coefficients in these specifications.

Model 1.5 presents a more parsimonious specification including only the most relevant variables. In this model, mobility continues to show a negative association with declared professional well-being, while self-employment is positively associated with professional well-being relative to other employment categories.

Table 1 Features of the respondents

1250 Alumni	Average	Standard deviation	Maximum	Minimum
Mobility (12-1)	4.83	2.85	12.0	1.0
English proficiency (12-1)	4.79	2.77	12.0	1.0
Grade	3.30	0.28	3.9	2.4
Age	20.62	0.57	22.0	20.0
Male (1) female (0)	0.57		1.0	0.0
Urban (1) rural (0)	0.51		1.0	0.0
Public (1) non-public (0)	0.34		1.0	0.0
Business (1) non-business (0)	0.39		1.0	0.0
Master student (1) non-master student (0)	0.15		1.0	0.0
Self-employed (1) non-self-employed (0)	0.12		1.0	0.0
Professional wellbeing (12-1)	5.13	2.92	12.0	1.0

Table 2 Professional wellbeing related to mobility and English proficiency

Professional wellbeing	Model 1.1		Model 1.2		Model 1.3		Model 1.4		Model 1.5	
R2	0.002		0.003		0.004		0.015		0.007	
p	0.106		0.142		0.082		0.026		0.009	
	B	p	B	p	B	p	B	p	B	p
(Constante)	5.353	0.000	5.516	0.000	7.259	0.025	7.631	0.019	5.276	0.000
Mobility	-0.046	0.106	-0.047	0.100	-0.048	0.095	-0.050	0.077	-0.048	0.088
English			-0.033	0.255	-0.035	0.225	-0.037	0.197		
Grade					-0.681	0.022	-0.742	0.015		
Age					0.020	0.893	0.046	0.763		
Male/female					-0.062	0.746	-0.070	0.716		
Urban/rural					0.267	0.161	0.259	0.173		
Public							-0.773	0.017		
Business							-0.825	0.009		
Master student							-0.880	0.018		
Self employment									0.768	0.009

5.2 Question 2: what people and place declare higher professional well-being

To find the response to Question 2—What people and place declare higher professional well-being? a consistent treatment of data, following (Dentinho et al. 2023), is requested:

- (1) First, to shift from features to people and places, it is necessary to transpose the data set so that observations become variables, and variables observations, normalized and expanded to all possible combinations of 10 dummies. 10 variables lead to $2^{10}=1024$ transposed observations. Each new observation for each one of the 1250 questionees (i) and each one of the 1024 (j) result in combined responses given by:

$$x_{ij} = \sum_{K=1}^{10} \sum_{k=1}^{10} X_{ki} X_{kj} \text{ for all } k, i, j \quad (1)$$

The composed data set will have 1024 rows of composed variables and 1250 columns of respondents (Table 3).

- (2) Second, a Principal Component Analysis is undertaken to collapse the 1250 respondents into 10 components with eigen values higher than 1. Graph in Fig. 2 shows that the first non-rotated component explains 52% of the Variance and, until the 5th Non-Rotated Component, 87% of the Variance is explained and 84% of the Rotated Components.
- (3) Third, the standardized coefficients regression of the extracted scores with the 10 dummies is used to get all the complementarity of transposed variables, allowing the characterization of the 10 components, or 10 virtual alumni with exaggerated features Table 4 presents the 10 that explain 100% of the variance of the data.

Table 3 Transposed normalized and combined observations

	№											Q1	Q2	...	Q1249	...	Q1250
	Mobility											0.00	0.09	...	0.0909	...	0.0909
	English											0.18	0.36	...	0.0909	...	0.3636
	Grade											0.81	0.35	...	0.5033	...	0.5294
	Age											0.00	0.00	...	0.5000	...	1.0000
	Gender											1.00	1.00	...	1.0000	...	0.0000
	Urban Rural											0.00	0.00	...	0.0000	...	1.0000
	Public											1.00	0.00	...	0.0000	...	1.0000
	Business											0.00	1.00	...	1.0000	...	0.0000
	Master student											0.00	0.00	...	0.0000	...	0.0000
	Self employment											0.00	0.00	...	0.0000	...	0.0000
	D	D	D	D	D	D	D	D	D	D	D						
	Mobility	English	Grade	Age	Gender	Urban	D	D	D	D	D						
						Rural				Public	Business	D	D	D	D	D	D
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

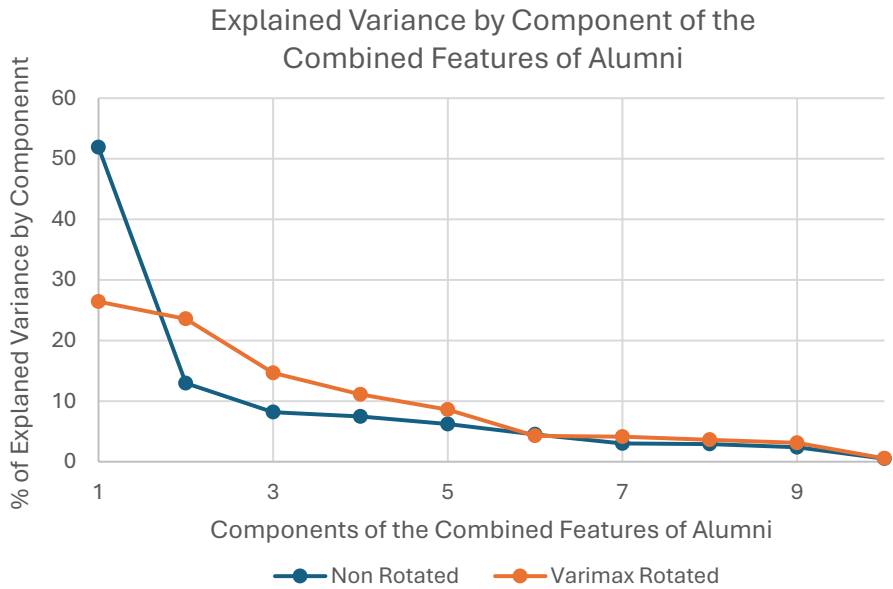


Fig. 2 Explained variance of the combined features of alumni

Table 4 Coefficient regression o the extracted scores with the features

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
Explained Var.	26%	24%	15%	11%	9%	4%	4%	4%	3%	1%
Naming	Business /Males	Public	Urban / Females	Master	Self	Mobile	Old	English	Low Grade	High Grade
Mobility	0,094	0,120	0,091	0,098	0,111	0,883	-0,282	-0,044	0,276	0,100
English	0,126	0,153	0,029	0,087	0,110	-0,113	-0,109	0,935	0,156	0,132
Marks	0,244	0,287	0,119	0,256	0,252	0,079	0,274	-0,066	-0,608	0,509
Age	0,059	0,112	0,111	0,19	0,037	-0,009	0,761	-0,071	0,589	0,055
Gender	0,516	0,274	-0,353	0,196	0,234	-0,343	-0,368	-0,294	0,314	0,054
Urban Rural	-0,029	0,050	0,892	0,067	0,100	-0,259	-0,282	-0,142	0,137	0,032
Public	-0,149	0,860	0,029	-0,152	-0,170	0,028	0,04	-0,003	-0,106	-0,414
Business	0,776	-0,178	0,209	-0,18	-0,203	0,119	0,157	0,078	-0,165	-0,42
Master student	-0,099	-0,100	-0,014	0,878	-0,132	0,022	-0,047	0,042	-0,14	-0,409
Self employment	-0,100	-0,090	-0,010	-0,105	0,871	0,038	0,107	0,029	-0,085	-0,437

- (4) Looking at Table 4, Component 1 relates with alumni employed in the business sector, mainly males, with relatively good marks. Component 2 is associated with alumni employed by the public sector with more males than females, and relatively good marks; Component 3 represents the more urban alumni, female and with some employment in the business sector. Component 4 represents Master students, older and with good marks; Component 5 shows the profile of self-employed also with good marks. Component 6 refers to alumni with student's mobility, bad English Proficiency not so good marks, female, rural and employments distributed by all sectors. Component 7 represents older alumni with good marks and non-mobile. Component 8 refers to alumni with better

English proficiency, female, younger and rural. Component 9 corresponds to alumni with lower grades, older and male. Finally, Component 10 highlights the alumni with higher grades non employed. Components symbolize exaggerated profiles of people and places. Component 1 represents what is the more common profile of alumni, Component 2 represents what is common from the variance not included in Component 1 and so forth. So, each component can be considered as an extreme profile of the population that in this case, is represented by ten extreme profiles.³ Fourth, using the varimax rotated scores per component with 1250 alumni professional wellbeing, it is possible to estimate how Professional Wellbeing changes with the components or alumni profiles, Table 5 indicates that the more relevant profiles for Professional Wellbeing are Component 3 (Urban, Female) and Component 5 (Self-employed). Strange is the indication of Component 10 (Alumni with higher grades) that seems desolated with professional wellbeing. Component 6 (Mobility) shows a non-robust ad negative impact on Professional Wellbeing and English proficiency (Component 8) indicates a non-robust impact of Professional Wellbeing. Note that, according to Table 4, English proficiency and students mobility are not related because students move mainly to where Russian is the common language and not English.

- (5) Fifth, the graphic representation of the extracted rotated scores for the 10 Components for the 1250 alumni cluster into 12 main groups. A Cluster Analysis based on these two components lead to a clearer definition of each of the clusters based on gender (Male, Female, Male/Female); place (Urban, Rural, Urban/Rural); and employment (Public, Business, Master/Self-employed). Table 6 presents the regression between Professional Wellbeing and combined Features of Alumni and each of the combinations of condition related to gender, place or origin and employment sector and Table 7 presents the same estimates, but with the selection of only the variables with robust coefficients.

Results show that the type of alumni that tend to score higher levels of professional wellbeing are: (10) Male, self-employed, younger, coming from urban or rural places. They are the only ones for whom students' mobility plays a positive and robust role. (4) Urban Female employed in the Public Sector where, strangely, higher marks are associated with lower levels of well-being. (4) Urban and Urban Female employed in the Business Sector where, strangely, higher marks are associated with lower levels of well-being, may be because they do not like what they do. And the interpretation can go on.

The importance of the exercise is that looking are people and places instead of factors it is possible to inform the stakeholders to follow a better path for their professional well-being. "Chose to go abroad even if you get lower marks and chose to be self-employed rather to choose an immediate career in the public or the business sector of even chose to continue your academic career as a master student". From Table 1 only 12% of the students are self-employed.

³ In the work of Pepeka et al. (2022) on land ownership and food security the authors associated the components with personages of the novels of the writer Pepetela from Angola.

Table 5 Professional wellbeing related to components

Professional wellbeing	Model 2.1		Model 2.2	
	Linear		Linear	
	All components		Robust components	
R2	0.015		0.013	
p	0.042		0.001	
	B	p	B	P
(Constante)	3.828	0.251	4.788	0.000
C1-Business	0.635	0.791		
C2-Public	0.834	0.744		
C3-Urban	1.035	0.508	0.584	0.099
C4-Master student	0.687	0.765		
C5-Self employed	1.783	0.389	1.203	0.010
C6-Mobility	-0.421	0.653		
C7-Old	0.691	0.419		
C8-English proficiency	0.008	0.993		
C9-Low grade	-0.342	0.775		
C10-High grade	-5.679	0.207	-4.433	0.000

Table 6 Professional wellbeing related to combined features of alumni

Constant		-3,250	0,743	Dummy	Mobility	English	Grade	Age					
Female	Rural	Business	24,258	0,122	-0,121	0,241	0,073	0,487	-1,789	0,131	-0,469	0,401	1
		Public	4,896	0,754	-0,257	0,016	-0,130	0,214	-1,075	0,351	0,416	0,474	2
	Urban	Business	23,337	0,131	-0,069	0,490	-0,062	0,568	-0,664	0,516	-0,607	0,283	3
		Public	22,540	0,180	0,030	0,786	0,032	0,777	-2,205	0,051	-0,341	0,586	4
	Urban/Rural	Public	-7,393	0,690	-0,211	0,082	0,258	0,042	0,943	0,480	0,652	0,376	5
Male	Rural	Business			0,016	0,863	0,017	0,855	-0,126	0,889	0,399	0,367	6
		Public	3,161	0,830	-0,059	0,521	0,063	0,523	-0,587	0,550	0,332	0,519	7
	Urban	Business	10,399	0,432	-0,071	0,378	-0,160	0,037	-0,672	0,427	0,081	0,845	8
		Public	11,347	0,434	-0,159	0,065	-0,127	0,152	-1,520	0,097	0,178	0,720	9
	Urban/Rural	Self	41,291	0,010	0,240	0,041	-0,041	0,725	-2,172	0,059	-1,267	0,032	10
Male/Female	Rural	Master	-6,616	0,657	0,029	0,768	-0,184	0,072	0,035	0,974	0,757	0,153	11
	Urban	Master	-4,521	0,768	0,048	0,684	-0,025	0,827	0,757	0,475	0,476	0,356	12

6 Discussion

In the introduction, professional well-being was defined as a multidimensional construct encompassing career satisfaction and professional integration. The results demonstrate this. Professional well-being does not depend on the influence of isolated factors, as asked in Question 1, but on the people, places, and roles in which they are integrated, as we attempted to answer in Question 2.

In fact, even in the response to Question 1, the determining factors in professional well-being were not the respondent's conditions taken (student mobility, English proficiency, gender, rural or urban origin, grade) but rather the workplace or occupation (public, business, master's participation, or self-employment) (Table 2); interestingly, self-employment had a significantly greater impact on professional well-being than alternative occupations.

But the most revealing aspect of this study is that contrary to what the cited literature says (Kim et al. 2024; Hooli et al. 2023), English proficiency did not make a difference in declared professional well-being, certainly because the most widely spoken interna-

Table 7 Professional wellbeing related to robust combined features of alumni

Constant	-4,154	0,347	Dummy	Mobility	English	Grade	Age	Ran
Female	Rural	Busines	9,333	0,03				1
		Public		-	0,02		0,490	0,02
	Urban	Busines	8,858	0,04				3
		Public	16,94	0,00		-	0,04	4
	Urban/Rura	Public		-	0,07	0,255	0,04	5
Male	Rural	Busines					0,430	0,04
		Public					0,436	0,04
	Urban	Busines	10,39	0,01		-	0,03	8
		Public	10,27	0,02	-	0,06		9
	Urban/Rura	Self	43,25	0,00	0,243	0,03	-	0,05
Male/Femal e	Rural	Master			-	0,06	0,495	0,02
	Urban	Master					0,427	0,04

tional language in Central Asia is Russian, not English. The same is even clearer with student mobility, which, taken as a factor, has the opposite effect to what the reviewed literature suggests.

In response to question 2, several ways were used to explore the available data, but always from a perspective of focusing on people and places, not the features used to respond to Question 1. The results of the Generalized Q Analysis in Table 5 made it clear once again that English proficiency and student's mobility have little effect on declared professional well-being. In fact, it is female alumni from urban areas (Component 3) and self-employed alumni (C5) who report better professional well-being; in this analysis, although Component 10, marked by school classification, is marginal (1% of the explained variance), it is important to reflect on why there are good students who feel professional distress.

Delving deeper into question 2, we return to the model in Table 2, but using the differences-in-differences methodology to verify if there were differences in the assessment of well-being at work according to people and places scrutinized in the Generalized Q Analysis. Results are interesting. First, students' mobility and English proficiency do not show up as important in declared professional well-being, and when they are, the signal is negative.

Second, what stands out is good performance in undergraduate studies, especially for male students enrolled in master's programs or self-employed, who can thus recover the negative effect of their master's enrolment on professional performance, indicated by the coefficient of the constant for that group.

Despite these recognized influences, the effect of university internationalization practices on the professional well-being of alumni remains insufficiently explored, particularly in Kazakhstan, where the higher education system is experiencing rapid transformation aimed at integrating into the global scientific and educational space. This scarcity of research highlights a critical need for empirical evidence to understand how English language proficiency and academic mobility can tangibly contribute to graduates' well-being and career development.

Summing up people and places analysis seem to be more adequate to inform people and people's-based policies. It is true that the study of the factors that influence professional wellbeing (Question 1) identified self-employment as the main factor. But the scrutiny of who gets higher professional wellbeing (Question 2) is better responded by looking at the profiles that achieve higher results: self-employed associated with students' mobility programs.

7 Conclusion

The paper aims to show why people and place-based policies should be grounded on people and place research. Looking at the specific case of professional well-being of university alumni in Kazakhstan using Generalized Q Analysis it became evident that more attention to people and place-based approaches are needed to assume informed better attitudes and design more effective policies.

More specifically the study aimed to examine the professional well-being of university alumni in Kazakhstan by focusing on two external factors emphasized within the framework of global educational internationalization, namely English language proficiency and academic mobility. For this purpose, survey data from recent graduates were analyzed to assess the extent to which these components relate to professional well-being outcomes in the early transition from university to employment.

The findings highlight that, despite what could be expected, these two factors—English proficiency and students' mobility—do not yet influence declared professional well-being among university alumni, either by considering these factors per se addressing Question 1 or looking at people and places defined by a set of complementary features, trying to respond to Question 2.

These results are not deceptive because, assuming that what is reported by the international literature, they reinforce the importance to invest both English language education and academic exchange opportunities within Kazakhstan's higher education sector, more relevant if postgraduation courses are taught in English for national and international academics. By enhancing these areas, universities may provide graduates with improved access to global labor markets, stronger professional adaptability, and increased confidence during the first stages of their careers. At the same time, ensuring reliable employment conditions in start-ups, and master's degrees that lead to business projects, reinforcing the indication that self-employment associates with better professional well-being.

While this study offers practical insights into educational policy and graduate support mechanisms, it is limited to a single institutional context and data collected immediately after graduation. Future research may benefit from longitudinal designs to evaluate how professional well-being evolves over time and across places, and how additional factors such as workplace culture, career development opportunities, and personal psychological resources contribute to longer-term outcomes.

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