Comparative Study of Professional Motivation and Emotional Intelligence of Future Primary School Teachers (Based on a Kazakhstani-Spanish Sample)

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ABSTRACT

Aim. is to conduct an empirical investigation and provide a theoretical justification of the features of professional motivation and emotional intelligence of Kazakhstani and Spanish future primary school teachers, with an emphasis on cross-cultural factors and gender differentiation.

Methods. The Kazakhstani sample consisted of 57 primary school teachers who studied at Abai Kazakh National Pedagogical University (Kazakhstan). The Spanish sample included 54 primary school teachers enrolled at the University of Granada (Spain). Valid and reliable psychodiagnostic instruments were used.

Results. An advantage of KAZ samples in "professional motive" and "social usefulness" was recorded for the cross-cultural grouping variable. According to gender, eleven significant differences were identified in the Kazakhstani sample and three in the Spanish sample. Males in the Kazakhstani sample showed an advantage in "social status", "comfort", "avoidance motive", "life support" and "social usefulness", while females demonstrated a higher level of "creative activity", "professional motive", "social motive", "communication", "general activity", and "emotional awareness". This suggests that the modern education system in Kazakhstan is attractive to the male segment of the sample, which is driven by "social support". In the Spanish sample, females show an advantage in the "life support" motive, "social motive", and "social usefulness", indicating a dominance of a general life-oriented focus within their personality structure. The correlation matrices revealed positive correlations for the educational-cognitive motive, comfort motive, and communication motive, along with an expected inverse relationship with the avoidance motive and life support motive.

Conclusions. It was noted that the corporate culture of the universities significantly influences the traditions and customs of educational and professional training. The identified significant differences and psychological correlates are of scientific interest; it is advisable to integrate them into the educational processes of universities.

Keywords: educational process, educational and professional training, university corporate culture, educational-cognitive motive, social usefulness, emotion regulation, gender differentiation

INTRODUCTION

The need to compare professional motivation and emotional intelligence in training future primary school teachers in Kazakhstan and Spain is driven by historical and cultural factors. Educational traditions in Kazakhstan combine the historical roots of nomadic pedagogy, Islamic culture (madrasa) and the Soviet system, transformed into a contemporary model. Primary education in Kazakhstan is based on professional motivation and academic achievements. Educational traditions in Spain focus

on emotional development, health-saving technologies, and open-air schools. Primary education in Spain cultivates well-developed emotional intelligence. Comparing two educational systems with different historical and cultural dimensions aims to identify cognitive value and common and distinctive features. Future primary school teachers' professional motivation and emotional intelligence are key factors in successful pedagogical activity. In educating early primary-age children, emotional intelligence enables educators to create a positive learning environment, effectively interact with students and colleagues, and enhance their own professional effectiveness (Sökmen & Sarikaya, 2022). Researchers interpret emotional intelligence as a combination of the educator's various abilities, which include recognising, understanding, and managing one's own emotions, feelings, and psychophysiological states, as well as influencing the emotional-volitional sphere of other interaction subjects (Karpenko et al., 2024). In turn, professional motivation serves as an indicator of the educator's attitude towards work. It reflects their desire for development, drive to perform professional tasks, and achievement of personal goals.

Researchers Perisat Dautkalieva and Zaure Ormanova (2020) believe that professional motivation is an internal driving force that contributes to the personal development of a young specialist and is aimed at mastering and improving their professionalism. It is justified that professional motivation is important for a student and is formed within the educational process. The study by Rose Moldabaeva et al. (2024) reveals the influence of professional orientation on the structure of students' motivation. The dominance of professional motives is associated with the desire to use knowledge, skills, and abilities in future professional activities and to realise their competencies in practical work. The article by Dautkalieva et al. (2025) presents the results of an experimental study on the formation of professional motivation among future specialists in the teaching profession during university education. The researchers drew a parallel: the professional motivation of the student – a future teacher – can influence the development of a competent and responsible schoolchild with a stable system of spiritual and educational values. In their work, Jiying Han and Hongbiao Yin (2016) conducted a fundamental review of teachers' professional motivation and grouped the obtained data into five research areas: the first – factors influencing teachers' motivation; the second – teachers' motivation and teaching effectiveness; the third – teachers' motivation and student motivation; the fourth – research on teachers' motivation by different educational components; the fifth – tools for assessing teachers' motivation. As a result of their analysis, the authors identified the most relevant and promising research direction, which relates to the content of the problem and depends on the contextual issues.

Alongside the problem of future teachers' professional motivation, there is a critical need to develop emotional intelligence both in teachers and students. The current social challenges, innovative processes in education, the growth in the share of educational programs mastered through computer applications, and the development of the digital

educational space do not promote the actualisation of emotional intelligence; rather, they are already based on an established level (Kariyev et al., 2022; Kovalchuk et al., 2022). In this context, the didactic strategies and case studies for adaptive and responsible learning proposed by the authors are relevant (Vargas-Hernández & Kariyev, 2023; Vargas-Hernández et al., 2023). The emotional intelligence of primary school teachers is a key aspect of their professional activity, as it influences their interactions with students, colleagues, and parents, as well as the general psychological climate in the classroom. The development of emotional intelligence allows teachers to understand and manage their own emotions better, as well as the emotions of children, which promotes more effective learning and positive psychological development of students, higher job satisfaction among teachers, and greater trust among colleagues (Singh & Loh, 2024). Spanish researchers Inmaculada García-Martínez et al. (2021), during a comparative study of the connection between emotional intelligence, educational achievements, and academic stress among future teachers, found that female educators tend to outperform male educators in the parameters of emotional intelligence, academic stress, and academic achievements. It was noted that the sample consisted of 1,020 respondents aged 17 to 50 and was formed randomly. A direct and significant relationship between emotional intelligence, academic stress, and the achievements of student teachers was also established. In a similar study, Begona García Domingo (2021) collected materials on improving and developing emotional competence among preschool and primary education teachers. Emphasis was placed on discussing the identified facts and factors to create effective recommendations. Óscar Gavín-Chocano et al. (2024) established a connection between emotional intelligence and key components of the professional development of future teachers, such as self-esteem and optimism. Researchers Mingwei Li et al. (2024), using the "Job Demands-Resources" model, studied emotional intelligence and job satisfaction among teachers. Using structural equation modelling, researchers found that emotional intelligence can significantly predict student receptivity through a sequential mediating effect. There are a number of other studies on the components of emotional intelligence in students and future teachers that focus on the content-related aspects of development (Burkhanova & Tazhina, 2020; Papoutsi et al., 2023), the importance of emotional intelligence in professional activity (Calandri et al., 2025; Muho et al., 2024), and the integrity and structure of the teacher's personality (Cristóvão et al., 2023; Khalil & Hazwani, 2023). Socio-educational changes in the post-pandemic period are leading to new challenges and transformative shifts, prompting the search for universal and effective mechanisms to address pressing educational problems and forecast the future (Kobylarek et al., 2021; Mytskan et al., 2023).

The retrospective analysis of the aforementioned modern studies did not allow for tracking the values and significant differences in the content parameters of respondents' professional motivation and emotional intelligence. The research design and nineteen variables comprehensively reflect the current state of the studied

phenomena in Kazakhstani and Spanish subsamples. They are characterised by scientific novelty and cognitive value and allow for identifying common and distinctive features. The proposed investigation of professional motivation and emotional intelligence among Kazakhstani and Spanish future primary school teachers is a comparative descriptive strategy aimed at identifying significant differences in communicative, educational-cognitive, social, and professional motives, as well as motives for avoidance, prestige, and creative self-realization, based on the measurement of current needs and their satisfaction in professional activities, along with the components of emotional intelligence of the studied individuals. It is also acknowledged that the corporate culture of the universities where the future specialists studied may significantly influence the levels of the research variables' expression.

Based on the reviewed literature and the identified gap, the following hypotheses were tested: a) comparing the studied variables of the Kazakhstani and Spanish samples across the cross-cultural component will reveal significant differences. The proposed hypothesis a) is based on a profound impact of the national culture and educational systems of Kazakhstan and Spain, which is of considerable scientific interest; b) comparing the variables of professional motivation and emotional intelligence by gender in the Kazakhstani sample will not show significant differences; c) comparing the variables of professional motivation and emotional intelligence by gender in the Spanish sample will not show significant differences. Based on contradictory conclusions and analysed literature on gender differentiation of professional motivation and emotional intelligence in education, the hypotheses b) and c) about a lack of significant differences in the studied subsamples were proposed; d) the combined sample will exhibit a set of psychological correlates of professional motivation and emotional intelligence. According to the hypothesis d), determining the strength and direction of a correlation between the variables of the studied phenomena will allow for recording data patterns, making predictions, and performing analysis.

The aim is to conduct an empirical study and provide a theoretical justification of the features of professional motivation and emotional intelligence among Kazakhstani and Spanish future primary school teachers, focusing on cross-cultural factors and gender differentiation.

METHODS

Participants

The comparative cross-cultural study comprised two samples (Table 1) forming the overall research sample (n = 111). Respondents were future primary school teachers – students from two universities: Abai Kazakh National Pedagogical University (Almaty, Kazakhstan) and the University of Granada (Granada, Spain). Students were

enrolled in a bachelor's degree program specialising in "Primary School Pedagogy." The Kazakhstani sample included 57 students studying at a Kazakh university. The Spanish sample consisted of 54 future primary school teachers enrolled at the University of Granada. The respondents' ages ranged from 19 to 27 years.

Table 1

Research Kazakhstani-Spanish Sample (N = 111)

Sample	**Spain (N = 54)**		**Kazakhstan (N = 57)**		**ANOVA**		
ESP & KAZ	Female (n = 25)	Male (n = 29)	Female (n = 45)	Male (n = 12)	F	p	η^2_p
	Mean, SD	Mean, SD	Mean, SD	Mean, SD			
	21.56 ±3.95	20.94 ±3.57	22.32 ±4.02	21.89 ±3.68	.179	.910	.014

Note. ESP – the Spain sample of primary school teachers; KAZ – the Kazakhstan sample of primary school teachers; N and n – number of respondents; SD – the standard deviation; η^2_p – (partial eta-squared) denotes a measure of effect size in ANOVA.
Source. Own research.

Organisation of Research

The comparative cross-cultural study was conducted using a comparative descriptive strategy. The research was organised as part of an international scientific grant project in collaboration with the foreign partner university – the University of Granada (Granada, Spain) – on the topic "Research on the influence of emotional-motivational factors on mastering language competencies by future primary school teachers using artificial neural networks" (Order №05-04/250 dated 03.04.2025). Participants' informed consent for participation in the international research project was obtained from the Scientific and Methodological Councils and Ethical Committees of Abai Kazakh National Pedagogical University (Almaty, Kazakhstan) and the University of Granada (Granada, Spain). The design for comparing empirical data was agreed upon with the research organisers from the two universities. Before data collection, the psychodiagnostic instruments were identified and approved, with adaptations made for the Kazakhstani and Spanish samples. Written consent was received from participants to take part in the survey. The surveys were conducted confidentially in classroom settings. Respondents were provided with comprehensive information about their voluntary participation in the study. All ethical requirements related to empirical and experimental psychological research were strictly observed by the organisers.

Procedures and Instruments

The proposed research strategy involved the use of three methods. Two psychodiagnostic tools – the "Diagnostics of Learning Motivation" (DLM) (Badmayeva, 2004)

and the "Diagnostics of Motivational Structure of Personality" (DMSP) (Milman, 1990) – were used to determine variables of professional motivation. The "Emotional Intelligence Test" (EIT) (Hall, 2007) allowed for assessing respondents' emotional intelligence parameters. The necessity of applying two motivation-oriented methods was due to their differing content components. The "Diagnostics of Learning Motivation" (DLM) (Badmayeva, 2004) reflected the structure of relevant motives within the context of educational and professional activity, while the "Diagnostics of Motivational Structure of Personality" (DMSP) (Milman, 1990) primarily captured the measurement of current needs and the degree of their satisfaction in professional activity. Seven scales of the "Diagnostics of Learning Motivation" (DLM) (Badmayeva, 2004). A unipolar five-point scale was used. The reliability statistic according to Cronbach's alpha corresponds to a high level (Table 2). The "Diagnostics of Motivational Structure of Personality" (DMSP) (Milman, 1990) was used to identify seven parameters. The Cronbach's alpha reliability statistic indicates a high level (Table 2). The "Emotional Intelligence Test" (EIT) (Hall, 2007) assessed five dimensions. A bipolar six-point scale was employed. The Cronbach's alpha reliability coefficient indicates a high level (Table 2). All psychodiagnostic tools were adapted for Kazakhstani and Spanish samples.

Table 2

Statistical Data of the Psychodiagnostic Research Instruments

Scale	**Measurement range**	**Statistical reliability (Cronbach's alpha), α**
"DLM" (Badmayeva, 2004)		
Communication motive (CMT)	1.00 – 5.00	.912
Avoidance motive (AM)	1.00 – 5.00	
Motive of prestige (MP)	1.00 – 5.00	
Professional motive (PM)	1.00 – 5.00	
Creative self-realisation motive (CSRM)	1.00 – 5.00	
Educational-cognitive motive (ECM)	1.00 – 5.00	
Social motive (SM)	1.00 – 5.00	
"DMSP" (Milman, 1990)		
Life support (LS)	.00 – 10.00	.892
Comfort (C)	.00 – 8.00	
Social status (SS)	.00 – 8.00	
Communication (CM)	.00 – 11.00	
General activity (GA)	.00 – 8.00	
Creative activity (CA)	.00 – 11.00	
Social usefulness (SU)	.00 – 11.00	

Scale	Measurement range	Statistical reliability (Cronbach's alpha), α
"EIT" (Hall, 2007)		
Emotional awareness (EA)	–15.00 – +15.00	.869
Emotion management (EM)	–15.00 – +15.00	
Self-motivation (S-M)	–15.00 – +15.00	
Empathy (E)	–15.00 – +15.00	
Emotion recognition (ER)	–15.00 – +15.00	

Source. Own research.

Statistical Analysis

The empirical data set was collected using survey forms, which respondents received for completion after providing voluntary consent. The raw empirical data were entered into "MS Excel". To determine reliability statistics, descriptive frequency characteristics, comparison statistical operations, and correlation analyses, the computer program "IBM SPSS Statistics," version 30.0.0.1 (125), was used. Levels not lower than $p \leq .050$ were considered reliable.

Results

The comparative research strategy involved a series of statistical operations to compare the studied variables. For reproducibility, descriptive frequency characteristics are presented using mean (*M*) and standard deviation (*SD*). In Table 3, the results of comparisons of the studied variables across three methods based on the cross-cultural component – Kazakhstani and Spanish samples – are summarised. The Student's t-test was used for the comparisons. KAZ represented the Kazakhstani sample ($n = 57$; 51.35%), and ESP the Spanish sample ($n = 54$; 48.65%).

Table 3

Comparison of the KAZ and ESP samples based on the variables of professional motivation and emotional intelligence

Scale	Levene's test		Student's t-test				
	F	p	t	p[a]	95 CI		Cohen's d
					Lower	Upper	
CMT	.063	.802	-.112	.130	-.511	.456	-.021

Scale	Levene's test		Student's t-test				
	F	p	t	p[a]	95 CI		Cohen's d
					Lower	Upper	
AM	.033	.856	-.078	.134	-.641	.592	-.015
MP	.047	.829	-.080	.133	-.626	.577	-.015
PM	.798	.374	*.946*	.049	-.273	.773	.180
CSRM	.735	.393	-.391	.099	-.969	.649	-.074
ECM	.087	.769	.056	.137	-.503	.532	.011
SM	.788	.377	.518	.087	-.438	.748	.098
LS	.023	.881	.171	.124	-.609	.724	.032
C	.235	.629	-.252	.802	-.769	.595	-.048
SS	.187	.666	-.016	.115	-.617	.608	-.003
CM	.538	.465	-.568	.082	-1.514	.839	-.108
GA	.012	.912	.208	.119	-.532	.657	.039
CA	.694	.407	-.235	.116	-1.295	1.020	-.045
SU	.008	.928	*-1.202*	.033	-1.933	.473	-.228
EA	1.308	.255	-.376	.141	-1.431	.975	-.071
EM	.209	.649	-1.057	.059	-1.751	.533	-.201
S-M	.063	.802	-.112	.182	-.510	.456	-.021
E	.033	.856	-.078	.188	-.641	.592	-.015
ER	.047	.829	-.080	.187	-.626	.577	-.015

Note. KAZ – the Kazakhstan sample of primary school teachers; ESP – the Spain sample of primary school teachers; F – Levene's test for equality of variances (two levels of variance); p – statistical significance; [a] – Bonferroni correction; t – Student's t-test; 95 CI – confidence interval; Cohen's d – effect size; $p \leq .050$; $p \leq .010$ and $p < .001$, the data is given *in italics*; CMT – communication motive; AM – avoidance motive; MP – motive of prestige; PM – professional motive; CSRM – creative self-realization motive; ECM – educational-cognitive motive; SM – social motive; LS – life support; C – comfort; SS – social status; CM – communication; GA – general activity; CA – creative activity; SU – social usefulness; EA – emotional awareness; EM – emotion management; S-M – self-motivation; E – empathy; ER – emotion recognition. *Source*. Own research.

The comparison of the studied variables across the Kazakhstani and Spanish subsamples for the cross-cultural component revealed significant differences in two dimensions. The respondents of the KAZ samples show an advantage in two motivation parameters, "professional motive" (t = 0.946, p = 0.049, d = 0.180) and "social usefulness" (t = 1.202, p = 0.033, d = -0.228). The remaining parameters are characterised by a relatively uniform manifestation. The results obtained allow for concluding that the hypothesis a) has been proved. In Table 4, a comparison of the studied variables

of the Kazakhstani sample by gender is presented: males – M-KAZ and females – F-KAZ.

Table 4

Comparison of the M-KAZ and F-KAZ samples based on the variables of professional motivation and emotional intelligence

Scale	Levene's test		Student's t-test				
	F	p	t	p[a]	95 CI		Cohen's d
					Lower	Upper	
CMT	1.312	.257	.526	.086	-.624	1.069	.171
AM	3.736	.058	*-1.046*	.043	-1.620	.509	-.340
MP	2.557	.116	-.053	.137	-1.081	1.025	-.017
PM*	9.960	.003	*1.191*	.037	-1.114	3.753	.737
CSRM	2.804	.100	.496	.089	-1.113	1.846	.161
ECM	2.052	.158	-.675	.071	-1.190	.590	-.219
SM	1.511	.224	*1.301*	.028	-.369	1.735	.423
LS*	4.805	.033	*-.983*	.048	-1.503	.537	-.277
C	.040	.842	*1.930*	.008	-.041	2.208	.627
SS*	6.804	.012	*2.158*	.007	.007	2.725	.868
CM	.605	.440	*-.983*	.047	-3.155	1.078	-.320
GA	.406	.526	*-1.554*	.018	-1.818	.230	-.505
CA	.581	.449	*-2.534*	.002	-4.476	-.523	-.823
SU	.593	.444	*-1.607*	.016	-3.719	.408	-.522
EA	.613	.437	-.121	.181	-2.350	2.084	-.039
EM	.127	.723	*1.647*	.021	-.352	3.608	.535
S-M	1.312	.257	.526	.120	-.624	1.069	.171
E	3.736	.058	-1.046	.060	-1.620	.509	-.340
ER	2.557	.116	-.053	.192	-1.081	1.025	-.017

Note. * – data are presented using Welch's t-test because of uneven variance; M-KAZ – the Kazakhstan sample of male; F-KAZ – the Kazakhstan sample of female; F – Levene's test for equality of variances (two levels of variance); p – statistical significance; [a] – Bonferroni correction; t – Student's t-test; 95 CI – confidence interval; Cohen's d – effect size; $p \leq .050$; $p \leq .010$ and $p < .001$, the data is given *in italics*; CMT – communication motive; AM – avoidance motive; MP – motive of prestige; PM – professional motive; CSRM – creative self-realization motive; ECM – educational-cognitive motive; SM – social motive; LS – life support; C – comfort; SS – social status; CM – communication; GA – general activity; CA – creative activity; SU – social usefulness; EA – emotional awareness; EM – emotion management; S-M – self-motivation; E – empathy; ER – emotion recognition.

Source. Own research.

A comparison of the variables studied in the Kazakh sample by gender revealed significant differences in eleven dimensions. Male teachers have an advantage in five dimensions: "avoidance motive" (t = -1.046, p = .043, d = -.340), "life support" (t = -.983, p = .048, d = -.277), "comfort" (t = 1.930, p = .008, d = .627), "social status" (t = 2.158, p = .007, d = .868), and "social usefulness" (t = 1.607, p = .016, d = .522), while female teachers have an advantage in six dimensions: "professional motive" (t = 1.191, p = .037, d = .737), "social motive" (t = 1.301, p = .028, d = .423), "communication" (t = -.983, p = .047, d = -.320), "general activity" (t = -1.554, p = .018, d = -.505), "creative activity" (t = -2.534, p = .002, d = -.823), and "emotional awareness" (t = 1.647, p = .021, d = .535). The rest of the parameters have relatively uniform expression. The results obtained provide grounds to conclude that the hypothesis b) has been refuted. In Table 5, a comparison of the studied variables of the Spanish sample by gender is presented: males – M-ESP and females – F-ESP.

Table 5

Comparison of the M-ESP and F-ESP samples based on the variables of professional motivation and emotional intelligence

Scale	Levene's test		Student's t-test				
	F	p	t	p[a]	95 CI		Cohen's d
					Lower	Upper	
CMT	.358	.552	.559	.083	-.506	.898	.153
AM	.152	.698	-.180	.122	-.988	.825	-.049
MP	.015	.904	.154	.125	-.813	.949	.042
PM	1.090	.301	.407	.098	-.258	.390	.111
CSRM	3.334	.074	.569	.082	-.802	1.436	.155
ECM	2.255	.139	-.313	.108	-.889	.649	-.085
SM	.603	.441	*-1.314*	.028	-1.370	.286	-.358
LS*	4.978	.038	*2.289*	.006	-.007	2.334	.798
C	.110	.742	-.359	.103	-1.209	.842	-.098
SS	.774	.383	-.740	.066	-1.202	.554	-.202
CM	.292	.591	.774	.063	-1.010	2.279	.211
GA	.497	.484	.410	.097	-.688	1.041	.112
CA	1.247	.269	-.066	.099	-1.691	1.583	-.018
SU	.383	.538	*-.964*	.049	-2.580	.905	-.263
EA	.895	.349	.241	.162	-1.457	1.854	.066
EM	.113	.738	.609	.109	-1.143	2.139	.166
S-M	.358	.552	.559	.115	-.506	.898	.153

Scale	Levene's test		Student's t-test				
	F	p	t	p[a]	95 CI		Cohen's d
					Lower	Upper	
E	.152	.698	-.180	.172	-.988	.825	-.049
ER	.015	.904	.154	.176	-.813	.949	.042

Note. * – data are presented using Welch's t-test because of uneven variance; M-ESP – the Spanish sample of male; F-ESP – the Spanish sample of female; F – Levene's test for equality of variances (two levels of variance); p – statistical significance; [a] – Bonferroni correction; t – Student's t-test; 95 CI – confidence interval; Cohen's d – effect size; $p \leq .050$; $p \leq .010$ and $p < .001$, the data is given *in italics*; CMT – communication motive; AM – avoidance motive; MP – motive of prestige; PM – professional motive; CSRM – creative self-realization motive; ECM – educational-cognitive motive; SM – social motive; LS – life support; C – comfort; SS – social status; CM – communication; GA – general activity; CA – creative activity; SU – social usefulness; EA – emotional awareness; EM – emotion management; S-M – self-motivation; E – empathy; ER – emotion recognition.
Source. Own research.

A comparison of the variables studied in the Spanish sample by gender revealed three significant differences. All advantages were recorded in the female sample. Female teachers predominate in the "social motive" ($t = -1.314$, $p = .028$, $d = -.358$), "life support" motive ($t = 2.289$, $p = .006$, $d = .798$), and "social usefulness" motive ($t = -.964$, $p = .049$, $d = -.263$), which indicates a predominance of a social life orientation in their personality structure. The remaining parameters are distributed evenly. The results obtained provide grounds to conclude that the hypothesis c) has been refuted.

In accordance with the design of the comparative descriptive strategy, the correlation between the studied variables of professional motivation and emotional intelligence of future primary school teachers in the combined sample was determined. According to the Kolmogorov-Smirnov *Z*-test, the absence of a normal distribution of data was established. This allowed us to use Spearman's correlation coefficient (r_s). Obviously, the combination of empirical data from respondents from different cultures may not have a normal distribution, even with a sufficient number of respondents ($n = 111$). In Table 6, a correlation matrix of the study is presented.

Table 6

Correlation matrix of the studied variables of professional motivation and emotional intelligence among future primary school teachers of the combined sample (n = 111)

Studied variables	EA	EM	S-M	E	ER
Communication motive (CMT)	-.086	.033	.108	.004	-.082
	.369	.729	.260	.965	.393

Studied variables	EA	EM	S-M	E	ER
Avoidance motive (AM)	-.007	-.196*	-.070	-.253**	-.016
	.946	.040	.466	.007	.869
Motive of prestige (MP)	.026	.097	.074	-.118	.129
	.786	.310	.440	.219	.176
Professional motive (PM)	.135	.045	.179	-.144	.071
	.159	.643	.061	.132	.460
Creative self-realisation motive (CSRM)	-.078	.013	.091	-.115	.081
	.421	.889	.346	.230	.399
Educational-cognitive motive (ECM)	-.072	.217*	-.077	.036	.142
	.451	.022	.422	.705	.138
Social motive (SM)	.015	-.013	.137	.033	.107
	.872	.891	.151	.728	.266
Life support (LS)	-.102	-.196*	-.084	-.017	.143
	.287	.039	.382	.856	.133
Comfort (C)	.209*	-.105	.077	.016	-.069
	.028	.272	.421	.870	.474
Social status (SS)	-.073	.006	-.179	.136	.110
	.446	.946	.061	.154	.250
Communication (CM)	.223*	-.086	.107	-.076	-.079
	.019	.369	.265	.426	.412
General activity (GA)	-.022	-.041	-.088	.176	-.016
	.817	.666	.357	.064	.864
Creative activity (CA)	.126	-.078	-.120	-.052	-.026
	.186	.417	.211	.591	.787
Social usefulness (SU)	-.104	-.131	-.158	.059	.113
	.277	.169	.099	.541	.238

Note. EA – emotional awareness; EM – emotion management; S-M – self-motivation; E – empathy; ER – emotion recognition; * – $p \leq .050$; ** – $p \leq .010$; and *** $p < .001$.
Source. Own research.

Six significant relationships were identified: three direct and three inverse. The direct correlations include: educational-cognitive motive and emotion management ($r_s = .217, p = .022$); comfort and emotional awareness ($r_s = .209, p = .028$); communication and emotional awareness ($r_s = .223, p = .019$). The inverse correlations include: avoidance motive and emotion management ($r_s = –.196, p = .040$); avoidance motive and empathy ($r_s = –.253, p = .007$); life support and emotion management ($r_s = -.196, p = .039$). The listed correlations provide grounds to conclude that the combined sample possesses a number of important correlations between professional motivation and emotional intelligence.

DISCUSSION

The comparative study was conducted within the framework of an international scientific grant project in collaboration with the foreign partner university – the University of Granada (Granada, Spain) – on the topic "Research on the influence of emotional-motivational factors on mastering language competencies by future primary school teachers using artificial neural networks" (Order №05-04/250 dated 03.04.2025). It involved comparing the formed variables and testing a series of implemented educational technologies in the context of training future primary school educators. Since a descriptive strategy was chosen, the comparison focused on the most relevant variables within the scope of the grant research. Researchers acknowledged that the national cultural component, traditions, and the corporate culture of the universities would play a role; however, these dimensions were not included in the comparison. The emphasis was placed on emotional intelligence and professional motivation as the most critical components of educational and professional training for future specialists. Numerous contemporary comparative studies (Aydin & İşlek, 2021; Layek & Koodamara, 2024) demonstrate interesting scientific facts and conclusions. As shown in the study by Rafet Aydin and Meray İşlek (2021), teachers' professional motivation and expectations regarding their future profession can be high and positive. However, the realities encountered by young professionals during the early stages of their careers introduce significant adjustments, which should not be overlooked. The developed emotional intelligence, self-motivation, and empathetic and reflective abilities contribute not only to the realisation of professional meaningful content but also assist in adapting to a new environment (Wang & Qin, 2025; Wood, 2020). The study by Yingjie Wang et al. (2022) established a relationship between teachers' self-awareness and occupational burnout and demonstrated the mediating role of emotional intelligence and coping styles in overcoming difficulties in professional activity. The comparison of parameters of professional motivation for educational and professional activities, current needs and their satisfaction in the context of professional work, and components of emotional intelligence among the studied groups for the cross-cultural component (see Table 3) between Kazakhstani and Spanish future teachers provided grounds to prove the notion that national cultural factors, traditions, and the corporate culture of universities would influence differences. Statistically significant differences were identified in two dimensions. The advantage of respondents in the KAZ samples in two motivation parameters, "professional motive" ($p \leq .050$) and "social usefulness" ($p \leq .050$), is logical. It is clear that training future professionals varies significantly in content and technological aspects, as confirmed by the values of the studied variables. An interesting observation is that the work of primary school teachers among male respondents in Spain is more popular than in Kazakhstan, which affected the representation of respondents by gender in the sample and could also have

influenced the cross-cultural comparison. Somewhat different results were obtained during the comparison of males' and females' samples from Kazakhstani and Spanish universities (see Table 4 and 5). Gender was used as a grouping variable. Eleven significant differences were found in the Kazakhstani sample (see Table 4), and three in the Spanish sample (see Table 5). Male teachers in the Kazakhstani sample showed a significant superiority in the "social status" ($p \leq .010$), "comfort" ($p \leq .010$), "avoidance motive" ($p \leq .050$), "life support" ($p \leq .050$), and "social usefulness" ($p \leq .050$), while female teachers also had a single superiority in the "creative activity" ($p \leq .010$), "professional motive" ($p \leq .050$), "social motive" ($p \leq .050$), "communication" ($p \leq .050$), "general activity" ($p \leq .050$), and "emotional awareness" ($p \leq .050$). Evidently, Kazakhstan's functioning national education system provides certain attractive social benefits for the male part of the sample, so male teachers are guided in their choices primarily by social advantage. The superiority of the female part of the sample is associated with a combination of personal qualities, such as creativity, communication and initiative, manifested in activities aimed at creating something new and unique. In the Spanish sample, female teachers dominate in the "life support" motive ($p \leq .010$), "social motive" ($p \leq .050$), and "social usefulness" motive ($p \leq .050$), indicating a prevalence of a social life-oriented focus within their personality structure. It is evident that, for Spanish women, the "life support" motive is not just a fundamental motivator but also a determinant of their current behaviour and activities, primarily aimed at survival and satisfying basic needs, followed by self-realisation and self-actualisation. These findings partially confirm the previous results concerning the academic giftedness of future teachers (Kariyev et al., 2024). The male part of the Spanish sample shows no superiority in any of the studied parameters. Analysing the psychological correlates (see Table 6) allowed us to establish a number of relevant regularities for the combined sample. The correlation matrices demonstrated direct correlations for the educational-cognitive motive, comfort motive, and communication motive ($p \leq .050$) and, as expected, an inverse relationship with the avoidance motive ($p \leq .050$; $p \leq .010$) and life support motive ($p \leq .050$). It is worth noting that emotion management is the most dependent parameter of emotional intelligence, possessing both direct and inverse correlations (see Table 6). There are three such relationships concerning emotion management. Emotional awareness has two direct correlations. Among professional motives, the most dependent is the avoidance motive, which has two inverse relationships, including the strongest with empathy. We must acknowledge that the avoidance motive, often reflected in the coping strategy "escape-avoidance", is the one most frequently used by future and current teachers in their educational and professional activities (Wang et al., 2022).

In summary, the identified significant differences and psychological correlates are of scientific interest, and their implementation into university educational processes is advisable. The proposed comparative study does not exhaust all current research

issues but rather represents an attempt to verify the key measures – professional motivation and emotional intelligence – within the context of an international research project on the educational and professional training of future primary school teachers from two countries – Kazakhstan and Spain.

CONCLUSIONS

It was emphasised that randomly formed samples reflect the typical quantitative superiority of Spanish male teachers in the field of education. It was noted that the corporate culture of the universities where the future specialists studied significantly influences the traditions and customs of educational and professional training. For the cross-cultural grouping variable, a significant advantage was recorded in the respondents in the KAZ samples in motivation parameters, "professional motive" ($p \leq .050$) and "social usefulness" ($p \leq .050$). This suggests that training future professionals varies significantly in content and technological aspects, as confirmed by the values of the studied variables. According to gender, eleven significant differences were identified in the Kazakhstani sample and three in the Spanish sample. Males in the Kazakhstani sample showed a superiority in the "social status" ($p \leq .010$), "comfort" ($p \leq .010$), "avoidance motive" ($p \leq .050$), "life support" ($p \leq .050$), and "social usefulness" ($p \leq .050$), while females demonstrated a higher level of "creative activity" ($p \leq .010$), "professional motive" ($p \leq .050$), "social motive" ($p \leq .050$), "communication" ($p \leq .050$), "general activity" ($p \leq .050$), and "emotional awareness" ($p \leq .050$). This suggests that the modern education system of Kazakhstan is attractive to the male part of the sample, guided primarily by social benefits. The superiority of the female part of the sample is associated with a combination of personal qualities, such as creativity, communication and initiative, manifested in activities aimed at creating something new and unique. In the Spanish sample, females dominate in the "life support" motive ($p \leq .010$), "social motive" ($p \leq .050$), and "social usefulness" motive ($p \leq .050$), indicating a prevalence of a social life-oriented focus within their personality structure. It was noted that the "life support" motive, "social motive", and "social usefulness" motive are not just a fundamental drive but also determines the respondents' current behaviour and activities, aimed primarily at survival and satisfying basic needs, and only later at self-realisation and self-actualisation. The correlation matrices demonstrated direct correlations for the educational-cognitive motive, comfort motive, and communication motive ($p \leq .050$), and an expected inverse relationship with the avoidance motive ($p \leq .050$; $p \leq .010$) and life support motive ($p \leq .050$). The aim was achieved; the a) and d) hypotheses were confirmed; the b) and c) hypotheses were refuted. It is recommended that educational organisers involved in primary school teacher training take into account the scientifically established facts.

RESEARCH RESTRICTIONS

The comparative research into future primary school teachers' professional motivation and emotional intelligence conducted on the Kazakhstani-Spanish sample is a successful attempt to identify important empirical patterns. This study does not exhaust all scientific problems related to the research subject. Though an extremely small number of respondents in the M-KAZ (n = 12; 21.05%) reflected the random participation of male teachers from the Kazakhstani sample in the research and demonstrated a lower quantitative indicator compared to the Spanish sample, the obtained scientific facts require verification with a larger or equal proportion of male teachers in the study. The organiser did not consider the year of study, which could affect the values of learning motivation parameters. The multiple factors in the research and the results obtained can vary depending on the psychodiagnostic instruments selected to identify the variables of respondents' professional motivation and emotional intelligence. The aforementioned research limitations do not diminish the value of the study and its findings but rather outline the relevant tasks that need to be performed and verified within the framework of the grant programme.

COGNITIVE VALUE

The cognitive value of the research lies in its cross-cultural approach, which allowed for identifying differences and similarities in the values of psychological content parameters of professional motivation and emotional intelligence among future primary school teachers in the Kazakhstani and Spanish educational systems, as distinctive representatives of Eastern and Western cultures. It was proved that the national cultures and educational systems of Kazakhstan and Spain, in comparison of the studied parameters, show significant differences. The males' advantage in the Kazakhstani sample in the "social status", "comfort", "avoidance motive", "life support", and "social usefulness" testifies that male teachers find their profession attractive and seek social benefits in Kazakhstan's educational system. The females' superiority in the Kazakhstani sample in "creative activity", "professional motive", "social motive", "communication", "general activity", and "emotional awareness" are related to the combination of such personal qualities as creativity, communication and initiative that dominate in Kazakhstani females' activities aimed at creating something new and unique. Spanish females' advantage in the "life support" motive, "social motive", and "social usefulness" motive, was explained by the prevalence of social life orientation in their personality structure. It was substantiated that the corporative cultures of universities where future professionals studied affect the traditions and customs of educational and professional training.

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