CULTURAL AND EMOTIONAL INTELLIGENCE AMONG ASIAN STUDENTS IN RUSSIA

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ABSTRACT

Emotional and cultural intelligence are very important for foreign students during cross-cultural adjustment. Asian students from China, Vietnam, South Korea and Mongolia face different problems during their stay in People's Friendship University of Russia (RUDN University). In this intercultural context of living and studying they learn to communicate and interpret facial expressions not only of Russian people, but also students from all over the world.

The main purpose of this study was to investigate differences in Emotional and cultural intelligence among Asian students from China, Vietnam, South Korea and Mongolia, who study in Russia. We used two questionnaires: Emotional Intelligence Test developed by D.V. Lusin and Cultural Intelligence Scale developed by S.Ang et al. We conducted Kruskal-Wallis H-test, Mann-Whitney U-test and Spearman's rho test.

Results indicate the following. Vietnamese students have the highest level of cultural intelligence and its metacognitive, cognitive and behavioral dimensions and lowest level of emotional intelligence namely expression and emotion control, managing their own emotions and intrapersonal emotional intelligence. Chinese students have the highest level of emotional intelligence and all its aspects. Mongolian and Chinese students have the highest level of cultural intelligence namely in its metacognitive, and behavioral dimensions. South Korean students have the lowest level of cultural intelligence motivation dimension.

Emotional intelligence has negative weak correlation with cognitive dimension of cultural intelligence. Cultural intelligence correlates positively with understanding others emotions, emotion control, interpersonal emotional intelligence and negatively with expression control, intrapersonal emotional intelligence, emotion control.

Keywords: emotional intelligence, cultural intelligence, Asian students

INTRODUCTION

Our research touches upon a problem of main psychological resources of acculturation during educational migration. We consider cultural and emotional intelligence very important for our students from Asia. For instance students from China, Vietnam, South Korea and Mongolia have varying degrees of closeness to

NORDSCI Conference

Russian culture. Mongolian students usually know Russian culture and Russian language quite well. Mongolia and Russia had a common history. As for the students from China, Vietnam, South Korea their culture differs very much from Russian culture and they usually don't have any common cultural background with Russian students that could help them in preparing to acculturation.

According to Hofstede's cultural dimension scores (Culture Compass at Hofstede Insights) and Rarick's research for Mongolia (see Table 1) we can see that Mongolia differs in all dimensions from other countries except high scores in Uncertainty Avoidance which are close to South Korean results. China, Vietnam and South Korea unlike Mongolia have high scores in Power Distance, Collectivism, Long Term Orientation and Restraint Index. Mongolia and China are masculine countries. China and Vietnam have little Uncertainty Avoidance Index [4], [6]. Culture dimension and cultural intelligence allowed us to describe the problem of acculturation from different points of view. But what differences have students from these countries in cultural and emotional intelligence? Will Mongolian students outstand in our survey too or not?

	China	Vietnam	South Korea	Mongolia
Power Distance	80	70	60	18
Individualism - Collectivism	20	20	18	71
Masculinity	66	40	39	103
Uncertainty Avoidance	30	30	85	92
Long Term Orientation	87	57	100	41
Indulgence - Restraint Index	24	35	29	56

Table 1. Hofstede's cultural dimension scores for China, Vietnam, South Korea and Mongolia.

We assumed that students from Asian countries had differences cultural and emotional intelligence. Also we wanted to understand how cultural and emotional intelligence and their aspects correlate.

MATERIALS AND METHODOLOGY

Emotional intelligence was measured with the help of Emotional Intelligence Test developed by D.V. Lusin [5]. It includes 46 sentences in Russian language. Each respondent was asked to rated them in a four-point scale (1 = "completely agree" to 4 = "completely agree"). The procedure allowed us to measure 5 aspects of emotional intelligence: Understanding other people's emotions, Managing other people's emotions, Understanding your emotions, Manage your emotions, Expression Control. They can be combined into several scales: Interpersonal Intelligence, Intrapersonal Intelligence, Emotion understanding, Emotion Control and Emotional Intelligence Index.

Cultural intelligence was measured with the help of Cultural Intelligence Scale developed by S.Ang et al. The questionnaire was administrated in Russian using adopted version develop by Belovol et al. [1], [2], [3]. It includes 20 sentences that

Section EDUCATION AND EDUCATIONAL RESEARCH

measure 4 components of cultural intelligence: *Metacognitive Dimension, Cognitive Dimension, Motivational Dimension* and *Behavioral Dimension of Cultural Intelligence.* Each respondent was asked to rated 20 sentences in a four-point scale (1 = "completely agree" to 4 = "completely agree").

All 172 students were from RUDN University (Peoples' Friendship University of Russia) and participated in paper-pencil testing and on-line testing. We tested 48 Mongolian students, 44 Chinese, 40 South Koreans and 40 Vietnamese.

We analyzed parameter distribution in the student groups with the help of the Kolmogorov-Smirnov Z-test. Though some parameters had normal distribution, we decided to use non parametric tests. In order to evaluate differences between samples we used Kruskal-Wallis H-test for all groups and Mann-Whitney U-test for pairs of groups. The Spearman's rho test allowed us to evaluate correlations between cultural and emotional intelligence among Asians.

RESULTS

Kruskal-Wallis H-test showed us significant differences in every aspect of emotional and cultural intelligence (see table 2).

	Mean range					p-
	Mongolia	China	South Korea	Vietnam	H- test	value
Understanding other people's emotions	44,4	126,6	88,8	90,7	64,0	0,000
Managing other people's emotions	67,2	138,4	89,3	49,8	77,9	0,000
Understanding your own emotions	71,5	112,2	96,7	66,1	24,7	0,000
Managing your own emotions	96,3	119,0	74,2	51,3	44,5	0,000
Expression Control	120,6	112,8	79,9	23,2	101,2	0,000
Interpersonal Intelligence	47,8	138,1	89,7	73,1	79,8	0,000
Intrapersonal Intelligence	102,5	115,9	85,2	36,3	61,3	0,000
Emotion understanding	47,2	122,7	99,0	81,4	56,5	0,000
Emotion Control	101,3	135,2	77,8	24,0	111,0	0,000
Emotional Intelligence	72,2	134,1	92,8	24,0	72,8	0,000
Metacognitive Dimension	61,1	83,9	88,1	24,0	29,2	0,000
Cognitive Dimension	57,3	77,4	101,2	24,0	36,5	0,000
Motivation Dimension	99,8	88,1	39,2	24,0	54,2	0,000
Behavioural Dimension	31,1	105,6	98,4	24,0	86,9	0,000
Cultural Intelligence	40,7	94,7	96,5	24,0	64,6	0,000

Table 2. Kruskal-Wallis H-test results.

In order to specify these results we used Mann-Whitney U-test. It showed us the following.

Understanding other people's emotions. There are differences between all groups except South Korea and Vietnam. Chinese students have higher results than Vietnamese ($U_{0,000}$ =489, m_{China} =51, $m_{Vietnam}$ =33), South Koreans ($U_{0,000}$ =278,5, m_{China} =54, $m_{S.Korea}$ =30) and Mongolian ($U_{0,000}$ =185, $m_{Chinese}$ =66, $m_{Mongolia}$ =28). Mongolian students

NORDSCI Conference

have lower results than Vietnamese ($U_{0,000}=518$, $m_{Mongolia}=35$, $m_{Vietnam}=56$), South Koreans ($U_{0,000}=250$, $m_{Mongolia}=30$, $m_{S,Korea}=62$).

Managing other people's emotions. There are differences among all groups. Chinese students have higher results than Mongolian ($U_{0.000}=212$, $m_{Chinese}=66$, $m_{Mongolia}=29$), South Koreans ($U_{0.000}=204,5$, $m_{China}=58$, $m_{S.Korea}=26$) and Vietnamese ($U_{0.000}=116$, $m_{China}=60$, $m_{Vietnam}=23$). South Koreans have higher results than Mongolian ($U_{0.000}=647$, $m_{S.Korea}=52$, $m_{Mongolia}=38$) and Vietnamese ($U_{0.000}=325$, $m_{S.Korea}=52$, $m_{Vietnam}=29$). Mongolian have higher results than Vietnamese ($U_{0.005}=730$, $m_{Vietnam}=39$, $m_{Mongolia}=49$).

Understanding your own emotions. There are differences among all groups except Mongolian and Vietnamese. Chinese students have higher results than Mongolian ($U_{0.000}$ =608, $m_{Chinese}$ =57, $m_{Mongolia}$ =37), South Koreans ($U_{0.025}$ =631,5, m_{China} =48, $m_{S.Korea}$ =36) and Vietnamese ($U_{0.000}$ =448, m_{China} =52, $m_{Vietnam}$ =32). South Koreans have higher results than Mongolian ($U_{0.001}$ =580, $m_{S.Korea}$ =54, $m_{Mongolia}$ =37) and Vietnamese ($U_{0.001}$ =525, $m_{S.Korea}$ =47, $m_{Vietnam}$ =34).

Manage your emotions. There are differences among all groups. Chinese students have higher results than Mongolian ($U_{0,006}=710$, $m_{Chinese}=54$, $m_{Mongolia}=39$), South Koreans ($U_{0,000}=410,5$, $m_{China}=53$, $m_{s.Korea}=31$) and Vietnamese ($U_{0,000}=264$, $m_{China}=57$, $m_{Vietnam}=27$). Mongolian surpass South Koreans ($U_{0,013}=670$, $m_{s.Korea}=37$, $m_{Mongolia}=51$) and Vietnamese ($U_{0,000}=434$, $m_{Vietnam}=31$, $m_{Mongolia}=55$). South Korean surpass Vietnamese ($U_{0,000}=534$, $m_{s.Korea}=47$, $m_{Vietnam}=34$).

Expression Control. There are differences among all groups except Chinese and Mongolian students. Chinese students have higher results than South Koreans $(U_{0.001}=528, m_{China}=51, m_{S.Korea}=34)$ and Vietnamese $(U_{0.000}=104, m_{China}=60, m_{Vietnam}=23)$. Mongolian surpass South Koreans $(U_{0.000}=255, m_{S.Korea}=27, m_{Mongolia}=59)$ and Vietnamese $(U_{0.000}=0, m_{Vietnam}=21, m_{Mongolia}=65)$. South Korean surpass Vietnamese $(U_{0.000}=4, m_{S.Korea}=60, m_{Vietnam}=21)$.

Interpersonal Intelligence. There are differences between all groups except South Korean and Vietnamese students. Chinese students have higher results than Mongolian ($U_{0.000}$ =118, $m_{Chinese}$ =68, $m_{Mongolia}$ =27), South Koreans ($U_{0.000}$ =216, m_{China} =58, $m_{S,Korea}$ =26) and Vietnamese ($U_{0.000}$ =212, m_{China} =58, $m_{Vietnam}$ =26). Mongolian have lowers results than South Korean ($U_{0.000}$ =295, $m_{S,Korea}$ =61, $m_{Mongolia}$ =31) and Vietnamese ($U_{0.031}$ =704, $m_{Vietnam}$ =51, $m_{Mongolia}$ =39).

Intrapersonal Intelligence. There are differences among all groups. Chinese students have higher results than Mongolian ($U_{0.024}$ =768, $m_{Chinese}$ =53, $m_{Mongolia}$ =41), South Koreans ($U_{0.003}$ =551,5, m_{China} =50, $m_{s.Korea}$ =34) and Vietnamese ($U_{0.000}$ =201, m_{China} =58, $m_{Vietnam}$ =26). Mongolian surpass South Koreans ($U_{0.008}$ =647, $m_{s.Korea}$ =37, $m_{Mongolia}$ =51) and Vietnamese ($U_{0.000}$ =218, $m_{Vietnam}$ =26, $m_{Mongolia}$ =60). South Korean surpass Vietnamese ($U_{0.000}$ =212, $m_{s.Korea}$ =55, $m_{Vietnam}$ =26).

Emotion understanding. There are differences between all groups except South Korea and Vietnam. Chinese students have higher results than Mongolian ($U_{0,000}=241$, $m_{Chinese}=65$, $m_{Mongolia}=30$), South Koreans ($U_{0,001}=509,5$, $m_{China}=51$, $m_{S.Korea}=33$) and Vietnamese ($U_{0,000}=475$, $m_{China}=52$, $m_{Vietnam}=32$). Mongolian have lowers results than South Korean ($U_{0,000}=199$, $m_{S.Korea}=64$, $m_{Mongolia}=29$) and Vietnamese ($U_{0,000}=648$, $m_{Vietnam}=52$, $m_{Mongolia}=38$).

Section EDUCATION AND EDUCATIONAL RESEARCH

Emotion Control. There are differences among all groups. Chinese students have higher results than Mongolian ($U_{0.000}$ =393, $m_{Chinese}$ =62, $m_{Mongolia}$ =33), South Koreans ($U_{0.000}$ =233, m_{China} =57, $m_{S.Korea}$ =26) and Vietnamese ($U_{0.000}$ =49, m_{China} =61, $m_{Vietnam}$ =22). Mongolian surpass South Koreans ($U_{0.000}$ =526, $m_{S.Korea}$ =34, $m_{Mongolia}$ =54) and Vietnamese ($U_{0.000}$ =488, $m_{Vietnam}$ =33, $m_{Mongolia}$ =54). South Korean surpass Vietnamese ($U_{0.000}$ =69, $m_{S.Korea}$ =59, $m_{Vietnam}$ =22).

Emotional Intelligence. There are differences among all groups. Chinese students have higher results than Mongolian ($U_{0.000}=257$, $m_{Chinese}=65$, $m_{Mongolia}=30$), South Koreans ($U_{0.000}=280$, $m_{China}=56$, $m_{s.Korea}=28$) and Vietnamese ($U_{0.000}=184$, $m_{China}=58$, $m_{Vietnam}=25$). Mongolian have lowers results than South Korean ($U_{0.002}=601$, $m_{s.Korea}=53$, $m_{Mongolia}=37$) and Vietnamese ($U_{0.000}=378$, $m_{Vietnam}=59$, $m_{Mongolia}=32$).

Metacognitive Dimension of Cultural Intelligence. Vietnamese students have higher results than Chinese ($U_{0.003}$ =547, m_{China} =35, $m_{Vietnam}$ =15), Mongolian ($U_{0.000}$ =386, $m_{Vietnam}$ =59, $m_{Mongolia}$ =33) and South Korean ($U_{0.001}$ =447, $m_{Vietnam}$ =49, $m_{S.Korea}$ =32). Mongolian have lower results than Chinese ($U_{0.048}$ =805, $m_{Chinese}$ =52, $m_{Mongolia}$ =41) and South Koreans ($U_{0.001}$ =574, $m_{S.Korea}$ =54, $m_{Mongolia}$ =36).

Cognitive Dimension of Cultural Intelligence. Vietnamese students have higher results than Chinese ($U_{0,002}$ =538, m_{China} =35, $m_{Vietnam}$ =51), Mongolian ($U_{0,018}$ =680, $m_{Vietnam}$ =52, $m_{Mongolia}$ =39) and South Korean ($U_{0,004}$ =504, $m_{Vietnam}$ =48, $m_{S.Korea}$ =33). South Korean have higher results than Chinese ($U_{0,029}$ =637, m_{China} =37, $m_{S.Korea}$ =49) and Mongolian ($U_{0,000}$ =318, $m_{Mongolia}$ =31, $m_{S.Korea}$ =61).

Motivational Dimension of Cultural Intelligence. Vietnamese students have higher results than Chinese ($U_{0.019}$ =622, m_{China} =37, $m_{Vietnam}$ =49), Mongolian ($U_{0.000}$ =72, $m_{Vietnam}$ =67, $m_{Mongolia}$ =26) and South Korean ($U_{0.000}$ =156, $m_{Vietnam}$ =57, $m_{S.Korea}$ =24). Chinese have higher results than South Korean ($U_{0.000}$ =413, m_{China} =53, $m_{S.Korea}$ =31). Mongolian surpass South Korean ($U_{0.000}$ =179, $m_{Mongolia}$ =61, $m_{S.Korea}$ =25).

Behavioral Dimension of Cultural Intelligence. Vietnamese students have higher results than Mongolian ($U_{0,000}$ =168, $m_{Vietnam}$ =64, $m_{Mongolia}$ =28) and South Korean ($U_{0,012}$ =543, $m_{Vietnam}$ =47, $m_{S.Korea}$ =34). Mongolian have lower results than Chinese ($U_{0,000}$ =161, $m_{Chinese}$ =67, $m_{Mongolia}$ =28) and South Koreans ($U_{0,000}$ =85, $m_{S.Korea}$ =66, $m_{Mongolia}$ =26).

Cultural Intelligence. Vietnamese students have higher results than Chinese $(U_{0,007}=580, m_{China}=36, m_{Vietnam}=50)$, Mongolian $(U_{0,000}=438, m_{Vietnam}=58, m_{Mongolia}=34)$ and South Korean $(U_{0,001}=452, m_{Vietnam}=49, m_{S,Korea}=32)$. Mongolian have lower results than Chinese $(U_{0,000}=447, m_{Chinese}=60, m_{Mongolia}=34)$ and South Koreans $(U_{0,000}=160, m_{S,Korea}=65, m_{Mongolia}=28)$.

The Spearman's rho test allowed us to evaluate correlations between cultural and Emotional intelligence among Asians. *Emotional intelligence* has negative weak correlation with *Cognitive dimension of cultural intelligence* ($r_{s\,0.02}$ = - 0,177). *Cultural intelligence* correlates positively with *Understanding others emotions* ($r_{s\,0.000}$ = 0,48), *Interpersonal emotional intelligence* ($r_{s\,0.000}$ = 0,377) and *Emotion understanding* ($r_{s\,0.000}$ = 0,398). It correlates negatively with *Expression control* ($r_{s\,0.000}$ = 0,423), *Intrapersonal emotional intelligence* ($r_{s\,0.007}$ = 0,206) and *Emotion control* ($r_{s\,0.002}$ = 0,238).

CONCLUSION

Results indicate the following. Vietnamese students have the highest level of cultural intelligence and its metacognitive, cognitive and behavioral dimensions and lowest level of emotional intelligence namely expression and emotion control, managing their own emotions and intrapersonal emotional intelligence. Chinese students have the highest level of emotional intelligence and all its aspects. Mongolian and Chinese students have the highest level of cultural intelligence namely in its metacognitive, and behavioral dimensions. South Korean students have the lowest level of cultural intelligence motivation dimension.

Chinese and South Korean students have differences in every aspect of *Emotional intelligence*. South Korean students surpass others in *Cognitive dimension* of *Cultural Intelligence* and Chinese in *Motivational Dimension of cultural intelligence*.

Chinese students surpass Mongolian in *Emotional intelligence* except *Expression* control and Cultural Intelligence namely in its Metacognitive and Behavioural dimensions.

Chinese and Vietnamese students differ in *Emotional Intelligence* and its aspects and almost in every aspect of *Cultural Intelligence* except *Behavioural Dimension*. Namely Chinese student surpass in *Emotional Intelligence* whereas Vietnamese in *Cultural Intelligence*.

Vietnamese students surpass Mongolian students in *Cultural Intelligence* and its *Metacognitive, Cognitive* and *Behavioural dimensions* and *Emotional Intelligence* namely *Emotion Understanding, Understanding other people's emotions, Interpersonal Emotional Intelligence*. Mongolian students surpass Vietnamese in *Managing other people's and their own emotions, Intrapersonal Emotional Intelligence.* Intelligence, Emotion Control and Motivational Dimension of Cultural Intelligence.

Vietnamese students surpass South Korean students in *Cultural intelligence* whereas inferior in *Emotional Intelligence* namely in *Emotion Managing, Managing* their own and others emotions, Understanding their own emotions, Expression Control, Intrapersonal Emotional Intelligence.

Mongolian and South Korean students have differences in every aspect of *Cultural and Emotional Intelligence*. South Korean students have higher results in *Emotional Intelligence* namely *Understanding and Managing other people's* emotions, Interpersonal Emotional Intelligence, Emotion Understanding and *Cultural Intelligence* namely in its *Metacognitive*, *Cognitive*, *Behavioural Dimensions* and lower results in *Managing their own emotions*, Emotion Managing, Intrapersonal Emotional Intelligence and Motivation Dimension of Cultural Intelligence.

Emotional intelligence has negative weak correlation with Cognitive dimension of cultural intelligence. Cultural intelligence correlates positively with Understanding others emotions, Interpersonal emotional intelligence and Emotion understanding. It correlates negatively with *Expression control*, *Intrapersonal* emotional intelligence (and Emotion control.

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