



УДК 159.9.075

<https://doi.org/10.26516/2304-1226.2022.42.48>

What Matters More – Inherited Traits or Life Experiences? An Application of the Integrative Communication Theory in the Study of Cross-Cultural Adjustment and Assignment Satisfaction

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Abstract. Emotional stability and sense of coherence are both predictors of global quality of life, general life perception, psychological and physiological functioning. However, previous studies found these two concepts to overlap and called researchers to find more well-defined borders and study these two concepts. In the present study, I tried to address this issue using a mixed-method approach. I pretested the conceptual framework through the interviews conducted with 21 international students. I then measured the variables via a quantitative survey. Emotional stability and sense of coherence both enhancing cross-cultural adjustment processes and influencing assignment satisfaction. Later on, I analysed the direct effects, the mediating effect of cross-cultural adjustment and the role of cross-cultural motivation. Firstly, present levels of assignment satisfaction rather depend on personality traits than the time spent abroad, probably due to the stress-adaptation-growth dynamics. Secondly, the extent to which students feel satisfied with their cross-cultural adjustment in general affected their thoughts about assignments. Thirdly, the satisfaction-wise benefit of having high motivation to fit in a new culture was bigger in students who had higher sense of coherence, and lower in those with lower levels of it.

Keywords: emotional stability, sense of coherence, assignment satisfaction, cross-cultural adjustment, cross-cultural motivation.

For citation: Muzychenko I.N. What Matters More – Inherited Traits or Life Experiences? An Application of the Integrative Communication Theory in the Study of Cross-Cultural Adjustment and Assignment Satisfaction. *The Bulletin of Irkutsk State University. Series Psychology*, 2022, vol. 42, pp. 48-62. <https://doi.org/10.26516/2304-1226.2022.42.48>

Научная статья

Применение теории интегративной коммуникации в исследовании межкультурной адаптации и удовлетворенности иностранных студентов

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Аннотация. Эмоциональная стабильность и чувство упорядоченности являются предикторами психофизиологического функционирования. Однако авторы предыдущих исследований показали, что эти концепции пересекаются, и призвали исследователей найти более четко определенные границы и вместе изучить эти концепции в разных контекстах. В настоящем исследовании автор попытался решить эту проблему, используя смешанный метод. Предварительно протестировав концептуальную основу, которая включала отношения между определенными переменными, в ходе интервью, проведенных с 21 иностранным студентом, автор измерил переменные с помощью количественного опроса. Выявлено, что эмоциональная стабильность и чувство упорядоченности как усиливают процессы межкультурной адаптации, так и влияют на удовлетворенность заданием, что позже было количественно проанализировано, включая модулирующую роль межкультурной мотивации.

Ключевые слова: эмоциональная устойчивость, чувство упорядоченности, удовлетворение заданием, межкультурная адаптация, межкультурная мотивация.

Для цитирования: Muzychenko I. N. What Matters More – Inherited Traits or Life Experiences? An Application of the Integrative Communication Theory in the Study of Cross-Cultural Adjustment and Assignment Satisfaction // Известия Иркутского государственного университета. Серия Психология. 2022. Т. 42. С. 48–62. <https://doi.org/10.26516/2304-1226.2022.42.48>

Introduction

Stress response is a powerful tool of self-protection. However, in the last centuries, hazard has become less obvious and situations that make it inhibited in us have less apparent nature. They may be purely psychological and related to our natural inability to perceive “safety” since a situation may seem to us rather novel than dangerous, as the GUTS theory states [Brosschot, Verkuil, Thayer, 2018]. One great example of situations which flip many familiar habitat characteristics upside down is cross-cultural transaction, according to Holmes and Rahe stress scale [Muzychenko, Apollonova, Evans, 2022]. Students, upon arrival to a foreign country, immediately join the group of moderate illness risk, not to mention reduction in general life and assignment satisfaction. The last one is especially important to both higher educational institutions (HEIs) and students. B. Zimmerman hypothesized that levels of assignment satisfaction influenced motivation, absenteeism, anxiety, stress, organizational commitment, individual job performance and turnover intentions, plus, that is a KPI indicator of successful realization of the educational programs [Zimmerman, 2008]. A deeper study of international students’ experiences must not be excluded if universities are intended both to enroll and retain students [Mukhamejanova, 2019].

The previous studies suggested that both situational factors and personality define important for adjustment cultural competence, and the last was called to deserve more attention in future expatriate research [Wilson, Ward, Fischer, 2013]. The basic concept of the expatriate adjustment antecedents related to personality is that some people who possess more pronounced qualities, have greater chances to get adjusted and satisfied. Based on the integrative communication theory of cross-cultural adaptation [Kim, 2017], this mixed-method study is aimed to get more deep comprehension of foreign student experiences in Russia and answer a question of how they rely on their personal qualities to adjust and overcome difficulties in the course of successful integration in new environment and achieve acceptable level of assignment satisfaction.

This study contributes to the existing literature in several ways. Firstly, even though emotional stability and sense of coherence have been known for quite some time, scientists only recently noted that those two are not studied well in combination [Kase, Ueno, Oishi, 2018]. Both of the concepts fit the definition of the required traits for successful adjustment given by Y. Kim [Kim, 2017], plus the literature suggests that they both may evolve during the early life, though given that emotional stability is a largely inherited trait, thus, sense of coherence could be formed under the influence of emotional stability.

Secondly, host-communication competence [Kim, 2017] may be represented by cross-cultural motivation [Ang, Rockstuhl, Tan, 2015] and may enhance the relationships between personality traits and adaptation outcomes.

Theory and Hypothesis

All relationships between the variables can be seen at the conceptual model (Fig. 1).

Personality and assignment satisfaction

Quality of life researchers identify various character strengths which are important for wellbeing of individuals. Y. Kim broadly refers to a unique quality that helps one to adjust as “the inner quality that absorbs shocks from the environment and bounces back without being seriously damaged by them” [Kim, 2017, p. 393].

Emotional stability (ES) is the core personality trait which can account for reactions to challenges [Goldberg, 1992]. Recent review on health-related quality of life [Does personality affect ... , 2017] identified that ES was in fact related to psychophysiological, social and other outcomes. At the same time, according to the salutogenic theory, particular life situations are likely to provide the development and reinforcing experiences that result in a strong sense of coherence, through recognizing the external stimulus as manageable, meaningful and comprehensible [Antonovsky, 1978]. Emotional stability and sense of coherence are both called to be predictors of overall or global quality of life, general health perception, psychological and physical functioning [Does personality affect ... , 2017].

J. Hochwalder addressed the question that was previously raised by some studies if SOC is a scale that measures the same as ES does, and came to conclusion that SOC captures some additional personal characteristics compared to ES [Hochwalder, 2012]. Some studies tended to separate similarities from differences in ES and SOC and found an overlap, indeed. [Kase, Ueno, Oishi, 2018] reported that ES was highly and strongly related to all measurements of SOC, however, in the same study, researchers reported that two variables had only 36 percent of the explanation ratio, therefore, some parts did not overlap and might not be mutually explained.

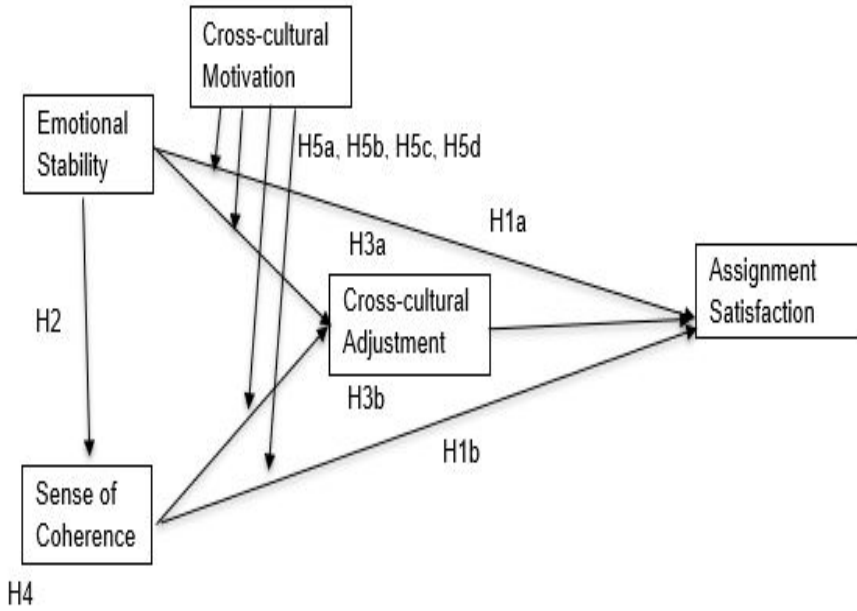
Given the fact that SOC is largely formed during the adolescence, while ES is believed to be to a great extent a heritable trait, the following hypotheses were proposed:

Hypothesis 1a. ES is positively related to AS.

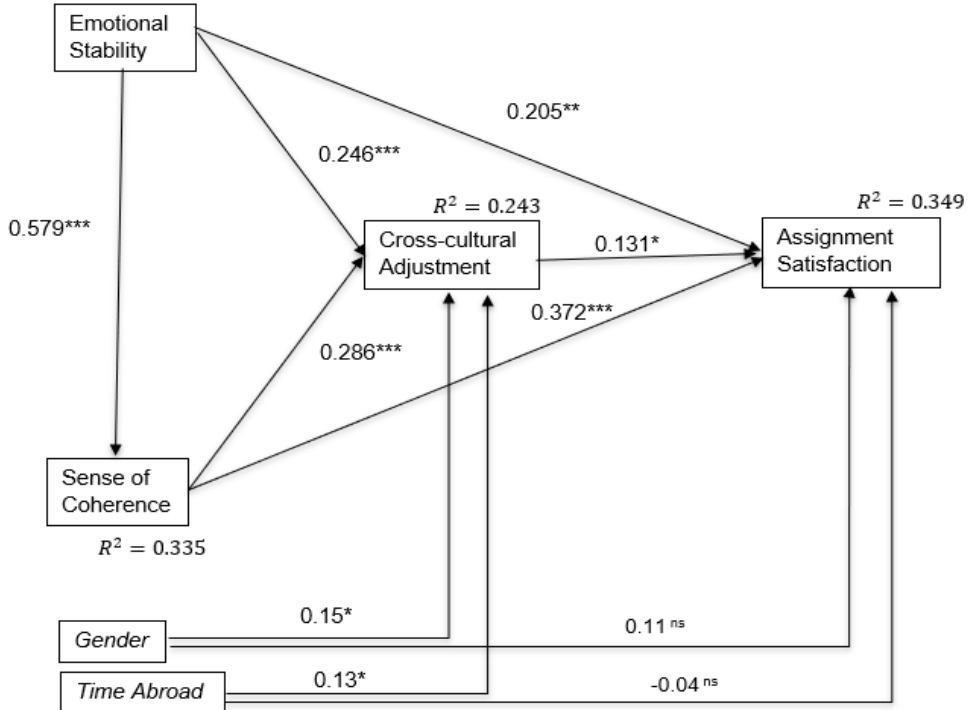
Hypothesis 1b. SOC is positively related to AS.

Hypothesis 2. ES is positively related to SOC.

A. Conceptual model of the study



B. Structural model and path coefficients for direct effects testing



Note: ^{ns} p – not significant, * $p < 0,05$, ** $p < 0,01$, *** $p < 0,001$

Fig. 1. Model of the study

Cross-cultural adjustment as a mediator

Although theory suggests that the levels of cross-cultural adjustment (CCA) and satisfaction change over time, Y. Kim [Kim, 2017] in her integrative communication theory of cross-cultural adaptation states that they change gradually up and down over time, that is why one may experience ‘ups’ and ‘downs’ multiple times throughout adaptation.

ES facilitates the development of rational judgement and evaluation ability; the previous literature acknowledges that it promotes positive outlook of life under chronic stress conditions. It was reported previously to affect psychological, socio-cultural adaptation of foreigners when being abroad [Galchenko, Vijver, 2007]. Yet some studies highlight that adjustment process is not that well studied by now and report on insignificant relation to the culture in some cases, which introduces a suggestion of higher importance of personality in the adjustment process [Kim, 2017].

SOC was previously mentioned to be a predictor of general adjustment; people with high SOC are more likely to experience lower levels of stress which, in turn, may lead to lower levels of maladjustment, I. Anderzen and B. Arnetz [Anderzen, Arnetz, 1999] call this number as 5 times higher. A. Antonovsky [Antonovsky, 1993] proposed that persons with strong SOC tend to manage stressors better and stay well, whereas persons with weak SOC tend to be more vulnerable to ill health.

Based on the idea that one may perceive a situation as manageable and decide if it’s worth worrying about it, SOC and ES may influence CCA. It is important for people abroad because they are more vulnerable due to higher psychological distress, which, in turn, influences well-being. Indeed, the previous literature [Pinto, Cabral-Cardoso, Werther, 2012] indicates that expatriate adjustment were positively correlated with general assignment satisfaction. Yet, the literature has given relatively little consideration to the models that observe the dynamic flow of adaptation in expatriates in general [Moran, Harris, Moran, 2010]. In view of the above, the following hypotheses were proposed:

Hypothesis 3a: CCA mediates the relationship between ES and AS.

Hypothesis 3b: CCA mediates the relationship between SOC and AS.

Serial mediation (emotional stability to sense of coherence to cross-cultural adjustment to assignment satisfaction)

J. Zhang, H. Mandl and E. Wang stated that ES was one of predictors of acculturation and, thus, psychological adjustment [Zhang, Mandl, Wang, 2010]. When individuals relocate to unfamiliar cultures, they often experience stress because norms and behaviors are unfamiliar and confusing. R. Piedmont [Sense of coherence: Big ... , 2014] stated that people with higher levels of SOC had higher levels of social engagement as well as compassion what could also lead to better chances to be adjusted abroad and higher adjustment outcomes that include AS. In view that SOC was stated to be a better predictor of overall health level in the long term, although sharing many similarities with ES. Suggested that these two traits might have impact on CCA in a foreign country, logical would be the conclusion about the effect on assignment satisfaction or wellbeing, thus:

Hypothesis 4: ES impacts AS indirectly through SOC and CCA.

Cross-cultural motivation as moderator

Cross-cultural motivation (CCM) is a part of cultural intelligence [Ang, Rockstuhl, Tan, 2015] that describes intrinsic, extrinsic motivations, and self-efficacy. CCM has been previously studied as a predictor of CCA [Newcomers Abroad: Expatriate ... , 2014] and general adjustment, as well as lower emotional exhaustion. CCM positively relates to work adjustment and expatriates' motivation to engage in proactive behaviors during international assignments. An expatriate with high CCM is more likely tending to express positive response to challenging and/or negative events, involve additional motivational resources, and approach flexibility [Ang, Rockstuhl, Tan, 2015]. This study proposed that CCM should moderate the previously mentioned direct relationships, because people who are motivated to be involved, adapted, and assimilated in a culturally different environment are believed to adjust better:

Hypothesis 5a: The direct positive effect of ES on AS is expected to be strong for international students with high level of, but weak for those with low level of CCM.

Hypothesis 5b: The direct positive effect of ES on CCA is expected to be strong for international students with high level of, but weak for those with low level of CCM.

Hypothesis 5c: The direct positive effect of SOC on CCA is expected to be strong for international students with high level of, but weak for those with low level of CCM.

Hypothesis 5d: The direct positive effect of SOC on AS is expected to be strong for international students with high level of, but weak for those with low level of CCM.

Processes and Research Method

This is a mixed-method study with a sequential approach (Fig. 2) using methods triangulation proposed by J. Creswell [Creswell, 2015]. The first group included 1 face-to-face and 6 phone interviews. Thus, some initial conclusions were made about the model drawn from the literature review (Fig. 1); it was pre-tested with interviewees' answers on the basis of two-way reasoning (inductive and deductive) to ensure high quality [Joffe, 2011]. The strength of qualitative method can be seen here as a skill for discovering and verifying the logic of relationships that link the study variables together [Creswell, 2015].

After 7 students were recruited for pre-test via network sampling, the authors have been contacting 868 enrolled foreign students by email through census-based sampling over five months between May and November 2018 to take part in online surveys and attend phone interviews. In order to avoid any bias related to history threat, the period of June to mid. July (2018 FIFA World Cup) was excluded. June, August and September were also excluded from data collection because of busy time with session exams, vacation and new semester preparation stage, accordingly [Cook, Campbell, 1978].

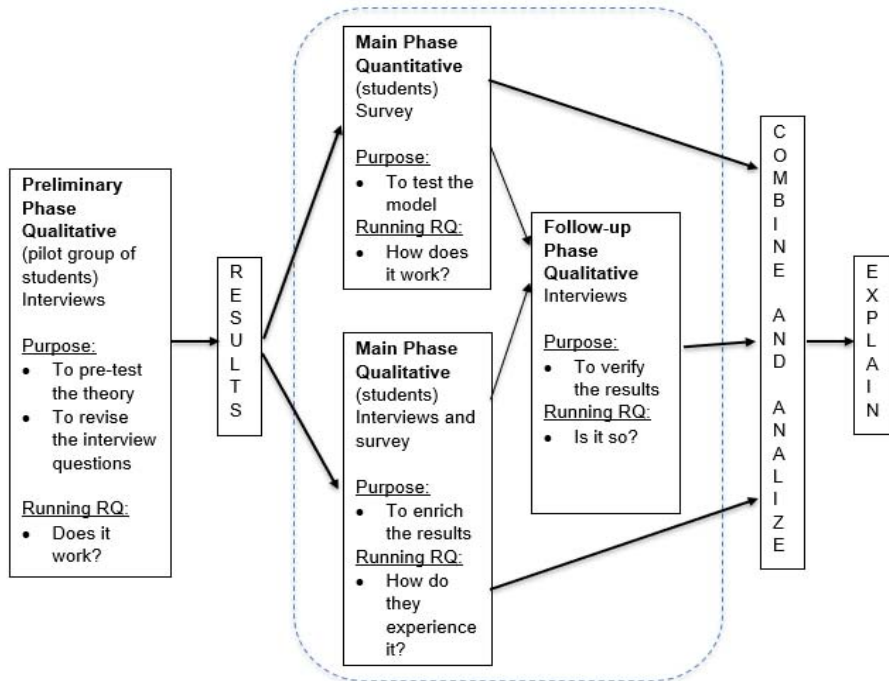


Fig. 2. Visual display for an advanced mixed-method study design with sequential approach

Qualitative sample

Given the qualitative methodology, this paper draws empirical basis from a narrative inquiry focused on experiences processed via inductive thematic analysis with Y. Lincoln and E. Guba's trustworthiness criteria [Thematic Analysis: Striving ... , 2017]. The study protocol was reviewed and approved by the university authorities. Another 12 foreign students were recruited for phone interviews, and 2 students have replied with their detailed opinions. The array of collected qualitative data in combination with pre-test data was sufficient enough to start the data saturation.

Quantitative sample

With the same invitation letter, international students were proposed to fill in the survey form online (SurveyMonkey Tool) which incorporated a consent in accordance with the Russian Federal Law "On Personal Data" No. 152-FZ of 27.07.2006. After the series of follow-ups, in total 301 responses were collected. Fully completed data were obtained from 214 participants. The participating students represented 43 different countries; age ranged from 17 to 42 years with a mean of 23,1 years. Most of the participants were bachelor students (61,4 percent), masters (29,7 percent), and doctoral (9 percent). 76 percent of the respondents were male and 24 percent were female. Of the total participants, only 4 percent (n=6) were married. The length of time that the students were involved in their

current program varied, with 84 percent of respondents reporting longer than 6 months.

Qualitative data management and analysis

The preference was given to telephone interviews. All digital records were translated verbatim in order to overcome potential methodological challenges [Squires, 2009]. The interview length varied from 13 to 73 min with a mean of 20 min, and the field notes and tape records were used as additional methods of data collection to reduce investigator bias.

Quantitative measures and analysis

Surveys for this study were conducted in English, Russian and Chinese (“back-translation” procedure). Participants were proposed to evaluate their consents with statements using seven- and five-point Likert scales, and semantic differential scales. The descriptive statistics as well as variable correlations are given in table.

Table

Correlation analysis

Correlations	M	SD	AS	CCA	SOC	ES	CCM
Assignment Satisfaction (AS)	3,820	0,820	1,000				
Cross-cultural Adjustment (CCA)	5,030	1,590	0,374**	1,000			
Sense of Coherence (SOC)	4,530	0,940	0,540**	0,412**	1,000		
Emotional Stability (ES)	3,240	0,800	0,458**	0,384**	0,579**	1,000	
Cross-cultural Motivation (CCM)	5,550	1,250	0,213**	0,407**	0,329**	0,260**	1,000

Emotional stability was measured with Goldberg’s scale IPIP-50 [1992], namely 10 items that responded to neuroticism (e.g. “I get irritated easily”). International students were asked to rate how the statements describe their personality (1 = “very inaccurate”, 5 = “very accurate”, $\alpha = 0,84$).

Sense of coherence was measured with Antonovsky’s validated scale consisting of 13 questions (e.g. “Do you have a feeling that you are treated unfairly?”) (responses were rated from 1 to 7 with unique wording for every item, $\alpha = 0,79$) [Antonovsky, 1993]. Its 3 measurements were jointly connected into a single factor variable according to the author.

Cross-cultural adjustment was measured with a 3-item questionnaire by J. Black and G. Stephens [Black, Stephens, 1989], which captured how comfortably one feels in the host country’s environment (e.g., “How well have you adjusted to interaction with people on day to day basis?”) (1 = “extremely unadjusted”; 7 = “extremely adjusted”, $\alpha = 0,90$).

Assignment satisfaction was measured with [Hackman, Oldham, 1976] three-item job satisfaction scale: the original items were reworded to refer to the current expatriate assignment rather than job (e.g., “Generally speaking, I am very satis-

fied with my assignment”) (1 = “strongly disagree”, 5 = “strongly agree”). Rather mild level of Cronbach alpha ($\alpha = 0,68$) can be explained with the reason of reverse question number 2, when the scale consists of 3 items only, yet this value can be considered acceptable for behavioral science [Nunnally, 1978].

Cross-cultural motivation was measured with a 5-item scale [Ang, Rockstuhl, Tan, 2015] (e.g., “I am confident that I can socialize with locals in a culture that is unfamiliar to me”) (1 = “very strongly disagree”, 7 = “very strongly agree”, $\alpha = 0,85$).

Control variables. Women respond to stressors more adaptively than men; therefore, gender was included as a control variable [Deane, Wilson, Ciarrochi, 2001]. Time was also chosen as a control variable for cross-cultural adjustment and wellbeing since they evolve over time in a new country as a person learns new things about the environment [Kim, 2017]. Introduction of them had no effect on the model significance.

Quantitative analysis strategy

Prior to adjustment of the data reviewed, answers’ engagement and missing data were checked and reconstructed where it was appropriate according to J. Gaskin [Gaskin, 2017]. Slight skewness and kurtosis were noted, although all within the range according to [Sposito, Hand, Skarpness, 1983]. The final dataset was reviewed using IBM SPSS v.23. When all necessary items were reversed and Cronbach's alphas for each scale calculated, the means were calculated for each variable and IBM SPSS Amos v.23 software was used to perform SEM analysis for testing direct and indirect relationships simultaneously.

Results and discussions

Common method bias and model fit

The survey data containing both independent and dependent variables was collected from the same source at a single point in time. Therefore, concerns about common method variance biases were alleviated through procedural remedies [Common method biases ... , 2003]: (1) variables were measured with different scales and (2) outcome items and, earlier, the items for the predictor and mediator variables were administered to control possible item-order effects. Survey Monkey online tool ensured participants’ anonymity. Harman’s single factor test revealed that variance in methods accounted for 25,54 percent in the measurements, which indicated that the influence of common method variance was not substantial. The model had a very good fit (CMIN/DF=0,439, CFI=1,0, TLI=1,037, RMSEA=0,0, PCLOSE=0,851).

Hypothesis testing

People with lower levels of ES are usually prone to negative thinking which can explain those slips to negativity in AS, whereas higher levels of ES were related to higher levels of AS, and that was supported in H1a ($\beta = 0,205^{***}$, $p < 0,001$). Interestingly, SOC had a stronger relation with AS, but also positive (H1b) ($\beta = 0,372^{***}$, $p < 0,001$). H2 was associated to the positive relation between partially inherited ES and learnt through the course of life SOC. The analy-

sis strongly supported this positive relation ($\beta = 0,579^{***}$, $p < 0,001$), people with higher levels of ES in the sample intended to have higher levels of SOC.

If a person is not well-equipped emotionally, this person may break emotionally easily. (E11)

Well, in our country we have this saying “sabr”, that means just calmly wait for some time and that will be all right. We often say it to each other. (E07)

Mediating hypotheses H3a and H3b were supported. For indirect effect, since the hypotheses were one-directional, 90% CI were calculated on 2,000 bootstrap samples as suggested by J. Gaskin [Gaskin, 2017], as well as p-value was presented as a half. H3a was as the following: CCA mediated the relationship between ES and AS. The interaction effect was 0,033, 90% CI was [0,002; 0,092], $p=0,029$. For H3b, there was a similar situation, the indirection effect between SOC and AS was 0,033, 90% CI was [0,004; 0,076], $p=0,028$.

Because you need to be open, easy to go out and see how life is there, all of these help you, because, in the end, you understand life better there, which helps you again, what makes life easier for you, again. (P06)

In other words, if one is open to make steps towards exploring, chances to adjust rise due to the fact that this person might learn more and get more awareness of the environment through learning “safety” signals. This quote is also related to the serial mediation H4. The indirection effect was 0,022 and 90% CI was [0,003; 0,053], $p=0,026$. That could be probably because of the learnt experiences that formed the personal vision effected by emotional stability throughout the lifetime.

For the analysis of moderation effects, the model had a very good fit (CMIN/DF=2,767, CFI=0,971, TLI=0,825, RMSEA=0,091, PCLOSE=0,84). We can see that RMSEA is not that good but still acceptable [Kenny, Kaniskan, McCoach, 2014]. CCM had positive impact on AS of the international students. $\beta = 0,008$, $p=0,898$ means that single CCM has no significant effect, that still allows us to test for moderating effect. CCM has positive impact on CCA of the international students. $\beta = 0,272^{***}$ ($p < 0,001$), thus, possible moderation effects were tested, only H5d was supported: CCM strengthens positive relationship between SOC and AS ($\beta = 0,208^{***}$ ($p < 0,001$)) (Fig. 3).

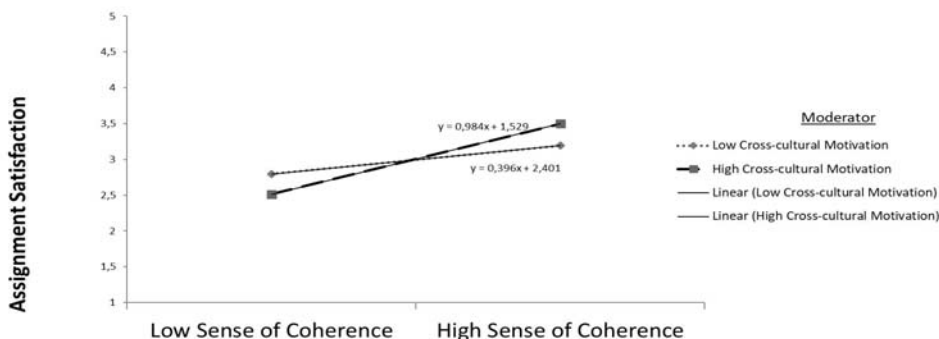


Fig. 3. The moderating effect of CCM on SOC to AS relationship

We can see the SOC effect on AS: the higher its level, the more people enjoy the assignment. Interestingly to note that the main effect of CCM on AS was not

found: people with higher levels of CCM were not necessarily more satisfied with assignment than those with low levels of CCM in the sample. Indirect effect was observed and additional information thereon obtained with PROCESS regression Model 1.

Positive relationship between SOC and AS in international students with higher levels of CCM was found to be stronger ($\beta_{\text{simple}} = 0,59$, $t = 8,84$, $p = 0,00$) than in people with lower levels of it ($\beta_{\text{simple}} = 0,32$, $t = 4,61$, $p = 0,00$), thereby illustrating the accepted H5d in detail. We can see that students with higher SOC had higher AS as well when CCM was higher, however, for students who were more motivated and yet had low level of SOC it seemed that they had to struggle more to have higher AS than those who had not so much motivation to “fit in”. Maybe due to the reason that they felt negative emotions rather than positive ones more often, because they could not see the situation as manageable, meaningful or coherent. The later saying may explain why motivation to fit in well can potentially enhance the adaptation:

I would say I was higher motivated to fit in, it was also necessary because there were not that many other Germans, for example, which made it kind of necessary to fit in, otherwise I would be on my own. It helped me of course because when you get together with people, and when you can communicate with other people, it always helps you because you can ask them questions and you can help each other and exchange experiences. (P06)

The analysis outcome showed that CCM could be a catalyst in a sense that people who are motivated and have some predispositions might have higher chances to achieve higher levels of assignment satisfaction, but when there are no predispositions, it's vice versa.

Conclusions

When a person moves to another country, a row of changes follow along the way. These can be compromised in terms of unsafety consciously or unconsciously [Brosschot, Verkuil, Thayer, 2018], which can potentially explain cross-cultural adaptation during the first 3 to 6 months after relocation that were deemed to be the most stressful for expatriates and called as “cultural shock”. The adjustment stage follows the cultural shock stage of adaptation and may last longer than 4 years in some cases. Most of individuals usually tend to achieve some level of satisfaction despite the negative psychological impacts, but there still remains a considerable number of people who suffer from maladjustment.

The study findings lead us to the following conclusions. Firstly, present levels of assignment satisfaction rather depend on personality traits than the time spent abroad, probably due to the stress-adaptation-growth dynamics [Kim, 2017] (the control variable “Time abroad” had no significant relation with the assignment satisfaction). Secondly, the cross-cultural adjustment in general affected their thoughts about assignments. Thirdly, the satisfaction-wise benefit of having high motivation to fit in a new culture was bigger in students who had higher sense of coherence, and lower in those with lower levels of it.

Theoretical Contributions

Firstly, extending previous research on cross-cultural adjustment with a mixed methods study with regard to personality traits showed that international students considered sense of coherence and emotional stability as those two that actually could help them the most in adjustment. Having known that the adjustment process is a cycling and fluctuating draw-back-to-leap pattern [Kim, 2017], we can assume that changes in adjustment and satisfaction may grow over time, which is supported by the previous findings [Markovizky, Samid, 2008]. However, the findings confirmed that doing a snapshot at one point in time you may find it difficult to take the “ups” and “downs” into account.

Secondly, later empirical testing of those two characteristics in the context of cross-cultural adjustment and assignment satisfaction addressed the issue of a gap that allegedly were covered by previous studies conducted on those two variables [Kase, Ueno, Oishi, 2018]. The data review results demonstrated that the effects which those personality characteristics had on self-reported cross-cultural adjustment and assignment satisfaction were significant and yet different in intensity. In other words, taking that emotional stability is a partially inherited trait and sense of coherence is mostly learnt over the course of life [Trap, Rejkjær, Hansen, 2016], we can assume that our experiences matter, when it comes to recognizing “safety” signals [Brosschot, Verkuil, Thayer, 2018] in real life, alike or even more than our inherited traits; that may be explained by individual perception of everything that happens throughout life through the process of learning how to recognize safety [Brosschot, Verkuil, Thayer, 2018].

Thirdly, this study expanded the scope of application of the integrative communication theory which showed that people with high levels of cross-cultural motivation were found to be more adjusted if they had higher levels of sense of coherence, and less adjusted if they had lower levels of the same. That can be accounted for when designing training for the newcomers, given that cross-cultural motivation may be developed.

Implications

Apart from the fact that internationalization literature is disorganized as stated above [Kim, 2017], little research worldwide have addressed the issues of HE internationalization with in-depth analysis. This position is supported by the empirical studies that had conclusions about positive effect upon the well-being of all students that was generated by host universities’ reflective practices and interventions based on the increased understanding of international students’ adaptation experiences [Mukhamejanova, 2019].

Moreover, according to the social cognitive career theory, individuals succeed the best in what they are good at and at what they like doing. And since the university years are the main time when students develop their academic and career interests [Camargo, Storme, Çelik, 2019], a university is able to facilitate this process through teaching international students how to make use of their personalities for better cross-cultural adjustment and assignment satisfaction.

Limitations and Future Research

Self-reported data was used to assess the model's variables. On one side, it is the way to access the real inner state, but because it is subjective then may be not that reliable. An additional limitation is that the author focused solely on the reported personality characteristics. Apart from them, students suggested such variables like social capital, different coping strategies and cultural distance which may be considered for further research.

References

- Anderzén I., Arnetz B.B. Psychophysiological reactions to international adjustment: Results from a controlled, longitudinal study. *Psychotherapy and Psychosomatics*, 1999, vol. 68, no. 2, pp. 67-75. <https://doi.org/10.1159/000012315>
- Ang S., Rockstuhl T., Tan M.L. Cultural Intelligence and Competencies. *International Encyclopedia of the Social & Behavioral Sciences*, 2015, pp. 433-439. <https://doi.org/10.1016/B978-0-08-097086-8.25050-2>
- Antonovsky A. *Health, Stress, and Coping*. San Francisco, Jossey-Bass Inc, 1978, 255 p.
- Antonovsky A. The structure and properties of the Sense of Coherence scale. *Social Science & Medicine*, 1993, vol. 36, is. 6, pp. 725-733. [https://doi.org/10.1016/0277-9536\(93\)90033-Z](https://doi.org/10.1016/0277-9536(93)90033-Z)
- Black J.S., Stephens G.K. The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of Management*, 1989, vol. 15, is. 4, pp. 529-544. <https://doi.org/10.1177/014920638901500403>
- Brosschot J. F., Verkuil B., Thayer J.F. Generalized Unsafety Theory of Stress: Unsafe Environments and Conditions, and the Default Stress Response. *International journal of environmental research and public health*, 2018, vol. 15, is. 3. <https://doi.org/10.3390/ijerph15030464>
- Camargo A., Storme M., Çelik P. Further investigation of the relationship between cultural intelligence and expatriate career intentions. *International Journal for Educational and Vocational Guidance*, 2020, vol. 20, pp. 101-122. <https://doi.org/10.1007/s10775-019-09396-1>
- Cook T.D., Campbell D.T. *Quasi-experimentation: Design and analysis issues for field settings*. Boston, MA, Houghton Mifflin Company, 1978, 405 p.
- Podsakoff P.M. et. al. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 2003, vol. 88(5), pp. 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Creswell J. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. New York, Pearson, 2015, 677 p.
- Deane F.P., Wilson C.J., Ciarrochi J. Suicidal ideation and help-negation: Not just hopelessness or prior help. *Journal of Clinical Psychology*, 2001, vol. 57, no. 7, pp. 901-914.
- Huang I-C. et. al. Does personality affect health-related quality of life? A systematic review. *PLoS ONE*, 2017, vol. 12, no. 3. Article e0173806.
- Gaskin J. "SEM Speed Run". *Gaskination's Statistics*, 2017. Available at: <https://www.youtube.com/watch?v=-j3LkADfgWs> (date of access: 10.09.2022)
- Galchenko I., van de Vijver F.J.R. The role of perceived cultural distance in the acculturation of exchange students in Russia. *International Journal of Intercultural Relations*, 2007, vol. 31, is. 2, pp. 181-197. <https://doi.org/10.1016/j.ijintrel.2006.03.004>
- Goldberg L.R. *The development of markers for the Big-Five factor structure*. *Psychological Assessment*, 1992, vol. 4(1), pp. 26-42. <https://doi.org/10.1037/1040-3590.4.1.26>
- Hackman J.R., Oldham G.R. Motivation through the design of work: Test of a theory. *Organizational Behavior & Human Performance*, 1976, vol. 16, is. 2, pp. 250-279. [https://doi.org/10.1016/0030-5073\(76\)90016-7](https://doi.org/10.1016/0030-5073(76)90016-7)
- Hochwalder J. The contribution of the big five personality factors to sense of coherence. *Personality and Individual Differences*, 2012, vol. 53, is. 5, pp. 591-596. <https://doi.org/10.1016/j.paid.2012.05.008>
- Joffe H. (ed. by D. Harper, A. R. Thompson) Thematic Analysis. *Qualitative Research Methods in Mental Health and Psychotherapy: A Guide for Students and Practitioners*. Chichester, John Wiley & Sons, Ltd, 2011, pp. 209-233. <http://dx.doi.org/10.1002/9781119973249.ch15>

Kase T., Ueno Y., Oishi K. The overlap of sense of coherence and the Big Five personality traits: A confirmatory study. *Health Psychology Open*, 2018, vol. 5, is. 2 <https://doi.org/10.1177/2055102918810654>

Kenny D., Kaniskan B., McCoach D.B. The Performance of RMSEA in Models With Small Degrees of Freedom. *Sociological Methods & Research*, 2014, vol. 44, is. 3. <https://doi.org/10.1177/0049124114543236>

Kim Y.Y. Cross-cultural Adaptation. *Oxford Research Encyclopedia of Communication*, 2017. <https://dx.doi.org/10.1093/acrefore/9780190228613.013.21>

Markovizky G., Samid Y. The Process of Immigrant Adjustment: The Role of Time in Determining Psychological Adjustment. *Journal of Cross-Cultural Psychology*, 2008, vol. 39, is. 6, pp. 782-798. <https://doi.org/10.1177/0022022108323790>

Moran R., Harris P., Moran S. *Managing Cultural Differences*. London, Routledge, 2010, 586 p. <https://doi.org/10.4324/9781856179249>

Mukhamejanova D. International students in Kazakhstan. *International Journal of Comparative Education and Development*, 2019, vol. 21, is. 3. <https://doi.org/10.1108/ijced-07-2018-0024>

Muzychenko I.N., Apollonova I.A., Evans D. Is Silence Golden? Chronic Stress and Psychophysiological Indicators' Changes over Time in International Students: A Pilot Study. *RUDN Journal of Psychology and Pedagogics*, 2022, vol. 19, no. 1, pp. 128-145. <https://doi.org/10.22363/2313-1683-2022-19-1-128-145>

Firth B. et. al. Newcomers Abroad: Expatriate Adaptation during Early Phases of International Assignments. *The Academy of Management Journal*, 2014, vol. 57, no. 1, pp. 280-300. <https://doi.org/10.5465/amj.2011.0574>

Nunnally J.C. *Psychometric Theory*. New York, McGraw-Hill, 1978. 701 p.

Pinto L.H., Cabral-Cardoso C., Werther W.B. Adjustment elusiveness: An empirical investigation of the effects of cross-cultural adjustment on general assignment satisfaction and withdrawal intentions. *International Journal of Intercultural Relations*, 2012, vol. 36, is. 2, pp. 188-199. <https://doi.org/10.1016/j.ijintrel.2011.06.002>

Piedmont R.L. et. al. Sense of coherence: Big five correlates, spirituality, and incremental validity. *Current Issues in Personality Psychology*, 2014, vol. 2(1), pp. 1-9. <https://doi.org/10.5114/cipp.2014.43096>

Sposito V.A., Hand M.L., Skarpness B. On the efficiency of using the sample kurtosis in selecting optimal lpestimators. *Communications in Statistics - Simulation and Computation*, 1983, vol. 12, is. 3, pp. 265-272. <https://doi.org/10.1080/03610918308812318>

Squires A. Methodological challenges in cross-cultural qualitative research: a research review. *International Journal of Nursing Studies*, 2009, vol. 46, is. 2, pp. 277-287. <https://doi.org/10.1016/j.ijnurstu.2008.08.006>

Nowell L.S. et. al. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 2017, vol. 16, is. 1. <https://doi.org/10.1177/1609406917733847>

Trap R., Rejkjær L., Hansen E.H. Empirical relations between sense of coherence and self-efficacy, National Danish Survey. *Health Promotion International*, 2016, vol. 31, is. 3, pp. 635-643. <https://doi.org/10.1093/heapro/dav052>

Wilson J., Ward C., Fischer R. Beyond Culture Learning Theory: What Can Personality Tell Us About Cultural Competence? *Journal of Cross-Cultural Psychology*, 2013, vol. 44, is. 6, pp. 900-927. <https://doi.org/10.1177/0022022113492889>

Zhang J., Mandl H., Wang E. Personality, acculturation, and psychosocial adjustment of Chinese international students in Germany. *Psychological reports*, 2010, vol. 107, is. 2, pp. 511-525. <https://doi.org/10.2466/07.09.11.17.PR0.107.5.511-525>

Zimmerman B. Investigating Self-Regulation and Motivation: Historical Background, Methodological Developments, and Future Prospects. *American Educational Research Journal*, 2008, vol. 45, no. 1, pp. 166-183.

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Статья поступила в редакцию **18.08.2022**; одобрена после рецензирования **18.09.2022**; принята к публикации **05.12.2022**
The article was submitted **August, 18, 2022**; approved after reviewing **September, 18, 2022**; accepted for publication **December, 5, 2022**