International Journal of Language and Literary Studies
Volume 5, Issue 3, 2023
Homepage : http://ijlls.org/index.php/ijlls

# MBTI Analysis of Technical Translators in Kazakhstan: Personality Insights

**Tatyana V. Em**
*Translation Theory and Practice Department, Buketov Karaganda University, Karaganda, Kazakhstan*

**Anna N. Kalizhanova**
*Translation Theory and Practice Department, Buketov Karaganda University, Karaganda, Kazakhstan*
anna.kalizhanova2017@gmail.com

**Danil E. Markus**
*Translation Theory and Practice Department, Buketov Karaganda University, Karaganda, Kazakhstan*

**DOI:** http://doi.org/ 10.36892/ijlls.v5i3.1329
**APA Citation**: Em, T. V., Kalizhanova, A.N. & Markus, D. E . (2023). MBTI Analysis of Technical Translators in Kazakhstan: Personality Insights. *International Journal of Language and Literary Studies. 5*(3).367-377. http://doi.org/ 10.36892/ijlls.v5i3.1329

***Received:***
*10/07/2023*

***Accepted:***
*25/08/2023*

***Keywords:***
*Myers-Briggs Type Indicator, Technical translation and interpretation, Translator training, Multimodal texts, Personality profiles.*

***Abstract***
*This study introduces a novel approach for training technical translators and interpreters in Kazakhstan using international best practices. The Myers-Briggs Type Indicator (MBTI), widely used globally but barely known in Kazakhstan, assesses individuals' decision-making, perception, and interaction styles relevant for translators. Twelve technical translators and five specialists were surveyed. Semi-structured interviews, code extraction, and descriptive analysis examined participants' personality profiles. Results indicated translators with intuitive-logical personalities (NT) outperformed sensory-logical ones (ST), although the latter succeeded given multimodal materials and professional networks. Communicating with coworkers proved challenging for NT and NF types; the former needs skill development and the latter career support. Effective technical translation and interpretation without technical knowledge requires strong communication, proximity to facilities, intuitive-logical reasoning, and experience.*

## 1. INTRODUCTION

The translation profession contributes to the intelligent, communicative, and scientific development of any country worldwide. In the Republic of Kazakhstan, the "Translation Studies" discipline is considered a relatively new science (Emelianova, 2021), which is not free from some significant drawbacks connected to preparing professional technical translators and interpreters, ready to guarantee the customers high-quality interpreting and translating services (Rysmagambetova, 2021).

Recent research demonstrates the growing interest in the connections between translators' personality traits and their work, including variability in translation styles (Navidinia et al., 2021; Hovdi, 2023), preferences for translation strategies (Vural, 2022), and overall performance (Gevaert, 2020). However, there remain gaps in thoroughly examining how personality assessments like the Myers-Briggs Type Indicator (MBTI) may inform translator training, especially in technical domains. This represents a key problem, along with the

complexities posed by multimodal technical texts, which impose additional responsibilities on technical translators (Gibbons, 2012; Ketola, 2016; Olohan, 2019).

The current study aims to address these gaps by investigating the relationship between Kazakhstani technical translators' MBTI profiles and their efficiency in translating multimodal Russian and English texts.

## 2. LITERATURE REVIEW

### 2.1. Multimodality of Technical Texts

Technical documents frequently include visual elements such as illustrations, diagrams, and charts alongside written text to facilitate reader comprehension and meaning-making (Gibbons, 2012; Ketola, 2016). According to Ketola (2016), the translation of illustrated technical texts requires processing both verbal and visual information simultaneously. However, research suggests technical translators often overlook such visuals and focus mainly on translating the words themselves (Olohan, 2019).

According to Byrne (2014), technical manual illustrations help readers understand how a machine or process operates. Meanwhile, Tercedor-Sánchez and Abada-Molina (2005) argue that technical translators must develop criteria for choosing appropriate illustrations to include. Despite their intended helpfulness, translating multimodal technical texts imposes added challenges for the translator compared to text-only documents. Troitskii and Stepanova (2019) explain that it necessitates excluding machine translation and carefully checking the translation of technical terminology and concepts that may be unclear to those without subject-matter expertise.

While previous studies have analyzed the complexity of multimodal technical texts, there remains a need to further examine the role of individual differences among translators in this context.

### 2.2. Myers-Briggs Typology

The Myers-Briggs Type Indicator (MBTI) is one of the most widely used instruments for assessing personality traits and preferences (Schaubhut & Thompson, 2008). Based on Jung's theory of psychological types, the MBTI categorizes individuals along four dichotomies: extraversion vs. introversion, sensing vs. intuition, thinking vs. feeling, and judging vs. perceiving (Myers & Briggs Foundation, 2018). Different combinations of these preferences result in 16 distinct personality types (King & Mason, 2020).

According to Schaubhut and Thompson (2008), the MBTI describes differences in how people gather information, make decisions, and orient them to the external world. For example, the Sensing-Intuition scale involves whether an individual focuses more on concrete details versus abstract concepts and patterns. The MBTI has demonstrated reliability and validity across diverse groups (Schaubhut & Thompson, 2008). Thus, it provides a framework for examining cognitive functions relevant to work performance and interpersonal interactions.

While less research has employed the MBTI specifically in Central Asian contexts, it has been widely used internationally in fields ranging from career counselling to leadership development (Schaubhut & Thompson, 2008). Assessing technical translators' MBTI profiles may reveal insights into their skills, strengths, and areas needing development that traditional proficiency measures do not capture.

### 2.3. Myers-Briggs Typology in Translation Studies

A growing body of research has explored connections between MBTI personality types and competencies related to translation and interpreting. For example, Nicholson (2005) found intuitives were perceived as ideal translators, while sensors struggled more with tasks requiring imagination and intuition. A study on Persian translators similarly concluded that intuitive and thinking types produced higher-quality technical translations (Shaki & Khoshsaligheh, 2017).

In terms of interpersonal skills, Hubscher-Davidson (2013) showed that intuition was positively correlated with the emotional intelligence of French-English translators. Additionally, thinking and feeling types were more adaptable in translating diverse text types compared to predominant sensors (Shaki & Khoshsaligheh, 2017). Raees Yazdi and Bagheri Masoudzade (2023) recently demonstrated that introverted translators had higher accuracy in translating political and journalistic texts than extroverts.

While these studies reveal connections between MBTI profiles and translator performance, Vural (2022) argues more research is needed on how personality affects the choice of translation strategies. There also remain gaps in examining the MBTI-based assessment of technical translators in Central Asian contexts. The present study aims to help address this by investigating Kazakhstani technical translators' cognitive functions and efficiency in translating multimodal Russian and English texts.

## 3. METHODOLOGY

### 3.1. Research Design

This exploratory study utilized a mixed-methods approach, combining MBTI assessment, translation evaluation, and qualitative interview data to investigate the research question. This method draws on the mixed-methods designs described by Creswell and Creswell (2023) that integrate quantitative and qualitative data to provide a more comprehensive understanding of research problems.

### 3.2. Participants

Purposive sampling was used to recruit 12 technical translators from a large industrial company in Kazakhstan. Additional participants included five experienced project managers and technical translation experts from the same organization. Purposive sampling is a non-probability sampling technique discussed by Etikan et al. (2016) that is suitable for exploratory research focused on a targeted group.

### 3.3. Data Collection

The study incorporated three stages of data collection:

***Stage 1:*** Demographic data, MBTI types, and 5-point Likert scale ratings of translation abilities were collected via online surveys, following procedures outlined in Sue and Ritter (2012). The MBTI types were determined using a validated online assessment tool.

***Stage 2:*** Semi-structured interviews averaging 45–60 minutes were conducted with the five project managers and expert participants, following the methodology described in Whiting (2008) as well as in Clarke and Braun (2006). Interviews were transcribed and analyzed using open and axial coding to extract key themes, per guidelines in Corbin and Strauss (1990).

***Stage 3:*** Technical translators' translation outcomes were statistically analyzed using two-sample t-tests and Pearson correlation analysis, as explained in Moore et al. (2012).

## 4. RESULTS AND DISCUSSION

***Stage 1*** involved collecting demographic, MBTI type, and translation rating data through online surveys completed by the 12 technical translator participants. The validated MBTI assessment tool categorized individuals into one of 16 personality types based on their responses. Participants also self-rated their technical translation abilities (TTA) in English and Russian on a 5-point Likert scale (table 1). Descriptive statistics were calculated to analyze this quantitative data, including means, frequencies, and percentages of the MBTI types and translation ratings.

Table 1. Participants' Demographic Information and Myers-Briggs Personality Types

| Participant | MBTI Type | Work Experience (months) | TTA |
|---|---|---|---|
| 1 | ISTJ | 48 | 5 |
| 2 | INFP | 48 | 5 |
| 3 | ENFP | 24 | 5 |
| 4 | ENTP | 6 | 4 |
| 5 | ENFP | 48 | 4 |
| 6 | INTJ | 24 | 4 |
| 7 | ESTJ | 6 | 4 |
| 8 | ENTJ | 3 | 4 |
| 9 | ESFP | 24 | 3 |
| 10 | ENTP | 3 | 3 |
| 11 | ISTJ | 9 | 2 |
| 12 | ISFJ | 9 | 2 |

We revealed a slight prevalence of intuitive-thinking types (NT) among the MBTI profiles of the 12 technical translators. This aligns with past research indicating that technical translators often have a preference for intuition over sensing (Karimnia & Mahjubi, 2013). For example, Sîtnic (2018) found that the majority of technical translator respondents were ENTP and ENTJ personality types, which also rely on intuition. Additionally, Nicholson (2005) concluded that intuitive types were perceived as ideal translators compared to sensing types. The dominance of NT profiles in the current sample provides further evidence that technical translation may attract and suit individuals with abstract reasoning and conceptual abilities.

***Stage 2*** involved a series of five semi-structured interviews, focused on analyzing code-extracted and transcribed pre-recorded data. The purpose of this analysis was to identify and examine the important criteria that contribute to a high-quality technical translation or interpretation (table 2).

Table 2. Key Criteria for Effective Technical Translation Based on Interviews

| Theme/Criteria | Interview Excerpt | Dominant MBTI Functions | Key Strengths | Development Needs |
|---|---|---|---|---|
| Efficient network of communication | - *"Good communication …"*<br>- *"…target audience…"*<br>- *"Communication is..."* | Fe: Extroverted Feeling | Fe: Strong communication skills, client relationships | Fe: Technical language acquisition |
| Close proximity to a technical facility | - *"To understand the technicality… that technical term … see such words technically … the technical language."* | Se: Extroverted Sensing | Se: Immersion in technical environment | Se: Understanding abstractions |
| Logical thinking and accumulation of one's experience | - *"...a translator must / should be..."* | Te: Extroverted Thinking | Te: Logical analysis | Te: Interpersonal skills |
| | - *"…work experience…"*<br>- *"…true / real knowledge…"* | Si: Introverted Sensing | Si: Drawing on past knowledge | Si: Applying knowledge across contexts |
| External search and contacting experts | - *"Technical education is non mandatory."*<br>- *"It is easier with the figures…"* | Ne: Extroverted iNtuition | Ne: Exploring interpretations, consulting experts | Ne: Attention to details |
| | - *"…judge by the context…"*<br>- *"…ask others..."*<br>*"…ask if possible…"* | Ti: Introverted Thinking | Ti: Analyzing complex concepts, logical problem-solving | Ti: Communicating analytical insights, plain language explanations |

The interview excerpts in Table 2 reveal several competencies impacting technical translation quality, including communication skills, proximity to technical environments, reasoning ability, and experience accumulation. Participants with extroverted feeling (Fe) preferences highlighted the importance of building strong professional networks and client relationships, aligning with Hubscher-Davidson's (2013) findings linking higher emotional intelligence to better translation outcomes. Those relying on extroverted sensing (Se) also noted that immersion in technical facilities helped build semantic understanding of concepts, consistent with Nicholson's (2005) observation that sensing types may struggle with technical abstraction. Also, people with extroverted thinking (Te) and introverted sensing (Si) said they

used past knowledge and logical analysis to help them translate. This fits with what Shaki and Khoshsaligheh (2017) found, which is that thinking-sensing profiles have strengths in adaptability. Those with extroverted intuition (Ne) approaches emphasized exploring multiple interpretations and consulting experts when unsure, reflecting Nicholson's (2005) characterization of intuition as an ideal translator trait.

In short, the qualitative findings suggest technical translation quality benefits from both innate preferences like intuitive processing and developed abilities like communication skills honed through experience collaborating on technical projects. According to Kuznik and Verd (2010), integrating competency training with personality-based insights is crucial for a well-rounded translator education. Specifically, this highlights the potential value of multifaceted training programs that build both innate strengths like abstraction abilities and learned skills like technical vocabulary acquisition (Hubscher-Davidson, 2013; Shaki & Khoshsaligheh, 2017).

Adopting a holistic approach that combines MBTI-based personality assessment with targeted competency development may better prepare technical translators to handle multimodal content and complex subject matter. However, further research is needed on how personality-competency connections vary across different translation settings and tasks (Nicholson, 2005).

The MBTI profiles identified align with the competencies highlighted in the interviews. As noted in Table 2, extroverted intuition (Ne) and thinking (Te) types described strengths like exploring interpretations and logical analysis. However, they may need to develop technical vocabulary and interpersonal skills. Sensing (Se) types emphasize immersion in technical environments, though they can struggle with abstraction.

Based on the data obtained, we see that the intuitive-logical type of ENTP corresponds to all four key criteria from the interviews that existing studies have identified as beneficial for technical translation (Nicholson, 2005; Karimnia and Makhubi, 2013, p. 41) (table 3). The ISTJ type meets three criteria: lacking only external search skills, suggesting written translation strengths but possible oral interpretation challenges. For ENFPs and ESTJs, realizing the advantages of communication and collaboration may boost their interpretation and translation success.

Table 3. Essential conditions for high-quality technical translation and interpretation development according to Myers-Brigges typology

| Condition | MBTI type |
|---|---|
| Efficient network of communication | ISTJ, ENFP, ENTP |
| Close proximity to a technical facility | ISTP, ISTJ, ENTP |
| Logical thinking and accumulation of one’s experience | ISTP, ESTJ, ENFP, ENTP |
| External search and contacting experts | ISTJ, ESTJ, ENTP |

***Stage 3*** demonstrated a clear and direct correlation between the physical closeness of technical translators and interpreters to a technological facility and the level of translation quality. A two-sample t-test allowed for a statistically significant relationship between the two

variables mentioned before (t = 3.4; a = 0.05). Pearson correlation analysis showed that the revealed relationship was quite high (p = 0.6; a = 0.05). It allowed us to conclude that the longer the technical translator or interpreter is immersed in the scientific and technical environment with the subsequent efficient communication, the higher quality translation he or she demonstrates.

Here comes a short translational anecdote demonstrating both the oral and written translation approaches of an ENTP technical translator with their natural skills of quick context analysis, visual-text cross-referencing, logical deduction, and proactive use of resources to figure out an accurate technical interpretation, even though some of the words were unfamiliar:

Dan was an ENTP translator tasked with interpreting a presentation on new industrial automation technologies and then translating the accompanying technical documents.

When the presenter first showed a slide with the unfamiliar Russian term *"обечайка"* (obechayka), Dan quickly pulled out his phone to consult his dictionary app. He saw "barrel" listed as one translation, but thought "that can't be right..." Based on the presenter's description of the rolling and welding process, Dan interpreted it as "automation part that gets rolled and welded into shape" for the audience.

He made a note to ask the presenter afterwards, thinking "I bet there's a cool technical word for that thingamajig." During the Q&A portion, Dan smiled and asked "What is the exact English term for *obechayka*? I want to make sure I have the translation right for these complex automation concepts." The presenter told him it was "shell" in English. Dan grinned and gave a thumb up, appreciating learning the new term.

Later, when translating the documents, Dan encountered a diagram labeling part #1 as "*стульчик*" (stulchik) (figure 1).

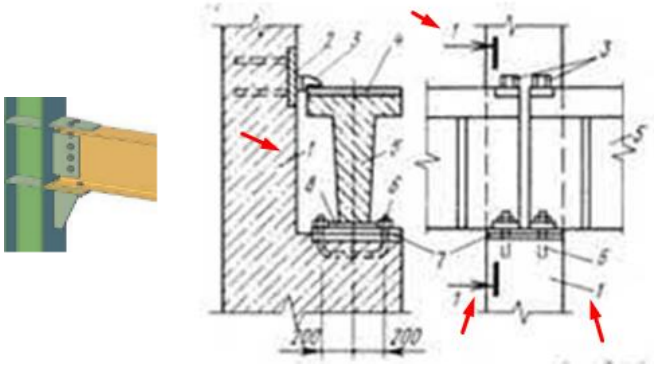

Figure 1. Wall-mounted Support Bracket (*Stulchik*)

He chuckled thinking "Well that stumpy thing looks nothing like a chair!" Reviewing the text, he saw it described a supporting bracket. Dan leveraged his visualization skills and logical reasoning to conclude it was a type of cantilever mount, translating it as "wall-mounted support bracket" while making a note that the one-word equivalent was still needed.

When Dan had compiled a list of 10 unfamiliar terms, he set up a quick Skype call with the engineering team to clarify the optimal translations. He knew collaborating with subject matter experts would enhance the accuracy of his technical terminology well beyond what dictionaries provided. Dan natural curiosity and personable nature made him comfortable admitting uncertainty and proactively filling knowledge gaps.

In the end, Dan delivered a flawless technical translation true to the source content, while also broadening his vocabulary for future projects. He appreciated that each new translation provided an opportunity to expand his skills if he leveraged the right mix of reference materials, logical thinking, visual analysis, and expert collaboration.

Such an anecdote allows providing the following steps that will help each technical translator clarify meanings and produce an accurate technical translation despite terminology challenges:

For the oral translation:

*1) Quickly consult any technical dictionary app for initial translations;*

*2) Provide descriptive interpretations focused on conveying functional meaning;*

*3) Make notes to verify exact terminology with experts post-presentation.*

For the written translation:

*1) Scan the full document and flag unfamiliar terms before translating;*

*2) Break down technical terms into recognizable roots, prefixes and suffixes;*

*3) Analyze the accompanying diagram and symbols to deduce meaning;*

*4) Check proposed dictionary definitions against the contextual use;*

5) *Collaborate with subject matter experts to clarify optimal terminology.*

In summary, when translating complex technical content involving unfamiliar terms and visuals, all translators can benefit from leveraging their innate strengths while also proactively filling knowledge gaps. They should avoid the temptation to guess meanings based on assumptions or incomplete understanding. Instead, they would better take a systematic approach:

*1) Leverage one's visualization skills and reasoning abilities to analyze diagrams and derive meaning from textual context. Make logical deductions about unfamiliar elements.*

*2) Consult technical dictionaries and glossaries as a starting point, but evaluate if the proposed definitions fit the specific context.*

*3) For very unfamiliar terms without sufficient context, provide descriptive translations of the element's purpose and check with subject matter experts to verify accuracy.*

*4) Make note of unclear technical concepts and proactively collaborate with experts in the field to determine optimal interpretations and terminology.*

*5) Combine one's innate talents with the dedicated development of an industry-specific vocabulary and the willingness to admit uncertainty.*

By pairing their natural skills with methodical technical knowledge building, any translators can maximize competence and confidence when tackling multimodal translation challenges. Proper preparation and expert collaboration are keys to conveying precise meaning.

## 5. CONCLUSION

This exploratory mixed-methods study makes several notable contributions to understanding connections between technical translators' MBTI profiles and their efficiency in translating multimodal texts.

Quantitative results, as shown in tables 1 and 3, demonstrated a prevalence of intuitive-thinking (NT) personality types among the sampled translators. Statistically significant positive correlations were found between increased proximity to technical environments and specialists and higher translation quality ratings.

Qualitative findings, as shown in table 2, revealed four factors impacting translation quality: communication skills, proximity to technical facilities, intuitive reasoning ability, and accumulated experience. Translators with NF profiles faced communication challenges, needing career support and development of technical language skills. In contrast, NT types with their preference for intuitive reasoning were adept at building professional networks vital for effective collaboration on technical projects.

Taken together, these quantitative and qualitative results indicate that while innate preferences like intuition are beneficial for technical translation, developing strong professional networks and immersion in technical settings are also key to building an understanding of complex concepts. Even sensing-thinking types can succeed given sufficient experience and proximity.

Limitations of this study include the small sample size from one organization. Further research should investigate MBTI-performance connections in diverse technical translation settings. There is also a need to study additional competencies beyond MBTI.

Overall, this research provides preliminary evidence that MBTI-based assessment can assist in identifying translators who need targeted training and support. Fostering robust collaboration between translators and technical experts is vital for enhancing translation outcomes, especially for multimodal texts. The study introduces a novel approach to improving technical translator training in Kazakhstan using personality assessment.

## ACNOWLEDGEMENT

This research has been funded by the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan (Grant No. AP19679833 “The Connectivist Model of a Foreign Language Educational SMART-Environment in Kazakhstani Context: Necessity, Availability, and Development Strategy.”)

## REFERENCES

Byrne, J. (2012). *Scientific and technical translation explained: A nuts and bolts guide for beginners (1st ed.)*. Routledge. https://doi.org/10.4324/9781315760391.

Clarke, V., & Braun, V. (2013). *Successful qualitative research: A practical guide for beginners*. Sage.

Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1), 3-21.

Creswell, J. W., & Creswell, J. D. *Research design: Qualitative, quantitative, and mixed methods approaches* (6th Ed.). Sage.

Emelianova, E. V. (2021). Topical issues of Kazakhstan translation. *Sciences of Europe*, 64-2, 32–35. https://doi.org/10.24412/3162-2364-2021-64-2-32–35.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11.

Gevaert, M. (2020). *Personality in translation: An experimental study of the relationship between personality traits of student translators and translation quality* (Publication No. 01506205) [A dissertation, Ghent University]. Ghent University Library.

Gibbons, A. (2012) Multimodal literature and experimentation. In J. Bray, A. Gibbons, & B. McHale (Eds.), *Routledge Companion to Experimental Literature* (pp. 420-434). Routledge. https://doi.org/10.4324/9780203116968.

Navidinia, H., Imani, P., & Mobaraki, M. (2021). Exploring the relationship between translation students' personality characteristics and their preference for using translation strategies. *Indonesian Journal of Applied Linguistics*, *11*(2), 341-350. https://doi.org/10.17509/ijal.v11i2.23985.

Hovdi, A. *Variability of translations as a psycholinguistic manifestation of the translator's personality (based on the material of Ukrainian translations from Lord George Gordon Byrons lyrics)* [Bachelor's thesis, Ferenc Rakoczi II Transcarpathian Hungarian College of Higher Education]. Ferenc Rakoczi II Transcarpathian Hungarian College of Higher Education.

Hubscher-Davidson, S. (2013). Emotional intelligence and translation studies: A new bridge. *Meta*, *58*(2), 324–346. https://doi.org/10.7202/1024177ar.

Karimnia, A., & Mahjubi, M. (2013). Individual differences and quality of translation: A personality-based perspective. *Psychology of Language and Communication, 17*(1), 37–64. https://doi.org/10.2478/plc-2013-0003.

Ketola, A. (2016). Towards a multimodally oriented theory of translation: A cognitive framework for the translation of illustrated technical texts. *Translation Studies, 9*(1), 67–81. https://doi.org/10.1080/14781700.2015.1086670.

King, S. P., & Mason, B. A. (2020). Myers-Briggs type indicator. In B. J. Carducci, C. S. Nave, & B. J. Carducci (Eds.), *The Wiley encyclopedia of personality and individual differences: Models and theories*. https://doi.org/10.1002/9781118970843.ch123.

Kuznik, A., & Verd, J. M. (2010). Investigating real work situations in translation agencies. Work content and its components. *HERMES - Journal of Language and Communication in Business, 23*(44), 25–43. https://doi.org/10.7146/hjlcb.v23i44.128882.

Moore, C., Detert, J. R., Klebe Treviño, L., Baker, V. L., & Mayer, D. M. (2012). Why employees do bad things: Moral disengagement and unethical organizational behavior. *Personnel Psychology*, *65*(1), 1-48. https://doi.org/10.1111/j.1744-6570.2011.01237.x.

Myers & Briggs Foundation (2018). *Type use for everyday life*. http://www.myersbriggs.org/type-use-for-everyday-life/.

Nicholson, N. S. (2005). *Personality characteristics of interpreter trainees: The Myers-Briggs type indicator (MBTI).* https://www.openstarts.units.it/bitstream/10077/2476/1/08.pdf.

Olohan, M. (2019). Technology, translation. In *Routledge Encyclopedia of Translation Studies* (3rd ed., pp. 574-579). Routledge.

Rysmagambetova, S.B. (2021, February 18). Basic requirements for the translator in modern reality in Kazakhstan [Conference paper]. *Problems and prospects of the development of science and education in the twenty-first century* (pp. 219–228). Naftokamsk, Russian Federation.

Schaubhut, N. A., & Thompson, R. C. (2008). *MBTI type tables for occupations*. Mountain View, CA: CPP, Inc.

Shaki, R., Khoshsaligheh, M. (2017). Personality type and translation performance of Persian translator trainees. *Indonesian Journal of Applied Linguistics, 7*(2), 360–370. https://doi.org/10.17509/ijal.v7i2.8348.

Sîtnic, I. (2018). The ideal interpreter: didactic perspectives, practitioner's views and client expectations. *Études Interdisciplinaires en Sciences humaines*, (5). https://ojs.iliauni.edu.ge/index.php/eish/article/view/405.

Sue, V. M., & Ritter, L. A. (2012). *Conducting online surveys*. Sage.

Tercedor-Sánchez, M. I., Abada-Molina, F. (2005). The role of images in the translation of technical and scientific texts. *Meta*, *50*(4). https://doi.org/10.7202/019857ar.

Troitskii, D. I., Stepanova, M. M. (2019). Key principles of teaching technical translation to linguistics students. *Teaching Methodology in Higher Education*, *8*(29), 57–67. https://tmhe.spbstu.ru/userfiles/files/29-5_-D_I_-Troitskiy%2C-M_M_-Stepanova.pdf.

Whiting, L. S. (2008). Semi-structured interviews: Guidance for novice researchers. *Nursing Standard (through 2013)*, *22*(23), 35. https://www.proquest.com/scholarly-journals/semi-structured-interviews-guidance-novice/docview/219839081/se-2.

Vural, H. (2022). Do personality traits matter in preferences of translation strategies?. *Research in Social Sciences and Technology*, *7*(1), 42-55.

Yazdi, R. H., & Masoudzade, B. A. (2023). Personality traits and translation: The effect of introvert and extrovert personality types on translation quality of political and journalistic texts. *Critical Literary Studies*, *5*(2), 169-182. https://doi.org/10.34785/J014.2023.023.