The influence of psychological factors on translation quality

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ABSTRACT

Translators need to be aware of their personality traits and how these traits can influence their translation and lead them to translate in their own unique way. Therefore, they themselves can direct their efforts to the most optimal way in the task of translation. At a higher level, this knowledge can help teachers and curriculum designers to develop more efficient translation courses and to provide an environment to improve students' strengths and deal with their weaknesses in translation of different text types. It also can help those in charge of designing translation programs to develop specialized courses at graduate level for training more skillful translators in different fields and for different text types instead of focusing just on theories of translation.The current empirical study aimed at answering a number of questions investigating the effect of translators' personality types on their translation skills. The main aim of the research project is to investigate the influence of psychological factors on translation quality. Participants were selected from among English language students of Azad Universities in Tehran. There were 60 learners in upper-intermediate level who were given an OQPT as the homogenization test. Next, 40 participants were selected with respect to their proficiency level. The researcher introduced the MBTI test to the students and asked them to take the test in the class. Then, they were asked to take translation tasks in their comfort. In order to adjust the test scores for any differences, the SPSS software was used. The result of the study revealed that the quality of the translation of participants with Intuitive and Thinking personality types was better than their Sensing type counterparts in translating expressive texts. Participants with Intuitive and Feeling personality type performed better than their counterparts with Sensing personality type in translation of the informative text. Also, participants with Intuitive, Feeling and Thinking personality types out-performed the participants with Sensing type in translation of the appellative text.
Keywords: Translation, Personality Types, Thinking Personality Type, Intuitive Personality Type, Feeling Personality Type, Sensing Personality Type.

Introduction

Translation in a broad category—interlingual rendition, revision, and rewriting—provides and facilitates the introduction, transfer, or even reshaping ideas and knowledge across or within cultures. Translation studies as an interdisciplinary field is a growing field of research. The domain has undergone serious changes during the past years, which root from the change in the interests of the researchers of the field and

that of the scholars of other fields looking into translation from their own perspectives. Recently, more studies are exploring the translation quality phenomena in translation studies (Moron, 2020).

Being a young field of study, Translation Studies has not yet fully gained its momentum as a thoroughly studied discipline among others. There are much potential yet to be realized and many areas to be investigated. It's under investigated areas are even more manifested when specific to Iranian context. Although translation practice has quite a long history in Iran, translation studies as an academic discipline is fairly young and in need of more academic attention. One of the under investigated areas in this discipline is related to translators themselves. Despite the existing heavy bulk of investigations on different aspects of translation studies, translator as an agent of the translation process with his psychological preferences whose competences should embrace the whole complexity of tasks has not been adequately investigated, especially in Iran. Although Chesterman's (2009) Translator Studies, following Holmes and his map of TS, and works by scholars such as Snell-Hornby (1988), O'Brien (2013), Jääskeläinen (2012), Tirkkonen-Condit (1986), to name but a few, have oftentimes referred to this lacking field, but little has been done so far.

Jung (2014) suggested that people differ in the degree to which they are oriented toward the external world (Extraversion) or the internal world (Introversion). These two orientations are referred to as attitudes. Jung also assumed that people differ in the way they perceive the environment (Sensation versus Intuition) and the way they make judgments about their perceptions (Thinking versus Feeling). The Myers–Briggs Type Indicator (MBTI) is the most popular instrument for the measurement of Jungian personality with ''between 1.5 and 2 million persons completing it each year'' (Jackson, Parker, &Dipboye 1996, p. 99). The MBTI is the first self-reporting instrument used to measure personality from the type approach and is the most widely used typical instrument. The MBTI enjoys several distinguishing features. it is based on a classic theory; it purports to measure types rather than traits of continuous variables, and it is widely used to explain individuals' personality characteristics not only to professionals but also to the individuals themselves. Over the years, "the MBTI has become the most widely used personality measure for non-psychiatric populations" (Myers and Myers 1995, p. 111). The indicator is not trying to measure people, but to sort them into groups to which, in theory, they belong and indicate their type.

This instrument which is used in this study to identify the personality of translators, includes four dichotomous dimensions, which classify individuals either as extraverted or introverted, sensing or intuitive, thinking or feeling, and judging or perceiving (Myers, Briggs, & Kirby, 1998), which are described in the following sections. The primary feature of the MBTI is that each person's personality fits into one of the sixteen four-letter types, namely ISTJ The Duty Fulfiller, ISFJ - The Nurturer, INFJ The Protector, INTJ - The Scientist, ISTP - The Mechanic, ISFP - The Artist, INFP - The Idealist, INTP - The Thinker, ESTP - The Doer, ESFP - The Performer, ENFP - The Inspirer, ENTP - The Visionary, ESTJ - The Guardian, ESFJ - The Caregiver, ENFJ - The Giver, and ENTJ - The Executive.

Dominant Intuitive function: INFJ, INTJ, ENFP, ENTP.

Dominant Sensing function: ISFJ, ISTJ, ESFP, ESTP.

Dominant Thinking function: ISTP, INTP, ESTJ, ENTJ.

Dominant Feeling function: ISFP, INFP, ESFJ, ENFJ.

Deeper understanding about translators and their psychological aspects helps translators to be able to realize their potential skills and translation teachers to better understand their students and help them improve to their best. Therefore, the current study attempted to investigate this realm focusing on how translation students' personality type can affect their translation performance in translation of different text types.

Significance of the Study

The knowledge of the ways psychological preferences can influence translators' performance might prove useful in developing the translators' skills and shedding light on the reasons of differences in their translation performance. Understanding the effects of translation students' individual differences on the quality of their translation of various text types can provide illuminating perspectives in designing more

efficient translation training courses to channel students' energy to develop their skills most proficiently at BA or even MA level.

Translators need to be aware of their personality traits and how these traits can influence their translation and lead them to translate in their own unique way. Therefore, they themselves can direct their efforts to the most optimal way in the task of translation. At a higher level, this knowledge can help teachers and curriculum designers to develop more efficient translation courses and to provide an environment to improve students' strengths and deal with their weaknesses in translation of different text types. It also can help those in charge of designing translation programs to develop specialized courses at graduate level for training more skillful translators in different fields and for different text types instead of focusing just on theories of translation.

Finding the relationship between students' personality types and their translation quality of different text types may also be used in designing a methodology to develop aptitude tests that assess students not just based on their language and translation knowledge but on their personality traits and guiding them to choose their academic and ultimately their carrier path in light of this knowledge.

Review of literature
- **personality**

The word personality is one of the popular ones used with fascination with different senses in English language. However, according to Hall, Lindzey, and Campbell (Lucie Smith, 2012, p. 210) most of popular meanings of personality fall into one of the following two categories: The first usage pertains to social skill or adroitness. An individual's personality is evaluated by the effectiveness with which he is able to elicit positive reactions from a variety of people in different situations. The second usage considers the personality of the individual to inhere in the most salient impression which he creates in others. A person may therefore be said to have an aggressive personality or a submissive personality or a fearful personality. In each case the observer selects an attribute or quality which is highly typical of the subject and which is presumably an important part of the overall impression which he creates in others and his personality is identified by this term.

In order to have a deeper understanding of the word personality, it might be better to know its Latin root. Chauhan (2009) provided a brief history of the word personality:

The term personality comes from the Latin word 'persona' that was associated with Greek theatre in ancient times. A Greek player commonly held a mask before his face. … According to the concept of mask, personality was thought to be the effect and influence which the individual wearing mask left on the audience. Even today, for a layman, personality means the effect which an individual leaves on other people. Precisely, we can say that the mask or persona of the actor implied a cover for the real person behind it. It was developed on the basis of Plato's idealistic philosophy who believed that personality is a mere façade for some substance.

The term Personality has been defined and described variously by many of the psychologist who studied personality and its components.

Allport (1937) in his study of the literature indicated about fifty different definitions and presented them in some categories, from which biosocial and biophysical personalities are the most noticeable ones. The biosocial definition is closer to the popular sense of the term as it defines personality as the social stimulus value of the individual i.e., it is the reaction of others to a person which defines personality. One may even say that a person does not have a personality but that provided by the reaction of the others. Allport (1937) himself objected to the assumption that personality is defined only in the responding other and proposes a biophysical definition which highly relates personality to characteristics or qualities of individuals.

Some theorists have considered personality as a part of the individual which is the most representative of him, not only in that it differentiates him from other persons but, more importantly, because it is what the person actually is. Allport's famous quote that personality is what a man really is illustrates this type of definition. The implication here is that personality consists of what is most typical and genuine characteristic of the person.

- **Translation**

Translation entails use of the student's language, so it is a kind of own language use, but it is by no means the only one. Teachers may use the student's language in a variety of other ways too. For explanation, for classroom management, to establish personal relationships- none of which necessarily entail translation. The term 'own language' is used in preference to 'first language' (L1), 'native language' or 'mother tongue', all of which seem unsatisfactory. For instance, in many language classrooms, the most common shared language of the students is not the first or native language of all students. In addition, the word 'native language' is obscure – it mixes several criteria and can mean the language someone spoke in infancy, the language with which they identify, or the language they speak best; these are not always the same. Finally, first language is not only an emotive term but also inaccurate – for the obvious reason that many people's first language is not their mother's mother tongue. Thus translation can be seen as separable from other ways of using the student's own language, and those advocating bilingual teaching are not therefore necessarily advocates of translation (Cook, 2009).

Before the 1990's, English education focused on reading skills in order to help students read and translate materials written in English. The pedagogy in general, thus, was purposed at improving learner's grammar knowledge in reading and translation. Consequently, English masters essentially used grammar-translation to meet the expectations of the national pedagogy. The revised pedagogy for high school English teaching in the last decade seems to have put more stress on communicative competence. Nevertheless, it is still far from being called 'communicative'.

Masters start to use the grammar-translation method through textbooks which has no listening and speaking activities and expanse grammatical exercises disguising as 'writing' activities. They do so because the standardized national exams are very important. Here, English language textbooks are very critical because they are the sole source of language input for the students. The quality of paper, binding and printing of these textbooks may be excellent, but they seriously lack variety in communicative tasks and information gap activities. According to Khaniya (1990), a majority of teachers help learners solve problems in order to preserve their reputation as good teachers.

Teachers' has stress about weak results as a consequence of their students' performance in public examinations might lead teachers to teach English for testing purposes only (Alderson & Wall, 1993). According to Jahangard (2007), teachers in Iran teach in way of demanding. In Iran, expectations of parents and school principals merely round the students' performance in exams which, as earlier noted, is not grounded in communicative principles in language teaching. Even Iranian learners at the university level have weak ability to be able to use English communicatively. English teaching in university often goes around translation and the actual purpose is to enable students to read and understand English written materials in their majors. There is very little motivation for authorship in the use of the books, thus masters refuge to grammar translation and audio-lingual methods. They also then use Farsi to teach English and cannot be persuaded to use the foreign language communicatively. On the other hand, there is an opposite movement to governmental language education system in Iran. Here, there are many private institutions which offer English programs to students. In these institutes teachers are forbidden from the use of translation in foreign language classes. Some of these institutes like Iran Language Institute, ILI, strictly adhere to American variety. They immediately correct the learners who violate this variety. In their training courses, they emphatically ask instructors not to use translation and disallow their students, too. Therefore, in Iran, like many other developing countries, translation, misconceived and overused, is a victim of the grammar-translation method. Indeed, translation itself is linked to a communicative purpose.

- **the MBTI and Translation Studies**

Type theory suggests that people have individual preferences concerning what they pay attention to, how they make decisions, draw conclusions, and how they approach and respond to tasks. This idea led to some studies in the realm of translation studies as an endeavor to come to a better understanding of the process of translation and translation results. As Hubscher-Davidson (2009) declared, Reiss (1971) was the first scholar who analyzed translators' personalities. She adopted the concept of characterology and, on the basis of Sprangers' typology presenting the six forms of personality including: theoretical, economic,

aesthetic, social, aggressive and religious. As Reiss (2004) stated, "The theoretical type would be good in translating technical and philosophical texts" (p. 111), and on the other hand, would feel frustrated in translating creative and expressive works like poetry because his or her theoretical character prevents him or her from producing artistic works (Reiss, 2004). She mentioned that aggressive type cannot be a good translator in contrast, she described the aesthetic type as the best translator (Reiss, 2004). Another study was run by Kussmaul (1995, as cited in Karimnia & Mahjubi, 2013), in which he used Think Aloud Protocols method (TAP) to show how different personalities can affect the translated works. He means that, those translators who do not have creativity, produced less creative translations and "his research backed up the link between personality and the translating process" (Karimnia & Mahjubi, 2013, p. 42).

In a comprehensive study which was conducted by Karimnia and Mahjubi (2013) the relationship between translation students' personalities and the quality of their English-to-Persian translations in terms of different text types were studied. Researchers selected three types of operative, informative and expressive texts and to examine the effect of the translation students' personality type on the quality of their English-to-Persian translations; they asked participants who were 35 undergraduate senior students of translation to translate the texts. In addition, they adopted some instruments such as, background questionnaire to gain some demographic information about the participants, a retrospective questionnaire about the translated texts and the Myers-Briggs Type Indicator (MBTI), a personality test induced from Jung's type theory, was applied to determine the personality type of each participant. Once the participants' personality types were identified and in this way the researchers used the first taxonomy of dominant mental function proposed by Myers-Briggs "to confirm the result, the researchers also used the personality hierarchy chart used by Wilz (2000) in their study"(p. 44) and finally, on the basis of the determined personality types, four groups were specified, namely Intuitors, Sensors, Feelers and Thinkers.

The result of the study showed that there are not significant differences between the Sensors over the Intuitors and the Feelers over the Thinkers in terms of their translations of the operative and informative texts and in contrast there is a significant difference between the Intuitors and the Sensors regarding the expressive text. So, they mentioned the findings of this study did not show any significant relationship to distinguish the Thinkers from the Feelers and the only significant difference was that of the Intuitors versus the Sensors. This study revealed that, the Sensing students had weak performance in the translation task because they did not have creativity and self-confidence, and also, in the process of reading comprehension, Sensors and Intuitors apply their own specific method. Also, sensing students cannot read individually and they need help so they employ a bottom-up process for the process of reading comprehension and using the bottom-up approach leading to low-quality translations. As Sharp (2004) claims Intuitive translators are more successful because they can take advantages of guessing, predicting and other compensation strategies and these are important points that were proved by the findings of this study.

As Karimnia and Mahjubi (2013) mention, scholars believe that translation of expressive texts demands imagination and intuition; therefore, it is not easy for Sensors to use their imagination which is the necessary for the process of translating expressive texts. Another important point in translation is creativity both in decoding and encoding of the ST. Creativity and translation are interrelated, especially in the translation of expressive texts. There are two kinds of creativity in translation, on the one hand, it is novel strategies for coping with lexical and syntactic difficulties because of having innovative ideas and enjoying solving problems and on the other hand, translation is a creative process and translators have to use their creativity to encode the ST message (Karimnia & Mahjubi, 2013). Above all, translators deal with problem solving process which is challenging for Sensors because they do not like problems "unless their experience in the past can help them solve the problem" (Capretz& Ahmed, 2010, as cited in Karimnia & Mahjubi, 2013, p. 40). In a nutshell, Karimnia and Mahjubi (2013, p. 50) declared that "the Sensors' failure in translation could originate from the lack of creativity and imagination in their personality as well as using the bottom-up approach in reading comprehension".

There are other studies in this field which are not as much comprehensive as above mentioned study, but the results of them can help scholars. One of them is a recent study which was conducted on the impact of translator's personality on translation quality of narrative texts by Pourgharib and Dehbandi (2013). To reach this goal, participants of the study were asked to translate two narrative texts and then the personality

test was given to them to show whether they were Thinking or Feeling. The result of this study showed that translator's personality had no impact on translation quality of narrative text.

Another recent research in this area is studying of the effect of Introvert and Extrovert personality on translation quality which was conducted by Raees Yazdi (2013). To this end participants of the study (60 translation students) were asked to translate two political and journalistic texts and in the second step a Persian personality test was given to them to show whether they were Introvert or Extrovert. The results of the study indicated that the personality characteristics of the subjects did not have a significant effect on translation quality.

Methodology

Participants of the study were male and female Translation Studies students. They were selected from among English language students of Azad Universities in Tehran. Participant selection was based on convenience sampling method. Convenience sampling may not be the most desirable sampling method but is largely practical and as the name suggests is the most convenient and according to Dörnyei (2007, p. 129) "the most common in postgraduate studies". There were 60 participants from which 21 were female and 39 were male. All of them were of Persian mother tongue. The reason behind choosing English language students as the participants was the fact that they had met the minimum requirements and knowledge, so they would have the required English language efficiency and translation knowledge, and the fact that they had passed several methodology courses had made them familiar with the translation area.

The following instruments were adopted in data collection phase to achieve the purpose of the study:

Personality Test: The current study used Myers-Brigs Type Indicator (MBTI). It is a personality test developed based on Yung's type theory. It is a paper-and-pencil questionnaire containing 93 items each with 2 possible responses for each item. The questionnaire can be administered individually or in groups. It was administered to determine the personality type of the participants by identifying their personality preference among Extraversion-Introversion, Intuitive-Sensing, Feeling-Thinking and Perceiving- Judging dichotomies. In order for the native Persian language participants of the study to better understand the test items, the Persian translation of the test with reported reliability and validity retrieved from thesis done by Yaghoubi Beiglar (2008) was used (see appendices).

Translation Production Texts: The study made use of three paragraphs of different text types with respect to Reiss' (1971) text typology involving expressive, operative and informative texts. Therefore, an expressive text, an informative text and an advertisement were selected to fulfill the intended text types respectively. Three short paragraphs with the intended functions were extracted from the following sources:

The expressive paragraph was chosen from the book the great Gatsby by Fitzgerald (1925).

The informative paragraph was selected from the book Creative confidence: Unleashing the creative potential within us all (Kelley & Kelley, 2013).

The advertisement was selected from National geographic (National Geographic Society (U.S.), 2014)

Oxford Quick Placement Test: the OQPT (Oxford Quick Placement Test) was used to determine the proficiency level of the participants in this study. The Oxford test consists of three parts. The test has 60 items and a writing part. Due to administration problems, the writing section will be excluded. According to Oxford university press (2001) the Oxford Quick Placement Test (OQPT) provides teachers with a reliable and efficient means of placing students at the start of a course. Oxford Quick Placement Test is calibrated against the Common European Framework of Reference for Languages: Learning, Teaching, Assessment (commonly known as the CEFR), which has been adopted by the Association of Language Testers in Europe (ALTE) and by governments and major institutions, including exam boards, throughout Europe. In addition, the OQPTs can clearly and reliably identify any learner's CEFR level (on the A1 to C2 CEFR scale) and also provide a score which shows where the learner is within that band, e.g. near the top of B1. It should be noted that the allotted time was 30 minutes.

procedure

In this study, the main purpose was to investigate the impact of a variety of personality traits provided by Myers-Briggs on the translation skills of Iranian translators. Accordingly, 60 male and female students

were selected. They were selected from among English language students of Azad Universities, in Tehran. In order to ensure the homogeneous entry behavior of the participants in terms of proficiency, the OQPT with reasonable measures of validity and reliability was administered and those whose score fells one standard deviation above and below the mean included in the study. From 60 students, 40 students (including 15 female and 25 male) were selected and considered as the participants of this study. The selection of these 40 students was based on their level which identified by OQPT, and it should be mentioned that the students with the level of upper intermediate selected for the research. Before starting the process, the researcher visited the participants for 20 minutes and explained the study to them; what they were supposed to do in the study. The researcher introduced the MBTI test to the students and asked them to take the test in the class and ask their questions, in case they had any regarding the items of the test. Then, they were asked to take translation tasks in their comfort. It must be noted that the required data for the study was collected in classrooms at Azad Universities, in Tehran.

This study used statistical analysis to investigate the impact of a variety of personality traits provided by Myers-Briggs on the translation skills of Iranian translators. Also, the data gathered through the MBTI test and TQA to provide the results achieved through the statistical analysis. The Participants' personality types were identified based on their answers to the MBTI test by using the scoring sheet provided for MBTI test. The personality type of each participant was determined as a four letter word which was abbreviation for one of the sixteen personality types defined by Myers-Briggs. Then the personality dominant function was determined for each of the participants based on Myers et al. (1998) categorization. In order to assess the quality of the produced translation, the researcher asked 3 raters to score the translated texts applying holistic approach to translation quality assessment (TQA) validated by Waddington (2001). A marker sheet by Waddington (2001) and a scoring sheet were provided to the raters. After collecting the needed data through questionnaires, they will be analyzed through SPSS and the mean and standard deviation will be obtained

Results

Summaries for the distribution of diagnosed personality types based on the MBTI questionnaire are presented in Figure 1. There were 12 personality types present in this study out of the 16 personality types introduced by Myers et al. (1998).The personality types were categorized into the dominant personality functions, which are the independent variables of the analysis. The distribution of dominant functions of Sensing, Feeling, Intuitive and Thinking among participants is reported in Table 1.
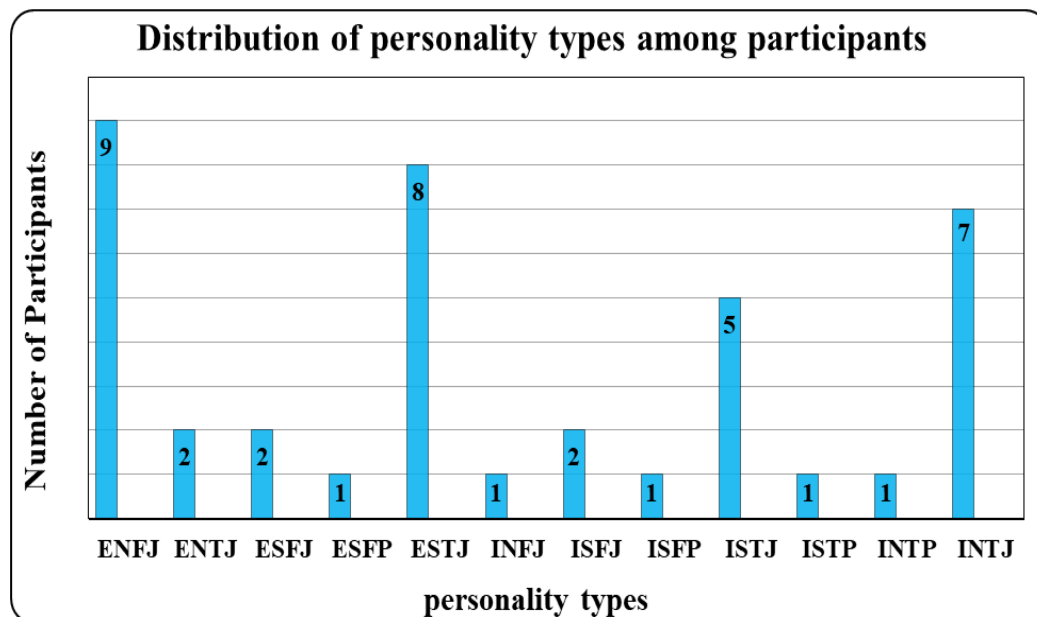

Figure 1: Distribution of personality types among participants

Table 1: Distribution of dominant functions among participants

Personality types	Frequency	Percentage
Sensing	9	21.4
Feeling	12	32
Intuitive	8	19.4
Thinking	11	27.2
Total	40	100

The participants with Feeling and Thinking dominant functions outnumbered the ones with Sensing and Intuitive functions. Feeling group was over-represented (32%) and Intuitive group was under-represented (19%) in this study. In order to investigate the first question of the study, it was needed to investigate the assumption that the means of scores for quality of translations produced for each text type were different. Shapiro–Wilk test examines the normality of distribution of variances and Levene's test examines the homogeneity of variance. Shapiro–Wilk test examines whether the distribution of variances deviate from a comparable normal distribution. According to Field (2009):

[It compares] the scores in the sample to a normally distributed set of scores with the same mean and standard deviation. If the test is non-significant (p >.05) it tells us that the distribution of the sample is not significantly different from a normal distribution (i.e. it is probably normal). If, how- ever, the test is significant (p <.05) then the distribution in question is significantly different from a normal distribution (i.e. it is non-normal). These tests seem great: in one easy procedure they tell us whether our scores are normally distributed. The results for Shapiro–Wilk test on average scores for the three text types among the dominant functions is presented in Table 4. As shown in Table 2, the distribution of average scores for quality of translations of the expressive text for Feeling (.008), of the informative text for Feeling (.010), Intuitive (.003) and Thinking (.020) and of the appellative text for Sensing (.001), Feeling (.026), Intuitive (.012) and Thinking (.026) dominant functions significantly deviate from the normal distribution, which is the indicative of non-normality of their distribution.

Table 2: Results of Shapiro-Wilk Test for Normality

		Statistic	df	Sig.
	Sensing	.918	22	.071
	Feeling	.907	33	.008 *
Avg. Score in Exp. Text	Intuitive	.934	20	.182
	Thinking	.952	28	.225
	Sensing	.931	22	.129
Avg. Score in Info. Text	Feeling	.911	33	.01 *
	Intuitive	.835	20	.003 *
	Thinking	.910	28	.020 *
	Sensing	.816	22	.001 *
Avg. Score in App. Text	Feeling	.925	33	.026 *
	Intuitive	.871	20	.012 *
	Thinking	.915	28	.026 *

a. The level of significance is .05
* Lower than the significance level

To test the homogeneity of variances, Levene's test is used. "Levene's test is used to assess the tenability of the assumption of equal variances (homogeneity of variance)" (Field, 2009, p. 436). In cases where Levene's test is significant, it is indicative of the group variances not to be equal (therefore the assumption of homogeneity of variance is violated).The result of Leven's Test shows that f ratio for average scores for quality of translation of the expressive text, $f(3, 99) = .235$, was non-significant, of the informative text, f

(3, 99) = .095, was non-significant, and of the appellative text, f (3, 99) = .043, was significant, which violated the homogeneity assumption of variance.

Table 3: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Average score for text 1	1.441	3	99	.235
Average score for text 2	2.185	3	99	.095
Average score for text 3	2.838	3	99	.042*

a. The level of significance is .05
* Lower than the significance level

Since the normality and homogeneity assumptions for running parametric tests (such as ANOVA) to compare the quality of translation produced for different text types regarding different personality dominant functions were violated, a non-parametric counterpart could be used. There are several procedures to calculate the f-ratio for non-parametric data; however, according to a review done by Tomarken and Serlin (as cited in field, 2009) on the Brown–Forsythe F (1974), and Welch's F (1951) and other techniques they "seem to conclude that both techniques control the Type I error rate well (i.e. when there's no effect in the population you do indeed get a non-significant F). … [in] detecting an effect when it exists), the Welch test seems to fare the best" (p. 380).The results of descriptive statistics and Welch test for the average ratings of the three text types as the dependent variable across the dominant functions (i.e. independent variables) are reported in Table 3 and 4 respectively.

As shown in Table 3, the significance values for all the three dependent variables are less than the criterion value 0.05, indicating that the test rejects the first null hypothesis. In other words, there were significant differences between means of average scores for the expressive text, the informative text and appellative text regarding different personality functions. As manifested in Table 3, the results indicate that there is a significant difference between translation quality of the expressive text amongst Sensors (M=4.45, SD=1.62), Feelers (M=4.99, SD=1.73), Intuitors (M=5.93, SD=1.441) and Thinkers (M=4.67, SD=1.38), [F (3, 52) = 4.04, p<.05, est., $\omega 2$ =.021].There was a significant difference in translation quality of the informative text amongst Sensors (M=4.62, SD=1.24), Feelers (M=6.40, SD=1.57), Intuitors (M=6.25, SD= 1.04) and Thinkers (M=5.29.66, SD=1.74), [F (3, 54) = 9.75, p<.001, $\omega 2$ =.03].There was a significant difference in translation quality of the appellative text amongst Sensors (M=4.09, SD=1.45), Feelers (M=6.10, SD=2.00), Intuitors (M=6.58, SD=1.32) and Thinkers (M=5.63, SD=2.08), [F (3, 54) =3.18, p<.001, $\omega 2$=.03].

Table 4: Robust Tests of Equality of Means (Welch Test)

		Statistic	df1	df2	Sig.
Average score for text 1	Welch Test	4.048	3	51.612	.012*
Average score for text 2	Welch Test	9.757	3	53.594	.000*
Average score for text 3	Welch Test	11.968	3	53.745	.000*

a. The level of significance is .05
* Lower than the significance level

Table 5: Welch Descriptive Analysis

	D Function	N	Mean	Std. Deviation	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Avg. Score for Exp. Text	Sensing	9	4.445	1.62	3.73	5.17	2	6.7
	Feeling	12	4.994	1.73	4.37	5.61	2.7	8
	Intuitive	8	5.935	1.44	5.26	6.61	3	8
	Thinking	11	4.671	1.38	4.13	5.20	2	6.7
	Total	40	4.974	1.62	4.65	5.29	2	8
Avg. Score for Info. Text	Sensing	9	4.62	1.24	4.07	5.18	2	7
	Feeling	12	6.4	1.57	5.84	6.96	4	9
	Intuitive	8	6.25	1.04	5.76	6.74	4	8.3
	Thinking	11	5.29	1.74	4.62	5.97	1	8
	Total	40	5.69	1.61	5.37	6.01	1	9
Avg. Score for App. Text	Sensing	9	4.09	1.45	3.45	4.73	1	5.7
	Feeling	12	6.1	2.00	5.39	6.81	2.7	9
	Intuitive	8	6.58	1.32	5.96	7.19	4	8.3
	Thinking	11	5.63	2.08	4.82	6.44	1	8.3
	Total	40	5.64	1.98	5.25	6.02	1	9

Q2. What personality types are better at translating text? To find the answer to this question Welch test was applied. The results of Welch test only shows whether there is a significant difference between means of a group of dependent variable in relation with an independent variable, but does not identify exactly which variables are significantly different; however, it can be determined through applying a post hoc test. According to Field (2009, p. 372) "post hoc tests consist of pairwise comparisons that are designed to compare all different combinations of the treatment groups. So, it is Rather like taking every pair of groups and then performing a t-test on each pair of groups".

To this aim, the researcher conducted a post hoc test, which is offered by SPSS as an option for ANOVA under post hoc. Several types of post hoc tests are listed, typically delivering almost exactly the same results. However, as mentioned earlier the distribution of our data was not normal (Table 2) and the group sizes were unequal. SPSS provides four options for this situation: Tamhane'sT2, Dunnett'sT3, Games–Howell and Dunnett'sC. Field (2009) believes in such cases that "there is any doubt that the population variances are equal then use the Games–Howell procedure because this generally seems to offer the best performance" (p. 375).

It is important to reiterate that we conduct post hoc tests if and only if the initial F value for the Welch test is significant. To determine the significance of the effect of each personality type groups on translation quality of the text types, Games–Howell post hoc test was applied. The results are reported in Table 6. As Table 4 shows, post hoc comparisons using Games–Howell test, at the significance level of 0.05, indicates Intuitors out-performed Sensors ($p<.05$) and Thinkers ($p<.05$) in translation of the expressive text. Other personality dominant functions did not have significant effect on translation quality of the expressive text ($p>.05$). In translation of the informative text, Intuitors and Feelers out-performed Sensors ($p<.001$). Other personality dominant functions did not have significant effect on translation quality of the informative text ($p>.05$).Regarding the translation quality of the appellative text, Intuitors ($p<.001$), Feelers ($p<.001$) and Thinkers ($p<.05$) out-performed Sensors.

Table 6: Games–Howell Multiple Comparisons of Group Means

Dependent Variable	(I) Dominant Function	(II) Dominant Function	Mean	Std. Error	Sig.	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Avg. Score for Exp. Text	Sensing	Feeling	-.539	.4601	.647	-1.765	.686
		Intuitive	-1.480*	.4734	.017	-2.749	-.212
		Thinking	-.216	.4346	.959	-1.380	.946
	Feeling	Sensing	.539	.4601	.647	-.686	1.765
		Intuitive	-.941	.4421	.159	-2.119	.237
		Thinking	.322	.4004	.852	-.736	1.381
	Intuitive	Sensing	1.480*	.4734	.017	.212	2.749
		Feeling	.941	.4421	.159	-.237	2.119
		Thinking	1.263*	.4155	.021	.150	2.377
	Thinking	Sensing	.216	.4346	.959	-.946	1.380
		Feeling	-.322	.4004	.852 -	1.381	.736
		Intuitive	-1.263*	.4155	.021	-2.377	-.150
Avg. Score for Info. Text	Sensing	Feeling	-1.775*	.3819	.000	-2.790	-.762
		Intuitive	-1.627*	.3539	.000	-2.577	-.679
		Thinking	-.669	.4231	.399	-1.795	.457
	Feeling	Sensing	1.775*	.3819	.000	.762	2.790
		Intuitive	.148	.3601	.976	-.809	1.105
		Thinking	1.106	.4283	.058	-.028	2.241
	Intuitive	Sensing	1.627*	.3539	.000	.679	2.577
		Feeling	-.148	.3601	.976	-1.105	.809
		Thinking	.958	.4036	.097	-.118	2.035
	Thinking	Sensing	.669	.4231	.399	-.457	1.795
		Feeling	-1.106	.4283	.058	-2.241	.028
		Intuitive	-.958	.4036	.097	-2.035	.118
Avg. Score for App. Text	Sensing	Feeling	-2.010	.4659	.000	-3.247	-.775
		Intuitive	-2.484	.4276	.000	-3.631	-1.338
		Thinking	-1.540	.5016	.018	-2.876	-.205
	Feeling	Sensing	2.010	.4659	.000	.775	3.247
		Intuitive	-.473	.4566	.728	-1.687	.739
		Thinking	.473	.5265	.808	-.924	1.864
	Intuitive	Sensing	2.484	.4276	.000	1.338	3.631
		Feeling	.473	.4566	.728	-.739	1.687
		Thinking	.944	.4930	.236	-.370	2.259
	Thinking	Sensing	1.540	.5016	.018	.205	2.876
		Feeling	-.470	.5265	.808	-1.864	.924
		Intuitive	-.944	.4930	.236	-2.259	.370

a. The level of significance is .05
* Lower than the significance level

- **Rankings of Participants**

In order to better compare the performance of participants in the four personality function groups, the total average score for the three text types was calculated. Since scores given to the translations were ranged from 0 to 10, the score of 5 was set as the cut-off score for the total average and the following statistics were extracted from the scores of the Participants.

Table 7: Descriptive Statistics for the Total Average

Dominant Function	Number of Participants	Number of Failed Participants	In Group Fail Percentage	In Group Pass Percentage
Sensing	9	7	(77.8)	(22.2)
Feeling	12	4	33.4	66.6
Intuitive	8	1	(13)	(87)
Thinking	11	5	46	54
Total				

As reported in Table 7, 42.5% of the participants (17 participants) scored lower than the cut-off score and 57.5% of the participants (23 participants) scored higher than the cut-off score. A cursory examination of Table 7, indicate a possible correlation between the presence of Sensing type and low quality of their translation and Intuitive type and high quality of translation.

The ranking of the participants based on the total average score suggests the highest fail and consequently the lowest success percentage belong to Sensing type. 77.8% of Sensing dominant type participants failed and only 22.2 percent of them succeeded to score higher than 5. On the other hand, the highest success and thus the lowest fail percentage belong to Intuitive type. 87% of Intuitive type participants successfully scored higher than the cut-off score and only 13% of them failed to pass.

Conclusion

The current study attempted to investigate the influence of psychological factors on translation quality. To this aim, personality types of participants were determined using the MBTI test, and the translation quality of the three expressive, informative and appellative texts produced by the participants were assessed by three raters using holistic approach to translation quality assessment validated by Waddington. The analysis of the data suggested that the personality type of participants affects the translation quality of expressive, informative and appellative texts. The quality of the translation of participants with Intuitive and Thinking personality types was better than their Sensing type counterparts in translating expressive texts. Participants with Intuitive and Feeling personality type performed better than their counterparts with Sensing personality type in translation of the informative text. Also, participants with Intuitive, Feeling and Thinking personality types out-performed the participants with Sensing type in translation of the appellative text. Sensing type participants' poor translation performance compared to the other two personality types was suggested to be originated from their personality traits, the traits which generally lead them to have difficulties with comprehending the source text and solving new problems.

The findings of the study may help students to make more informed choices regarding the improvement of their skills and selecting the most suitable career path among translation specialties. They also may help teachers and planners to provide a better environment to boost students' skills and better address students' problematic areas in translation practice. Furthermore, the findings may assist curriculum designers and academic programs planners to develop specialized courses at graduate level for training more skillful translators in different fields and for different text types and genres.

Discussion of the Findings

Previous researches (Hubscher-Davidson, 2009; Karimnia & Mahjubi, 2013) studied the effect of personality types on quality of translation. The purpose of the study was to investigate the existence of possible relationship between Iranian translation students' personality types and the quality of their English-to-Persian translation of expressive, appellative and informative text types and also to identify the personality types that can perform better in English-to-Persian translation of different text types. Based on the data analysis, this section discusses the implications of the findings for each of the three research questions of the study.

Does individual characteristic significantly affect on the translation quality of Iranian translation students? The findings resulting from research question one indicate the existence of significant relationship among the participants' personality types and their corresponding translation assessment scores, and therefore their translation quality of different text types. The findings signify the influence of personality on the process and eventually the quality of the produced translation. The effect of individuals' personality on their interactions with environment (Larsen & Buss, 2008) and their respond to the problems they encounter (Myers et al., 1998) in different tasks have already been reported in previously conducted studies. In agreement with the same token, the influence of aspects of personality on the quality of translation task has been confirmed by numerous studies conducted in the realm of translation studies (Hubscher-Davidson, 2007, 2009; Karimnia & Mahjubi, 2013; Pourgharib & Dehbandi, 2013). These finding signify the role of

translators' personality on the decisions they make in the process of translation which in turn ultimately affect the quality of the produced translations.

What personality types are better at translating text? The quantitative findings for research question two revealed that Intuitive types outperformed their Sensing and Thinking counterparts in task of translating the expressive text. The quantitative findings indicated that Intuitive and Feeling types outperformed their Sensing counterparts in the translation task of the informative text.

As showed, there were only two Sensing types among the top 50 participants in the ranking for translation quality of the informative text, which shows the weak performance of Sensing type participants compared to those with other personality types. In a nutshell, the results of analyses suggest that Sensing type participants showed a weaker performance in translation of all the three text types compared to Intuitive type participants.

This study is not the only one indicating the significance of Sensing-Intuitive dichotomy. This dichotomy has been considered to be the most prominent category in the studies that have employed the MBTI. McCaulley (1990, as cited in Felder et al., 2002, p. 6) reports the Sensing-Intuitive difference to be "by far the most important of the preferences". Its importance has been reported by many researchers (including Callahan, 2000; Hubscher-Davidson, 2009; Marefat, 2006; Wankat & Oreovicz, 1993).

Recommendations for further research

This study aimed at to investigate the influence of psychological factors on translation quality. Data was collected to test the two research questions relating to this aim. Many significant findings resulted from the examination of the gathered data. The findings, although significant, have some limitations. One limitation is that they are based on the data gathered from only Azad universities in Tehran and may not be generalized to all the translation students; therefore, it is recommended for researchers to conduct further replications with more students from different universities to form a more rigorous body of findings, as one study cannot cover such a vast information. The data were collected from English-to-Persian translations of expressive, informative and appellative text types. Therefore, further researches may investigate Persian to English or other language pairs and other genres to examine whether the findings stay consistent with the ones in this study.

The only instrument to determine participants' personality type used in this study was the Persian translation of the MBTI. Seeking advice from a well-trained psychologist's interview with participants may prove helpful in verifying the determined personality types, which in this study was not possible due to the scope of the study. The studies with less quantitative and more qualitative design and thus fewer participants can get the help from a psychologist. Another limitation on the findings was the reliability and validity of the Persian translation of the MBTI. Although having acceptable reliability and sufficient validity, more studies can focus on the measurement and improvement of the questionnaire to provide a more reliable and valid version of the test to help the researchers using it in different areas of study.

References

[1] Alderson, J. C., & Wall, D. (1993). Does washback exist? Applied linguistics, 14(2), 115-129.
[2] Allport, G. W. (1937). Personality: A psychological interpretation.
[3] Briggs-Myers, I., & Myers, P. B. (1995). Gifts differing: Understanding personality type.
[4] Capretz, L. F., & Ahmed, F. (2010). Making sense of software development and personality types. IT professional, 12(1), 6-13.
[5] Chauhan, M., (2009). Impact of self-talk and personality on empathy. Indian Journal of Health and Wellbeing, 4(8).
[6] Chesterman, A. (2009). The name and nature of translator studies. HERMES-Journal of Language and Communication in Business, (42), 13-22.
[7] Cook-Sather, A. (2009). Translation: An alternative framework for conceptualizing and supporting school reform efforts. Educational Theory, 59(2), 217-231.
[8] Dehbandi, Z., & Pourgharib, B. (2013). The difference in translation quality of undergraduate translation students and experienced translators in narrative text. International Journal of Basic Sciences & Applied Research, 2(7), 13-716.

[9] Dörnyei, Z. (2007). Creating a motivating classroom environment. In International handbook of English language teaching (pp. 719-731). Springer, Boston, MA.

[10] Hubscher-Davidson, S. E. (2009). Personal diversity and diverse personalities in translation: A study of individual differences. Perspectives: Studies in translatology, 17(3), 175-192.

[11] Jääskeläinen, R. (Eds.). (2012). Tapping and mapping the processes of translation and interpreting: Outlooks on empirical research (Vol. 37). John Benjamins Publishing.

[12] Jackson, S. L., Parker, C. P., & Dipboye, R. L. (1996). A comparison of competing models underlying responses to the Myers-Briggs Type Indicator. Journal of Career Assessment, 4(1), 99-111.

[13] Jahangard, A. (2007). Evaluation of the EFL materials taught at Iranian high schools. The Asian EFL Journal, 9(2), 130-150.

[14] Jung, C. G. (2014). Two essays on analytical psychology. Routledge.

[15] Karimnia, A., &Mahjubi, M. (2013). Individual differences and quality of translation: A personality-based perspective. Psychology of language and communication, 17(1), 37-64.

[16] Khaniya, T. R. (1990). The washback effect of a textbook-based test. Edinburgh Working Papers in Applied Linguistics, 1, 48-58.

[17] Larsen, R. J., & Buss, D. M. (2008). Personality disposition over time. Personality psychology: Domains of knowledge about human nature.

[18] Lucie-Smith, A. (2012). The Genius of the Roman Rite: The Reception and Implementation of the New Missa. By Keith Pecklers, SJ. Pp. xii, 117, London, Burns and Oats, 2009 $12.05. The Heythrop Journal, 53(6), 1047-1048.

[19] MORÓN, M. (2020). CHAPTER SEVENTEEN FROM TRANSLATION PROFESSIONALS TO TRANSLATION-RELATED PROFESSIONALS OR "NON TRANSLATORS" MARIÁN MORÓN MARTÍN. Strategies and Analyses of Language and Communication in Multilingual and International Contexts, 179.

[20] Myers Briggs, I., & Kirby, L. K. (1998). An Introduction to Types: A Guide to Understanding Your Results on the Myers-Briggs Types Indicator. CPP, Palo Alto, CA, Revised from the.

[21] O'Brien, W. (2013). Changing roles: Applying continuity theory to understanding the transition from playing to volunteering in community sport. European sport management quarterly, 13(1), 54-75.

[22] Reiss, S. (2004). Multifaceted nature of intrinsic motivation: The theory of 16 basic desires. Review of general psychology, 8(3), 179-193.

[23] Sharp Jr, J. M. (2004). The compleat Darcy: new lessons learned from the first English translation of Les Fontaines Publiques de la Ville de Dijon. Ground Water, 43(3), 457-461.

[24] Snell-Hornby, M. (1988). Translation studies: An integrated approach. John Benjamins Publishing.

[25] Tirkkonen-Condit, S. (1990). A Think-Aloud Protocol Study. In Learning, Keeping, and Using Language: Selected Papers from the 8th World Congress of Applied Linguistics, Sydney, 16-21 August 1987 (Vol. 1, p. 381). John Benjamins Publishing Company.