

**Multicultural Personality Traits Development in an EFL Context:
The Case of Iranian EFL Students at BA, MA and Ph.D. Levels**

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Abstract

This study examined the Iranian EFL learners' multicultural developmental trend in light of Investment Hypothesis as they furthered their academic studies from BA toward postgraduate levels. In so doing 117 BA, 92 MA, and 35 Ph.D. EFL students at Allameh Tabataba'i University, Tarbiat Modarres, and Islamic Azad Universities, Tehran, Iran, were randomly selected to provide answers to Multicultural Personality Traits Questionnaire (MPQ) that measures individuals' Multicultural Personality Traits (MPTs: Cultural Empathy, Open-Mindedness, Social Initiative, Emotional Stability, and Flexibility). Ph.D. students' MPTs mean was found to be 277.77; MA students' MPTs mean score was 272.20; and BA students' MPTs mean score was 267.96. The ANOVA conducted revealed that EFL Iranian students' MPTs improved as they furthered their academic career from

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BA to MA and from MA to Ph.D. levels. The study concluded that advancement in EFL students' academic career resulted in a concomitant development in their MPTs and among the five MPTs, cultural empathy and social initiative were found to have been significantly improved at Ph.D. level. Among the MPTs, Social initiative provides the highest contribution to social interactions and its significant development at Ph.D. level is confirmatory of the discursive-constructionists' approach to L2 learning.

Key words: Concept formation; Identity development; Multicultural personality traits; Socialization; Valorization

Introduction

Language and culture are so inextricably intertwined that one's existence without the other is almost inconceivable and every speaker's personal identity is primarily established on the foundation of these two elements employed in social interactions. Agar (1994 cited in Risager, 2006,) states that "culture is in language and language is loaded with culture" (p.112). Elgin (2000) maintains that "language and culture are inseparable" (p.27). Fogle's (2007) studies also support the argument that language learning is concomitant with cultural assimilation, which gradually contributes to identity establishment. Kramsch (2005) in describing the integration between language and culture believes that language "expresses", "embodies", and "symbolizes cultural reality." Li (2006) asserts that language, culture, speech community and identity are intertwined. Therefore, it can be concluded that a seamless bond between culture and language creates a unified body and it becomes very difficult to have cases of L2 learning without its culture (C2) instilling itself upon the learning process that will have its due influence on language learners' personality traits and attitudinal behaviour.

Language-and-culture hybridity and their social applications in language acquisition gradually construct social and individual identities in its members in every speech community (Spolsky, 2004). Language is not only the scene of manifestation for culture, but also the means for its materialization (Hall, 2008). Gumperz and Cook-Gumperz (1997) assert that "social identity" is "in large part established and maintained through language" (p. 7). In identity construction, Language is used to establish "social relations" and "a sense of identity" (Spolsky, 2004, p. 33). Therefore, language, culture, and identity are three dimensions of a triangle within which individuals exercise their social beings.

Identity construction, even in the context of the first language, is a lifelong process and in the context of L2 learning, which brings about the possibility of exposure to a second culture, can be of a greater sensitivity. EFL students, and especially graduates, have spent considerable time of their daily lives negotiating meanings and intentions in English; therefore, there exists potential for acquiring altered personality features. Ghafar Samar and Mahdavy (2009) in a study on “the reflection of national, Islamic, and western identities in Iranian newspapers” characterize identity as an entity “constructed and reconstructed in the course of time and as a result of interaction with other identities” (p. 85).

Background

No doubt that every individual’s self-assumed identity is constructed by means of verbal and behavioral features that he employs and manifests in his social interactions. In line with this reading of identity by functionalist linguists, Tann (2010) depicts it as “a linguistic phenomenon that emerges from discourse” (p.163). In the functional approach to identity, identity is not seen “as some discourse-external source that informs the use of language, but as discourse-generated properties of language use that serve specific functions of the discourse”(Tann, 2010, p. 170). The same idea of identity being a negotiated phenomenon is referred to by Bakhtin as “dialogical” (Bostad, Brandist, Evensen & Faber, 2004).

Overview

Sociocultural perspectives of language and sociolinguistics with their context-based and discourse-oriented analyses of every bit of language have gained a substantial status in L2 learning (Milner & Browitt, 2002). Social accounts of L2 learning concentrate on “how the social identities that the learners negotiate in their interactions” provide them with opportunities to learn their new language (Ellis, 2003, p. 37). “When learners interact in their L2, they are continually negotiating their own social identity. Therefore, investing in the L2 also involves investing in one’s own constantly changing social identity” (Siegel, 2005, p. 191). The idea of construction of an identity by means of learning a new language was first proposed by Norton (1995) referred to as “Investment Hypothesis” (IH). Norton initiated the idea that L2 learners who invested in their L2 learning as a means to enrich their identity can gain higher achievements in their L2 proficiency as well.

Investment Hypothesis (IH) in SLL identifies L2 learners as a social being with an active role in the materialization of an enriched identity in the context of the new language. L2 learners in IH are portrayed as social beings with a future perspective of an enriched identity by means of investment in learning a new language. Norton (2010) argues in favor of IH and believes that investment in language learning can be more facilitative in L2 learning and more comprehensive in analyzing L2 learning process. Within IH, L2 learners are portrayed with an ideal goal to go and pass foreign, second and speech community realms and foresee the membership of their L2 discourse community. Investment in an L2 leaning provides a wonderful self-energizing opportunity to reconstruct a richer bilingual and bicultural identity that transcends the monolingual identity and offers a possibility of passing through barriers to better understand L2 community by means of gaining its membership status. It also can provide a deeper-penetrating cognitive vision to L2 learners, to conceive a deeper and wider ontological cognizance (Giampapa, 2010). But in other approaches to L2 learning, linguistic flawlessness, communicative perfection, and at most intercultural or pragmatic masteries are sought and at most probably materialized.

But investment in L2 learning as a means of identity reconstruction cannot simply be materialized by mere desire or intention. It requires taping into a first-language-like perception, a potential capability which, since the accomplishment of the first language acquisition, has been left dormant. Therefore, a fundamental capability to perceive and conceive the realities of the world around anew by means of learning a new language is necessarily required prior to the materialization of an enriched bicultural/bilingual identity.

Language and Perception

The idea of how the language used might influence one's perception and way of thinking has always been intriguing to scholars in philosophy, sociology, linguistics, and language learning. Language is not only the means to be used to represent our understanding of the world around us, but it is also the agent that molds and shapes our conceptions in a way that finally results in a congruent cultural understanding and behaviours among its speakers. This aspect of language has been studied under "linguistic relativity" and "linguistic determinism" (Lund, 2003; Ishtla, 1999; Sapir & Whorf, cited in Kramsch, 2005). This is the aspect of language that cannot be gained in L2 *learning* because in an exclusively L2 learning, the sign-and-concept association is not genuine or authentic. The sign-

and-concept association in L2 learning is almost a mechanical replacement of the first language concept for the second language sign, whereas in the cases where the L2 learner intends to reconstruct a richer personality by means of investing in L2 learning, aspects of L2 beyond its pure linguistic features are tried not just to be gained or achieved in a mathematical sense that one entity is added to another one but to be created anew. In IH, every one of L2 concepts is brought to life as an independent entity. This creative approach to L2 learning can equip the language learner with a new ontological perspective and consequently a new identity.

Conceptuality in language is “the innate knowledge of systematic pairing of labels and meanings” (Ishtla, 1999, p. 21) and the same idea is expressed by Saussure (in Ishtla, 1999) in terms of signifier and signified. The signifier is the linguistic label and the signified is the concept which the signifier refers to and identifies. Every speech community has established its own bridged-network between signs and concepts which sustains its existence in the mind of every new generation of every speech community by means of a firsthand experience and association between the signifiers and the signifieds, i.e. valorization process.

By the time that the acquisition of the first language is accomplished, linguistic parameters are fine-tuned and the possibility to be retuned is partially blocked. In the same fashion, the conceptual associations between signs and meanings are finalized when the first language is thoroughly mastered and the access to concept-formation ability to create new concepts and link them to the signs is almost barred. L2 learners without any investment in identity reconstruction have a limited concept-recognition capability that is an end-closed system. This system cannot create a new concept-and-sign association but searches in its archive of concepts already created in its first language to find the best match for the new sign and associated them with each other (Figure 1).

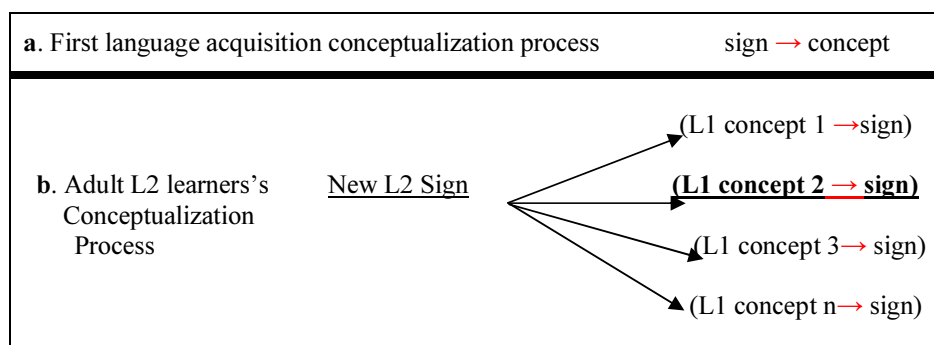


Figure 1: Sign-Concept associations in *L1 acquisition* and *L2 learning*

The realization of language in the first language *acquisition* is a sign-and-concept association, in which concepts are meaningfully and experientially painted and portrayed (Figure 1, a), but in *L2 learning* process the sign-and-concept association is established not between a new sign and a new concept; but rather, between a new sign and the-already-existing concepts established in the course of the first language *acquisition* (figure 1, b). In the acquisitional process of the first language, the sign-and-concept association is a creative process in which the concepts are experientially designed to be an exact and identical version of their whole-speech-community concept and reflective of their own specific community's culture as well, but in the second language learning process, the concepts of the second-language community are not conceived as new entities and consequently are not tried to be created; rather, the new signs or signifiers are received and cross checked with the concepts already constructed in the first language domain to find their best matches. This type of L2 learning cannot provide language learners with a perfect understanding of the new language and consequently with the advantages of developing new ontological perspectives and identities. But an L2 learner who sees the possibility of materializing his/her ideal of possessing a richer understanding of life in the perfect mastery of a new language would try to experientially gain and create a new conceptual world by means of his/her new language. This type of L2 learning, i.e. investment in the new language, will lead toward reconstruction of personality features and consequently identity.

Socialization, Valorization, and Identity in L2 Learning

Socialization is an interactional process by means of which language is acquired and for which language is also acquired and employed. Forms and functions of language are mapped, acquired and internalized through socialization. From a sociological point of view, language socialization is both the means and the end in language learning and it gradually attributes certain characteristics to its practitioners that both gives every individual a psychological *content* and befits him for his social context. Every Individual's inner self and social identity gradually develop as they go through their language socialization process (Hamers & Blanc, 2000; Ochs, 1993). Second language learning brings about new and different socialization experiences that will mold different valorizations that can, of course to varying degrees, yield in altered personalities in advanced L2 practitioners.

Valorization, the attribution of semantic and cultural values to linguistic forms, in first language acquisition has an entirely experiential base that constitutes a solid and unified form-function mapping. Hamers and Blanc (2000) state that "form-function mapping (F/F) will not occur outside a valorization process" (p. 18). Hamers and Blanc (2000) noted that L1 learners develop an "affective relation" with their language. This affective affiliation is built on the harmonious and simultaneous accumulation of valorized cases, the sum of which will constitute every L1 speaker's first language culture (C1). The affective associations between L1's forms and valorized functions is carved into the psychological domain of the L1 speaker that a second similar perfect affective association can be very difficult to be materialized in case of adult L2 learners' consecutive L2 learning.

Finally Hamers and Blanc (2000) conclude that L1 valorization develops into a "social psychological mechanism" that consequently will construct a "motivational mechanism" that "will be relevant to the construction of the social/cultural/ethnic identity." (p. 19). This is quite similar to Norton's (1995) "investment construction" hypothesis for a perfect and ideal L2 learner who goes through his/her L2 learning stages in an experiential manner similar to L1 acquisition and *creates* every concept of the new language rather than searching and finding the best match in the archive of his/her L1 lexicon.

Social Interactions and Identity Construction

Riley (2008) reckons every interaction as the key factors in constituting personal cultural identities. Even he counts in “the interpersonal dialogues” as “the primary identity formation processes” (p. 39). Hall and Bucholtz (2005) have offered a very concise but at the same time comprehensive definition of identity in relation with social interaction. They have stated that “identity is the social positioning of self and other” (p. 586). They have also introduced the term “Sociocultural Linguistics” to account for “the intersection of language, culture, and society” (p. 586). Rejecting the psychological base and understanding of identity as “narrow” and “static”, Sociocultural Linguists argue for the identity to be a “discursive construct that emerges in interactions” (p. 587). Coupland’s (2007) analysis of styles used to signify identity in the social context also confirms that “Identity construction” is the “consequence, perhaps a target, of social action” and “linguistic behaviours” are seen as “a series of acts of identity in which people reveal both their personal identity and their search for social roles” (p. 108).

Miller (2004) asserts that identity is represented and constituted by means of “speaking” which to him is “a critical tool of representation” (p. 293). Kim (2003) having conducted a research on Malaysian EFL students’ identity reconstruction and L2 learning noted that L2 learners “constantly wrestle with power positioning - resisting positioning, attempting positioning, deploying discourses and counter discourses. They are constantly conducting delicate social negotiations in order to obtain viable identities” (P. 24). Kim’ (2003) in his study also found that these students became “more open-minded” and “more reflective and critical” regarding their own respective cultures as they went further with their L2 learning (P. 30).

Rationalist and Constructivist Theories of Cultural Identity

Sociostructural/rationalist models of cultural identity attribute cultural differences and varieties among different cultural groups to their collectively accepted psychological principles such as individualism, collectivism, masculinity, feminism, etc. But discursive-constructionist approaches provide cultural identity with an interactionally-constructed foundation and quality. In defining cultural identity, discursive-constructionist approach assumes an “etic” view, but sociostructural/rationalist approach takes an “emic” view (Kasper & Omori, 2010). In discursive-constructionists’ approach, cultural identity is not a *noun* to have or to not have, rather it is a *verb* to be acted out.

Cultural identity “In Sociostructural/Rationalist theories is a stable, intra-psychological, situation-transcendent trait shared by members of the same cultural group. [It] structures their actions and relations with others”. But “discursive-constructionist approaches relocate cultural identity from the privacy of the individual mind to the public sphere of social life. [Cultural identity is] coproduced by participants in the course of their social activities.” cultural identity is considered to be related to what “people do rather than what they have” (Kasper & Omori, 2010: 462).

Discursive-constructionist analysis of cultural identity provides the logical base for L2 learners who idealize their L2 learning as a possibility of reconstruction of an enriched identity.

The Present study

Everyone’s personality and self-identity is a dynamic and developmental phenomenon that is gradually solidified in the course of life. Monolinguals’ cultural identity is constructed within their L1 contextual environment within which there exists only a monolithic cultural world. Within this monoculture context their “culture is transmitted, shaped, and maintained through language and dialogue” (Hymes, 1974 cited in Finnan & Swanson, 2000, p. 67). But bilinguals’ cultural world is deeply rooted in two languages’ valorization system. Therefore, this study investigated Iranian EFL students’ multicultural personality development in the course of their EFL academic studies as they furthered their academic career from BA towards postgraduate studies.

Research Questions

EFL students in their EFL learning process are exposed to a new valorization system that makes them appropriate subjects and samples for cross-cultural studies and multicultural personality traits. EFL students, due to their long-time associations with the English language and particularly at graduate studies that is a witness to their excellent command of English, are experiencing a bilingual life in the foreign language context. Their extensive and intensive coexistence with English language will have potential influence on their perceptions of the external world, conception of values and criteria and consequently on their verbal, psychological and social behaviors which would constitute their personality. Every one of these cultural features calls for a thorough scientific study and analysis that

is beyond the capacity of a single research; therefore, in this study, the investigation was confined to MPTs (Cultural Empathy, Open-mindedness, Social Initiative, Emotional Stability, and Flexibility) of 215 Iranian EFL students in the course of their academic career from BA to MA and to Ph.D. levels. The following questions were posed and investigated in the present study:

- 1) Does the association with English as a foreign language develop in Iranian EFL students a significant level of MPTs as they further their academic career from BA to MA and to Ph.D.?
- 2) In which one of the five subcategories of MPTs, is there a greater degree of change witnessed as EFL Iranian students further their academic career from BA to MA and from MA to Ph.D. levels?

Method

Three groups of EFL students at BA, MA and Ph.D. levels were randomly selected. Then their MPTs were measured by means of using MPQ. Total MPTs' developmental trend among these three groups was studied by conducting an ANOVA and MANOVA was utilized to find out in which one of the five subcategories of MPTs greater development took place.

Participants

244 Iranian EFL students at Allameh Tabataba'i University, Tarbiat Modarres, and Islamic Azad Universities, in Tehran, Iran participated in this study in the Fall Semester 2010. In the first group, there were 117 BA EFL students majoring in TEFL, Literature or Translation in their second or third semester. It was found that there were already seven Azeri and Kurdish bilinguals plus six incomplete questionnaires. Therefore, excluding these bilinguals and the incomplete ones, there were 104 BA EFL participants left in the first group.

The second group of participants included 92 MA EFL students who were MA graduates or completing their last semester. The administered questionnaires revealed that there were seven Azeri and Kurdish natives among the participants and five incomplete questionnaires; therefore, excluding these 80 participants in this group.

The third group of participants included 30 Ph.D. students and 5 newly graduated Ph.D. holders in TEFL. It was revealed that there were three Azeri native speakers and one Kurdish among the participants; therefore, to keep the participants within the range of the expected precondition, i.e. influence of only *one* foreign or second language, they were excluded from the final list and there were 31 participants left in this group.

Instrument

In order to measure the Multicultural Personality Traits (MPTs) of the participants, Multicultural Personality Questionnaire (MPQ) developed by Van Der Zee and Oudenhoven (2001) at the University of Groningen in the Netherlands was used. An authentic copy of MPQ was received from Dr. Oudenhoven through correspondence.

MPQ, a 91-item questionnaire, measures Multicultural Personality Traits (cultural empathy, open-mindedness, social initiative, emotional stability, and flexibility) on a five-point Likert scale. It is used to predict how easy or difficult it is for individuals to adjust to other cultures in bicultural and multicultural environments. It covers personal features that are attributive to one's capability to adjust to other culturally different environments. It can identify individuals' capability of adjustment to other cultures (Van Der Zee & Oudenhoven, 2000; Burkard & Ponterotto, 2008).

This study on EFL students' MPTs development was a part of an extended work that investigated Iranian MA EFL students' biculturality in English and Persian contexts plus MA EFL students' divergence, in term of the MPTs, from their first language norms by running a comparative study between EFL students and Persian language students. Both Biculturality and divergence studies required a Persian version of MPQ. Therefore, the English version of MPQ had to be translated into Persian and was done so. In order to have an identical version of the original MPQ in Persian in terms of content validity and reliability, maximum care was taken in the translation and every effort was made to have a Persian-translated version that could be as valid and reliable as the original one.

The first version of the required translation done by the researchers was checked and revised by an MA graduate of the English Language Translation. The revised

and edited version together with the original English version were given to three EFL Ph.D. students at Allameh Tabataba'i University and three veteran EFL teachers at the English Language Department of the School of International Relations to compare every translated item with its original English version and evaluate every item on a five-point Likert scale from the least relevant to the most relevant in terms of their content relevancy and language clarity. The result revealed that five items regarding their content relevancy and six items regarding their language clearance could not gain enough credits, i.e. as high as 24. Therefore, they were omitted and finally an 80-item MPQ was used.

The 80-item MPQ was pilot-administered at School of International Relations. Twenty MA students, out of whom 14 were male and six others female, were to take all 3 versions of MPQ (91-item the original English version, 80-item English version and 80-item Persian-translated version). The correlation between 80-item Q in Persian and 91-item Q in English was found to be .88 which was high enough to ensure that both versions would evaluate the same traits with the same accuracy and reliability. The following table presents correlation statistics of the pilot administration of the 80-item MPQ in English, 80-item MPQ in Persian, and 91-item original English version.

Table 1
Correlation between original 91-item MPQ, 80-item English version and 80-item Persian version

| MPQ | Pearson Correlation | MPTs in 91 English | MPTs in 80E |
|--------------------|---------------------|--------------------|-------------|
| 91 MPTs in English | Pearson Correlation | 1 | |
| 80 MPTs in English | Pearson Correlation | .974(**) | 1 |
| 80 MPTs in Persian | Pearson Correlation | .883(**) | .890(**) |

Data Collection Procedures

All the participants were informed that their responses would be anonymously recorded to give them the assurance to reduce their pretentious tendencies of presenting an affected personality different from their genuine real personalities.

Results

The data on MPTs collected from 104 BA EFL students, 80 MA EFL students and 31 EFL Ph.D. students were analyzed by performing a one-way ANOVA on the MPTs of these three groups to provide answer to the hypothesized idea whether promoting academic career in EFL studies had altered EFL Iranian students' MPTs to a significant level or not. It was revealed that Ph.D. students' MPTs' mean was 277.77, MA students MPTs mean was 272.2, and BA students' MPTs mean was 267.96. (Table 2)

Table 2
Descriptive statistics of PhD, MA and BA students' MPTs for One-Way ANOVA

| Dependent Variables | Levels | N | Mean | SD | Std. Error | 95% Confidence Interval for Mean | | Min. | Max. |
|---------------------|--------|-----|--------|-------|------------|----------------------------------|-------------|------|------|
| | | | | | | Lower Bound | Upper Bound | | |
| MPTs | Ph.D. | 31 | 277.77 | 19.24 | 3.45 | 270.71 | 284.83 | 242 | 329 |
| | MA | 80 | 272.20 | 23.11 | 2.58 | 267.06 | 277.34 | 227 | 345 |
| | BA | 104 | 267.96 | 14.60 | 1.43 | 265.12 | 270.80 | 236 | 294 |
| | Total | 215 | 270.95 | 19.06 | 1.30 | 268.39 | 273.52 | 227 | 345 |

The ANOVA performed on the MPTs' means at Ph.D., MA, and BA levels revealed a sig value of .031 that was reflective of a significant difference between these three groups at $p \leq .05$. (Table 3)

Table 3
ANOVA of MPTs for PhD, MA and BA EFL Iranian students

| D. Variables | groups | Sum of Squares | df | Mean Square | F | Sig. |
|--------------|----------------|----------------|-----|-------------|------|---------|
| MPTs | Between Groups | 2497.46 | 2 | 1248.73 | 3.51 | .031(*) |
| | Within Groups | 75300.06 | 212 | 355.18 | | |
| | Total | 77797.53 | 214 | | | |

Test of Homogeneity of Variances

Levene's test for Homogeneity of Variance performed indicated a Sig. value of .003 (Table 4) that was not greater than .05; therefore, homogeneity of variances

assumption was violated. In order to resolve this assumption violation, it was necessary to perform Robust Test of Equality of Means and it was done so (table 5). The findings for both Welch (Sig = .025) and Brown-Forsythe (Sig = .041) confirmed the significant value earlier found for MPTs by means of conducting the ANOV at $p \leq .05$. It was concluded that the association with English as a foreign language developed in Iranian EFL students a significant level of MPTs as they furthered their academic career from BA to MA and to Ph.D.

Table 4
Test of Homogeneity of Variances of Ph.D., MA and BA students

| Dependent Variables | Levene Statistic | df1 | df2 | Sig. |
|---------------------|------------------|-----|-----|------|
| MPTs | 6.01 | 2 | 212 | .003 |

Table 5
Robust Tests of Equality of Means for Ph.D., MA and BA students

| Dependent V. | Tests | Statistic(a) | df1 | df2 | Sig. |
|--------------|----------------|--------------|-----|--------|---------|
| MPT | Welch | 3.87 | 2 | 76.17 | .025(*) |
| | Brown-Forsythe | 3.27 | 2 | 118.88 | .041(*) |

Multiple Comparisons Post Hoc Tests of MPTs

At this stage, Multiple Comparisons Post Hoc Tests of MPTs of Ph.D., MA and BA EFL participants were conducted to explore the differences between the groups at a greater depth (Table 6). It was found that the greatest difference (Mean difference = 9.81) was between Ph.D. and BA students that was significant at $p < .05$. The difference between MA and BA (5.57) was not high enough to be significant.

Table 6
Multiple Comparisons Post Hoc Tests of MPTs of Ph.D., MA and BA EFL
Iranian students (Tukey HSD)

| Dependent Variable | (I) Level | (J) Level | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|--------------------|-----------|-----------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | | Upper Bound | Lower Bound |
| MPTs | Ph.D. | MA | 5.57 | 3.98 | .34 | -3.84 | 14.99 |
| | | BA | 9.81(*) | 3.85 | .03 | .71 | 18.92 |
| | MA | Ph.D. | -5.57 | 3.98 | .34 | -14.99 | 3.84 |
| | | BA | 4.23 | 2.80 | .28 | -2.38 | 10.85 |
| | BA | Ph.D. | -9.81(*) | 3.85 | .03 | -18.92 | -.71 |
| | | MA | -4.23 | 2.80 | .28 | -10.85 | 2.38 |

* The mean difference is significant at the .05 level.

Multivariate Analysis of Variance

Multivariate analysis of variance (MANOVA) was conducted on the five subcategories of the MPTs to find out in which one of these personality features EFL students gained significant difference as they furthered their academic studies, i.e. to answer the second research question of this study.

Prior to conducting MANOVA, its assumptions were checked. Sample size and normality assumptions were met because the number of participants ($N = 30+73+104$) were higher than the dependent variables and well above 30. Both univariate and multivariate outliers were checked and the cases of univariate outliers were found to be the following ID-number holders for every one of the subcategories of MPTs (CE: 88 and 46, OP: 58, SI: 102 and 18, Es: 69 and 34, and FI: none). In order to meet the MANOVA's assumptions these cases were removed from the list of data.

Multivariate normality was checked by conducting Mahalanobis distance using regression analysis. One case was found to be exceeding the critical value (20.52) for a MANOVA with five dependent variables (ID NO = 35 with a value of 20.71). This case was also removed from the list of the data to meet the multivariate normality requirement of MANOVA.

Linearity assumption was checked by generating scattered plots between the pairs of the independent variables. There were not extreme detrended cases and a linearity improvement was witnessed as participants advanced toward the Ph.D. level.

Multicollinearity assumption was also checked by means of performing correlations to check the strength of correlation between pairs of variables and the results found were: correlations between CE/OP = .48, CE/SI = .23, CE/ES = .06, and CE/FL = .08. The established criterion is that correlations above .8 are cases of concerns. The correlations found all were below .8; therefore, it was concluded that the assumption of multicollinearity was also met.

Equality of variance was checked by performing Levene's Test of Equality of Error Variances. As presented in Table 8, the Sig. values for CE and SI were less than .05; therefore, the assumption of equality for these two variables was violated. The solution to compensate for these shortcomings and have a more reliable results and conclusions is to promote the alpha value to a higher level (Tabachnick & Fidell, 2001, cited in Pallant, 2005). Therefore, alpha level was decided to be set at .025 rather than .05.

Table 7
Levene's Test of Equality of Error Variances (a)

| variables | F | df1 | df2 | Sig. |
|-----------|--------|-----|-----|------|
| CE | 10.502 | 2 | 204 | .000 |
| OP | 1.206 | 2 | 204 | .302 |
| SI | 3.875 | 2 | 204 | .022 |
| ES | 2.706 | 2 | 204 | .069 |
| FL | 2.785 | 2 | 204 | .064 |

Finally, having set the alpha value at .025, MANOVA was conducted. The seven outliers and one not meeting the multivariate normality assumption were removed and there were 30 Ph.D., 73 MA, and 104 BA participants left. The descriptive statistics of these participants are presented in the following table. As indicated in Table 8, EFL students at Ph.D. level indicated higher means in CE, OP, SI, and Es, but their FL was found to be lower than MA and BA levels.

Table 8
Descriptive Statistics of Ph.D., MA, and BA EFL students

| | Level | Mean | SD |
|---------------------|-------|-------|------|
| Cultural Empathy | Ph.D. | 58.37 | 4.78 |
| | MA | 57.18 | 6.17 |
| | BA | 55.58 | 3.91 |
| Open-Mindedness | Ph.D. | 55.63 | 5.54 |
| | MA | 55.29 | 5.75 |
| | BA | 54.39 | 4.80 |
| Social Initiative | Ph.D. | 57.63 | 5.18 |
| | MA | 54.90 | 6.88 |
| | BA | 54.13 | 5.01 |
| Emotional Stability | Ph.D. | 52.97 | 6.41 |
| | MA | 51.47 | 6.74 |
| | BA | 52.13 | 5.01 |
| Flexibility | Ph.D. | 51.47 | 4.11 |
| | MA | 51.66 | 5.04 |
| | BA | 51.73 | 3.80 |

Multivariate analysis of variance conducted to investigate the impact of EFL studies at Ph.D., MA, and BA levels on subcategories of MPTs of EFL students indicated that there was a statistically significant difference at $p \leq .05$ between BA, MA, and Ph.D. EFL students on the combined dependent variable: $F(5, 207) = 1.87$, $p = .048$; Wilks' Lambda = .913; partial eta square was = .045 (Table 9). When the results for the dependent variables were considered separately (Table 10), using Bonferroni Adjusted alpha level of .025, it was found that cultural empathy: $F(2, 204) = 4.63$, $p = .011$, partial eta square was = .043 and social initiative: $F(2, 204) = 4.283$, $p = .015$, partial eta square was .040 were significantly different among EFL students at Ph.D., MA, and BA levels. This finding provided the answer to the second research question and proved that EFL students' CE and SI gains significant differences as they further their EFL studies from BA to post graduate level.

Table 9
Multivariate Tests of MPTs at Ph.D., MA, and BA levels(c)

| Effect | Test type | Value | F | Hypothesis df | Error df | Sig. | Partial Eta Squared |
|--------|--------------------|-------|---------|---------------|----------|--------|---------------------|
| Level | Pillai's Trace | .08 | 1.859 | 10.00 | 402.00 | .049* | .04 |
| | Wilks' Lambda | .91 | 1.87(a) | 10.00 | 400.00 | .048* | .04 |
| | Hotelling's Trace | .09 | 1.88 | 10.00 | 398.00 | .046* | .04 |
| | Roy's Largest Root | .08 | 3.27(b) | 5.0 | 201.00 | .007** | .07 |

Table 10
Tests of Between-Subjects Effects

| Source | Dependent Variable | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
|--------|---------------------|-------------------------|----|-------------|------|------|---------------------|
| Level | Cultural Empathy | 226.27 | 2 | 113.13 | 4.63 | .01* | .043 |
| | Open-Mindedness | 53.68 | 2 | 26.84 | .96 | .38 | .009 |
| | Social Initiative | 285.02 | 2 | 142.51 | 4.28 | .01* | .040 |
| | Emotional Stability | 50.45 | 2 | 25.22 | .72 | .48 | .007 |
| | Flexibility | 1.63 | 2 | .81 | .04 | .95 | .000 |

Discussion

Going successfully through different stages of foreign/second language learning and gradually becoming competent bilinguals brings about some degrees of biculturality that will have its due effect on the personal identity of language learners. Norton's (1995) "Investment Hypothesis" asserts that L2 learners who invest in the reconstruction of their identity by means of learning a new language will have an impetus, even stronger and more efficient than integrated or intrinsic motivations, to master the language. Furthermore, the language mastered in this fashion by investors will be a perfect one with all its due sociopragmatic and cultural features. Therefore, as EFL students who have invested in their L2 learning further their academic careers, their personality also develops alongside and

consequently graduate EFL students, as the result of the analyzed data indicated, gained a higher multicultural personality development.

The very first finding, the significant difference in the MPTs of BA, MA, and Ph.D. EFL students, rejected the null hypothesis of the research question. Therefore, it can be concluded that there is a significant difference in the MPTs of Iranian EFL students as they promote their academic status from BA to Ph.D.

Post-Hoc test applied identified that the significant difference in MPTs was between Ph.D. and BA students. Therefore, it can be concluded that the duration of exposure and association with EFL from BA to Ph.D., that is almost more than eight years also plays a significant role in the development of MPTs.

Identity that is the sum of personality features, in current socio-constructionist approach is not an intrapersonal issue but an interpersonal phenomenon i.e. “the product of social interaction between the individuals and other members of the society” (Riley 2008:16). This study has indicated that MPTs development in the course of L2 learning among EFL students increased as they furthered their academic career toward the Ph.D. level.

The finding that CE and SI were significantly different among these three groups is confirmatory of the latest models/theories of L2 learning i.e. sociocultural constructionist approach within which it is believed that L2 learning is materialized by means of engagements in interactional processes and finally it results in “attitudinal change” that would lead to “behavioural change”, (Munroe & Pearson, 2006). Social initiative, as a personality feature paves the way for social interactions and a perfect meaningful engagement in social interactions by means of using language would include most of the L2 learning models such Input, Intake, Processing and Output Hypotheses in an integrated chain and in a unified entity. Furthermore, the social accounts of L2 learning are more tangible and realistic and if fused with the interactionist theories of L2 learning (Ellis 2003) plus the ideas of the constructionist or emergentist approaches (Mitchell & Myles, 2004) can provide a more comprehensive model of L2 learning that can truly be materialized in a model of L2 learning that is termed here as *the identity construction by means of L2 learning*.

Conclusion

Graduate EFL students and especially Ph.D. students, having successfully gone through various exams and entrance test, have proven to possess a high English language proficiency next to their knowledge on science of language. These two aspects of their L2 are also confirmed by their presence at the graduate levels. Furthermore, the third aspect of their L2, i.e. their possession of higher MPTs (CE, OP, SI, ES, and FL), is also ratified in this study. Therefore, it can be concluded that developmental trend in English language proficiency is concomitant with a parallel line of development of Multicultural personality traits in EFL learners. And personality development, i.e. identity reconstruction, can only be materialized for L2 students who invest in their L2 learning as a possible means of nurturing a new and richer personality. This type of L2 learners manage to valorize the world and its concepts anew by means of the new instruments provided for them in their new language. These students see their L2 as a means to provide them with new conceptual framework to readjust their relative stance with their surroundings. In other words, they provide themselves with a new identity and as they further their academic career and gain higher achievements in their English language, their personal identity also gains higher lands. L2 learning developmental process from BA to MA and to Ph.D. levels, as reflected in the collected and analyzed data in this study, is a progressive trend toward not only greater language proficiency but also personality development and improvement in MPTs.

Although identity is an end product of human characteristics, it is a cumulative entity undergoing constant modifications. It is an experientially achieved quality of being that is gradually gained through meaningful, intentional and attentive interactions. Language learning provides extensive possibilities for interactions not only to communicate meanings but also to forge new meanings and new understandings all of which lead to the construction of new and richer identities. The L2 learners who recognize such possibility in L2 learning would invest in their L2 learning and consequently apply an effort that will surpass the-regularly-talked-of motivations such as, Instrumental, Integrated or even Intrinsic Motivations. In the Investment Model of L2 learning, learners determined to investment in identity construction through L2 learning have no intentions of gaining any profit other than getting engaged and going through social interactions within which L2 language is the means of discovering new dimensions of life and existence. Chen (2005) asserts that “The desire to know a target culture is likely to promote the

learning of an L2” and gaining higher achievements in L2 learning means enriched cultural capital and identity (p. 32).

The concluding idea of the present study is that graduate EFL students having already successfully passed through all stages of their L2 learning also possessed higher MPTs. The possession of greater MPTs can relatively be translated as an enriched personality/identity which was available only to the L2 learners who, in the first step, had recognized the existence of a differently conceptually framed world in their new language, and in the second step desired to improve by equipping themselves with this new means of framing and forging the world and their relative stance with it and the others. These are the L2 learners who invest in their L2 learning to reconstruct their identity by means of mastering a new language far above its daily and common communicative or functional competences. The L2 learners meant quest to master *conceptual competence* of their L2 which is the very essence of the language providing commonality of mutual understanding for communicative, sociopragmatic, and discourse competences of its discourse community.

Notes on Contributors

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References

- Bostad, F., Brandist, C., Evensen L., & Faber, H. (2004). *Thinking culture dialogically*. In F. Bostad, C. Brandist, L. Evensen, & H. Faber (Eds.), *Bakhtinian perspective on language and culture* (1-20). Palgrave Macmillan.
- Burkard, A., & Ponterotto, J. (2008). Cultural Identity, Racial Identity, and the Multicultural Personality. In L. A. Suzuki & J. G. Ponterotto (3rd ed.) (Eds.), *Handbook of Multicultural Assessment* (pp. 52-73). Jossey-Bass, A Wiley Imprint
- Chen, J., warden, C., & Chang, H. (2005). Motivators that do not motivate: The case of Chinese EFL learners and the influence of culture on motivation. *TESOL Quarterly*, 39(4), 609-633.
- Coupland, N. (2007). *Style: Language Variation and Identity*. Cambridge: Cambridge University Press.
- Elgin, H. S. (2000). *The Language imperative: the power of language, enrich your life and expand your mind*. Perseus Books Group.
- Ellis, R. (2003). *Second language acquisition*. Oxford: Oxford University Press.
- Finnan, C., & Swanson J. D. (2000). *Accelerating the Learning of All students*. Colorado: West View Press.
- Fogle, E. W. (2007). *Language socialization in internationally adoptive family: Identities, second languages, and learning* (PhD Dissertation). Graduate School of Arts and Sciences of Georgetown University.
- Ghafar Samar, R., & Mahdavy, B. (2009). Identities in the Headlines of Iranian National Newspapers. *The Linguistics Journal – Special Edition: Language, Culture and Identity in Asia*, September 2009, 82-100
- Giampapa, F. (2010). Multiliteracies, Pedagogy and Identities: Teacher and Student Voices from a Toronto Elementary School. *Canadian Journal of Education*, 32(2), 407-431.
- Gumperz, J. J., & Cook-Gumperz, J. (1997) Introduction: language and the communication of social identity. In J. J. Gumperz (Ed.), *Language and social identity* (pp. 1 - 22). UK: Cambridge University Press.
- Hall, J. (2008). Language education and culture. In S. May & N. Hornberger (Eds.), *Language policy and political issues in education* (pp. 45- 55). New York: Springer.
- Hall, K., & Bucholtz, M. (2005). Identity and interaction: A sociocultural linguistic approach. *Discourse Studies*, 7 (4-5), 585-614.
- Hamers, J., & Blanc, M. (2000). *Bilinguality and Bilingualism* (2nd ed.). Cambridge UK: Cambridge University Press.

- Ishtla, S. (1999). Language, thought and representation. In L. Thomas & S. Wareing (Eds.), *The centrality of language across humanities* (pp. 20-38). New York: Routledge.
- Kasper, G., & Omori, M. (2010). Language and culture. In N. Hornberger & S. McKay (Eds.), *Sociolinguistics and language education* (pp. 455-491). Bristol: Multilingual Matters.
- Kim, L. S. (2003). Exploring the Relationship between Language, Culture and Identity. *GEMA Online Journal of Language Studies*, 2(3).
- Kramsch, C. (2005). *Language and culture*. Oxford: Oxford University Press.
- Li, G. (2006). Biliteracy and trilingual practices in the home context: Case studies Chinese-Canadian children. *Journal of Early Childhood Literacy* 6(3), 355-381.
- Lund, N. (2003). *Language and thought* (6th ed.). East Sussex: Routledge.
- Miller, J. (2004). Identity and language use: the politics of speaking ESL in school. In A. Pavlenko & A. Blackledge (Eds.), *Negotiation of identities in multilingual contexts* (290- 315). GB: Cromwell Press Ltd.
- Milner, A., & Browitt, J. (2002). *Contemporary cultural theory*. Singapore: South Wind Production.
- Mitchell, R., & Myles, F. (2004). *Second language learning theories* (2nd ed.). New York: Oxford University Press.
- Munroe, A., & Pearson, C. (2006). The Munroe multicultural attitude scale questionnaire: A new instrument for multicultural studies. *Educational and Psychological Measurement*, 66 (5), 819-834.
- Norton, B. P. (1995). Social Identity, Investment, and Language Learning. *TESOL Quarterly*, 29(1), 9-31.
- Norton, B. (2006). Identity as a sociocultural construct in second language education. In K. Cadman & K. O'Regan (Eds.), *TESOL in Context* [Special Issue], 22-33.
- Norton, B. (2010). Language and identity. In N. Hornberger and S. L. McKay (Eds.), *Sociolinguistics and language education* (pp. 349-370). Bristol. UK: Short Run Press Ltd.
- Ochs, E. (1993). Constructing social identity: A language socialization perspective. *Research on language and Social Interactions*, 26(3), 287-306.
- Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS for windows* (Version 12) (2nd Ed.). Crows Nest, Australia: Allen & Unwin.

- Pavlenko, A., & Blackledge, A. (2004). Introduction: New theoretical approaches to the study of negotiation of identities in multilingual contexts. In A. Pavlenko & A. Blackledge (Eds.), *Negotiation of identities in multilingual contexts* (pp. 1-33). GB: Cromwell Press Ltd.
- Riley, P. (2008). *Language, culture and identity*. London: continuum.
- Risager, K. (2006). *Language and culture: Global flows and local complexity*. London: The Cromwell Press Ltd.
- Siegel, J. (2005). Social context. In Catherine J. Doughty & Michael H. Long (Eds.), *The handbook of Second Language Acquisition* (pp. 178-224). Oxford: Blackwell Publishing.
- Spolsky, B. (2004). *Sociolinguistics*. Oxford: Oxford University press.
- Tann, K. (2010). Imagining Communities: A multifunctional approach to identity management in texts. In M. Bednarek & J. R. Martin (Eds.), *New Discourse on language: Functional perspectives on multimodality, identity, and affiliation* (pp. 163-194). London: Continuum.
- Van Der Zee, K. I., & Oudenhoven, J. P. (2000). The Multicultural Personality Questionnaire: A multidimensional instrument of multicultural effectiveness. *European Journal of Personality*, 14, 291-309.

Appendices

Appendix A: MPTs Questionnaire

First of all, **Your participation** in completing this questionnaire is highly appreciated. In this Ph.D. dissertation, you will be recognized and registered as an EFL Iranian student and there will be no personal records of yours retrievable or mentioned anywhere by any means.

Name: **course:** **Year of birth:** **Mother Tongue:**

Directions: There are 80 items in this questionnaire. Every one of the items represents a personality trait. To what extent do the following statements apply to you? (*Please circle the answer that is most applicable to you*)

| Personality of someone who | Totally not applicable | Hardly applicable | Moderately applicable | Largely applicable | Completely applicable |
|----------------------------|------------------------|-------------------|-----------------------|--------------------|-----------------------|
| 1. Takes initiative | 1 | 2 | 3 | 4 | 5 |
| 2. Is nervous | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 3. Makes contacts easily | 1 | 2 | 3 | 4 | 5 |
| 4. Looks for regularity in life | 1 | 2 | 3 | 4 | 5 |
| 5. Is troubled by conflicts with others | 1 | 2 | 3 | 4 | 5 |
| 6. Finds it difficult to make contacts | 1 | 2 | 3 | 4 | 5 |
| 7. Understands other people's feelings | 1 | 2 | 3 | 4 | 5 |
| 8. Is sensitive in other cultures | 1 | 2 | 3 | 4 | 5 |
| 9. Avoids adventure | 1 | 2 | 3 | 4 | 5 |
| 10. Changes easily from one activity to another | 1 | 2 | 3 | 4 | 5 |
| 11. Is fascinated by other people's opinions | 1 | 2 | 3 | 4 | 5 |
| 12. Tries to understand other people's behavior | 1 | 2 | 3 | 4 | 5 |
| 13. Is afraid to fail | 1 | 2 | 3 | 4 | 5 |
| 14. Avoids surprises | 1 | 2 | 3 | 4 | 5 |
| 15. Takes other people's habits into consideration | 1 | 2 | 3 | 4 | 5 |
| 16. Is inclined to speak out | 1 | 2 | 3 | 4 | 5 |
| 17. Likes to work on his/her own | 1 | 2 | 3 | 4 | 5 |
| 18. Is looking for new ways to attain his/ her goal | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|--|---|---|---|---|---|
| 19. Dislikes travelling | 1 | 2 | 3 | 4 | 5 |
| 20. Wants to know exactly what will happen | 1 | 2 | 3 | 4 | 5 |
| 21. Remains calm in misfortunes | 1 | 2 | 3 | 4 | 5 |
| 22. Waits for others to initiate contacts | 1 | 2 | 3 | 4 | 5 |
| 23. Takes the lead | 1 | 2 | 3 | 4 | 5 |
| 24. Is a slow starter | 1 | 2 | 3 | 4 | 5 |
| 25. Is curious | 1 | 2 | 3 | 4 | 5 |
| 26. Takes it for granted that things will turn out right | 1 | 2 | 3 | 4 | 5 |
| 27. Is always busy | 1 | 2 | 3 | 4 | 5 |
| 28. Is easy-going in group | 1 | 2 | 3 | 4 | 5 |
| 29. Finds it hard to empathize with others | 1 | 2 | 3 | 4 | 5 |
| 30. Functions best in a familiar setting | 1 | 2 | 3 | 4 | 5 |
| 31. Easily approaches other people | 1 | 2 | 3 | 4 | 5 |
| 32. Finds other religions interesting | 1 | 2 | 3 | 4 | 5 |
| 33. Considers problems solvable | 1 | 2 | 3 | 4 | 5 |
| 34. Is timid | 1 | 2 | 3 | 4 | 5 |
| 35. Knows how to act in social settings | 1 | 2 | 3 | 4 | 5 |
| 36. Likes to speak in | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|-----|--|---|---|---|---|---|
| | public | | | | | |
| 37. | Tends to wait and see | 1 | 2 | 3 | 4 | 5 |
| 38. | Feels uncomfortable in a different culture | 1 | 2 | 3 | 4 | 5 |
| 39. | Works according to plan | 1 | 2 | 3 | 4 | 5 |
| 40. | Is under pressure | 1 | 2 | 3 | 4 | 5 |
| 41. | Sympathizes with others | 1 | 2 | 3 | 4 | 5 |
| 42. | Has problems assessing relationships | 1 | 2 | 3 | 4 | 5 |
| 43. | Likes action | 1 | 2 | 3 | 4 | 5 |
| 44. | Is often the driving force behind things | 1 | 2 | 3 | 4 | 5 |
| 45. | Likes routine | 1 | 2 | 3 | 4 | 5 |
| 46. | Is sensitive to criticism | 1 | 2 | 3 | 4 | 5 |
| 47. | Tries out various approaches | 1 | 2 | 3 | 4 | 5 |
| 48. | Has ups and downs | 1 | 2 | 3 | 4 | 5 |
| 49. | Forgets setbacks easily | 1 | 2 | 3 | 4 | 5 |
| 50. | Has fixed habits | 1 | 2 | 3 | 4 | 5 |
| 51. | Starts a new life easily | 1 | 2 | 3 | 4 | 5 |
| 52. | Asks personal questions | 1 | 2 | 3 | 4 | 5 |
| 53. | Enjoys other people's stories | 1 | 2 | 3 | 4 | 5 |
| 54. | Gets involved in other cultures | 1 | 2 | 3 | 4 | 5 |
| 55. | Remembers what other | 1 | 2 | 3 | 4 | 5 |

| | people have told | | | | | |
|-----|--|---|---|---|---|---|
| 56. | Is able to voice other people's thoughts | 1 | 2 | 3 | 4 | 5 |
| 57. | Is self-confident | 1 | 2 | 3 | 4 | 5 |
| 58. | Has a feeling for what is appropriate in another culture | 1 | 2 | 3 | 4 | 5 |
| 59. | Gets upset easily | 1 | 2 | 3 | 4 | 5 |
| 60. | Is a good listener | 1 | 2 | 3 | 4 | 5 |
| 61. | Worries | 1 | 2 | 3 | 4 | 5 |
| 62. | Notices when someone is in trouble | 1 | 2 | 3 | 4 | 5 |
| 63. | Has good insight into human nature | 1 | 2 | 3 | 4 | 5 |
| 64. | Seeks contact with people from different backgrounds | 1 | 2 | 3 | 4 | 5 |
| 65. | Has a broad range of interests | 1 | 2 | 3 | 4 | 5 |
| 66. | Is insecure | 1 | 2 | 3 | 4 | 5 |
| 67. | Has a solution for every problem | 1 | 2 | 3 | 4 | 5 |
| 68. | Puts his or her own culture in perspective | 1 | 2 | 3 | 4 | 5 |
| 69. | Is open to new ideas | 1 | 2 | 3 | 4 | 5 |
| 70. | Is fascinated by new technological developments | 1 | 2 | 3 | 4 | 5 |
| 71. | Senses when others get irritated | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|--|---|---|---|---|---|
| 72. Likes to imagine solutions for problems | 1 | 2 | 3 | 4 | 5 |
| 73. works according to strict rules | 1 | 2 | 3 | 4 | 5 |
| 74. Needs change | 1 | 2 | 3 | 4 | 5 |
| 75. Pays attention to the emotions of others | 1 | 2 | 3 | 4 | 5 |
| 76. Reads a lot | 1 | 2 | 3 | 4 | 5 |
| 77. Seeks challenges | 1 | 2 | 3 | 4 | 5 |
| 78. Enjoys getting to know others deeply | 1 | 2 | 3 | 4 | 5 |
| 79. Enjoys unfamiliar experiences | | 2 | 3 | 4 | 5 |
| 80. Looks for regularity in life | 1 | 2 | 3 | 4 | 5 |