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## Cross-Linguistic Transfer or Target Language

 Proficiency: Writing Performance of Trilinguals vs. Bilinguals in Relation to the Interdependence HypothesisSima Modir Khamene*

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#### Abstract

This study explored the nature of transfer among bilingual vs. trilinguals with varying levels of competence in English and their previous languages. The hypotheses were tested in writing tasks designed for 75 high ( $\mathrm{N}=35$ ) vs. intermediate $(\mathrm{N}=40)$ proficient EFL learners with Turkish, Persian, English and Persian, English linguistic backgrounds. Qualitative data were also collected through some think aloud procedures. The findings revealed: 1) a significantly positive relationship between writing skills of the languages known by participants; 2) trilinguals performed significantly better than bilinguals in English writing tasks, although, qualitative data revealed that both groups used the same language, i.e. Persian, as the most frequently referred language and; 3) the higher-level writers tended to present less cross-linguistic influence than the lower level writers. The results are discussed in relation to different patterns of linguistic Interdependence Hypothesis and implications for language teaching in multilingual contexts.


Key words: bilingual, interdependence hypothesis, transfer, trilingual.

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## Background

As people learn languages, they develop certain skills. They seem to transfer these skills, especially the cognitive ones, learned/acquired in their first language (L1) or probably any other previous language (PL) to the target language (TL). Jessner (2006) and Ringbom (2007) attribute this crosslinguistic transfer to a natural feature of multilingual learning and use in multilingual contexts. In multilingual settings, psycholinguistic research, according to Jessner (2008), focuses on the effect of bilingualism on additional language learning, trilingualism, and cross-linguistic influence. In particular, the two latter have turned out to be of major importance for research on the educational and psycholinguistic perspectives of multilingualism. The study of cross-linguistic transfer, for instance, has contributed to the analysis of the processes and conditions in which speakers transfer terms or skills from their previous language(s) to target language. Studies regarding such issues are especially important when speakers with different linguistic backgrounds (e.g., bilinguals vs. trilinguals) are compared.

Researchers (e.g., Zia Hosseiny \& Derakhshan, 2007; Wang, 2003; Wang \& Wen, 2002) have realized that second language (L2) learners' strategies are similar to those used for first language. In this perspective, previous language(s) can be viewed as critical basis for learning new linguistic system(s) rather than as interfering variable(s).Thus, target language learning can be regarded as an active process where the learner constructs and tests hypotheses about the target language against available linguistic system(s).This psycholinguistic aspect of learning additional language(s) that provides further insight into multilinguals' linguistic systems is explained through current models of third language acquisition (TLA), namely, Dynamic Model of Multilingualism (Herdina \& Jessner, 2002); the Factor Model (Hufeisen \& Marx, 2007);
and the Multilingual Processing Model ( Mißler, 2000 cited in Jessner, 2008). These models imply that a difference can be expected in the development of communicative efficiency exhibited by speakers of various linguistic backgrounds in TLA. However, researchers within second language skills, multilingual, and first language contexts (Cummins, 1979; Cenoz, 2001; Aronin \& Toubkin, 2002; Modirkhamene, 2006) propose that the conditions in which cross-linguistic influence take place and the source language of the elements that are transferred are determined by several factors. They can include task type, linguistic typology, proficiency, mode, age, necessity, previous language learning, language status, etc., that can potentially predict the relative weight of crosslinguistic transfer and its nature in the speakers' production.

Transferability of skills has been discussed as far as the task type is involved. Through the interdependence hypothesis, Cummins (1979) identifies the interconnection of skills and strategies across languages. According to the Interdependence Hypothesis, there is a positive and significant relationship between learners' first language development and their second language development. Cummins, however, suggests that the nature of transfer varies distinctively among the cognitive/academic language proficiency (CALP) skills and basic interpersonal communication (BICS) skills. Otherwise stated, the so-called common linguistic system may be demanded in different ways as far as the task type is concerned. Cummins (1991) holds the view that the less cognitively demanding surface aspects of language such as oral proficiency (e.g., conversation in a shop) develop separately in L1 and L2, but that the cognitively demanding and underlying cognitive/academic proficiency such as a writing task or the knowledge of complex syntax is common across languages. It seems, thus, that exploring the nature of transfer as regards the task type (e.g., CALP skill), which is
one of the aims of this study, would make significant contributions to the field.

Several studies, a good report of which is presented in Verhoeven (1994) and Jessner (2008), have found correlations between L1 and L2 skills. These studies provide considerable evidence that cognitively demanding skills in L1 and L2 are at least partially interdependent. Exploring cross-linguistic influence in cognitive skills, for instance writing, started within the realm of contrastive rhetoric by Kaplan (1983). It has taken new dimensions as research on second language writing processes have gained momentum. This increase in research has resulted in identifying similarities in the behaviors and strategies of L1 and L2 learners with regard to developmental and cognitive factors (Ringbom, 1992; Kobayashi \& Rinnert, 1992); transfer of L1 writing strategies to L2 (Zia Hosseiny \& Derakhshan ,2007; Wang \& Wen, 2002; Wang, 2003); thinking and revising strategies while writing (Hall, 1990); and an extensive use of L1 at linguistic, textual, and ideational processing levels (Roca, Murphy \& Manchón, 1999).In an Iranian context, Zia Hosseiny and Derakhshan(2007) attempted to find whether the performances of the Iranian students studying English in an EFL context were consistent in the L1 and L2 writing tasks and whether there was a cross-linguistic transfer in this respect. They instructed a group of intermediate and low-advanced students ( $N=60$ ) to write four compositions-two in English (L2) and two in Persian (L1). Their findings confirmed such a crosslinguistic relation through identifying strong correlation between performance in L1 and L2 writing tasks.

The issue of previous language proficiency in relation to performance in target language tasks has also yielded a number of interesting findings. In an investigation on the effects of different levels of proficiency acquired in the previous languages (Basque and Spanish) on the acquisition of
writing skills in L3 English, Errasti (2003) compared two groups of bilinguals ( $N=155$ ) who differed in terms of their competence in both languages as well as their language use patterns. The language use patterns distinguished between the students who used their languages in all social contexts, with their family members, and at school, as opposed to those who merely used one language in their interpersonal communication. The results showed that all the adolescents were highly competent in Basque (L1) and Spanish (L2) but that it was the students who used Basque in more language domains who had the best scores in written production in English. Munoz's (2000) study shows a similar trend in that levels of competence acquired in the previous languages affects learner's performance in the target language. Munoz investigated whether high levels of competence in L1 and L2 would correlate positively with a high level of competence in L3. Munoz compared the command the students had of their first two languages. Their analysis of the scores of their measurements through some cloze and dictation tests indicated high direct correlation between results in the two languages. Results of the study confirmed the hypothesis of the interdependence between languages. It was confirmed that students with high levels of competence in L1 and L2 would have a high level of competence in L3, though the combination of the languages involved (i.e. Catalan \& Spanish) were not formally close to L3.

Although research in the area has looked at transfer of skills particularly CALP skills across languages, few have examined it among learners of varying levels of competence attained in TL. Most studies report their findings related to those with limited proficiency in the target language, English in most cases. However, it is believed (Sasaki, 2000; Wang, 2003) that the amount of L1 use in the TL composing process varies with the development of the writer's TL proficiency. An important question which raises here is that to what extent and
how the use of L1 varies with the writer's TL proficiency. Thus, it remains to be answered whether or not and how often learners of varying levels of TL proficiency revert to their L1 when composing in their TL. Furthermore, an increasing number of studies ( e.g. Chamot \& O'Malley, 1994; Aronin \& Toubkin, 2002; Sparks, Patton, Ganschow \& Humbach, 2009) have reported details of L1 effects on performing L2 academic tasks, for example writing, in bilingual contexts, very few studies, however, to date have examined the interdependence of the writing skills among EFL learners with different linguistic backgrounds, especially when the levels of competence attained in the PL of the participants vary (Modirkhamene, 2010,2006) . It is accepted, Jessner (2008), that research in multilingual settings should disclose linguistic background or level of competence/proficiency attained in PL of all students since it may operate as an intervening variable mediating the effects of multilinguals' experience on cognitive processing. To account for Cummins'(1976) proposal of crosslinguistic interdependence, therefore, it would be more insightful to conduct comparisons among trilinguals versus bilinguals with varying degrees of proficiency in their PL. This would provide us with a sketch of the nature of transfer. In particular, findings from trilingualsim and implementation of the related concepts will contribute to a better understanding of multilingual processes (Jessner, 2008). Additionally, evidence from a survey of the literature suggests that there is interdependence of skills across languages; however, the queries probing whether such interdependence can be extended to the languages learned besides L1 are still limited. What has been made clear from some studies (Cenoz, 2001; Hammerberg, 2001; De Angelis, 2005) mostly related to indo-European language origins is that the Interdependence Hypothesis can be extended to the influence of the L2 to L3 or L4. In fact, the findings of these studies implied that trilinguals tended to transfer knowledge from their typologically related
and unrelated L2 to L3. Hence, including a combination of languages such as Turkish, Persian, English in an Iranian context will expand the scope of languages where the relationship between language proficiency and TL has been investigated. The present study was, thus, motivated by these limitations of the previous studies. It examined writing performance and behaviors of bilinguals versus trilinguals with varying levels of TL and PL proficiency in an Iranian context. In other words, participants belonged to intermediate and advanced EFL learners who had different languages, that is, Turkish, Persian, and English at their deposal while performing the CALP skill of writing. The study was planned to provide data on the possible transfer of prior linguistic and cognitive skills from previous languages which is underresearched in the literature in multilingual settings. It was hoped that the findings would contribute to the understanding of the mechanisms of writing in previous languages which might, in turn, promote the same skills in TL. Moreover, investigating the multilingual proficiency can put into picture the interaction, to use Jessner's (2008) terms, between the psycholinguistic systems (L1, L2, L3, Ln), cross-linguistic interaction and the multilingualism factor. Accordingly, the following research questions were investigated:

1. Do abilities in PL predict similar abilities in TL?
2. Is there a difference between trilinguals vs. bilinguals performing the CALP skill of writing?
3. Does the nature of cross-linguistic transfer differ among trilinguals vs. bilinguals?
4. Is there any difference between highly proficient (HP) versus intermediately proficient (IP) language learners in terms of the amount of TL use in writing tasks?

## Methods

## Participants

A total of 75 Iranian learners of English as a foreign language who were assigned into two groups participated in this study. The first group included 35 highly proficient (HP) learners of English who were within the age range of 23-28. Eighteen out of the 35 HP participants knew and actively used Turkish as their first language with a formal knowledge of Persian as their second language. Therefore, the HP group comprised 17 writers who were balanced Persian-English bilinguals and 18 Turkish-Persian-English trilinguals. The second group included 40 intermediate EFL learners within the age range of 18-22. Twenty-four IP participants came from a trilingual (Turkish-Persian-English) linguistic background. Turkish was their first language used mostly in the community, peer groups and with the parents. However, similar to the 18 HP participants, they did not receive formal instruction in their L1. Persian as their L2 was the formal and instructed language. The remaining 16 were categorized as bilinguals with Persian-English linguistic background. In addition, they reported use of Persian as their language of social relations, parents and peer groups. Out of the 75 participants, due to practical limitations, only 12 of them (6 from the intermediate cohort and 6 from the advanced cohort including 3 bilinguals and 3 trilinguals from each group were chosen at random for data collection purposes in the think-aloud procedures.Participants' profile is summarized in Table 1.

Table 1:Description of the Participants

## Instrumentation and procedures

The instruments included: a) Background information questionnaire (BIQ), b) the Writing prompts, and c) Think-

|  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Groups | $N$ | Linguistic background |  | Male | Female |
|  | Bilingual |  |  | trilingual |  |
| HP | 35 | 17 | 18 | 9 | 26 |
| IP | 40 | 16 | 24 | 15 | 25 |

aloud procedures. The BIQ included various sets of questions developed to identify the participants appropriately in terms of their linguistic background, educational background, socioeconomic status as well as their self-evaluation of their level of English proficiency and two other languages (i.e., Turkish, Persian). The writing prompts included two composition tasks, one in English and the other in Persian. In both tasks, the IP and HP writers were required to write passages of 120-180 and 300-350 words, respectively. The third part of the investigation (i.e. Think-aloud procedures) encompassed writing sessions conducted over the course of 2 weeks. To get language switch data for the analysis, the 12 participants were asked to think-aloud while producing English writing samples. The writing topics were the same as those taken by the 63 participants. This study was designed in two phases of data collection over the course of 4 weeks. In the first phase of the study, the BIQ was administered among 80 EFL learners who were doing BA and MA degrees. No measure of overall proficiency was felt necessary since the students' scores in the writing course they had already passed were used as the criterion according to which the outliers, who did not fit the purposes of this investigation, were excluded from the study. Therefore, out of the 80 students, 75 whose scores fell within a
standard deviation of 2 points below and above the mean were chosen as the candidates for the study. Accordingly, the students were assigned into two groups of advanced and intermediate learners of English with different linguistic backgrounds, that is, trilinguals versus bilinguals. Sixty-three participants were assigned the writing tasks. The remaining 12 participants were asked to participate in the think- aloud procedures. Each of the 12 participants selected for the thinkaloud procedures wrote individually in a private room. As the think-aloud procedure required some instruction, it was described and demonstrated briefly to each participant who then practiced the procedure on a similar problem before beginning the writing tasks. For assessment of every piece of writing in English, the composition marking scheme proposed by the University of Cambridge Local Examination Syndicate for the fourth paper of the First Certificate in English (FCE) test, that is writing, was applied. Since there is no established profile for evaluating written texts in Persian, the slightly modified version of the ESL composition profile, Jacobs, Zinkgraf, Wormuth, Hartfiel, and Hughey (1981) used by Zia Hosseiny and Derakhshan (2007) was adopted for evaluating papers written in Persian. Keeping the content and organization components, Zia Hosseiny and Derakhshan combined the vocabulary and language use components into a third component of style and dropped the mechanics component and slightly modified the evaluation criteria under each of the components. Prior to any further data analysis, the issue of inter-rater reliability which turned out to be significantly different from Zero ( $r=.86$ ) was dealt with.

The think-aloud writing sessions were observed. Analysis of the think-aloud protocols followed partly the procedures undertaken by Wang and Wen (2002). Any use of the PL while engaged in the TL writing process was defined as switch to previous language(s). Analysis of the think-aloud data encompassed counting the number of L1, L2, and TL
words in every think-aloud protocol. To get an idea about the extent to which L1 or L2 was used in the TL composing process, percentages of L1, L2, and TL words were calculated. It should be noted, however, that as an artifact of the thinkaloud procedures there is tendency to underestimate language switch, since only the verbalized switches are observed. The results of the study are discussed in combination with selected writing data and excerpts from selected think-aloud writing protocols.

## Results and Discussion

The first analysis was conducted to investigate the issue of degree of correlation between the writing abilities of the participants in each language as raised in the first research question. To get an insight into the degree of relationship between writing performance in an already established language and TL of the two HP and IP groups, Pearson's Product-moment correlation coefficients were computed. As the results show (Table 2), correlations between performance results ranged from .72 to .78 demonstrating that those who write well in an already established language were likely to write well in their TL. Table 2 indicates the degree of connection obtained between the variables.

Table 2 : Pearson's Correlation between PLW and TLW

|  | Groups | N | $(r)$ TLW | $P$ |
| :--- | :---: | :---: | :---: | :---: |
| PLW | HP | 35 | .78 | .001 |
|  | IP | 40 | .72 | .035 |

As can be seen from Table 2, the correlation estimates between PLW and TLW of both groups $\{r(35)=0.78$, and $r$ $(40)=0.72, p<.05\}$ stand at significantly strong levels which identify strong relationship between the participants' writing skills in PL and TL. In this sense, the significant correlations obtained for both groups provided strong support to what the proposed hypothesis predicted: Abilities in PL predict similar abilities in TL.

The first part of the analysis showed significant relationship between writing skills across languages as predicted by the Interdependence Hypothesis. However, as the participants belonged to different linguistic backgrounds, it was important to analyze the results related to the performance of the two groups, that is, trilinguals versus bilinguals in the target language writing task. This part of the analysis seemed to be complementing results obtained in the first hypothesis testing stage since trilingual participants with no literacy skills in their L1 (Turkish), and literacy skills in their L2 ( Persian) were to be explored against their bilingual counterparts who were literate in their L1 (Persian). The second part of the analysis, therefore, dealt with computing data regarding performance of the participants in the English writing tasks. As Tables 3 and 4 indicate, analysis of the 35 and 40 writing scores belonging to HP and IP participants, respectively, revealed significant differences between the groups in favor of trilinguals.

Table 3:Independent samples t-test: HP trilinguals versus bilinguals

| $N$ | $X$ | $S D$ | $d f$ |  | t.obs | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| trilingual | 18 | 16.30 | 1.43 | 33 |  |  |
| bilingual | 17 | 15.02 | 1.40 |  | 2.66 | .03 |

The results of the overall t -test showed the significant difference at $P=0.03$. This shows that generally speaking, trilinguals appeared to have superior performance in the writing tasks compared to their bilingual counterparts since the overall mean for trilingual performances is 16.30 , while the overall mean for bilinguals is 15.02 .

Table 4:Independent samples t-test: IP trilinguals versus bilinguals

| $N$ | $X$ | $S D$ | $d f$ |  | t.obs | $p$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| trilingual | 24 | 15.89 | 3.88 | 38 | 2.26 | .01 |
| bilingual | 16 | 13.40 | 3.05 |  |  |  |

The same pattern is evident from the results in Table 4, when again the higher mean score (i.e., 15.89) belonged to the trilingual group showing a significant difference at $P=0.01$.

It was thought that the numerical data could not present a clear picture of the nature of transfer and the role played by the previous languages as well as the target language sufficiently. Therefore, the researcher carried out further analysis to explore which language(s) of the participants contributed to processing TL writing task. In other words, the researcher was interested to explore whether L1, L2, or TL is more frequently used when participants are engaged in writing in English. Further data were, therefore, used to help uncover possible PL proficiency effects on the amount of transfer.

Overall, the 12 think-aloud protocols consisting of the use of three languages (i.e., Turkish, Persian and English) revealed the pattern presented in Table 5. The previous languages as well as the target language were used by the participants in both multiliterate and multilingual groups in the TL composing processes. However, the proportions of the languages used by the participants were different. On average, the think-aloud protocols revealed that highly proficient participants with Turkish (L1), Persian (L2), and English (L3) linguistic backgrounds utilized 32.72 Persian as their L2 in
their thought processes while writing. However, contrary to some high proportion of L2 use in writing TL of the trilingual participants, their L1, that is, Turkish did not appear to be called upon as frequently as their L2. 15.55 of the thought processes in L1 of the trilinguals was involved in their TL production. The bilingual HP group, on the other hand, referred to their L1, ( Persian: 40.62) while processing the writing task. However, they appeared to have higher tendency to use the target language (English: 59.38) to write.Both the trilingual and bilingual participants in the IP group turned out to have more tendencies to get help from Persian language. In other words, a high percentage, that is 47.36 of the thought processes of the trilingual group and 77.37 of the bilingual group, was devoted to the Persian language.

On the whole, the results indicate that all participants used Persian which was acquired in the written form as a base language more frequently than the Turkish language acquired in its spoken form.

Table 5:Percentages of PL \& TL use patterns

|  |  |  |  |  | L1 | L2 |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- |
|  | Groups | $N$ | TL | L1 |  |  |
| HP | trilingual | 3 | 52.73 | 15.55 | 32.72 |  |
|  | bilingual | 3 | 59.38 | 40.62 | NA |  |
|  |  |  |  |  |  |  |
| IP | trilingual | 3 | 19.53 | 43.11 | 47.36 |  |
|  | bilingual | 3 | 22.63 | 77.37 | NA |  |

It was to be further explored whether the nature of transfer varies among two groups with different TL proficiency levels. Another stage, hence, aimed at finding out the frequency of the English language used by the participants in the HP and IP groups. As regards the amount of TL use in writing across varying levels of proficiency, different amount of English language use employed by the 12 writers showed a decreasing tendency with the development of proficiency in English. In other words, as the results in Table 6 show, the average percentage of English language use among IP learners was (22.8), whereas the HP learners turned out to be using a high percentage (56.05) of English. Mann-Whitney U tests assessing the frequencies of TL while processing TL writing
revealed significant differences $(z=-5.41, P<.05)$ between the two proficiency groups.

Table 6: TL use in writing: IP versus HP group

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $N$ | TL | $P$ | $z$ |
| HP | 6 | 56.05 |  |  |
| IP | 6 | 22.8 | $.004^{*}$ | -5.41 |

## Conclusion

This investigation explored the extent to which abilities in the previous language(s) predict similar writing abilities in target language among learners with varying levels of competence attained in the target language. Further questions were posed concerning the interaction between individuals' various linguistic backgrounds and the nature of crosslinguistic transfer. The main assumption was that learners' writing abilities in the previous languages would predict similar abilities in English. At the same time, it was assumed that the nature of transfer and interdependence would differ across varying levels of proficiency attained in TL and PL. The research questions were tested through writing tasks designed for intermediate and high proficient trilingual versus
bilingual learners of English as a foreign language. Further data were also collected through some think-aloud procedures. The first part dealt with finding out whether there was any kind of cross-linguistic transfer of skills as predicted by the Interdependence Hypothesis. The findings confirmed that there is a positive correlation between writing abilities of the languages known by individuals. In other words, the findings showed that those, who write well in an already established language, write well in a TL too. The findings seem to correspond previous studies (Zia Hosseiny \& Derakhsahn, 2007; Ringbom,1992, 2007; Kobayashi \& Rinnert, 1992 etc.). This study, also, provides support for Cummins' (1979) Common Underlying Proficiency, Herdina and Jessners' DMM (2002), and Cook's (2003) model of multicompetence and linguistic proficiency which seem to be called upon while performing target language tasks. The findings, thus, seem to emphasize the relationship across languages. Proposing this type of relationship, then, would lead us to conclude that writing skills and strategies and even concepts readily developed in the previous languages are accessible through the target language.

Further exploration of the results uncovered interesting findings in relation to the role played by the previous
languages among groups of learners with varying levels of PL proficiency or threshold levels, to use Cummins' (1976) terms. Trilinguals performed significantly better than bilinguals in English writing tasks, although, further analysis revealed that both groups used the same language, that is, Persian, (L1 of the bilinguals and L2 of the trilinguals) as the most frequently referred previous language. Firstly, in line with Sanz (2007), the findings suggest that university EFL writers with varying levels of competence attained in their PL tend to think in the language in which they have received formal instruction, especially in literacy skills, while composing in the TL. Furthermore, it is thought possible that the L2 being typologically closest to the new target language has taken over the role of a bridge, (Hufeisen \& Marx, 2007; Jessner, 2008) or supporting language and functions as a kind of matrix against which the new language system is compared and contrasted. However, since there is no direct evidence to suggest that language typology plays a role in the results observed, further investigation in this respect is recommended. What is implied is that the Interdependence Hypothesis can be extended to the influence of the L2 to L3 or perhaps L4 as proposed by (Cenoz, 2001; Hammerberg, 2001; Jessner 2006, 2008). Secondly, it is implied that in addition to gaining
advantage from an academically developed L2, trilinguals used their L1 as an extra index language while writing in English. The results accommodate Hufeisen and Marx's (2007) Factor Model of multilingualism that proposes differences in processing of an additional language by learners of various linguistic backgrounds. It seems that, according to Hufeisen and Marx's Model, trilinguals have gathered individual techniques and strategies, L2 learning experiences, and interlanguages of other learned languages (consciously or subconsciously) to deal with language processing with differing degrees of success. So, trilinguals, in addition to language specific knowledge and competences, to use Hufeisen and Marx's terms, have some extra world knowledge exerting strong influence that bilinguals do not. This can highlight the role played by contextual factors when second and third language learning takes place in multilingual settings. In line with Saville-Troike (1984); Errasti (2003); and Modirkhamene (2010), the results propose positive interface between active use of the languages one already knows and gaining advantage when confronted with additional language learning. Hence, it can be possibly maintained that apart from education, active use of the languages one knows in almost all contexts including family, community, and peer groups may
be a powerful factor in improving language processing strategies among learners of rich linguistic backgrounds. This contributes to making progress in the study of multilingualism and provides fruitful understanding of its multiple aspects. It makes clear, as recommended by many scholars (e. g. Herdina \& Jessner, 2002; Jessner, 2008), that learning and using additional languages is dependent on both social and psychological factors.

Further examination of the differences in TL use among writers of varying levels of TL proficiency revealed that the higher-level writers tend to depend less on their previous languages than the lower level writers. In other words, TL writers adopt less and less PL for generating text as they become more and more proficient in their TL. This finding seems to correspond previous studies on transfer (Mohle, 1989; Ringbom, 1987) reporting that students who are less proficient present more cross-linguistic influence. The findings show language as a multifaceted process, suggesting that different patterns of interdependence can be observed for different levels of TL proficiency. The key findings in the present investigation expand our view on research on multilinguals and the issues related to cross linguistic interdependence. They bring new areas of enquiry as far as
different degrees of multilingualism and additional language learning is involved. What seems to be the outcome of this study and similar ones is that the most salient feature in TL writing is that two or three languages can be at work at the same time while playing different roles. Otherwise stated, in performing TL tasks, one language can be the source of extra schematic and world knowledge and experience and the other may provide the learner with available strategies and styles. How to benefit from an already established language system should, thus, especially be introduced to the foreign language learning contexts. Such a position which is clearly linked to Cummins' (1979) idea of a common underlying proficiency in relation to the Interdependence Hypothesis can be recommended to the teachers to include knowledge about other languages, including L1 and L2, in their classroom. In certain contexts of language instruction, as Jessner (2008) recommends moving away form isolation towards cooperation between the languages in the learner should be fostered in TLA. This is in fact a language-centered approach suggested by Clyne (2003) which means creating a relationship through and with language(s). This supports the call of several scholars such as (Jessner, 1999) to make the silent processes in multilinguals known from natural language learning and use
explicit instructed language learning in multilingual settings. It could be perceived, then, in agreement with Aronin \& Toubkin (2002), that PL learning styles and techniques, if embedded systematically, especially in earlier stages of life can influence learning of other languages later in life. However, future studies should adopt a longitudinal design to look into the interaction of TL development and PL use. In addition, switching to the previous languages in the TL writing is probably influenced by individual factors such as motivation and learning styles differences not considered in this study. As suggested by Woodall (2002) these factors are important sources of variance in writing process models, and future studies might address the presence of previous languages in TL writing with them in mind.

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