

A model of the factors predicting English language teacher immunity: A path analysis

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ABSTRACT

Language teacher immunity, recently put forth by Hiver and Dornyei (2015), refers to “a robust armoring system that emerges in response to high-intensity threats and allows teachers to maintain professional equilibrium and instructional effectiveness” (Hiver, 2017, p. 669). Due to the pure novelty of this construct, its significance to the practice of teaching and rarity of research on it, the present study aimed to develop a model on the predictors of this newly-developed concept. Based on the theories in the related literature, a model was proposed in which four traits of six HEXACO personality traits, job insecurity, and reflective teaching were considered as predicting factors. Through running Path Analysis using AMOS with Maximum Likelihood Estimate on the quantitative data obtained from 483 English language teachers from Iran, a revised model was obtained in which agreeableness, extroversion and emotionality were proved to have effects on language teacher immunity indirectly through job insecurity and reflective teaching which had direct effects on it. The strongest paths were from Job Insecurity (JI) to Reflective Teaching (RT) and Language Teacher Immunity (LTI) with considerable negative regression weights meaning that JI can have negative effects on both of them. The findings of the current research provide implications for both teachers and teacher trainers, highlighting the predictors of teacher immunity.

Keywords: HEXACO personality traits; language teacher immunity; job insecurity; reflective teaching

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INTRODUCTION

Like other scopes of education, there is now growing recognition and concern over teacher education in English language teaching community. Despite the width and depth of research on teacher education, teachers still suffer from some serious problems in their career and a great amount of job attrition takes place among English language teachers every year (Eghtesadi, 2011). Regarding this problem, Hiver and Dornyei (2015) coined the term Language Teacher Immunity (LTI) which is defined as “a robust armoring system that emerges in response to high-intensity threats and allows teachers to maintain professional equilibrium and instructional

effectiveness” (Hiver, 2017, p. 669). Borrowing the word “immunity” from physiology in which it is an essential part of body without which humans can be dead, Hiver and Dornyei (2015) attempted to recognize the existence of such a system in teacher’s career by using Chaos Theory (Larsen-Freeman, 2012) as the theoretical basis of their characterization of this concept.

One area which has not been covered in its thin related literature is recognizing the factors predicting LTI. Various factors can predict it; nonetheless, the present study focused on three variables of HEXACO personality trait model, Reflective Teaching (RT) and Job Insecurity (JI) which are theoretically

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acknowledged to be interwoven with LTI. Personality traits have been reported to have some impacts on teacher-related qualities (Fatemiet al., 2015; Navidnia et al., 2015; Rashtchi & Sanayi Mashhoor, 2019; Sadeghi et al., 2012; Threeton & Walter, 2009). Among the various theories and models of personality trait, HEXACO personality trait model was selected to be investigated in the present study. This recent six-item model for personality trait functions as a sound alternative to the widely-accepted Big Five model, and consists of six factors: honesty-humility, emotionality, extraversion, agreeableness, conscientiousness, and openness to experience. This new model of personality trait can meet the expectations of the present study more accurately to explore personality traits in relation to LTI.

As mentioned earlier, RT was another variable in the present study which was investigated to explore its possible effects on LTI. Dewey (1933) is considered to be the first person who put forward the concept of RT. Dewey defines it as “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends” (1933, p.6). Research has consistently shown that through RT, language teachers tend to view their career more valuable and to have more self-efficacy (Akbari, 2007). As RT has been proved to have some influences on other teacher-related qualities including burnout, self-efficacy, autonomy and personality type (Fani, 2017; Malmir, 2018; Stanley, 1998; Teng, 2017), it can be expected to find an effect of RT on LTI as a teacher quality too. To understand whether this effect exists, empirical data are required which was done in the present study. This is considered to be the present study novelty since it has not been approached so far. The last variable this study was supposed to find its effect on LTI is JI which has rarely been approached in English language teaching research community (Kawamura, 2012). Against diversity in definition, JI is characterized as expectations about continuity in a profession, understanding of hidden threats to keeping staying at work and inability to keep wanted continuity in endangered work conditions (Heaney et al., 1994). JI can be identified to be conceptually close to the definition of LTI, since frustration and disappointment which are directly related to burnout, one of the subscales of maladaptive end of teacher immunity, are hidden in the theoretical foundations of this construct (De Witte, 2000; Hiver, 2017). However few studies, in ELT, have been done on the influence of JI on various facets of teacher. This is another novel gap the present study aimed to explore. Thus it is essential to provide some insights on the feasible effects of these variables drawing on empirical data which constitutes the aim of the present study. While previous studies done on LTI (Hiver, 2017; Hiver & Dornyei, 2015; Ordem, 2017;

Saydam, 2019; Songhori & Ghonsooly, 2018) mainly focused on LTI types, the present study was concerned with the factors predicting it which made it totally distinct from these studies. Besides, this study could make contributions to the related literature, since no previous studies explored the predicting factors of language teacher immunity. All in all, the novelty of the present study lies in the facts that the causative factors of LTI have not been investigated previously, development of a model on predicting factors of LTI is unprecedented and considering JI as a predictor of LTI has not been approached in the related literature. Now, a short look at related literature on the mentioned variables can help cast more light on what the present study sought to reveal.

Language Teacher Immunity

Although LTI has just recently been introduced into the field of English language teaching, researchers have not hesitated to approach this newly-developed term. After reviewing the related literature, some research studies have been found which are briefly reported here. Hiver and Dornyei (2015) is the first study done on teacher immunity. In their study, having introduced the new construct, they compared it with the other similar psychological terms such as teacher resilience and teacher burnout and described the four stages of developing LTI among teachers including: triggering, linking, realignment and stabilization. It was also mentioned that like biological immunity, LTI can have both benign and malign effects on the quality of teaching profession, that is why it can be either productive immunity which refers to adopting effective strategies to cope with threats and challenges received from the different aspects of this profession, or maladaptive LTI in which teacher rejects any innovation in his methodology, behavior and policy in class management leading to either job attrition or burnout. An area of uncertainty which was not covered and addressed in Hiver and Dornyei (2015) is the importance of the factors which can have constructive or destructive effects on developmental processes of LTI. In other words, there exists a gap on the factors which can predict LTI.

The second study is Hiver (2017) which was mainly dealing with validation of this construct using Retrodictive Qualitative Modeling which aimed to find some empirical data to establish this trait. Since in Hiver and Dornyei (2015), LTI was proved theoretically, this empirical foundation was needed that was met in Hiver (2017). It was done on around 300 Korean language teachers using serial in-depth interview. Like the first study discussed above, Hiver (2017) failed to explore the factors which may determine LTI. As a result, this gap may be filled with doing the present study on the possible predictors of LTI. In another study, Ordem (2017) conducted a case study on LTI in which a teacher was observed

for 14 weeks while dealing with threats and dangers in her career to find her ideas, attitudes to adaptive skill, self and motivation. The instruments included interview, diary and students' online feedback tools. The findings revealed that "the teacher showed maladaptive behaviors with low motivation with constant reflection on her previous experiences and possible ideal self and high self-efficacy in a classroom setting" (Ordem, 2017, p. 1). This study showed that the teacher manifested maladaptive LTI using constant reflection on past experiences which is related to the concept of RT, one variable of the present study. Ordem (2017) revealed that RT can be taken into account as one possible predictor of LTI.

Songhori and Ghonsooly (2018) explored to find out dominant LTI types among Iranian English teachers and how these teachers might have developed their immunity type. The findings of the two-step cluster analysis of the questionnaire data revealed that maladaptive immunity was a dominant type of immunity among Iranian English teachers because their mean scores on six out of seven questionnaire scales were low. In addition, the results of the directed content analysis of the interviews showed that Iranian English teachers followed the four stages of self-organization, namely, triggering, coupling, realignment, and stabilization in forming their immunity. As seen, the focus of their study was on immunity type, while the factors causing these types can be explored in other studies.

Finally, Saydam (2019) aimed to investigate how LTI grows and works, to find out the motivational sides and effects of this new concept, and to study the ways of reshaping maladaptive LTI through a new questionnaire developed in this study and distributed to 187 teachers teaching at the School of Foreign Languages of a public university. The findings showed that the main LTI types are productively immunized and maladaptively immunized teacher classifications, and the majority of the 187 teachers had high immunity levels. Although Saydam (2019) explored this new construct from various aspects, she failed to study the influential factors causing it.

In education, investigating personal traits has been approached by researchers in a good proportion of works (Sadeghi et al., 2012; Threton & Walter, 2009). Likewise, these personality traits have been investigated in the scope of English language teaching too. In a study, Fatemi, et al (2015) investigated the probable relationship between English language teachers' personality type and their effectiveness in teaching from university students' attitude. The results proved that there is a significant relationship between teachers' personality type and their effectiveness in teaching.

Navidnia, et al (2015) tried to investigate the relationship between English language teachers' Big Five personality traits and their self-concept among 112 Iranian English language teachers. Results

indicated that self-concept was significantly correlated with four dimensions of the Big-Five personality traits. There was a positive correlation between self-concept and "Neuroticism", "Openness to experience" and "Conscientiousness", but it was negatively correlated with "Agreeableness". It was also revealed that there was not any statistically significant difference among the three groups (low, mid, and high experience English language teachers) regarding their self-concept.

Rashtchi and Sanayi Mashhoor (2019) aimed to explore the relationship between RT and burnout among 100 introvert and extravert English language teachers. The results of this study revealed that RT and burnout had a negative correlation with each other regardless of the personality type of the teachers. Also, the findings of the independent samples t-test showed that introvert teachers were more reflective than extravert teachers, while extravert teachers were less likely to have burnout. In these three aforementioned studies, it could be seen that personality traits can exert effects on personal qualities of teachers. Therefore, it can be expected to see some effects of personality traits on language teacher immunity, as a kind of teacher quality, which is one of the aims of the present study.

Over the last decade, RT has largely gained support and attention in English language teaching inquiry (Akbari, 2007; Safarie & Tarlani-aliabadi, 2014; Awan & Salam, 2014; Faremi, 2017). In one of the most outstanding works on RT, Akbari (2007) emphasized on the shortcomings of RT in its practice and theory. Theoretically, there exists a paradox in its definition and its essence. The extra focus on the retrospective facet of reflection rather than the prospective and innovative facets of the notion and the scarcity of evidence dealing with the relation of reflection and RT to professional development are among the main components of his criticism against RT practice. According to Akbari (2007), the proper practice of reflecting teaching can make great contributions to teacher's success in his profession.

Safarie and Tarlani-aliabadi (2014) investigated the relationship between RT and personality types of teachers in Iran. The findings proved the idea that each personality type had a relationship with certain components of the teaching reflection. They revealed that there is a positive correlation between extravert teachers and those teachers who have both cognitive and learner reflection elements as their teaching reflective practices. In another Iranian study, Fani (2017) sought to investigate the link between Iranian English language teachers' RT and teacher autonomy. The findings of statistical analyses showed that there was a significant and positive relationship between RT and teacher autonomy. Likewise, in another Iranian study, Ghazalbash and Afghari (2015) investigated the relationship between teacher burnout and RT among Iranian English language teachers. The findings of this investigation

revealed that there was a weak negative correlation between RT and burnout for teachers from each gender and also irrespective of their gender.

The number of studies done on JI among teachers is significantly lower than that number among other professions. However, some of them are reported here. Awan and Salam (2014) examined the effect of JI on Pakistani teachers' job performance through data gathered from teachers in private colleges of Larkana using a close-ended questionnaire developed on dichotomous and 5-point Likert scale. They revealed that there is a negative relationship among age, performance and JI and there is a significant difference in the level of performance and extent of JI with gender.

Faremi (2017) measured the relationship between teacher retention and job security among 200 teachers in private secondary schools in Ogun state, Nigeria. This research proved a significant relationship between teacher retention strategies and job security, and also a significant relationship between teacher turnover and job security in the schools. Besides, the results proved a significant relationship between teacher turnover and job security.

Ruvio and Rosenblatt (1999) studied JI among 326 secondary schoolteachers in the public and private sectors in Israel. Based on the findings of this study which examined different job aspects, two different JI profiles were discovered: public-sector schoolteachers were inclined to highlight intrinsic job characteristics, while private-sector schoolteachers were more eager to emphasize extrinsic ones. Sectoral differences were also found in regard to the reverse influence of JI on work attitudes: in the public sector JI influenced organizational commitment, perceived organizational support, and tendency to quit, and in the private sector only tendency to quit was influenced. In the field of English language teaching, Kawamura (2012) studied the consequences of JI among 15 native English speaking teachers teaching in Japanese universities with 4 to 5 year terms. The results showed that job performance was influenced by JI, wage inequality, and time spent on seeking employment.

In stark contrast to the practical influence of JI in the profession of teaching English as a foreign language, few works have been found to address the effect of JI on teacher. In other words, the effect of JI on various aspects of teacher in ELT has not been explored and this is the distinctive feature of the present study from other investigations. This scarcity of research calls for more fresh studies to find the possible consequence of this phenomenon on various aspects of English language teachers. For example, the adverse effects of JI on LTI can open a new door to further research in English language teaching scope of teacher education. This short review of literature on the four areas of language teacher immunity, HEXACO personality traits, RT and JI

indicates that they are theoretically interrelated. What the present study aimed to do was to empirically support a model which can illustrate the possible paths among these variables. Thus, in this study, LTI played the role of predicted variable, HEXACO personality traits, JI and RT were regarded as predictor variables. As a result, the main purpose of the present research is developing the best model on the predictors of LTI by HEXACO personality traits, JI and RT.

The proposed model

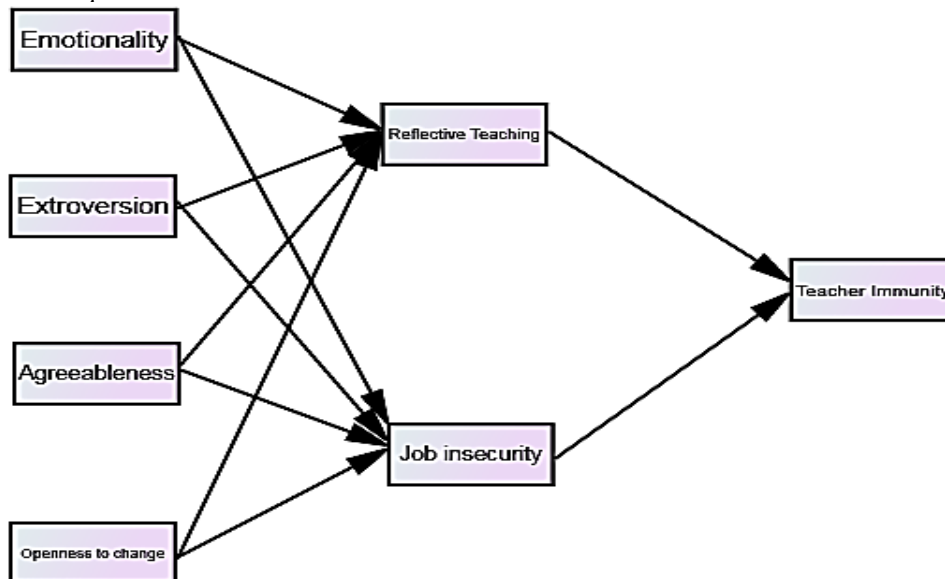
To answer the research question, based on the related literature on these four variables (Awan & Salam, 2014; Behzadpour, 2007; Faremi, 2017; Gurbuz & Dede, 2018; Hiver, 2017), a model (Figure 1) was proposed. As seen in Figure 1, there are several links between these variables which are illustrated with single-head arrows. The most probable path goes from JI directly to LTI which can be explained by the findings obtained from the studies done on the effect of JI on teacher-related qualities (Awan & Salam, 2014; Faremi, 2017; Gurbuz & Dede, 2018; Kawamura, 2012; Ruvio & Rosenblatt, 1999). Regarding these studies, the effect of JI on LTI which is one of the qualities of teacher should not be illogical. The next strong path is from RT to LTI which is again theoretically supported since the underlying components of both terms overlap to a certain extent (Behzadpour, 2007; Hiver, 2017; Stanley, 1998). Regarding the links between HEXACO personality traits and other variables, there can be a multiplicity of paths which can go indirectly from either JI or RT to teacher immunity. In this model, HEXACO personality traits were not considered to have direct effects on LTI due to lack of theoretical support in the related literature which may be owing to novelty of this term and its thin related literature. However, the links between four personality traits (openness to change, extroversion, emotionality, agreeableness) and JI and RT enjoy ample evidence (Ahmadi Safa & Zamani Jamshidi, 2017; Jalili & Mall-Amiri, 2015), while the related literature did not support the links between the other two HEXACO personality traits (conscientiousness and humility-honesty) and RT and JI. There were some studies supporting the effect of extroversion and emotionality on different aspects of teachers (Rashtchi & Sanayi Mashhoor, 2019; Teng, 2017). These studies imply the idea that emotionality and extraversion can have some effects on RT or JI too.

According to Figure 1, agreeableness and openness to experience are indirectly connected to LTI through RT and JI. This can be argued that the constituting components of agreeableness which are forgiveness, gentleness, flexibility and patience, can involve a teacher in doing more reflections (Tajik & Ranjbar, 2018), and may exert an influence on their attitude toward JI (Faremi, 2017; Gurbuz & Dede, 2018). In addition, teachers with openness to

experience who show creativity and unconventionality are more likely to reflect on their teaching owing to novelty of reflection (Cunningham, 2001). Hence, the paths going from these two personality traits to RT and JI can be theoretically possible. With regard to the fact that LTI is a teacher-related construct and the possible

theoretical links between these personality traits and the two teacher-related constructs, i.e. RT and JI, it is hypothesized that these traits can have indirect effects on LTI too. All in all, this model was evaluated through running path analysis on the data of the present study to see which paths are stronger to stay in the revised model.

Figure 1
The Proposed Theoretical Model



METHOD

Participants

In this study, all English language teachers in Golestan province, Iran constituted the population. According to formula (the number of sub-variables multiplied with 20 plus 15% of the obtained number) proposed by Kline (2015), the sample size was 483 Iranian English language teachers from all around of Golestan province, Iran who were selected through

convenience sampling method. They were both males and females, their age ranged from 20 to 60 years old and they taught English at public schools and private English language institutes. Persian was the most frequent mother tongue, while some of them spoke Torkmani and Turkish as their mother tongue. Their educational level varied from B.A to PhD. Their full demographic information is presented in Table 1.

Table 1
The Participants' Demographic Information

Demographic Aspects	Information			
Gender	Male: 290	Female: 193		
Academic degree	B.A: 274	M.A: 205	PhD: 4	
Age	20s: 125	30s: 154	40s: 110	50s: 94
Job experience	3-10 yrs: 169	11-20 yrs: 201	20-30 yrs: 113	

Instruments

Four questionnaires were utilized in this study to collect the data for testing the proposed model. The first questionnaire was developed by Hiver (2017) to measure LTI. It consists of 39 items under 7 factors with a 6-point scale (strongly disagree=1 to strongly agree=6). The factors are: teaching self-efficacy (7 items), burnout (5 items), resilience (5 items), attitudes toward teaching (5 items), openness to experience (6 items), classroom affectivity (6 items) and coping (5 items). As this questionnaire is used in an Iranian context which is different from the context in which it was originally developed, its

psychometric characteristics were measured in a pilot study. To check its reliability, it was piloted among 100 participants, and Cronbach Alpha of .81 was obtained which is an acceptable figure for good reliability. Besides since all the participants knew English well, this questionnaire needed no translation. Five experts in English language teaching were requested to review the questionnaire, and all items of the original questionnaire were maintained and no item was removed or modified.

The second instrument was a questionnaire developed by Behzadpour (2007) to measure RT. It contains 42 five-point Likert scale items from

“never” to “always” choices which is based on six factors: cognitive, metacognitive, affective, practical, critical, and moral factors. This questionnaire was selected to measure RT in this study since it was developed for the context of Iran and benefits from a good index of reliability ($r=.90$). Its validity has also been confirmed by Behzadpour (2007) who has reported the construct-related validation process which proved a high content and construct validity of this questionnaire. As Behzadpour (2007) checked the reliability and validity of this questionnaire in Iran, these issues were not checked in the present study.

HEXACO-60 Scale (Ashton & Lee, 2009) was employed to examine personality traits in six personality items: conscientiousness, extraversion, agreeableness, openness to experience, emotionality, and honesty-humility. Participants were supposed to mark their responses based on a 5-point Likert scale (where 1 = strongly disagree and 5 = strongly agree). Internal consistency reliabilities for this inventory have been reported to range between .77 and .80 in a sample of college students and between .73 and .80 in a community sample (Ashton & Lee, 2009). Within Iranian setting, its reliability was assessed by Esmaeilpouret al. (2013) and Cronbach's alpha for HEXACO dimensions were reported to be 0.74, 0.72, 0.75, 0.74, 0.76 and 0.71, respectively. To check its validity, it was reviewed by five experts in English language teaching who confirmed the appropriateness and usefulness of the scale.

The last scale utilized in the present study was JI questionnaire (De Witte, 2000) which covers both cognitive and affective aspects of JI through 11 items which are based on a 5-point Likert scale with number 1 showing strong disagreement and number 5 showing strong agreement. The reliability of this questionnaire has been reported by Cronbach Alpha coefficient of .92; besides, both cognitive and affective aspects with six and five items enjoyed acceptable Cronbach alpha reliability indices of .90 and .85 respectively (De Witte, 2000). Five expert reviewers confirmed its appropriateness and the Cronbach alpha of .72 in the local context of Iran among 100 participants indicated an acceptable moderate reliability index.

Procedure and data analysis

The four questionnaires were distributed among the participants both personally and electronically. The participants were informed about the aim of the research and asked to spend enough time to answer the questions carefully and patiently. The response rate of the questionnaires was 98%. However, several questionnaires had some missing information which were excluded from the final data in a pair-wise fashion. After inputting the data into SPSS (version 24), then, it was revealed that some respondents had not been engaged and had not responded carefully. To overcome this problem, the data were screened to

abandon non-engaged responses from the final dataset. Then, Path Analysis (PA) was run using AMOS with Maximum Likelihood Estimation (MLE) to evaluate the proposed model and reach the best model fit.

RESULTS

After checking data normality and running PA on the proposed model, the following graph with regression weights of the paths was obtained.

According to Figure 2, it is clear that some paths had small regression weights which may not be needed to be remained in the model. Running MLE revealed some model fit indices. The most recognized indices to measure model fit are GFI, CFI, NFI and RMSEA. GFI was .585 which should be over .8 (Kline, 2015), so this model did not enjoy acceptable amount of Goodness Fitness Index. In addition, CFI and NFI were not acceptable since they were .660 and .659 respectively which should be over .8 too. Furthermore, RMSEA was .477 which should be less than .05 so it did not enjoy good RMSEA either.

As a result, this proposed model was revised to identify the best possible model fit. To do so, the paths with lower regression weights were removed. According to Figure 2, the path going from emotionality to JI (-.38), the path going from agreeableness to RT (.11) were relatively low and removed. In addition, the two paths going from openness to experience to JI and RT (-.12 and -.05) were relatively low too and subsequently were deleted. Since the variable of openness to experience had no role in the revised model, it was deleted too. Regarding the modification indices table in PA output suggesting a relatively strong path from JI to RT which was not provided in the proposed model, this path was added to the revised model to gain a model with better model fit.

The revised model was tested with MLE too. Figure 3 displays the revised model with regression weights of the paths.

The revised model relatively enjoyed better fit model indices. GFI, CFI and NFI were .801, .830, and .828 respectively which were over .8 and considered to be acceptable. Moreover, RMSEA (.049) was lower than .05 which is acceptable. All in all, since all four model fit indices were in the acceptable range, the revised model can nearly be considered to have acceptable fit.

As Table 2 shows, six paths were statistically significant. Agreeableness had a negative and significant effect on JI (-.34, $p<0.05$); likewise, extroversion had a negative significant effect on JI (-.65, $p<0.05$). However, the effect of extroversion on RT was not significant (.07, $p>0.05$). Emotionality was shown to have a positive and significant effect on RT (.19, $p<0.05$). Thus, it was revealed that agreeableness, extroversion and emotionality were

proved to predict LTI indirectly through JI and RT. On the other hand, JI and RT were shown to exert negative and positive significant effects on LTI respectively (-.74, $p < 0.05$; .24, $p < 0.05$), proving the fact that these two variables are predictors of teacher immunity. The last remaining negative and significant path was from JI to RT (-.83, $p < 0.05$), focusing on the mediator role of RT in this model. All

in all, the present study mainly revealed that from among the suggested variables in the model, JI could be the best predictor of LTI. Additionally, from six personality traits of HEXACO model, just three of them were shown to indirectly predict LTI through JI and RT; and finally, RT was found to slightly predict LTI.

Figure 2
The PA Result Graph of the Proposed Model

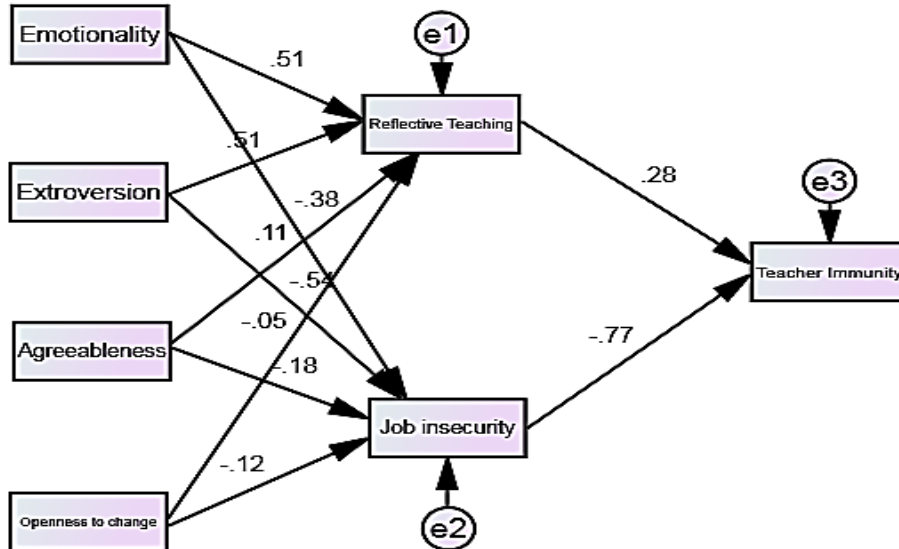
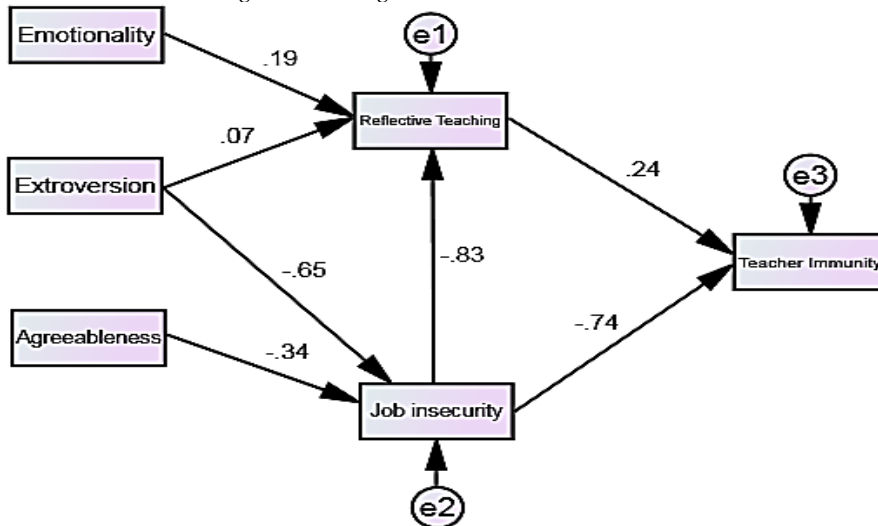


Figure 3
The Revised Model Regression Weights



As seen in Table 3, the paths had various regression weights. The largest one (-.830) belongs to the path from JI to RT; the second largest is the path from JI to TI (-.742), with the third largest being from Extroversion to JI (-.640). The smallest path went from Extroversion to RT (.070). The top three paths were related to JI which indicates that JI had the greatest contributions to the present model; while, Emotionality, having one path and a small regression weight (.191), made very little contribution to the

model. Thus, regarding regression weights, the most effective variables of this model are JI, RT, TI, Extroversion, Agreeableness and Emotionality respectively.

DISCUSSION

This study mainly sought to find out whether LTI can be predicted by HEXACO personality traits, RT and JI. To this aim, a theoretical model was proposed

based on the related literature. From among 11 paths in the proposed model, six ones remained in the revised model and one path was suggested by AMOS. The strongest paths were from *JI* to *RT* and *LTI* with considerable negative regression weights. It means *JI* can have negative effects on both of them. As *LTI* has

two ends with the negative end called maladaptive and the positive end named productive (Hiver & Dornyei, 2015), it can be concluded that *JI* may lead to maladaptive teacher immunity. On the other hand, in deeper levels of *JI*, frustration and disappointment are hidden.

Table 2
The Significance of the Paths

			Estimate	S.E.	C.R.	P
<i>JI</i>	<---	Agreeableness	-.762	.068	- 11.278	***
<i>JI</i>	<---	Extroversion	-1.134	.053	-21.463	***
<i>RT</i>	<---	Extroversion	.410	.149	2.753	.006
<i>RT</i>	<---	Emotionality	1.415	.144	9.810	***
<i>RT</i>	<---	<i>JI</i>	-2.768	.085	-32.625	***
Teacher Immunity	<---	<i>RT</i>	.291	.033	8.765	***
Teacher Immunity	<---	<i>JI</i>	-3.047	.111	-27.566	***

Table 3
Regression Weights of the Paths

			Estimate
<i>JI</i>	<---	Agreeableness	-.340
<i>JI</i>	<---	Extroversion	-.646
<i>RT</i>	<---	Extroversion	.070
<i>RT</i>	<---	Emotionality	.191
<i>RT</i>	<---	<i>JI</i>	-.830
Teacher Immunity	<---	<i>RT</i>	.236
Teacher Immunity	<---	<i>JI</i>	-.742

The traces of these two mental states exist in the maladaptive end of *LTI* which contains the features of teacher burnout, and affective and cognitive factors of *RT*. Hence, empirical data of the present study supported the theoretical foundations of these two variables (Hiver, 2017; De Witte, 2000). This finding was also supported by Faremi (2017) who showed a significant relationship between teacher retention strategies and job security, and also a significant relationship between teacher turnover and job security in schools. Teacher retention is theoretically related to productive *LTI* and *RT* since the strategies of teacher retention are similar to coping and resilience as two of the components of *LTI* and also to practical and metacognitive factors of *RT*. Thus, the positive relationship between job security and teacher retention can be considered the same as the negative relationship between *JI* and *LTI* and reflective teaching which is one of the findings of the present study. Additionally, this finding is in support of Ruvio and Rosenblatt (1999) who proved that *JI* can have some negative effects on teachers' attitude toward their profession, since attitude towards teaching is seen in the underlying factors of *LTI* and *RT*. However some other researchers considered job insecurity as an objective phenomenon which was caused by the interpretation that job insecurity happens as an environmental phenomenon irrespective of personal understanding. For instance Pearce (1998) conceptualized temporary

employment as a type of job insecurity. The logic behind of these interpretations of job insecurity is that the people who found themselves in these temporary and stressful job situations feel more job insecurity than the ones who work with a longer time employment contract. On the contrary, the present study came into conclusion that *JI* itself is a main source of effects on teacher's various qualities including teacher immunity (Emberland & Rundmo, 2010).

The next path goes from *RT* to *LTI* indicating that teachers with higher *RT* enjoy more productive teacher immunity. This shows the highly close theoretical relationship between these two variables. As *RT* includes thinking and criticizing one's own activities in the profession of teaching, it can remind teacher of his/her status as a teacher regularly and this can make him/her develop a system to survive in all difficulties experienced. Thus, this finding can be explained based on the theoretical underpinnings of *RT* in which a teacher should constantly reflect on their profession, criticize and find their weaknesses and strengths (Akbari, 2007). In addition, this finding can also be in line with Fani (2017) who proved the relationship between EFL Iranian teachers' *RT* and teacher autonomy as one of the qualities of a teacher. As *LTI* is considered as another quality of a teacher, it can be discussed that these two studies support each other. Furthermore, this finding supports Ghazalbash and Afghari (2015) who revealed that there was a

weak negative relationship between RT and burnout. Burnout is one of the constitutive components of productive LTI in a reverse way. Regarding the findings of the present study confirming the positive effect of RT on LTI, it can be interpreted that the negative relationship between RT and burnout which is the finding of Ghazalbash and Afghari (2015) can be implicitly supported by the present study.

In addition, Malmir and Mohammadi (2018) explored the prediction power of RT and self-efficacy for professional success. The results revealed that both factors could predict teachers' professional success similarly. Since the present study proved that RT can predict LTI, it seems logical to come into conclusion that both Malmir and Mohammadi (2018) and the present study revealed nearly the same finding which is the prediction power of RT for teacher's various qualities. In other words, the present study maintains that RT can have a range of effects on various aspects of teacher's practice (Stanley, 1998).

The fourth and fifth links were from emotionality and extroversion to RT indicating a positive and significant relationship between emotionality and LTI and the same relationship between extroversion and RT. It means that teachers with high amount of emotionality and extroversion are more likely to practice RT. The former relationship can be supported by Teng (2017) showing the effect of emotionality on teacher identity since when a teacher gains a deeper identity as a teacher, he/she is more prone to have reflection in his/her practice of teaching. The latter relationship was indirectly proved in Rashtchi and Sanayi Mashoor (2019) who revealed that extravert teachers were less prone to burnout. Regarding the reverse role of burnout in RT (Stanley, 1998), it can be concluded that the present study supported Rashtchi and Sanayi Mashoor (2019). In general, the effect of personality type on teacher's various qualities has been long approached including Henson and Chambers (2002) proving the Personality types as a predictor of teaching efficacy and classroom control beliefs; Fatemi, et al (2016), and Srivastava and Bhargava (1984) revealing the effect of personality on teaching effectiveness and Navidnia, et al (2015) showing the Effects of teachers' personality on teacher's self-concept. As a result, it can be concluded that the present study is in line with the mentioned studies in this paragraph since emotionality and extroversion as two types of personality were proved to have effects on RT directly and LTI indirectly which are considered to be teacher quality.

The remaining two paths were found to go from agreeableness and extroversion to JI. Patience and flexibility as two components of agreeableness, and sociability and liveliness as two components of extroversion (Ashton & Lee, 2009) can improve teacher's view toward JI regarding the affective

factors of this construct. Broadly speaking, LTI, in this study, was proved to be a "situated construct" (Hiver, 2017, p. 683) indicating that it is a function of environmental factors. This gives rise to ecological issues of English language teachers which implies that language teachers develop LTI as a defensive mechanism against environmental threats and dangers. In other words, the significant link between JI and LTI highlights the fact that teachers are highly susceptible to contextual demands. In addition, personal factors including personality type were reported to be of lower significance compared to environmental factors implying the idea that LTI emerges as a posterior concept and is not shaped merely based on teachers' personal variables. This finding can shake the solidified pillars of the dominant orthodoxy in language teacher education inquiry which has ignorantly paid little attention to ecological, organizational, administrative and environmental facets of language teachers. All in all, the present study findings support the recent paradigm shift towards ecological issues in mainstream education which is apparently less approached in ELT.

CONCLUSION

With regard to the novelty of language teacher immunity and scarcity of research in this area, the present study aimed to approach one of the most ignored aspects of LTI which was exploration on the main factors predicting it. Drawing on theoretical foundations in the related literature, a suggested model was developed and was measured against the empirical data obtained from a good number of participants to reach the revised model. This study mainly revealed that LTI can be predicted by JI, RT directly, and emotionality, extroversion and agreeableness indirectly. Compared to other studies, what seems more eye-catching is the role of JI as the most significant predictor of LTI in this study. In Iran, English language teachers in public school enjoy relatively good job security (regarding their governmentally-backed and strong employment contract) as opposed to those in private sectors who suffer from sever JI (due to their weak and short-time employment contracts) which, according to this study, has overridingly negative effects on their developing productive teacher immunity. Against the highlighted role of JI on teachers' vocational and mental life, it has been nearly neglected in previous studies done on other related constructs such as teacher resilience, burnout and self-efficacy. Thus, this study calls for more exploration on the construct of JI in the scope of teacher education research.

As pedagogical implications, the findings of this study can be implemented by teachers, teacher trainers and educational system administrative managers. Teachers are recommended to revisit their view toward RT and adopt it as an essential need to

improve their profession. As every teacher develops their own LTI system, through the practice of RT, they can be more immunized against possible threats and challenges and will be more likely to develop productive teacher immunity. In addition, teacher trainers in teacher education courses can be suggested to view teachers' personality types more accurately as an influential factor for novice teachers to develop a more benign LTI system. Besides, teacher trainers can invest more on incorporating the components of RT in their instruction to novice teachers in pre-service training courses and even experienced teachers in in-service training courses. Furthermore, due to the devastating effects of JI on teachers' immunity system, administrative managers are advised to ameliorate teachers' job security especially in private sectors in order to have more active, passionate and mentally-alive teachers.

This study, finally, can develop new horizons for the future research outlook. It is suggested to do more exploration on developing a more comprehensive model including more personal, social, environmental and vocational factors influencing and predicting LTI which can be a sound continuation of the present study. Furthermore none of the probability (random) sampling methods was chosen due to its impossibility to have access to all cities and villages of Goelstan province; as a result, a type of non-probability sampling method, convenience sampling, was adopted to its applicability to the authors' conditions. Thus, future studies can employ statistically stronger sampling methods to enrich the validity of findings.

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