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Validating the Persian versions of L2 ambiguity tolerance and learning approach scales and probing possible associations

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Abstract

The present study aims at validating the Persian versions of two-rarely explored scales among Iranian EFL learners. The first one is the *'second language tolerance of ambiguity'* scale (SLTA) developed by Ely (1995) to measure students' level of tolerating ambiguities. It includes 12 items and employs a 5-point Likert scale. The second one is the *'revised study process questionnaire'* (R-SPQ-2F) designed by Biggs, Kember, and Leung (2001). It consists of 20 items on a 5-point Likert scale. It measures learning approach and comprises two scales: deep and surface learning approach. Each scale includes two subscales: strategies and motive. The results of confirmatory factor analysis (CFA) substantiated the validity and reliability of the translated versions of scales in Iranian context. It was also revealed that there is a significant correlation between EFL learner's ambiguity tolerance and learning approach. In particular, it was found that ambiguity tolerance is positively associated with deep learning approach and negatively with surface learning approach.

Keywords: ambiguity tolerance; learning approach; psychometric; CFA; EFL learners

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1. Introduction

There are many factors which can influence on good learning. One of these factors is the approach that a learner adopts during learning. So, the types of approaches to learning can determine the quality and quantity of learning. Usually students choose an approach for their learning according to the perceived objectives of the course they are studying. For the first time, Marton and Säljö (1976) divided the approaches to learning in two categories of deep and surface. According to Marton and Säljö (1976), learners who adopt deep approach for their learning usually engaged in searching for meaning while, those who adopt surface strategies focusing on memorizing the parts that might be questioned about. Furthermore, as Franson (1997) put it, there is a relationship between deep approach of learning and students' motivation and levels of their anxiety. Students who choose deep approach to learning are more intrinsically motivated while, students who adopt surface approach have more extrinsic motivation prompted by the fear of failure. Tickle (2001) realized that students who adopt deep learning strategies are considered mastery-–oriented goals. Those who adopt surface strategies are motivated by pass only aspirations and have minimum degree of effort for learning, and most of the time they prefer rote learning. Students who choose a deep approach are more motivated for subject material and these kind of approach will help learners to remember the details more effectively while who adopts a surface strategies fear from failure.

Different factors can influence on adopting a certain approach for learning. In this study, ambiguity tolerance as one of the individual differences is hypothesized to affect learning approach. It is defined as perception of inadequate information to clearly understanding reaction (Melain, 1993). In other words, we presumed the individuals' adoption of deep and surface strategies as well as deep and surface motives can be influenced by their ability to cope with ambiguous conditions well. Low tolerance of ambiguity may increase stressful situation so it will encourage a surface approach and that in turn inhabits deep strategies. In the realm of L2 education, Brown (2000) contended that ambiguity tolerance is one of the styles that have emerged in second language research as contributors to successful acquisition (p. 114). Despite the robust efforts some learners dedicate to learn a second language, they do not have a successful learning. This failure may be attributed to degree of their ambiguity tolerance and the approaches or different strategies they adopt for their learning. Indeed, ambiguous situations are common in language learning and the same also hold true for learning approach. Due to versatile nature of language learning, it is prone to various strategies and motivational multiplicity.

2. Review of the literature

2.1 Review of the literature on learning approach

Students study for specific reasons and actually their reasons determine the type of approach they adopt (Bernardo, 2003). Marton and Säljö (1976) proposed the notion of approaches to learning consisting of two sides, i.e., the deep and surface approach. They contended that deep learning is based on higher order thinking skills including: evaluation and synthesis and personal commitment to learn the material, not just for the purpose of passing the course. Students with surface strategies, on the other hand, prefer memorization and rote learning. These students attempt to avoid failure with the minimum engagement and effort (Cano, 2003). All in all, it can be said that deep approach involves searching for meaning and linking new information with prior experience, while surface approach involves rote memorization of information (Entwistle & Ramsden, 1983). Recent studies were consistent in substantiating these components of approaches to learning (e.g., Bernardo, 2003, Biggs, Kember, & Levng, 2001, Kember, Biggs, & Leveng, 2004). A plethora of research has been done to examine the

structure of personal values (Allport, 1924, Feather, 1975, Rokeach, 1973; Schwartz, 1994) and learning approaches (Biggs, 1987; Marta & Saljo, 1976). These studies encompass many dimensions and include a variety of domains and academic disciplines. For instance, Renshaw (2002, 2003) correlated achievement goals with personal values that were consistent with deep approach to learning, while performance goals were consistent with a surface approach. This relationship was confirmed by a number of studies (Chan, 2002; Grant & Dweck, 2001; Hav & Salili, 1996; Biggs, 1993; Lietz & Matthews, 2010; Salili, 1996; Watkins, 2003; Wilding & Andrew, 2006).

Picou, Gatlin-Watts, and Packer (1998) examined the relationship between learning approaches and achievement, including the effect of gender and academic discipline. They found that female students tend to divide problems into logical steps. Cano (2005) showed that older female students prefer to adopt deep approaches to learning in comparison to younger male students. He also found a decrease from junior to senior high school with considering the deep and surface learning approaches both in boys and girls. Furthermore, Jone, Reichard, and Mokhari (2003) worked on preference of 105 college students in terms of choosing approaches to learning. Results showed that differences in learning approaches depend on different disciplines. Smith (2005) assessed the learning approaches of 248 students, studying business and psychology. In this study, psychology students tend to use deep motive and deep strategies subscales.

Subasinghe and Wanniachchi (2003) explored the correlation between the approach to learning and the academic performance of medical students. The result showed that they prefer deep strategies. Kumar and Sethuraman (2007) reported that most of high achievers prefer deep strategies while low achievers tend to use superficial approaches. This indicates that students who adopt deep approaches to learning have a better performance and vice versa. Those who tend to use deep approaches are interested in the content of material or relevancy of it to their vocation. Deep approach helps students remind factual details more effectively. Students adopting superficial approaches motivated to complete the course or fulfilling the requirement by memorization of material because they just fear from failure. High achievers use either the surface or deep approach depending on what they see as the most successful result.

Floyd, Harrington, and Santiago (2009) assessed the relationships among value of the course, engagement of the student, deep learning strategies, and surface learning strategies. As the results showed, the value of the course has a positive effect on deep learning and students' involvement. The ultimate goal of reaching deep learning can be achieved through increasing the content value and involvement. So students use deep strategies when they are more involved in the process of learning and the content of the course is valuable for them.

Garfield (1995) emphasized the role of teaching approach and learning theories in statistics education and how academics can support students' learning. In a related vein, Bilgin and Crowe (2008) explored the approaches to learning in statistics. They found that post graduate students used deeper approaches while under graduate students prefer surface approaches to learning. Keeler and Steinhorst (1995) showed the effect of teaching and learning approaches imposed by teachers. Cooper (2004) conducted a comparative longitudinal study of Australian and Malaysian Chinese students at RMTT University. It identified differences in the learning approaches of the two groups and the result indicated that Chinese male students prefer deep strategies while Australian students adopt surface strategies.

Kember (2000) found that the use of deep and surface approach depends on the nature of the assessment task and course requirements. Gijbels and Dochy (2006) showed that there was a relationship between students' approaches to learning and their assessment preferences. Smith (2005) found that students use mixed approaches to their learning. In addition, Ramsdon (1984) reported that science students rely on operation learning much more than Art students scored better on comprehension learning (Entwistle & Ramsden, 1988). Cheong (1989) explored the effects of motivation on the learning strategies. The sample consists of 495 Singapore pupils. The results indicated that Singapore pupils prefer deep approaches. According to Rellinger (1995) and Evans, Kirby, and Fabrigar (2003) school ability can be used to increase self-efficacy and deep approach to learning and helps

learners transform their ability into academic skills. The expected effects of school ability on deep and surface approach is different from the concept of Biggs (1987), Entwistle and Ramsden (1983), and Watkins (1996) where deep approaches to learning should result to increased ability and the opposite is expected for surface approach to learning, but the results of this study are consistent with Asian samples (Baumgap & Halse, 1999; Bernardo, 2003; Purdie & Hattie, 1996). These results showed a reversed impact of ability on deep and surface approach.

As demonstrated by the above literature on learning approach, it appears that this factor has received considerable attention among educationalists. Plenty of studies in various academic disciplines (such as, different science branches, arts, medicine, statistics) and among learners with different backgrounds have been conducted and substantiated the multi-faceted nature of learning approaches and their association with factors and constructs conducive to effective learning. Nevertheless, it seems the construct remained rarely unexplored in the realms of L2 education. Accordingly, the primary aim of present paper is to explore learning approach among Iranian EFL students.

2.2 Review of the literature on tolerance of ambiguity

Frenkel-Bruswik (1948) introduced tolerance of ambiguity as a general factor related to social orientation (p. 268). Brown (2000) considered tolerance of ambiguity as a factor to successful language learning (p. 114). Elis (1994) defined tolerance of ambiguity as a kind of ability to handle ambiguous conditions well without being frustrated. Budner (1962) defined tolerance of ambiguity as the tendency to perceive on certain conditions as desirable (p. 29) According to Furnham and Ribchester (1995), tolerance of ambiguity refers to the way that a person process information in ambiguous condition, as an example when they face by unfamiliar or difficult cues. Second language tolerance of ambiguity (SLTA) considered as a characteristic of the "good learner" because such a learner is comfortable with uncertain conditions and try at different guesses (Rubin, 1995, p. 45). Ely (1995) pointed that the ideal learner needed a habitat of low tolerance nor oblivious to linguistic subtleties. The student who is aware of but not threatened by uncertainty is the one for whom tolerance of ambiguity will be a help toward learning (p. 93). However, too much SLTA may have negative impact including unquestioning, acceptance, and being passive cognitively (Ehrman & Oxford, 1989).

Ehrman and Oxford (1989) pointed that those students with lower tolerance of ambiguity cannot be risk takers while taking intelligent risk such as: guessing for the meaning according to background knowledge can be helpful in foreign language learning. Johnson (1996) found that ability of risk taking and tolerating the ambiguities has a positive effect on L2 English achievement of Chinese University students. Liu (2012) found Chinese students' level of tolerance of ambiguity significantly correlated with their English performance. Mori (1999) found that those who avoid ambiguities and uncertain conditions have lower achievement and recommended that students who seek a single, clear-cut answer are not successful in learning a foreign language. Overall, substantial body of other studies have pointed to the facilitative role of SLTA in language learning as to be positively correlated with EFL learners' general English scores (Chapelle, 1983; Horng-Yi, 1992; Khajeh, 2002; Mori, 1999; Vecufen, 1995).

Oxford (1999) stated that tolerance of ambiguity is the acceptance of uncertain conditions and second language learning is full of these conditions in terms of meanings, references, and pronunciations. This can raise anxiety in language learning; therefor, a degree of ambiguity tolerance is essential for language learners (p. 62). Clement and Wen (2003) found that Chinese ESL learners with higher level of SLTA might have less anxiety. Similarly, Smock (1995) reported that anxiety correlated with tolerance of ambiguity; so, those who feel cannot handle uncertain conditions are more susceptible to stress and anxiety.

Dewaele and Liwei (2013) found the relationship between multilingualism and tolerance of ambiguity among 215 mono and bio and multilingual students. The result indicated that multilinguals gained a higher score on tolerance of ambiguity. Kazamia (1999) found that Greek EFL learners couldn't tolerate the uncertain

conditions do to their failure to express their opinion in writing and speaking. Liu (2006) reported that Chinese EFL learners could not tolerate uncertainties by their failure to express adequately their ideas in writing and speaking.

Due to the prominent position of learning approach and ambiguity tolerance in educational studies, and given that these two constructs are quite uncharted in Iranian EFL context, the present study set out to answer the following questions:

- Does EFL learners' tolerance of ambiguity play any role in opting for learning approach?
- Is the Persian version of second language tolerance of ambiguity (SLTA) scale a valid and reliable tool in context of Iran?
- Is the learning approach (LA) questionnaire valid and reliable in context of Iran?

3. Method

3.1 Participants

One hundred and eighty Iranian University students majoring in English language teaching and translation participated in this study. The sample included 40 males and 140 females; ages were from 18 to 42 and were attending Imam Reza International University in Mashhad, Iran. The convenience sampling was used due to the accessibility and features related to the purpose of the investigation. Their participation was completely voluntary and they were not required to write their names on the questionnaires.

3.2 Instrumentation

Second language tolerance of ambiguity scale - Second language tolerance of ambiguity scale (SLTA) developed by Ely (1995) was utilized to measure students' level of tolerating ambiguities. It includes 12 items and employs a 5-point Likert scale with a textual response format raging from strongly disagree to strongly agree. Cronbach's alpha internal consistency of SLTS is 0.84. The score range from 12 to 48. The sample items include: *"when I' reading something in English, it feel impatient when I don't really understand the meaning",* and "*when I write English compositions, I don't like it when I can't express my ideas clearly".* The items were translated in to Persian by researchers in order to test its validity in context of Iran.

Revised study process questioner (R-SPQ-2F) - This questionnaire was designed and validated by Biggs, Kember, and Leung (2001). It consists of 20 items and employs a 5-point Likert scale ranging from 1 (never true of me) to 5 (always True of me). It has two main scales, Deep Approach (DA) and Surface Approach (SA) with four subscales, Deep Motive (DM), Deep Strategies (DS), Surface Motive (SM), and Surface Strategies (SS) each measuring 5 items. The items measuring each scale and subscales are as follows: DA= 1 + 2 + 5 + 6 + 9 + 10 + 13 + 14 + 17 + 18 (DM= 1 + 5 + 9 + 13 + 17, DS= 2 + 6 + 10 + 14 + 18), and SA= 3 + 4 + 7 + 8 + 11 + 12 + 15 + 16 + 19 + 20 (SM = 3 + 7 + 11 + 15 + 19, SS = 4 + 8 + 12 + 16 + 20).

Sample item for DA includes: "*I find that at times studying gives me a feeling of deep personal satisfaction*". Sample item for DS is as follows: "*I find most new topics interesting and often spend extra time trying to obtain more information about them*". Sample item for SM is: "*My aim is to pass the course while doing as little work as possible*". Sample item for SS is: "*I learn some things by rote, going over and over them until I know them by heart even if I do not understand them*".

The scale enjoys an acceptable Cronbach's alpha value. Cronbach's alpha value for each subscale reported by designers is as follows: DM= 0.62, DS= 0.63, SM=0.72, SS= 0.57. Confirmatory factor analysis indicated a good fit to the intended two-factor structure. Both deep and surface had well identified motive and strategies

subscales.

3.3 Data collection

The two questioners distributed among 180 EFL learners. The study was carried out at Imam Reza International University in Mashhad during the second educational semester of 2014. The participants were asked to take the tests and in order to receive the reliable data; the researchers explained the purpose of completing the questioner. Confidentiality and anonymity considerations were observed.

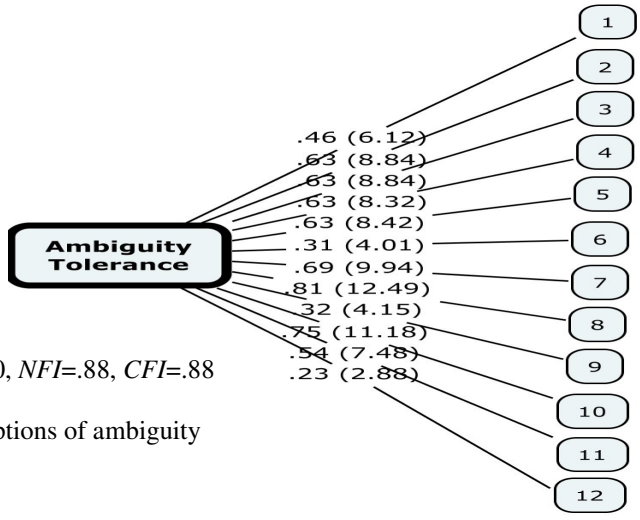
4. Results

4.1 Phase 1

The first phase of the present study included a series of different steps to validate the translated versions of the two questionnaires, i.e., ambiguity tolerance and learning approach. Having translated the scales into Persian, a group of experts (two psychometrician, and three English educators) evaluated the quality of items in terms of clarity and comprehensiveness. Accommodating the experts' views resulted in more refined and comprehensible versions of the scales. The translated questionnaires were then administered to 180 EFL students.

To determine the validity of the questionnaires, confirmatory factor analyses (CFA) utilizing the LISREL 8.50 statistical package were performed. The ambiguity tolerance questionnaire consisted of 12 items. A number of fit indices were examined to evaluate the model fit: the chi square/*df* ratio which should be lower than 2 or 3, the normed fit index (NFI) and the good fit index (GFI) with the cut value greater than .90**,** and the root mean square error of approximation (RMSEA) of about .06 or .08 (Schreiber, Amaury, Stage, Barlow, & King, 2006, as cited in Ghanizadeh & Jahedizadeh, 2015). The structural model is presented in Figure1. As indicated by Figure 1, the chi-square/*df* ratio (2.50), the RMSEA (.073), and GFI (.90) all reached the acceptable fit thresholds.

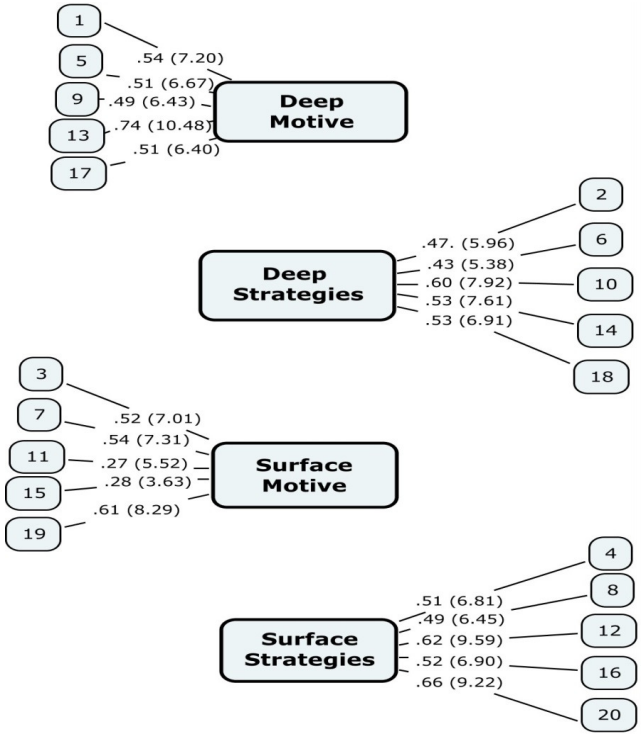
The indices on the lines indicate the standardized estimates and *t*-values, respectively. The first one is the standardized coefficient (*β)* which demonstrates the factor loading of each item with respect to the corresponding factor and presents an easily grasped picture of effect size. The closer the magnitude to 1.0, the higher the correlation and the greater the factor loading of the item is. The magnitude of lower than 0.30 is an indication of weak factor loading; in such cases the item must be revised or discarded. The second measure is the *t*-value (t); if $t > 2$ or $t < -2$, we call the result statistically significant. As the figure demonstrates, all items had accepted factor loading. The reliability of the questionnaire estimated via Cronbach's alpha was found to be .773. So, it can be concluded that the Persian version of ambiguity tolerance questionnaire had acceptable reliability and validity indices.



$\chi 2$= 138.42, *df*= 54, *RMSEA*=. 073, *GFI*=.90, *NFI*=.88, *CFI*=.88

Figure 1. The schematic representation of perceptions of ambiguity tolerance and the corresponding items

Identical analysis was performed for learning approach questionnaire. The model consisted of the four factors, namely, *deep motive, deep strategies, surface motive,* and *surface strategies*. Each consisted of five items and the addition of deep motive and deep strategies yielded *deep approach* and the addition of surface motive and surface strategies generated *surface approach*. The structural model is presented in Figure 2.



$\chi 2$= 455.93, *df*= 164, *RMSEA*=. 068, *GFI*=.86, *NFI*=.82, *CFI*=.81

Figure 2. The schematic representation of perceptions of learning approach and the corresponding items

As indicated by Figure 2, the chi-square/*df* ratio (2.78) and the RMSEA (.068) reached the acceptable fit thresholds. The other fit indices (GFI=.86, NFI=.82, and CFI= 81.) did not meet the acceptable fit thresholds but are slightly below those thresholds. According to Tseng, Dörnyei, and Schmitt (2006), in SEM it is normal for some indices to not conform to the majority trend. Overall, it can be concluded that the proposed model had a moderately good fit with the empirical data. As indicated by the indices on the paths (*t*-values and standardized coefficients), all items fitted the model and had accepted factor loading.

The reliability of the questionnaire estimated via Cronbach's alpha was found to be .692. The Cronbach's alpha estimates for each factor ranged from .61 to .65. (DM = .68, DS= .61, SM= .62, SS= .65). The reliability of DA was .77 and SA was .66. This demonstrated the reliability and validity of the Persian version of learning approach questionnaire. The correlations among the four dimensions and the corresponding approaches were then computed. As indicated in Table 1, deep and surface approaches negatively correlated with each other (r=-.211, p< 0.05). Deep motive has significant high correlation with deep strategies (r=.650, p< 0.05). The same also goes for surface motive and surface strategies (r=.598, p< 0.05). Deep motive and surface motive are negatively associated (r=-.235, p< 0.05). No significant correlation was found between deep and surface strategies.

4.2 Phase 2

In the second phase of the present study, we examined the relationship between students' ambiguity tolerance and their learning approach (deep motive, deep strategies, surface motive, and surface strategies). Table 2 represents the descriptive statistics of the variables in question. As table shows, among the four subscales of learning approach, deep motive and had the highest mean (M=14.73, SD=3.60) while surface motive received

the lowest mean (*M*=11.38, *SD*=3.31). Overall, between deep and surface approaches, deep approach had a higher mean (*M*= 28.52, *SD*=6.21 vs. *M*= 25.07, *SD*=5.79).

Table 1

The Correlation Coefficients among Factors of Learning Approach

	1	2	3	4	5	6
1. Deep motive	1.00					
2. Deep strategies	.650**	1.00				
3. Surface motive	-.235**	-.243**	1.00			
4. Surface strategies	-.056	.034	.598**	1.00		
5. Deep approach	.918**	.898**	-.263**	-. 015	1.00	
6. Surface approach	-.195**	-.190**	.899**	.889**	-.211**	1.00

Note. ** Correlation is significant at the 0.05 level

Table 2

Descriptive Statistics of Ambiguity Tolerance and Learning Approach

	N	Minimum	Maximum	Mean	Std. Deviation
Deep motive	180	6.00	25.00	14.7333	3.60261
Deed strategies	180	6.00	23.00	13.7889	3.23561
Surface motive	180	5.00	24.00	11.3833	3.31625
Surface strategies	180	7.00	21.00	13.6944	3.16245
Deep approach	180	14.00	46.00	28.5222	6.21267
Surface approach	180	13.00	45.00	25.0778	5.79198
Ambiguity tolerance	180	6.00	46.00	28.3222	8.13754
Valid N (listwise)	180				

To investigate the relationship between ambiguity tolerance and learning approach, multiple correlations were run. The results of Pearson Product Moment correlations are presented in Table 3.

Table 3

The Correlation Coefficients among Ambiguity Tolerance and Learning Approach

	Ambiguity tolerance
Deep motive	.259**
Deep strategies	.280**
Surface motive	-.221**
Surface strategies	-.201**
Deep approach	.301**
Surface approach	-.222**

Note. **Correlation is significant at the level of 0.05

As indicated in the Table, positive significant correlations were found between ambiguity tolerance and deep approach (r = 0.301, p < 0.05), between ambiguity tolerance and deep strategies (r = 0.280, p < 0.05), and between ambiguity tolerance and deep motive (r = 0.259, p < 0.05). The correlations between ambiguity tolerance and surface approach (r = -0.222, p < 0.05), surface motive (r = -0.221, p < 0.05), and surface strategies (r = -0.201, p < 0.05), albeit weak, were in the negative direction.

5. Discussion and conclusion

The primary aim of this study was to validate two rarely-explored scales among Iranian EFL learners. Regarding the first questionnaire question (SLTA) which measured the ambiguity tolerance of second language learning, the result of CFA demonstrated the validity and reliability of the Persian version among Iranian EFL learners. It included 12 items and employed a 5-point Likert scale with a textual response format raging from strongly disagree to strongly agree. Concerning the second scale assessing learning approach (LA) questionnaire in the context of Iran, the result indicated satisfactory reliability and validity indices. It comprised 20 items on a

5-point Likert scale ranging from 1 (never true of me) to 5 (always True of me). It has two main scales, deep approach and surface approach measuring four subscales, deep motive, deep strategies, surface motive, and surface strategies. All items fitted the model and had good factor loadings. The correlations among the four dimensions and the corresponding approaches indicated that deep and surface approaches negatively correlated with each other. Deep motive had significant high correlation with deep strategies. In the case of surface motive and surface strategies, a relatively high association was detected. Deep motive and surface motive were negatively associated with each other. These findings provided further validity evidences for the scale in Iranian context given that as contended by Biggs, Kember, and Leung (2001), deep and surface scales and subscales are in reverse direction. This is also in line with empirical studies. For instance, Franson (1997) found that there is a relationship between deep approach of learning and student's motivation. Students who choose deep approach to learning are more intrinsically motivated whereas those who adopt surface approach have more extrinsic motivation which prompted by the fear of failure.

The second phase of the present study aimed at investigating the role of tolerance of ambiguity in learning approach. Considering the first research question which was examining the role of ambiguity tolerance on EFL learners' learning approach (deep motive, deep strategies, surface motive, and surface strategies), the results indicated that there has been a statistically significant relationship between EFL learners' ambiguity tolerance and their learning approach. Positive significant correlations were found between ambiguity tolerance and deep approach, between ambiguity tolerance and deep approach, between deep strategies and between ambiguity tolerance and deep motive. On the other hand, negative correlations were detected between surface approach (surface motive and surface strategies) and ambiguity tolerance. In other words, it appears the higher the second language ambiguity tolerance is, the more likely the EFL students tended to adopt deep learning approach, both in applying strategies and in the desire to learn. While a person who cannot tolerate uncertain conditions has low motivation and tends to use surface approach.

This finding can be explained in the light of previous research corroborating the association of ambiguity tolerance and language achievement. For instance, Johnson (1996) found that ambiguity tolerance and risk taking have a positive effect on L2 English achievement of chines university students. Liu (2012) indicated that the effect of students' ambiguity tolerance on their English performance. Topkaya (2009) found there is a significant difference between ambiguity tolerance and learners' language proficiency levels indicating that the higher the proficiency level, the more tolerant learners become in foreign language learning. It goes without saying that language achievement in turn entails adopting learning approach and strategies associated with higher-order learning and thinking; otherwise, language achievement would not endure and progress on a steady basis. This is the case with academic motivation. It is generally accepted that previous achievement would inspire students to learn new materials with higher effort and more effectively. Whereas, in the absence of academic success, the desire to learn would diminish leading to frustration and helplessness.

Previous research has also substantiated the nexus between ambiguity tolerance level and the employment of effective language learning strategy (Jun-Yong, 1998; Khajeh, 2002; Yea-Fen, 1995). Conversely, it can conclude that to be ambiguity intolerant can jeopardize choosing the appropriate learning approach. Robin (1975) characterized good language learner as the one who is willing to make mistake in order to learn. White (1999) emphasized that if ambiguity is not tolerated reasonably, it can create stressful conditions for learners so adopting an appropriate approach may be negatively affected.

To sum up the findings, the present study highlighted the role of ambiguity tolerance in selecting appropriate learning approach. So by informing EFL learners about the contribution of tolerance of ambiguity to the learning approach, we can raise awareness in them and help them to tolerate uncertain conditions in language learning and adopt an appropriate approach to learning. EFL teachers should engage their students in in tasks and activities requiring reflection and inference-making in order to improve their skills in dealing with more complicated situation requiring higher levels of ambiguity tolerance. They also recommended designing different instructional tasks or activities which encourage students to think about alternative answers so as to increase

their level of tolerating ambiguous condition.

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