European Journal of English Language Teaching
ISSN: 2501-7136
ISSN-L: 2501-7136
Available on-line at: www.oapub.org/edu

doi: 10.5281/zenodo.581997 Volume 2 | Issue 3 | 2017

VALIDATING THE PERSIAN VERSION OF EPISTEMOLOGICAL BELIEFS AND PROBING IRANIAN EFL LEARNERS' EPISTEMOLOGIES

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Abstract:
The present study aimed at validating the Persian versions of epistemological beliefs scale among Iranian EFL learners. *Epistemological beliefs questionnaire (EBQ)* designed and validated by Chan and Elliot (2004) includes 30 items and employs a 5-point Likert scale which measure students' epistemological beliefs. On this scale, there are four dimensions: 1) "Innate/Fixed Ability" which refers to ability being innate and fixed, 2) "Learning Effort/Process" referring to hard work, and effort spent in drilling, 3)"Authority/Expert Knowledge" concerning knowledge being handed down by authority figures and experts, and 4) "Certainty Knowledge" denoting whether knowledge is certain, permanent, and unchanged. The present study also set out to investigate whether these epistemological beliefs vary by learner's gender, Grade point average (GPA) and contextual factor. To do so, 206 EFL learners were selected according to convenience sampling among EFL learners in language institutes and universities in Mashhad, a city in northeast of Iran. The results of confirmatory factor analysis (CFA) verified the validity and reliability of the translated versions of scale in Iranian context. It was also found that these epistemological beliefs vary by GPA not by gender and contextual factor.

Keywords: epistemological beliefs, innate/fixed ability, learning effort/process, authority/expert knowledge, certainty knowledge

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1. Introduction

Over the past decade, epistemological beliefs have attracted much attention from several researchers worldwide (Chen & Pajares, 2010, ac cited in Cama, Suluna, Topcub, & Guvena, 2014). Epistemology is the main domain of philosophy concerned with the nature and justification of human knowledge. Psychologists and educators become increasingly interested in personal epistemological development and epistemological beliefs: how individuals attain knowledge, the theories and beliefs they hold about knowing, and the manner in which such epistemological beliefs are a part of and an influence on the cognitive processes specially thinking and reasoning (Hofer & Pintrich, 1997). Epistemological beliefs express the beliefs of the individuals about the essence of knowledge and achieving knowledge (learning) (Pery, 1981; Vergnaud, 1990; Ozden, 2003, as cite in Önen & Ulusoya, 2014).

The basic theory of epistemological beliefs was conceptualized by Schommer (1990). The tenet behind the Schommer's (1990) approach is that individuals' thoughts about what knowledge is and how it is attained have different developmental levels, which are also reflected in learner's performances. Therefore, studying learner's epistemological beliefs is important in order to make them higher achievers.

Schommer (1994) conceptualized two broad dimensions for epistemological beliefs, namely 'naive' and 'sophisticated' beliefs. Learners with sophisticated beliefs might think that a large body of knowledge is unstable and evolving and a small body of knowledge is stable and hence unchanging. Naive learners, in contrast, believe that a large body of knowledge is innate and unstable, and a small body of knowledge is being evolved. Epistemological belief dimensions identified by Schommer (1994) exhibit a distribution rather than continuity. Each dimension is defined with significant distributions remaining between immature or naïve epistemological beliefs and complex epistemological beliefs (Schommer-Aikins & Hutter, 2002). Epistemological beliefs were related to variables such as strategies of study and solving the problem (Phillips, 2001), achievement motivation, approaches of learning (Cano, 2005; Kizilgunes, Tekkaya, & Sungur, 2009), motivation and learning (Buehl & Alexander, 2005; Cavallo, Rozman, Blickenstaff, & Walker, 2003; Paulsen & Feldman, 1999), learning styles and reflective thinking (Phan, 2008), and academic performance (Schommer, 1993).The rationale behind surge of studies on epistemological beliefs is that this concept is linked to cognitive and metacognitive operations (Chai, Khine, & Teo, 2006, as cited in Cama, et al, 2014)

Chan and Elliot (2004) studied epistemological beliefs in Hong Kong and developed and validated a 30-item questionnaire from Shommer's 63-item scales. This

new version of epistemological beliefs scale has been studied in different contexts; nevertheless, to the researchers' best knowledge, it remained unexplored in Iranian context. Accordingly, the main purpose of the present study is to explore the EFL learners' epistemological beliefs in the EFL context of Iran. To do so, Chan and Elliot (2004) epistemological beliefs questionnaire was translated into Persian and then administered to a group of Iranian EFL learners to determine its validity and internal consistency. Hence, the following research questions were formulated and addressed:

1. Is the Persian version of 'epistemological beliefs questionnaire' a valid and reliable tool in the EFL context of Iran?
2. Is there any significant relationship between EFL learner's epistemological beliefs and their gender?
3. Is there any significant relationship between EFL learner's epistemological beliefs and their Grade point average (GPA)?
4. Is there any significant relationship between EFL learner's epistemological beliefs and their contextual factor?

2. Literature review

In the current literature, the construct of epistemological beliefs is a subset of the wider belief system. Epistemological beliefs are always defined as a system of beliefs related to the knowing, nature of knowledge, and knowledge acquisition (Hofer, 2000; Hofer & Pintrich ,1997; Schommer,1990).The nature of knowledge and knowing includes definitions of knowledge, how knowledge is constructed, how is knowledge achieved, how knowledge is evaluated and how accurate is knowledge. In this definition, knowing means knowledge acquisition and learning, and these terms have equivalently been used in epistemological beliefs studies by researchers (e.g., Hofer, 2000, 2001; Hofer & Pintrich, 1997; Howard et al., 2000; Jehng et al., 1993; Schommer, 1990, 1994, as cited in Chan & Elliott, 2004).

Notwithstanding the fact that research on epistemological beliefs is not plentiful, recently there has been a growing interest in epistemological beliefs and personal epistemological development by psychologists and educators. Hofer and Pintrich (1997) described epistemological belief as "*how individuals come to know, the theories and beliefs they have about knowing, and the manner in which such epistemological premises are part of and an influence on cognitive process of thinking and reasoning beliefs about the processes of knowing and the nature of knowledge*" (Hofer & Pintrich, 1997, p. 435, as cited in Ozkal, Tekkaya, Cakiroglu & Sungur, 2008).

Perry (1968) was the pioneer for studying epistemological beliefs, who examined college students' beliefs about the nature of knowledge and the source of knowledge (as cited in Duell & Schommer, 2001). After that Kuhn, Cheney, and Weinstock (2000) studied the epistemological understanding of the model. All of these researchers supposed that epistemological beliefs were one-dimensional and it developed from simple to complex thinking process. Then, Schommer (1990) stated that epistemological belief is multidimensional frame work which consists of five dimensions: omniscient authority, certain knowledge, simple knowledge, quick learning and fixed/innate ability. Schommer (1994) noted that components of epistemological beliefs vary from naïve to sophisticated beliefs. Sophisticated teacher and learner believe that a large body of knowledge is progressively mature, knowledge is complex, uncertain, and can be learned gradually through reasoning and small body of knowledge is stable. Naive teacher and learner believe that a small body of knowledge is progressively mature, knowledge is simple and clear, can be learned quickly or not at all and a large body of knowledge is unchanging and certain. Muis (2004) proposed the terms "availing" and "non-availing" respectively instead of the terms "sophisticated" and "naive". Schommer's model (1994) described that epistemological beliefs are not innate and fixed features of an individual but develop over time, one factor stimulating this development is education, mainly with regard to beliefs about knowledge. The higher the adult's educational level is, the more likely s/he is to believe that knowledge is constantly developing and very complex (Schommer, 1998). On the other hand, beliefs about learning, the speed and control of learning, 'which seem to intimately involve "the self", were predicted by the adults' home life' (Schommer, 1994, p. 314).

Epistemological beliefs also impact learning not only separately but also as a whole (Schommer, 1990, 1994, as cited in Aypay, 2010). Based on Schommer's work (1990). Further studies in this area (with Schommer's instrument and findings or adapted instruments) have suggested that epistemological beliefs are linked to cognitive and meta-cognitive activities in learning such as comprehension in text reading, including checking comprehension, inferring information (Kardash & Scholes, 1996; Schommer, 1990; Schommer, Crouse, & Rhodes, 1992, as cited in Chan & Elliott, 2004), problem solving in mathematics (Schoenfeld, 1985, as cited in Chan & Elliott, 2004), learning in complex and ill-structured domains (Schommer, 1994), "conceptual change, ways of knowing and academic performance" (e.g., Hofer, 2000; Qian & Alvermann, 1995, 2000; Schommer, 1993; Schommer & Easter, 2006, as cited in Wong, Chan & Lai, 2009. P.2), "a wide variety of reasoning skills, including argumentation skills, moral reasoning and problem solving" (Hofer, 2001, as cited in Tutty &White,

2005, p .679), learning strategies and approaches of learning (Cano, 2005; Chan, 2003; Paulsen & Feldman, 1999, as cited in Wong, et al., 2009).

Schommer (1994) was a first proponent of such research. She described personal epistemology as a belief system which is consisting of five more or less independent beliefs. In this respect, Schommer offered five different sub constructs or dimensions of epistemology belief (EB), namely:

- the structure of knowledge: from simple and compartmentalized to complex and highly integrated;
- the certainty of knowledge: from certain and absolute to tentative and constantly evolving;
- the source of knowledge: from handed down by omniscient authority to derived by reason;
- the control of knowledge acquisition: from the ability to learn is innate and fixed at birth to ability to learn is acquired through experience;
- the speed of knowledge acquisition: from learning is quick or not-at-all to learning is acquired gradually. (as cited in Tutty &White, 2005, p.679).

Schommer (1990) by the word "system" means that there is more than one belief to be considered as well and by the phrase "more or less independent" means that students may be knowledgeable in some beliefs but not necessarily in others. Personal epistemological beliefs have an imperative influence on personal cognitive and meta-cognitive processes.

Based on this hypothetical framework and an exploratory study, Schommer developed a 63- item questionnaire grouped into 12 conceptual subscales and designed to estimate the epistemological beliefs developed from her multidimensional framework mentioned earlier (Schommer, 1990). In Schommer's study of college students in the United States only four dimensions were extracted such as Simple knowledge (knowledge is separated facts), Certain knowledge (knowledge is fixed), Innate ability (the ability to learn is fixed at birth), and Quick learning (learning occurs quickly or not at all) and the dimension "Omniscient Authority" unextracted. The same study was conducted by Burnettt and Dart (1997) Fanshawe and Burnett (1991) that resulted in a 45 item questionnaire. According to Factor analysis of the 45- item-questionnaire, just one factor was not extracted (as cited in Chan & Elliote, 2004). In the late 1990s, Chan administered the 30- item scale in Hong Kong for the first time that was developed and validated by Chan and Elliot (2004). Chan examined the epistemological beliefs of teacher education students and the results yielded four factors. These factors include "learning Effort/ Process" (replacing Quick learning), "Innate/ Fixed ability", "Certainty knowledge", "Authority knowledge". It was found

that acquiring knowledge is a process need understanding and effort and knowledge is tentative and changing. The main purpose of the present study is to determine the validity and the internal consistency of Epistemological beliefs questionnaire (EBQ) which was translated into Persian and administered to a group of Iranian EFL learners. Finally, this paper examines whether EFL learners' EB differ based on gender and contextual factor.

3. Method

3.1 Participants

The participant of the present study comprised 206 EFL learners (153 female, 53 male) selected according to convenience sampling among EFL students learning English in 2 different contexts in Mashhad a city in northeast of Iran. The first sample comprised 67 EFL students studying at language institute and the second sample consisted of 139 EFL learners studying at university. Their ages varied from 19 to 50 years old (M= 26.64, SD= 3.95).

3.2 Instrument

A. Epistemological beliefs questionnaire (EBQ)

The EBQ designed and validated by Chan and Ellito (2004) was employed in this study. It was adapted from Schommer's 63-item scale grouped into twelve subscales. Furthermore, these scales saturated into five factors or dimensions; innate/fixed ability, omniscient authority, certain knowledge, simple knowledge, and quick learning (Schommer, 1994), but in her studies with North American college student only the factor omniscient authority was not extracted. Chan and Elliot (2004) validate d the 30 – items questionnaire. On this scale, four factors or dimension such as "Innate/Fixed Ability" refers to ability being innate and fixed at one extreme, while at the other extreme ability is seen as changeable. "Learning Effort/Process" refers to hard work, and effort spent in drilling at one extreme or understanding at the other. "Authority/Expert Knowledge" refers to knowledge being handed down by authority figures and experts at one end, or knowledge being obtained through one's justification and reasoning at the other. "Certainty Knowledge" refers to whether knowledge is certain, permanent and unchanged for one pole or tentative and ever-changing at the other (p. 821). The validity indices computed via confirmatory factor analysis (CFA) were as follow (Chan & Elliot, 2004): GFI=.93, AGFI=.90, RMSEA=.058, RMR=.064.

The 3o items of the instrument are arranged on a_5-point Likert_scale providing 5 possible responses (1= never, 2 = some times, 3 = often, 4=usually, 5=always). The four sub factors measure: Innate/Fixed ability (IFA), Learning effort/process (LEP), Authority/expert knowledge (AEK), certainty knowledge (CK). IFA has 13 items, LEP has 6 items, AEK has 6 items and CK has 5 items and the sample item for each subscale is as follows:

- Innate/fixed ability: There isn't much you can do to make yourself smarter as your ability is fixed at birth
- Learning effort/ process: How much you get from your learning depends mostly on your effort.
- Authority/ expert knowledge: I often wonder how much experts really know.
- Certainty knowledge: I believe there should exist a teaching method applicable to all learning situations.

The internal consistency of the scale was equal to 0.89 in the Chan and Elliott's study; in this study, The Cronbach's alpha estimates for each factor ranged from .60 to .88. (IFA = .88, LEP= .79, AEK= .63, CK= .60).

3.3 Data collection

The study was conducted in Elm o Fan Baran Institute and Imam Reza International University in Mashhad. The participation was entirely voluntary. To gather reliable data, the researcher explained the purpose of completing the questionnaire; all participants received the translated questionnaires (Persian version of EB scale). In order to gather a reliable data, assured the participants that their views would be confidential by asking them not to write their names on it. They were just required to insert the demographic information, such as gender, age, grade and educational level. The questionnaire was coded numerically.

Data collection was done between March and April 2016.

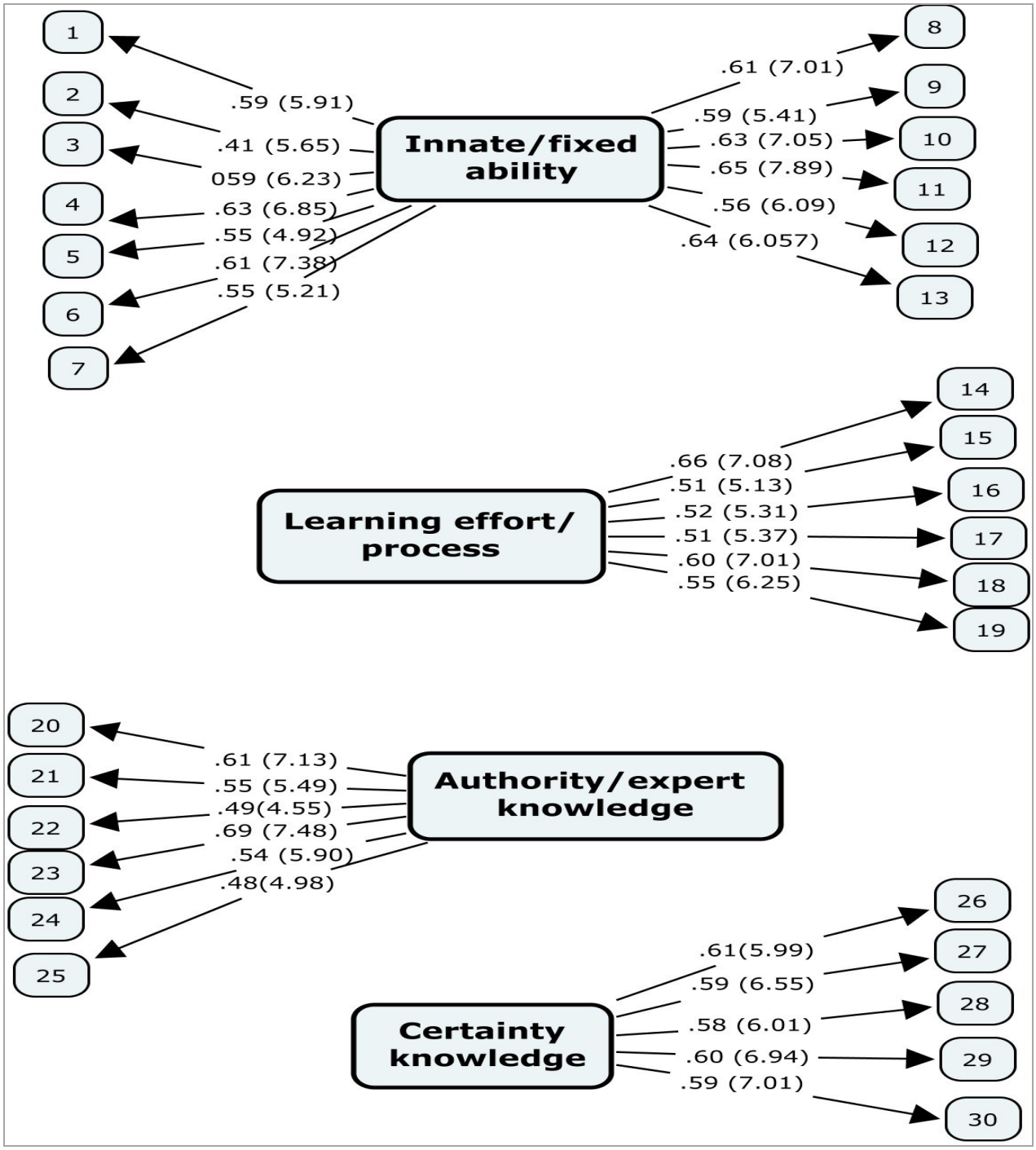
4. Result

4.1. Phase 1

The first phase of the present study included an array of different steps to validate the translated version of the 'Epistemological Belief Questionnaire (EBQ)'. Having translated the scale into Persian, a group of experts (a psychometrician, and three English educators) evaluated the quality of items in terms of clarity and comprehensiveness. Accommodating the experts' views and revision resulted in a more refined and comprehensible version of the scale.

To determine the validity of the scale, it was administered to 206 EFL learners. A confirmatory factor analysis (CFA) utilizing the LISREL 8.80 statistical package was then performed. The model consisted of the four perceptions, namely, *innate-fixed ability (IFA), learning/effort process (LEP), authority/expert knowledge (AEK),* and *certainty knowledge (CK)*. IFA comprised 13 items, LEP consisted of 6 items, AEK included 6 items, and CK comprised 5 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). The structural model is presented in Figure1. As indicated by Figure 1, the chi-square/*df*ratio (2.05) and the RMSEA (.062) reached the acceptable fit thresholds. The other two fit indices (GFI=.88, NFI=.85, and CFI=.79) did not meet the acceptable fit thresholds but are slightly below those thresholds. According to Tseng, Dȍrnyei, 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.

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 loadings.



$\chi 2$= 149.82, *df*= 73, RMSEA=. 062, GFI=.88, NFI=.85, CFI=.79

Figure 1: The schematic representation of the 4 epistemological beliefs and the corresponding item

The Cronbach's alpha estimates for each perception ranged from .60 to .88. (IFA = .88, LEP= .79, AEK= .63, CK= .60). The correlations among the four dimensions were then computed. As indicated in Table 1, the highest correlations were found between LEP and AEK ($r = 0.46$, $p < 0.05$).

Table 1: The Correlation Coefficients among Factors of Epistemological Beliefs

	1	2	3	4
1. IFA	1.00			
2. LEP	.194*	1.00		
3. AEK	.120	.463**	1.00	
4. CK	.322**	.301**	.109	1.00

** Correlation is significant at the 0.05 lev

2. Phase 2

In the second phase of the present study, we explored the relationship between students' epistemological beliefs and their language achievement (GPA). Table 2 represents the descriptive statistics of the four epistemologies as well as GPAs. As the Table shows, among the four epistemological beliefs, IFA and LEP had the highest means respectively, IFA (*M*=31, *SD*=6.52), LEP (*M*=21, *SD*=4.62).

Table 2: Descriptive Statistics of Students' Epistemological Beliefs

	N	Minimum	Maximum	Mean	Std. Deviation
IFA	206	21.00	52.00	31.18	6.52
LEP	206	12.00	30.00	21.38	4.62
AEK	206	8.00	30.00	17.16	3.97
CK	206	5.00	25.00	16.23	3.89
GPA	206	13.52	19.85	17.02	1.69

To investigate the relationship between the four epistemological beliefs and GPA, a correlation analysis was run. The results of Pearson Product Moment correlations are presented in Table 3.

Table 3: The Correlation Coefficients among Epistemological Beliefs and GPA

	IFA	LEP	AEK	CK
GPA	.07	.36**	.43**	.15*

**Correlation is significant at the level of 0.05

As indicated in the Table, GPA correlated significantly and positively with two epistemologies: LEP ($r = 0.36$, $p < 0.05$) and AEK ($r = 0.43$, $p < 0.05$).

To find our whether epistemological beliefs are different across university and institutes students, an independent samples *t*-test was applied to the data. The results of descriptive statistics of the two groups are represented in Table 4. As the Table

indicates, the four epistemologies are slightly different in the two groups (1: university, 2: institutes).

Table 4: Descriptive Statistics of Epistemologies in Contexts 1 & 2

	CONTEXT	N	Mean	Std. Deviation	Std. Error Mean
IFA	1.00	139	34.3597	6.33143	.53703
	2.00	67	33.8209	6.94115	.84800
LEP	1.00	139	21.2878	4.82933	.40962
	2.00	67	21.5970	4.19978	.51309
AEK	1.00	139	17.1151	3.83931	.32565
	2.00	67	17.2836	4.26332	.52085
CK	1.00	139	16.1007	3.76539	.31938
	2.00	67	16.5075	4.17559	.51013

To see whether these slight differences are statistically different, *t*-test Table was examined. As Table 5 reveals, there are not significant contextual differences in any of the four epistemologies: IFA (t= .55, p<0.05), LEP (t= -.45, p<0.05), AEK (t= -.28, p<0.05), and CK (t= -.70, p<0.05).

Table 5: The Results of Independent Samples T-test for Determining Differences between the Two Contexts

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
IFA	Equal variances assumed	.019	.89	.55	204	.58	.53	.97	-1.37	2.45
	Equal variances not assumed			.53	120.30	.59	.53	1.00	-1.44	2.52
LEP	Equal variances assumed	6.65	.011	-.44	20	.65	-.30	.68	-1.66	1.04
	Equal variances not assumed			-.47	148.15	.63	-.30	.65	-1.60	.98
AEK	Equal variances assumed	.12	.72	-.28	20	.77	-.16	.59	-1.33	.99
	Equal variances not assumed			-.27	118.98	.78	-.16	.61	-1.38	1.04
CK	Equal variances assumed	3.70	.05	-.70	20	.48	-.40	.58	-1.55	.73
	Equal variances not assumed			-.67	119.12	.50	-.40	.60	-1.59	.78

To find our whether epistemological beliefs are different across males and females, an independent samples *t*-test was applied to the data. The results of descriptive statistics of the two groups are represented in Table 6. As the Table indicates, the four epistemologies are slightly different in the two groups (1: male, 2: female).

Table 6: Descriptive Statistics of Epistemologies in male and female

	Gender	N	Mean	Std. Deviation	Std. Error Mean
IFA	1.00	146	33.8151	6.69328	.55394
	2.00	60	35.0833	6.05145	.78124
LEP	1.00	146	21.6986	4.65406	.38517
	2.00	60	20.6333	4.50599	.58172
AEK	1.00	146	17.3973	4.10799	.33998
	2.00	60	16.6167	3.59421	.46401
CK	1.00	146	16.4932	4.06371	.33632
	2.00	60	15.6000	3.41085	.44034

To see whether these slight differences are statistically different, *t*-test indix was examined. As Table 7 reveals, there are not significant contextual differences in any of the four epistemologies: IFA (*t*= . -1.27, *p*<0.05), LEP (*t*= 1.50, *p*<0.05), AEK (*t*= 1.28, *p*<0.05), and CK (*t*= 1.49, *p*<0.05).

Table 7: The Results of Independent Samples T-test for Determining Differences between the Two gender

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
IFA	Equal variances assumed	.55	.45	-1.27	204	.20	-1.26	.99	-3.23	.70
	Equal variances not assumed			-1.32	120.81	.18	-1.26	.95	-3.16	.62
LEP	Equal variances assumed	.00	.96	1.50	204	.13	1.06	.70	-.32	2.45

	Equal variances not assumed			1.52	113.21	.13	1.06	.69	-.31	2.44
AEK	Equal variances assumed	.78	.36	1.28	204	.20	.78	.60	-.41	1.97
	Equal variances not assumed			1.35	124.72	.17	.78	.57	-.35	1.91
CK	Equal variances assumed	2.89	.09	1.49	204	.13	.89	.59	-.28	2.06
	Equal variances not assumed			1.61	129.92	.10	.89	.55	-.20	1.98

5. Discussion and conclusion

The aim of this study was to validate Chan and Elliot's (2004) scale measuring learners' epistemological belief in an EFL context among Iranian learners. The scale was translated into Persian and was administered to Iranian EFL learners. The results of CFA demonstrated the validity and reliability of the Persian version among Iranian EFL learners. It comprised 30 items on a 5-point Likert scale ranging from 1(never) to 5 (always) and contained four dimensions (Innate and Fixed ability, learning Effort/ process, Authority/ Expert knowledge, Certainty knowledge).

To see how these four dimensions are in accordance with each other, a correlation analysis was run. The result indicated that the highest correlation were found between authority/ expert knowledge and learning Effort/ process, followed by the correlation between certainty knowledge and innate and fixed ability. It is accepted that who believe that a large body of knowledge is progressively mature, small body of knowledge is stable, knowledge is complex, uncertain, and it can be learned gradually through reasoning have a strong belief that achieving knowledge is deepened on attempt and effort and obtained through one's justification and reasoning.

This finding can also be interpreted from the prospective of attribution theory which has paved the way for studies in the achievement domain. What has emerged from almost all these studies demonstrated that academic achievement is improved and enhanced when learners attribute academic outcomes to factors such as effort and the use of appropriate study strategies; in contrast, academic achievement is hindered when learners attribute their failure to factors such as lack of ability or chronic health

problems and attribute their success to luck or other uncontrollable factors (e.g., Graham & Folkes 1990; Bempechat, Ginsburg, Nakkula, & Wu,1996; Pintrich & Schunk 2002). Besides, perceiving oneself as low in ability has substantial negative effects on the grounds that low ability perception lowers individuals' expectation for future success (Weiner, 2000).

The second research question investigated whether male and female learners differ in their epistemological beliefs. The result of *t-test* indicated that there were no gender differences in learner's epistemological beliefs. The issue of gender differences in beliefs about nature of knowledge and our academic functioning as the results of these beliefs has yielded confounding results. For instance, this finding is in contrast with previous research attesting to significant gender differences in learners' attributions of their performance. Smith, Sinclaire, and Chapman (2002) found that boys attributed their failure to luck or effort; and seldom ascribed failure to lack of ability so as to enhance their self-image. In L2-related research, Williams, Burden, Poulet, and Maun (2004) reported significant differences between boys and girls regarding their internal and external attributions for both doing well and not doing well. For instance, girls showed a greater tendency than boys to attribute their failures to lack of effort on their part, to lack of ability and to lack of employment of appropriate learning strategies. Boys cited lack of interest in the subject as a cause of failure more frequently than girls did. On the other hand, Ghonsooly, Ghanizadeh, Ghazanfari, and Ghabanchi (2015), for instance, found that the issue of gender differences in attributions does not appear to generalize to teachers and that teachers of both genders deploy somewhat similar attributional patterns.

The third research question aimed at exploring the relationship between learners 'GPA and their four epistemological beliefs. According to the result of a correlation analysis, GPA correlated significantly and positively with two epistemologies: LEP and AEK. In other words, effort, hardworking and obtaining knowledge through reasoning, justification and high ability were the most common factors cited for success. Learners, who believe that ability is fixed and knowledge is certain, have low achievement and get low grade. This finding is in line with Hsieh's (2004) contention that students making internal attribution such as ability and effort received higher grades than students making external attribution such as the ease of task or clear instruction.

The fourth research question sought to investigate whether epistemological beliefs are different across university and institutes students. An independent sample *t*-test was applied to the data.

The results demonstrated no significant contextual differences across university and institutes students in any of the four epistemologies beliefs. The context did not have any influence on the learner's epistemological beliefs.

Wong, Chan, and Lai (2009) found that the pre-service teachers have a tendency to not to think that inborn ability is important in establishing knowledge. Nor do they consider knowledge supplied by an expert as fixed. What underlies their epistemological system is a resistance to believe that their potential to know is predetermined by what already exists, be it in the form of inherited capability or authority opinions; but, rather, as something can be altered if they work at it. If knowledge is changing, submitting to expert opinions and to a fatalistic view of ability would not facilitate its acquisition. It has been found that effort and hard work has a strong influence on the beliefs of Hong Kong Chinese students in how to gain knowledge. Effort or diligence is considered a very important attribute of a person's success, especially in terms of academic achievement (Chen & Stevenson, 1995; Hau & Salili, 1996; Salili, 1996; Yan & Gaier, 1994). It is believed that obstacles can overcome if one only perseveres in working hard. It should be noted that the epistemological dimension of "Learning Effort/ Process" goes beyond mere hard working, but encompasses the active participation in the learning process as well. According to the findings of the present study, it seems beliefs and characteristics for effective learning do beyond educational contexts, whether public school, private institute, or university. Success in all these contexts entails diligence and perseverance (Monshi Toussi & Ghanizadeh, 2012).

Taken together, the present study was carried out to explore different learner's epistemological beliefs in two EFL contexts. A few data suggestion can be made regarding future study to collect more reliable. First, no quantitative method such as interview was utilized to collect data. So, other approaches can be employed to collect more reliable data. Second, more demographic variable such as learners' age, educational level can be considered to have deeper look into EFL learner's epistemological beliefs. Third, finally the data collection was done only in one city in Iran. Data collections from other cities would add to the generalizability of the findings.

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