



Experienced and Novice Teachers' Cognitive Construction of Noticing Concept in Language Teaching

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Abstract

Language teaching literature has developed plenty of compelling evidence to impress the need of attention to language form but this solid knowledge has not included teachers' perception of noticing in teaching language form, thus teachers' cognition in conceptualizing noticing concept was the main aim of this research. It was also tried to find out teachers' experience tenor in conceptualizing noticing. For this purpose, a noticing concept inventory (NCI) was developed. Therefore, a total population of 689 male and female English teachers was assigned to the study through two phases of factor analysis. Then, 60 teachers from both groups did the questionnaire and a t-test was carried out. The empirical findings from the first phase of the study revealed seven noticing constructs namely as 1) Pedagogical effect, 2) Learners' characteristics, 3) Type of input, 4) Skill type, 5) Task type, 6) Time and 7) Measurement. In the second phase of the study, the result showed that teaching experience is assigned as a dividing line between experienced and inexperienced teachers in the conceptualization of noticing in teaching. Teaching experience is a dynamic entity and other operational definitions might change the result; however, findings of the research will be of a valuable pedagogical framework.

Keywords: Noticing; Noticing Construct; Noticing inventory; Teacher cognition; Teaching experience

INTRODUCTION

The role of 'attention' in second language learning has a global status and there is an extensive literature perceiving noticing as a building block of language learning which stands out as a psycho-cognitive process. The primary traces of attention in second language learning were born when Krashen (1985) proposed the importance of comprehensible input. A general spectrum of studies indicates a

necessary place for using attention in language learning (Robinson, 1995; Schmidt, 1990, 1995, 2001) and take a cognitive view towards the use of attention in learning a language (Tomlin & Villa, 1994).

The first and foremost manifestation of Noticing Hypothesis revealed itself in teaching language form and its conceptual definition was practically implemented in classrooms when

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learners needed to focus on form; though this type of focal attention took several meanings ranging from attention only to language for focusing both on meaning and form, this hypothesis could, in a short period, take a huge space in language learning theories and practices.

The concept of noticing cannot be taken unidimensionally as it is more complex than can be captured as focal attention to form alone. In this regard, Batstone (1996) confirms the vast scope of noticing covering both meaning and form and its complex process of internalizing and restructuring the language hence noticing cannot come into one form and requires teachers to beware of various shapes and functions this concept can take in practice. In this case, what teachers mentally shape to understand noticing theoretically and practically should be of investigation.

Teacher cognition is inherently rooted in the belief, thought and knowledge of teachers regarding their understanding of their teaching. In Borg's view (2003) teacher cognition opens up an understanding of the unobservable dimension of teaching and teachers' mental lives. In other words, it bridges the gap between what teachers do and what they know and believe which seems to be a complex process. Borg (2003) metaphorically highlights the importance of teachers' cognition in pedagogies as teachers are not robots but agencies in the classroom; therefore, this area of research is widespread to researchers. In this vein, Borg's (2003) definition of teacher cognition includes teaching experience as a toolbox of beliefs shaped through several ways from learning to instruction. Therefore, teaching experience has a huge effect on teachers' perception and implication of instructional approaches such as noticing in teaching language form.

Piles of studies have focused on integrating Noticing Hypothesis in second language learning in terms of investigating language awareness and consciousness raising; however, their theoretical map did not show any transparent presentation of noticing concept in teaching pedagogy and it has made the cloudy concept still in a gray area (Truscott, 1998). The main concern regarding the necessity to

integrate teaching pedagogy with language noticing and awareness was because the quality of learning increases with teacher awareness or modification of teacher cognition on the concept of noticing. This area of research has not been granted in the related literature and particularly in Iran as an EFL situation where language awareness is a vital need for academic settings.

The next main issue is the learner language plateau at a specific learning time mainly at intermediate level (Richards, 2011), the knowledge gained from this research can enhance teacher awareness to devise their practices and teaching so that this plateau is broken or it takes a shorter time to recover.

In other words, teacher's effectiveness can increase if they recognize the impact of language awareness to enhance the chance of language learning outcome. Moreover, the place of teacher cognition in conceptualizing noticing in teaching and the belief formation in terms of perception and making use of noticing in teaching language form has been particularly ignored, especially when teaching experience sheds light on teachers' cognition. Therefore, this study investigated the place of teaching experience in shaping and modification of teacher cognition in classroom implication of noticing concept.

REVIEW OF LITERATURE

Noticing in Second language learning

Groundbreaking discoveries related to the practical place of Noticing Hypothesis and the strict bound to second language learning has created conspicuous manifestations of theories and hypotheses which are rooted in the felicity of attention in language learning. This has provided pathways to the interjection of some theories such as Input Hypothesis, Input Processing, Noticing Hypothesis and Consciousness Raising creating complemented insights into seismic changes in monolithic truth of using attention in successful language learning.

In this vein, one of the main hypothetical concepts particularly connected with the cognitive ability of learners is noticing. Noticing concept was primarily put forward by

Schmidt (1990) as one of the necessary requirements of language learning especially when learning is defined as changing input into intake. The very first idea of the crucial role of noticing in language learning and its possible effect on learning was assumed to be affected by two other cognitive concepts, attention and awareness. Although these two theoretical concepts have been variously defined and applied, there is much reasonable evidence suggesting the connection of attention and awareness as two different but related cognitive concepts with noticing. Despite the conflict over defining 'attention' and 'awareness' the same or different, there are many original studies in the benefit of noticing (Schmidt, 1990, Tomlin & Villa, 1994, Robbinson, 1995, Irene Ahn, 2014). What made noticing a standing concept in second language learning was the nature of consciousness (Schmidt, 1990) originally given to it that distinguishes the way input acts in Schmidt's terminology and its counterparts Krashen's (1985) and Gregg (1984) insistence on the subconscious role of input comprehension.

The first and foremost manifestation of Noticing Hypothesis revealed itself in teaching language form and its conceptual definition was practically implemented in the classroom when learners needed to focus on form through focal attention; this hypothesis could, in a short period, take a huge space in language learning theories and practices. The heyday of noticing birth into language learning classes was merged with the newly established place of conscious language learning which called for conscious attention to input as a necessary and sufficient condition in language learning (Schmidt, 1995).

Language awareness is the result of noticing which develops the enhanced consciousness and sensitivity of language learners to language form and function (Carter, 2003). However, language awareness is not a mutual result of focal attention to language form and needs some particular methods to highlight the language features for language learners through noticing (Bolitho & Tomlinson, 1995).

Although there are many areas of concern for using consciousness raising likely as vocabulary (Jinlin & Baimei, 2011),

pronunciation (Carlet & De Souza, 2018), Language skills (Wisastra, & Yufriзал, 2017) and task-based learning, (Naashia Mohamad, 2004; Tasnimi, 2018), most of the studies have been carried out to show the effectiveness of noticing in learning language grammar both globally and locally. These studies mainly experimented the role of language awareness and its impact on language learning (Doughty, 1991; Jourdanais, et al, 1995; Lee 2007; Lee & Huang, 2008); they also examined the use of input enhancement in increasing learners' attention to grammar (Izumi, 2002; Rashtchi, 2010; Dastjerdi, 2011; Rezvani & Ketabi, 2011; Nahavandi & Makundan, 2012; Sarkhosh, et al, 2013; Asadi et al, 2014;), they also tried to shed light on the prominence of noticing to language form in young learners (Fatemipour & Hemmati, 2015). In other words, the related literature is empty of teachers' role in directing the learners' attention and increasing language noticing opportunities. As a result, this gap introduced the necessity of the present study.

Teacher Cognition

The concept of noticing cannot be taken unidimensionally as it is more complex than can be captured as focal attention to form alone. In this regard, Batstone (1996) confirms the vast scope of noticing covering both meaning and form and its complex process of internalizing and restructuring the language hence noticing cannot come into one form and requires teachers to beware of various shapes and functions which this concept can take in practice. In this case, what teachers mentally shape to understand as noticing theoretically and practically should be of investigation.

Research on teacher cognition originated from almost half a century ago and is still one of the most important concepts being focused on in teacher education (Richards, 2011), however the serious look at this issue goes back to 30 years ago when research on teaching behavior was dominant (Borg, 2009) and global understanding of teaching style and teaching strategies were markedly looked into. The very first definition for teacher cognition includes what teachers' think, know and believe (Borg, 2009) which was later revised as a broader term

including “constructs such as attitudes, identities and emotions, in recognition of the fact that these are all aspects of the unobservable dimension of teaching” (Borg, 2011, p. 11).

According to Borg (2003), teachers are active, context-sensitive decision-makers who personalize their teaching practice and infuse their identity and attitude plus their knowledge and thinking into their practice. Although, divergent conceptual meaning is used to draw the image of teacher cognition (Borg, 2003), the core of this concept lies in personal attitudes and experience of practice which creates a multidimensional concept.

In Borg's view (2009) teacher cognition opens up an understanding of the unobservable dimension of teaching and teachers' mental lives. In other words, it bridges the gap between what teachers do and what they know and believe which seems to be a complex process. Borg (2009) metaphorically highlights the importance of teachers' cognition in pedagogies as teachers are not robots but agencies in the classroom; therefore, this area of research is widespread to researchers.

In other words, teacher condition is a complex concept embracing a variety of factors included in a teacher's mental life. Two broad categories of research taking teacher cognition into account have studied teachers' beliefs, knowledge and thinking on every stage of their career as well as how they operationalize this mental state into practical position; therefore, three main themes are created out of these two main categories as first, the place of cognition and prior learning experience; second, cognition and the effect of teacher education programmes on the teaching practice and third, cognition and classroom practice (Borg, 2003).

The strand of research has illustrated a neat-seated place of teacher cognition in language pedagogy especially in the area of teaching grammar being taken from investigating teacher cognition in teaching pronunciation and vocabulary (Gerami & Noordin, 2013; Yunus, et al, 2016; Chung, 2018) to effects of teacher cognition in teaching grammar (Borg, 2001; Borg, 2003; Raouf, 2008; Farshchi, 2009; Nishimuro & Borg, 2013; Liviero, 2014;

Salimi, et al, 2016). The results of these studies shed light on the cognitively-oriented perception of teachers to take decisions upon instructional approaches to teaching grammar in the language classroom.

Therefore, the present study strived to explain teachers' conception of noticing by developing teacher-oriented constructs of the noticing concept.

Teaching Experience

Teaching cognition includes several interactive features that are systematically connected and can affect each other's' activation. The inclusion of experience as an influential factor in human resource policies and promotion of decisions is so highlighted since experience entails knowledge and skills needed for productivity and qualification of workers (King Rice, 2010). Although experience is a multifaceted area in teaching, it is simply defined as the number of teaching years. However, it is assumed that teaching experience might be at play for the first three or five years but after that it is all a pile of activities repeated from one context to another. Carter (1985) makes a distinction between new and experienced teachers in terms of the level of classroom productivity. Benner (1982) knows experience as the frequency of exposure to enough real situations to recognize the situational components.

Experience is a context-effective entity and cannot be overgeneralized simply without considering the context-bound features of the place and participants that is the ecology of the classroom can shape, modify and even change the effects of the experience. Moreover, gaining experience of what is done might be consciously or subconsciously formed and it can become a part of teaching repertoire which is freely available to teachers automatically or causing implementation of the experience as its award holding commonly shared features of the teaching context and the experience tightly together. Therefore, how the experience is shaped and affects teaching cognition is of crucial importance since it can expand the scope of knowledge on experience-related performance in teaching.

Many studies (Sahinkarakas, 2012; Abd Samad, & Nurusus, 2015, Pourjamal, et al, 2017, Rezaee & Sarani, 2018) have claimed that teaching experience, the developed beliefs during training and teaching, affects the decision making approaches in language teaching; however, research has not provided a complete picture of how teaching experience would detect teachers' perception and use of noticing in teaching language form. Therefore, this study has been an attempt made to figure out how teaching experience uncovers the conceptualization of noticing concept and its use in teaching language form. The main focus of the study was placed on the discovery of perceived noticing constructs through the development of a noticing inventory as well as to quantify any differences between two groups of teachers in terms of teaching experience.

Noticing concept and language teaching

Despite plethora of research carried out in the realm of language awareness and attention to language form, teachers as learning mediators have been completely ignored in affecting learner's language awareness processes. Pedagogy of teaching is meaningless without the role of teachers as social beings carrying humanistic and psychological features which can directly impact their teaching practice hence learners' performance. There are plenty of areas active and untouched, albeit potentially present, in teachers that are responsible for triggering or blocking learners' level of noticing in language learning. In other words, teachers' quality of instruction and learning outcomes are embedded in teacher effectiveness (Friedman & Rockoff, 2014) lending itself to their cognitive perception of noticing as awareness in language teaching. In the meanwhile, one of the factors affecting teacher effectiveness is their teaching experience which certainly is cognitively mediated. Now the question is how teacher's cognitive understanding of the concept of noticing can rule their conceptualization of noticing use in their teaching practice and if teaching experience can employ cognitive modification in teachers' perception and implementation of language noticing.

In other words, one of the main purposes of this investigation was to structure the teachers' cognition on noticing in teaching language form based on some theoretical constructs; in other words, it could give insight into components of noticing concept.

Therefore, following the research questions were developed to be answered during the investigation:

1. *What are the noticing constructs cognitively perceived by experienced and inexperienced teachers?*
2. *Does Noticing Concept Inventory meet the psychometric properties of testing?*
3. *Is there any difference in conceptualizing noticing between experienced and novice teachers?*

METHODS

Participants

Language noticing coated with other recent terminologies such as consciousness raising, input enhancement, etc. has been kept as a learner-oriented concept. This restriction, especially from teachers' points of view, has made it a single-angled theoretical concept. To tap into an ecological perspective, holding teachers' roles in center and to explore the constructs of noticing in language teaching and learning, first, the researcher developed a noticing inventory to derive the concept's constructs and to trace any differences between experienced and novice teachers according to their teaching experience.

Therefore, two populations of 325 and 337 male and female English teachers (through two pilot phases) were assigned into the study whose age was ranged between 23-40. In the first phase of the study 176 experienced and 176 novice English teachers took part in the research. In the second phase of the study 168 experienced and 167 novice English teachers participated.

The only factor that brought the teachers into this study was the years of teaching English, their teaching experience which served as the dividing line for distinguishing them as the novice and experienced teachers. It is usually

suggested that teachers engaged in the teaching career more than five years are known as experienced (Tsui, 2005). Therefore, the teacher selection was carried out through purposeful sampling to prevent inserting any unnecessary anti-validity factors into the research.

Teachers were selected from both private and public sectors in Iran; however, all teachers in this investigation were stratified for having experience of teaching in the private sector due to controlling the effect of teaching setting factors.

Instruments and Procedures

Noticing Concept Inventory

To gain a more precise understanding of teachers' conceptualization of noticing, it was necessary to find out its constructs based on teachers' perception of the concept. This questionnaire was developed based on the findings from a related qualitative study of a PhD. thesis. This section is devoted to validate the developed noticing questionnaire. This study is the quantitative part of a larger scaled research that looked through the role of experience in noticing conceptualization as well as developing a noticing concept inventory (NCI) (see the Appendix) to be used for examining the way using noticing was constructed according to the teacher's thoughts and knowledge. For this purpose, the questions which were included in the inventory were based on the data obtained from another related qualitative research plus some constructs found in the literature about noticing in second language teaching.

The first version of the questionnaire contained 97 questions. To check the wording as well as the order of items, the researcher's

supervisor evaluated the items; after pruning the items for wording, especially grammatical simplicity and comprehensibility, there remained 80 questions to enter the pre-pilot phase. In the pre-pilot phase 7 other questions were removed by 10 experienced and novice English teachers. After rechecking for expert feedback, the questionnaire went through the pilot phase with 352 and 337 participants involved during two phases of questionnaire validation.

One of the variables affecting teachers' cognition is teaching experience; therefore, this variable was also examined. For this, after validation of the questionnaire, it was assigned to 60 novice and experienced English teachers to figure out the role of teaching experience in perception and conceptualization of noticing in language teaching and practice.

RESULT

NCI Reliability

During the first phase of the pilot study, Cronbach's Alpha estimated the reliability of the whole items consisted of 73 items as 0.845. In the second phase of the pilot study, using Cronbach's Alpha, a consistency coefficient of 0.826 was also identified for the whole items including 63 items. After factor rotation was inspected, the number of items was reduced to 59 and after SEM was employed, the number reduced to 51 and the reliability of the validated questionnaire was 0.776 as displayed in Table 4.1. The reliability of each of the six underlying factors was also examined as follows: Factor 1 (11 items): 0.87, Factor 2 (8 items): 0.81, Factor 3 (8 items): 0.77, Factor 4 (5 items): 0.72 Factor 5 (5 items): 0.67, Factor 6 (8 items): 0.64, and Factor 7 (6 items): 0.61.

Table 1

Reliability of the Validated

Cronbach's Alpha	N of Items
.776	51

Construct Reliability

As already mentioned, the study attempted to carefully measure the construct validity of NCI to accomplish the secondary purpose of the

research work. The construct validity of NCI was examined through the use of EFA. For the data to be gathered, a pilot study was conducted



in two phases. The results of each phase are presented below.

Initially, the researcher checked the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value that ranges from 0 to 1, with .6

suggested as the minimum value for a good factor analysis. The Barlett’s Test of Sphericity value should be significant (i.e. the Sig. value should be .05 or smaller) (Tabachnick & Fidell, 2001).

Table 2

KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.661
Bartlett's Test of Sphericity	Approx. Chi-Square	15692.748
	df	2628
	Sig.	.000

As shown in Table 4.2, the KMO value was .66 which is acceptable and The KMO index, and the Bartlett’s test was significant ($p=.0005<.05$); therefore, factor analysis was appropriate.

Phase I of Pilot Study

The designed inventory consisted of 73 items was administered to 352 subjects during the first phase of the pilot study. To explore the possible nature of the underlying traits, factor analysis was conducted. Initially, PCA extracted 11 factors with eigenvalues greater than 1.0 which accounted for 70% of the variance (Table 4.3). 63 items had loadings of 0.40 or greater on any factor. Put it another way, items 7, 10, 16, 21, 23, 47, 58, and 66 were not found to have loadings of 0.40 or higher on any factor. Items 36 and 44 had the problem of multicollinearity or high loadings ($r>0.80$). Therefore, they were removed from the questionnaire.

Phase II of Pilot Study

The new questionnaire consisted of 63 items, was administered again to 337 subjects in the second phase of the pilot study to reexamine the construct validity of the factor structure of the questionnaire through EFA. Again, items 14, 33, 39 and 61 were removed because their correlation coefficients were less than 0.40. This time, PCA extracted 9 factors with eigenvalues greater than 1.0 which accounted for 63% of the variance.

The researcher used the Scree Test to decide on the number of factors to retain for rotation. Given the natural bend or breakpoint in the data where the curve flattens out, the results of the Scree Test illustrated that a *seven-factor* solution might provide a more parsimonious grouping of the items as displayed in the following diagram.

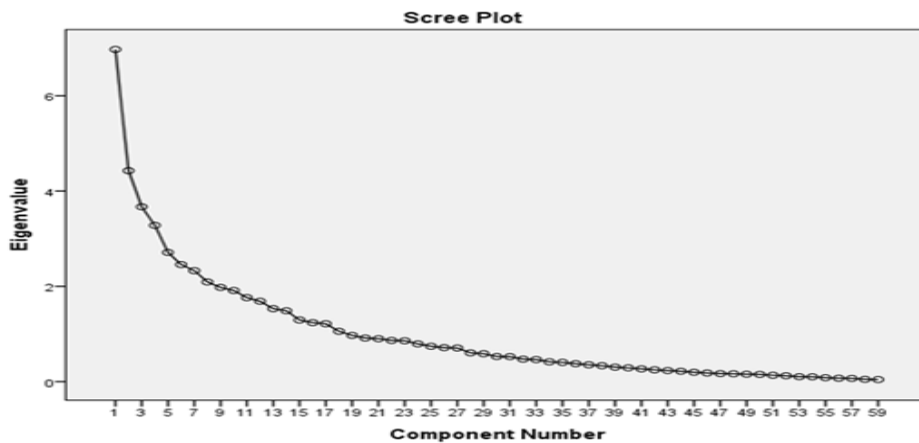


Figure 1. scree Test for NCI

Then, the oblique rotation was inspected. Varimax with Kaiser Normalization resulted in a rotated component matrix that appropriately represented the underlying factor structure as displayed in table 4.5. Concerning this table, the first factor consisted of 13 items, the second factor consisted of 9 items, the third factor consisted of 9 items, the fourth factor consisted of 6 items, the fifth factor consisted of 6 items, the sixth factor consisted of 10 items, and the seventh factor consisted of 6 items. The total number of items was 59. These new factors were named: 1) Pedagogical effect, 2) Learners' characteristics, 3) Type of input, 4) Skill type, 5) Task type, 6) Time and 7) Measurement.

Following this, the results obtained from Amos 20 showed a good fit to the data. Because some measurement models did not show

adequacy to the data, some modifications were made on the model (see figure 4.2). These modifications included the removal of two items from *pedagogical effort*, one item from *learners' characteristics*, one item from *type of input*, one item from *skill type*, one item from *task type*, and two items from *time* due to low loadings. Therefore, the final questionnaire included 51 items. The goodness-of-fit of the model improved substantially after modification. χ^2/df was 2.14, less than the cutoff point of 3; RMSEA was .07, less than .08; and GFI, CFI, and TLI were .92, .91, and .91, respectively, all above the suggested cutoff point of .90.

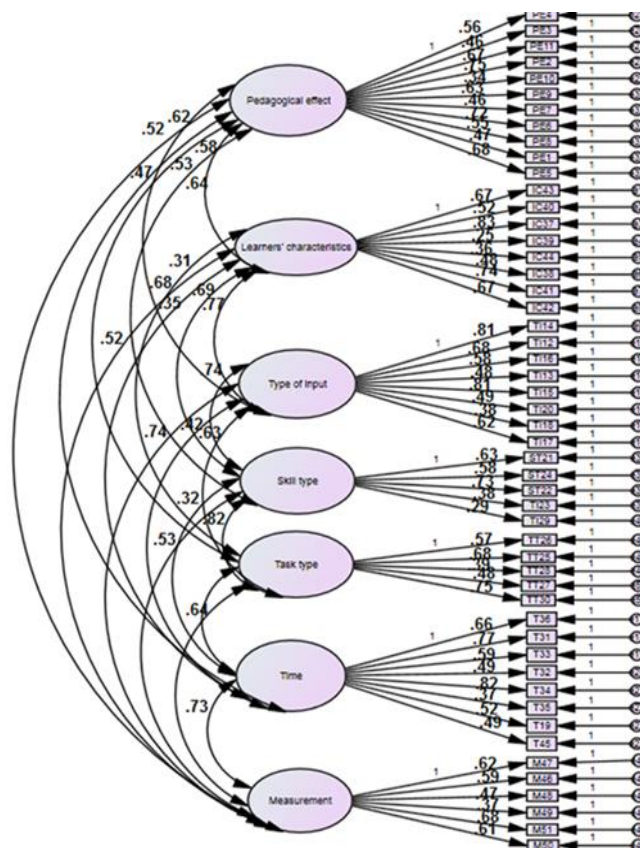


Figure 2. Measurement Model of NCI

As for the third research question of the study concerning the significant difference in

Conceptualizing Noticing with respect to Experienced and Novice Teachers



conceptualizing noticing between experienced and novice teachers, the researcher, having distributed NCI to 60 participants, ran Independent Sample t-test to compare the two

groups. The maximum score one could obtain on the inventory was 255 and the minimum score was 51 since the inventory consisted of 51 items in 5-likert scale.

Table 3
Descriptive Statistics for Experienced and Novice Teachers

	Teaching experience		Mean	Std. Deviation	Std. Error Mean
		N			
Scores from NCI	novice teachers	30	139.50	14.66	2.67
	experienced teachers	30	177.83	20.06	3.66

Using Descriptive Statistics, the means and standard deviations of the scores obtained from novice teachers were: M= 139.50; SD=14.66, and the means and standard deviations of the

scores obtained from experienced teachers were: M= 177.83; SD=20.06).

Table 4
Independent Samples Test for Experienced and Novice Teachers

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Scores from NCI	Equal variances assumed	.82	.36	-	58	.000	-38.33	4.53	-47.41	-29.25
	Equal variances not assumed			-	53	.000	-38.33	4.53	-47.43	-29.23

The independent sample t-test offered two lines as displayed by Table 4.4. Regarding the Table, since the significant value was larger than .05, therefore, the first line was followed which referred to equal variances assumed. That is to say since, in this table, the significant value was .36 which was larger than .05; the first line was used to report findings. To discover if there was a significant difference between the two groups, the researcher referred to the column labeled Sig. (2-tailed). Since the

Sig. (2-tailed) the value was less than .05 which was .00, then there was a significant difference in the mean scores on the dependent variable for each of the two groups.

To determine the effect size between the two groups, the researcher used eta squared, and calculated it manually, using the formula for eta squared: $t^2 / t^2 + (N1 + N2 - 2)$. As Table 4.4 shows, in this study the t value was -8.4. Therefore: $(8.4)^2 / (8.4)^2 + (30 + 30 - 2) =$



$70.56/128.56 = 0.54$. Following the guidelines proposed by Cohen (1992), the effect size of .54 is large. The guidelines (proposed by Cohen, 1992) for interpreting this value are: .01=small effect, .06=moderate effect, .14=large effect.

DISCUSSION AND CONCLUSION

Using noticing and awareness in language learning has grounded its neat-seated impacts in theory and practice; however, the uni-directional studies have had a single-eyed attention to its educational importance and necessity; The absence of pedagogical entries into the vital role of noticing from teachers' perspectives has ignored the ecological features of language teaching and learning. Taking teachers into the inner circle of the investigation and assessing their cognitive ideas in this area certainly can enhance the quality of teaching and would open more horizons in this respect.

Teachers' cognitive perception of teaching concepts has a huge effect on their teaching performance; Teachers' cognition has been the center of much research in recent years, however, teachers' realization of noticing in teaching language form has been out of concern in related studies. The first step to capture teachers' cognition on noticing concept was to construct this concept using teachers' beliefs.

Therefore, this study first strived to develop an Inventory to dig out teachers' understanding of noticing concept in teaching. Then, teaching experience, as a mediator to understand and implicate language noticing was examined.

To this aim, to answer the first two questions, the first section of the study targeted the development of a noticing concept inventory (NCI) to find out the constructs underlining the cognitive perception of noticing among English teachers. This investigation could manifest a theoretical framework to define noticing; second it could reveal what constructs were underpinned by teachers' conceptualization in teaching/practicing language form. This questionnaire can be used in the future studies to see how teachers' perception of noticing can affect, or is related with other features of teaching in language pedagogy.

To do so, the researcher developed a questionnaire and after piloting and validating

That is, the significant difference between novice and experienced teachers was large. Experienced teachers had a much better noticing conceptualization.

the results seven underlining constructs were explored as 1) Pedagogical effect, 2) Learners' characteristics, 3) Type of input, 4) Skill type, 5) Task type, 6) Time and 7) Measurement.

This finding is in line with Schmidt (1990) for a variety of ways with which teachers can increase learners' level of noticing to language features including task demands, level of perception, instruction and frequency of feature occurrence. The pedagogical implication of noticing in language teaching is pointed out by Leow (2018) as teachers require being aware of the internal cognitive processes involved in language learning, how the language input should be presented to make the robust leaning outcome happen.

The results revealed that English teachers believed that noticing had some pedagogical effects in teaching language form. Pedagogical implication of noticing in teaching can enhance the level of attention, under the effect of variables such as the level of students' concentration directed to a language features, language level and complexity of processed information (Schmidt, 1993). In other words, the main implication of noticing is helping learners to attend to the input during their limited-capacity information processing system (Leow, 2018). The next frequently used pedagogical implication of noticing in language teaching is provided by giving feedback which is rooted in teachers' cognitive status (Mori, 2011). Therefore, this inventory could create new insights into the use of language noticing and awareness.

Teachers showed that they knew 'learners' traits, learning features and styles' had to be considered when using language noticing in the classroom. Learner's characteristics are directly related to how they approach learning and how much they would take benefit from language learning. In other words, teachers confirmed the active role of learners in learning processes while using language noticing because they are

the agents to digest and use the results of teaching.

Type of input and skill type are believed by teachers to be the constructive elements of noticing concept in teaching language form that is teachers' cognition perceives noticing to act variously upon distinct language forms. In other words, teachers had a consensus on the priority of input type in planning to use noticing in the classroom. This finding embraces the fact that teachers thought noticing would have more effective results when used in particular skills; they also believed that noticing should be a skill-oriented approach to language teaching. The results can double check the major role of teachers' learning and academic background where explicit explanation or teaching was used in specific language skills especially when speaking or writing skills are concerned (Zargarán, 2020). These findings feed teacher educators, teacher trainers and material writers with more practical information to shed more light on the place of noticing in the area of input specification and skill orientation. Besides, it can give more food for thought to future research on how noticing can change its orientation or increase its usability when particular language skills are concerned.

In this vein, the type of language skill would be a determining factor in conceptualizing noticing for teaching language form. It means, teachers generally agree that type of language skills would modify the methodological decisions upon noticing use. It will be understood that teachers probably perform differently in response to the skill type in which the language form is focused. Although almost all of the research on noticing in language leaning is directed toward grammar instruction and learning grammatical features of the language, it does not neglect the essence of other language forms (vocabulary and pronunciation). In other words, teachers' perception of noticing embraces type of language input being presented and the skill in which that particular feature appears to be noticed.

Another construct of noticing concept was explored to be task type meaning what practical techniques teachers will make use of when

teaching/practicing language form. Sure enough, noticing techniques created and used by teachers can reflect the other constructs found in this research since the priority of skill and input type (Fotos & Ellis, 1991) can certainly affect the way teachers turn students' attention to language form. Conscious raising techniques are ranged from simple input flooding such as frequency of input exposure in a particular context of language use to structured input and explicit teaching. This result is a confirmation of the fact that teachers' perception of noticing is lied into the practicality of the techniques they can utilize to actualize this concept. It would embrace the task-orientation of language noticing, for instance, inductive tasks or some techniques such as recall, hypothesis building/ checking, etc. (for more activities and tasks see Tasnimi, 2018).

The next two constructs focus on the time of noticing and frequency of attention to a single form. Related to the result of this study, teachers all think that noticing concept is formed through the proper time that students may notice the most attention, for instance, in Zargarán (2020) noticing is found to be more fruitful if it is used at the end of the teaching or practice. Besides, teachers' cognition includes the frequency of noticing to the same language form which means teachers believed some language forms might need more attention and had to be focused more than their counterparts. This construct implies the importance of input flooding and the frequency of language feature occurrence in a context.

Finally, measurement was the last construct developed from the inventory and demonstrated a theoretical belief on the necessity as well as the ability to measure noticing concept. Despite lack of a definite route to noticing measurement, one of the most attractive methods is obtaining feedback from learners and classroom assessment. This area of research is still in gray and needs more profound investigations.

Another not-to-be-ignored point about the integration of teacher education in language noticing is the ELF-aware pedagogy (Dewey and Pineda, 2020; Korida, 2020). Language

noticing can also be taken in both areas of teaching and giving feedback in ELF (language as lingua franca) curriculum as it can enhance learners' level of awareness in the communicative features of language. Another point necessary to add was teaching experience which is a revolving factor in shaping and modification of teacher cognition. Teaching experience has always been defined as a dividing line among teachers, therefore this study, through answering the third research question, revealed the effect of teaching experience on teachers' conceptualization of noticing.

Therefore, in the second section of the research experienced and novice teachers were differentiated in terms of conceptualizing noticing based on the developed inventory. The result revealed a significant difference between experienced and new teachers which means experienced teachers could conceptualize noticing much better. This study is in line with findings in Zargarán (2020). Therefore, teaching experience could be taken as the main point of difference between the teachers since this major factor would certainly modify or activate the contextual awareness and turn their attention from the mutual transmission of the immature learning experience and the theoretical knowledge of teaching to their calculated steps in teaching practices (Zargarán, 2020). To be more precise, teaching experience can act as a mediator between two types of knowledge, declarative and procedural, to bridge in theoretical understanding of the noticing concept to practical performance in the classroom setting.

As Borg (2003, 2009) asserts the teachers' performance is undoubtedly in the effect of teachers' cognition which includes teaching experience as one of its main constructive features.

Another benefit that teaching experience can create for teachers is practical awareness of the teaching context, different learning styles and more importantly, developing effective teaching styles. Thus, teachers with more experience are believed to be more critical to teaching. In other words, what teaching experience does is to make changes, modify or

create these factors so that teachers' theoretical and practical repertoire will result in distinguishing beliefs and teaching methodologies. As Richards (2011) explains, experience can develop pedagogical reasoning skills, that is, how teachers can make use of teaching experience to cope with unplanned situations in teaching.

According to Zargarán's Experience Model in teaching (2020), experienced teachers act differently because of plenty of results born out of teaching experience effects namely 1. taking risks in using new teaching practices and actualizing teaching theories and knowledge, 2. creating and activating the teachers' metacognition, 3. using an active intuition about the implementation of their teaching syllabus and learners' needs at the point in time, 4. having the expertise to modify course books, 5. freely integrating their practices (teaching style) into their teaching practices, 6. making a more precise realization of contextual features and 7. being less worried about classroom management issues.

The cognitive repertoire of teachers includes experience as an influential factor that can modify and change decisions in teaching and even develop theories out of practices. Teachers usually use their practical experience to devise new teaching theories that are the direction of changing declarative knowledge into procedural knowledge as a bilateral relationship which makes a direct impact of practice on theory.

In this respect, Phipps and Borg (2007) give a range of interactively connected components underlining teacher cognition including learning, experience, academic education, teaching experience, reacting against the new setting, changes in doing teaching and instructional practices which all are highly under the influence of bidirectional interaction of experience and changes in beliefs. It means, teaching experience is responsible for the creation and modification of teachers' beliefs and thoughts in teaching in general and, according to the present study, in using noticing to teach language form in particular.

Therefore, teaching experience can be identified as a crucial factor in determining the type and scope of teachers' cognition and how it can develop and modify the beliefs and thoughts on the noticing concept in teaching language forms. In other words, experienced teachers have developed more precise cognition on understanding and actualizing the concept of noticing in teaching language form.

Teaching experience has been strictly defined as the number of teaching years (Tsui, 2005), however, it underlines many other factors which can be promoted through teaching development programmes and in-service education. Therefore, knowing this can help teacher educators to think of new methods of teacher awareness and teaching experience-enhancing programmes. It can be a great assistance to teachers, especially newly hired ones, because teacher cognition and teaching experience have a bi-lateral relation and both affect one another.

All findings from this study strived to illustrate a brighter stance of noticing concept taking teachers' cognition and their teaching experience into account. It interestingly showed how Iranian teachers in an EFL situation conceptualized noticing and how they viewed noticing per se. It could fill the gap of pedagogical use of noticing in language education and it could make a beginning to more transformative studies in this area in the future.

Sure enough, the most benefit of this study refers to teachers' metacognitive awareness to consciously take profit from actualizing their knowledge of noticing in their teaching practice while planning their teaching. Teachers should learn that experience comes about in discovering new situations to tap onto creative practical ideas which adds spice to teaching and ends in a quite fruitful practicum.

The major elements of teaching as a constructive phenomenon could have been also discovered if the researcher had been able to enter more variables, on the top, sociology and also psychology of learning as well as learners' cognitions on using noticing in teaching

language form. As it is known in language pedagogy, teaching is not a uni-dimensional view to transferring knowledge on the behalf of teachers; moreover, learners are not passive receivers of the knowledge. Thus, the gap in this study would be learners' more active participation. Furthermore, Teachers' cognition is in the effect of learner's cognition and this bi-lateral relation can conjure up to shaping, modification and alternation of cognition on both sides of teachers and learners.

Therefore, a more astute look at learners' roles in shaping teachers' cognition lacked in this study which was due to a shortage of budget and time and can be set as further research to explore more aspects.

Experience as one of the key variables of this investigation had the operational definition based on the number of teaching years (Tsui, 2005). However, teaching experience is not restricted to the quantity of teachers' presence in the classroom and it surely is relied on other factors such as teachers' motivation to improve, teachers' participation in professional development courses, level of educational degree, opportunity to be involved in various teaching situations and so forth. Therefore, the researcher suggests a new operational definition of teaching experience which lacks in language teacher education literature by carrying out a more precise study on teaching experience. It means, the current technical definition of teaching experience is an abstract, quantity-based, which seems to be a qualitative phenomenon and requires more astute attention in terms of how teaching experience shapes as a practical entity not a single-viewed, timed-based variable.

One more untouched part in the current study was excluding learners completely from the investigation because of some technical and especially financial limitations shaded upon the methodology of the study. A combination of learners' active role in shaping teachers' cognition and teachers' contextual teaching acts might have been of a more clear-cut result to the riddle of teachers' cognition in forming noticing conceptualization.

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APPENDIX

Noticing Concept Inventory (NCI)

All statements were on a 5 likert scale:

strongly agree, agree, I don't know, disagree, strongly disagree

1. Noticing increases learners' chance of finding out important parts in teaching /practicing
2. Noticing is a helpful technique to be used in crowded classes
3. Noticing boosts learners' understanding



4. Noticing increases the chance of long-lasting learning.
5. Noticing should be used when there is an exception in the grammatical rules
6. Using noticing techniques can help learners think critically.
10. Noticing help learners to attend language items
11. Noticing increases learners' chance to attend to
12. Reading and listening input need the most noticing
13. Authentic input needs no noticing
14. Abstract input with the most similarities or
15. Grammatical input needs the most noticing
16. Written input should be noticed the most
17. Noticing grammar and meaning can help language internalization when productive tasks are used
18. Noticing grammar is very helpful in receptive input
19. The amount of time to notice language forms depends on task complexity
20. Using noticing techniques has priority in teaching/ practicing grammar
21. Noticing should be used in receptive skills because students pay the least attention to these skills
22. Noticing should be used to highlight language form only in productive skills
23. In productive tasks, noticing techniques are usually used after teachers' explanation
24. Noticing is used most frequently in productive skills
25. Finding and circling are two noticing techniques that can help learners find hard items
26. Using games can help language forms to be noticed
27. Explicit explanation, as a noticing technique, increases learners' attention to language forms
28. Tasks that involve students can increase attention to language forms
7. Noticing is helpful when learners do not understand the grammatical structure
8. Using noticing techniques helps take learners needs into account
9. Noticing techniques help learners to have direct
29. Noticing techniques are used to increase learners' comprehension
30. Teachers' gestures are used as noticing techniques Strongly disagree
31. Noticing time should be as much as possible to boost language internalization
32. Not much time will be needed to use noticing for language internalization
33. Students' capacity is one of the main factors determining the amount of the time to notice
34. The amount of time to notice language forms depends on teaching style
35. The length of time to notice language forms depends on learners' language level
36. The length of noticing time changes depending on learners' strategy.
37. Noticing is a useful technique for students with lack of concentration
38. Noticing works well for any type of students regardless of their personality type
39. Shy learners should be provided with noticing techniques
40. Students with less self-esteem need more noticing
41. Introvert learners take the most benefit from noticing
42. Authority-oriented learners need noticing
43. Noticing is helpful to visual learners
44. Beginners are the target group to noticing techniques.
45. The length of time to notice language forms is not clearly determined
46. Noticing cannot be measured
47. Measuring noticing is not easy because there are many items involved in its measurement
48. Learners' feedback can be used to measure noticing

49. Measuring noticing can be carried out only based on teachers' experience
50. Noticing measurement depends on the type of noticing technique

51. Retrospection or self-report can be used to measure noticing

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