The impact of collaborative instruction of language learning strategies on language learning beliefs and learner autonomy

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Abstract
Research on the relationship among language learning strategy, language learning beliefs and autonomy abounds in the literature. However, few studies have explored the possibility of promoting learners’ autonomy and changing their beliefs through instructing language learning strategies in a collaborative manner. In addition, most of the earlier investigations have been carried out through purely cognitive or sociocultural perspectives employing solely quantitative or qualitative methods. Using a socio-cognitive framework, the present study aimed at first, identifying the relationships among language learning beliefs, language learning strategies, and learner autonomy; and second, investigating the role of collaboration in using language learning strategies that would eventually lead to autonomy and change of beliefs. To collect data, a mixed-method design was applied. An autonomy questionnaire, Horwitz's BALLI (Beliefs about Language Learning Inventory, 1987) and Oxford's SILL (Strategy Inventory for Language Learning, 1990) were given to 177 EFL learners at the University of Mazandaran in Iran. To supplement the quantitative data with qualitative data, negotiated interviews and the learners' self-reflection notes were used. The analysis was done using paired sample T-tests, SEM and also content analysis. The findings revealed that language learning beliefs affected the learners' autonomy through the mediation of language learning strategies. However, the instruction of the strategies did not have any effects on the learners' autonomy but it helped in changing their language learning beliefs. The qualitative analysis also led to identifying some categories, subcategories and their relationships to and effects on each other.

Key words: Autonomy, language learning strategies, language learning beliefs, cooperation

Introduction
Autonomy as a desirable goal in education helps individuals to get prepared for the rapidly changing world. According to Ahmadi (2013) citing Holec (1981), autonomy is not an inborn capacity but that needs to be acquired. Allwright (1990) defined autonomy as “a constantly changing but at any time optimal state of equilibrium between maximal self-development and human interdependence” (Little, 1995:178). Based on these definitions, it seems that learners can be guided to exercise autonomy through the interaction between internally individual and externally social aspects.

There have been a number of studies on different variables that affect learners’ autonomy including, language learning strategies (Griffiths, 2008; Kormos, Csizer, 2014; Mlstar, 2001; Oxford, 2003; Yang, 2003). Results of such studies indicate that good language learners employ a wide range of strategies and have more control over using them, while less proficient learners indicate less control and order in applying them.

While strategy is regarded as an important aspect in learners’ autonomy, some studies cast doubt about the centrality of strategy and proposed some other concepts including learners’ beliefs (Al Ghazali, 2011; Borg, Al-Busaid, 2012; Mohammadi, Alavi, 2016;
More specifically, in second language acquisition (SLA), beliefs have been regarded as the cornerstone of learning; since researches have shown that successful learners have insightful beliefs about the learning process, and their own abilities (Breen, 2011, Kia Heirati, 2014; White, 2008). These same learners were also reported to have more effective use of language learning strategies (Abedini, Rahimi, Zare, 2011).

Furthermore Horwitz (1988, 1999), Peacock (1999), Gabilon (2005) and Chang and Shen (2010) argued that beliefs are indicators of and influential in using strategies. Moreover Yang (1998), Dornyei (2005), SIM, (2007) stated that beliefs can also be influenced by strategy use.

Therefore considering autonomy as the idealistic goal of education, language learning strategies that provide the tools to achieve this goal, and language learning beliefs as the key to every action and behavior as well, it seems that more studies are required to show the relationship among and also probable changes in these variables as a result of appropriate intervention. Unlike previous studies, the intervention provided for the learners was not a one-way, teacher-structured one; rather, the learners were encouraged to engage in a collaborative dialogue sharing their experiences of language learning and strategy use which helped them in their language learning process.

As Oxford (2003) contends, autonomy should be investigated from different combined perspectives, as many as possible. Furthermore Dörnyei (2007), Mackey and Gass (2005) maintain that a mixed method can complement the weaknesses of a single method with the strength of another method and it also can reach into a wider audience. To this end, considering the limitations of purely quantitative and qualitative methods, a mixed method design was used in the present research to indicate first, the relationship among the learners’ autonomy, beliefs and language learning strategy use more clearly and second, to explore whether collaboration in using the effective language learning strategies would result in the learners’ autonomy and changed language beliefs. (Masalimova et. al. 2019)

Literature review
In today’s world, human being is “a producer in the society rather than a product” (Ahmadi, 2013: 28), and in some cases it can lead to serious counterproductive tendencies related to education. As Hašková and Manduľáková stress, the society we live in currently is indisputably technology-based and in the context of such a society, one would logically expect science and technology education to be obligatory at schools and students to be interested in continuing their career education in various technical branches, but the contrary is true. Therefore, learners should be assisted to understand the social needs, to gain the ability to reflect on their learning, and transfer their learning experiences to the outside world (Hašková, Manduľáková, 2018: 66). Consequently, they can evolve in their educational, individual and social life rather than being the blindfolded followers. Thus, as Kumaravadivelu (2006) aptly describes, this type of autonomy can be called “libratory autonomy”. There is not yet a single definition in the literature regarding autonomy, since different authors have described it from rather different perspectives, but all of them have a point in common, i.e. taking responsibility for learning.
Generally, autonomy has been defined from two extreme theoretical frameworks: cognitive and socio-cultural. Cognitive psychology considers learning and also autonomy as individual mental processes concerned with information processing, i.e. integrating information with old information that is stored in long-term memory to form a kind of network of mental knowledge. (Martin et. al. 2020, Mahriek et al. 2020)

Holec (1981) as the most cited author defined autonomy as “the ability to take charge of one’s own learning” implying that learners should take full responsibility in their own learning and their success depends on them not on others (Little, 2007:15). Benson (2006:22) also described autonomy as “the situation in which the learner is totally responsible for all of the decisions concerned with his learning and the implementation of those decisions”. The cognitive approach applying quantitative methods of data collection offers a psychological picture of learners’ autonomy by emphasizing what they need to be able to do to be autonomous through planning, monitoring, and self-assessment but does not describe ways through which autonomy could be achieved.

However some others take a sociocultural paradigm that believe human development is achieved not just based on individual cognition but as a result of social relations. Sociocultural theory applying qualitative data collection methods claims that “higher psychological functions are internalized from social interactions” (Little, 2007: 22). This theory believes that intermental processes are necessary to achieve intramental development. As Vygotsky claimed, social interactions provide some structures for learners to move from other regulation to self-regulation by having more volition over the process of learning. So, the intermental processes gradually change into intramental development and language is used as a tool to shape these processes.

However, Little (2001: 32) regards language learning as an interplay between social and cognitive processes and remarks that “in stressing the importance of the social-interactive dimension..., it is important not to underplay the importance of the individual-cognitive dimension”. Oxford (2003: 90) also proposed that in order to investigate autonomy, different views and approaches should be combined and “no single perspective should be considered antithetical to any other”. Thus, considering the limitations of both approaches and implying that independence is always restricted and influenced by dependence; it seems that socio-cognitive approach that takes on an interplay role in this continuum may represent the complex nature of language learning and autonomy.

Language classroom is a complex system in which events are not linear but there are a lot of factors that are related to each other. Among these factors learning beliefs and strategies are effective.

Oxford (1990) defined language learning strategies as “specific actions taken by language learners to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations” (p.8) and for her learning strategies are signs of autonomy (2008, cited in Ahmadi, 2013).

Oxford (1990), Wenden (1991) and Yang (1998, 2003) showed that learning strategies can be used in fostering learners’ autonomy. Wenden (1991: 15) in her definition of autonomous learners referred to the importance of learning strategies by stating “...expert or intelligent learners have learned how to learn, they have acquired the learning strategies...”. Yang (1998) considered strategy instruction as a part of autonomy training to guide learners to assess their performance, set their own goals, plan, monitor and evaluate their success. MIstar (2001: 99) maintained that “if the pursuit of learner autonomy requires that we focus explicitly on the strategic
capability of language learning and language use, the reverse should also be the case, focus on the strategies should lead us to learner autonomy”.

Although language learning strategies, especially the metacognitive strategies play a central role in learner autonomy, the variety of the strategies used seems to be restricted by learners’ beliefs (Chang, Shen, 2010; Gabillon, 2005). Belief as a complex construct is defined differently in the literature. This difference can be ascribed to the ideologies that different authors have. From the view of cognitive theories beliefs are considered as part of metacognitive knowledge (Flavell, 1987) and are defined as relatively static and stable phenomena pointing to the relationship among beliefs and other psychological constructs. On the other hand, Sociocultural theory recognizes beliefs as social, context-dependent, dynamic, changeable and flexible phenomena. In spite of cognitive and sociocultural theories, socio-cognitive framework takes an interplay role and according to Larsen-Freeman and Long, (1991) “it begins with the biological predispositions of the human mind for language and learning in consort with external reality” (Bernat, 2008: 10). According to this theory learners co construct their beliefs through their social experiences with others and with the tools in social contexts. Also their cognition processes work at the same time and in parallel to their social experiences.

In Iran, Abedini, Rahimi and Zare-ee's (2011) findings revealed that Iranian EFL learners with more positive beliefs used more strategies and were more proficient in English. In another study in Iran, KhaffafiAzar and Saeidi (2013) studied the relationship between EFL learners’ language learning beliefs and their strategy use applying Horwitz’s (1987) BALLI and Oxford’s (1990) SILL. They indicated that the learners with more positive and reasonable beliefs concerning language learning applied more language learning strategies.

In addition, Yang (1998) claimed that beliefs can also be influenced by strategy use and the relationship between these two factors can be bidirectional. In the same vein, Dornylie (2005) suggested that a direct intervention strategy may work in altering or fostering beliefs. SIM’s study (2007), too, indicated that learners’ beliefs in his study were affected positively by the teachers’ use of an “integrated, structured, and explicit focus on active learning and goal setting” (p.128) that in turn resulted in raising autonomous behaviors which were evident in the learners' beliefs.

Thus, as Barcelos (2006), Szöcs (2017), and Wenden (2001) remarked in order to understand what good language learning includes and subsequently foster autonomy first we need to identify students’ beliefs and knowledge about their learning, next offer activities that let them examine these beliefs and their influences on their learning process.

**Purpose of the study**

Generally, as can be implied from the literature, autonomy, beliefs and strategies are interrelated constructs and any attempt in one of them may foster or hinder the other two. Baring this in mind, the current study, exploring the relationship among these variables intends to shed further light on the issue and through the use of an intervention attempts to investigate the role of collaboration in promoting autonomy and the changes, if any, in the learners' language learning beliefs. In addition, considering the shortcomings of both cognitive and sociocultural theories that apply either quantitative or qualitative methods of data collection, it seems that a pluralistic framework (socio cognitive) that takes advantages of the both approaches and allows the triangulation and integration of data can provide the answer to the complex nature of language learning in general and also autonomy and beliefs in particular.
In an attempt to yield clear insight into the issue, this study seeks answers for the following questions:

1. Is there any relationship among autonomy, language learning strategy and language learning beliefs?
2. Does collaborative learning strategy instruction affect learners’ autonomy?
3. Does collaborative learning strategy instruction affect learners’ beliefs?

There are three hypotheses according to the questions:

1. Language learning strategies are the mediators of the effects of language learning beliefs on autonomy
2. Instructing language learning strategies leads to the development of autonomy.
3. Instructing language learning strategies leads to the development of beliefs.

**Methodology**

**Participants**
The participants were drawn from the original population of an antecedent study carried out by the same authors that included 177 BA students majoring in English literature and English teaching at the University of Mazandaran, Iran. The original subjects filled out BALLI, SILL and an autonomy questionnaire in order to find out the characteristics of autonomous learners and distinguish the autonomous and less autonomous participants. The learners who scored 1.5 standard deviation higher than the mean, were selected as the autonomous learners and the students who scored 1.5 lower than the mean were chosen as the less autonomous learners. This was done on the basis of the rubric provided by the developer of the questionnaire. Finally 11 less autonomous students including 6 males and 5 females were selected according to their availability as the participants of the current study to investigate the possible effects of the treatment on the learners’ language learning beliefs and strategies. The average age of the learners was 21.0675 (SD=2.36781, Range=18–30years).

**Instrumentation**

Horwitz’s (1987) beliefs about language learning inventory (BALLI) and Oxford’s (1990) the strategy inventory for language learning (SILL) were administered to the learners. Moreover, an autonomy questionnaire that was a combination of some items of Chan, Spratt and Humphreys (2002) and Zhang and Li (2004) autonomy questionnaires was designed and piloted with a group of learners sharing the same characteristics with the target group. The cronbach alpha was calculated and the result showed a valid and reliable reliability index (r=0.78). Since after examining the categories of BALLI through cronbach alpha it was shown that the reliabilities of individual categories of BALLI were not acceptable, it was decided to emit some items. The overall reliability of BALLI after the revision was 0.89. The analyses were based on the revised reliabilities attained through cronbach alpha.

The reliability of SILL was calculated through cronbach alpha and the results showed a satisfactory reliability index (r=91>70). Moreover, for the qualitative analysis of the data, negotiations or negotiated interviews, and self-reflection notes were used. As Dornyei (2007) mentioned interview is the most applied instrument in qualitative studies since it is regarded as a famous communication method that happens routinely in our social life. Furthermore Cook (1992) contends that in negotiation, learners discover their ideas for themselves. Self-reflected notes were also used to triangulate the data from several sources.

**Data Collection Procedure**
Initially, the three BALLI and SILL, and autonomy questionnaires were administered to 177 BA students including 55 males and 122 females majoring in English literature and English teaching at the University of Mazandaran. Then, based on the result of the
autonomy questionnaire, the participants were separated in to autonomous and less autonomous learners. Next, through convenient sampling, 11 participants for the second phase of the study were drawn from the pool of less autonomous learners and were engaged in collaborative learning strategy instruction. Then five of the strategies that were more frequently used by autonomous learners were selected and extracted from the SILL questionnaire and were used as the target of the treatment. The items included two cognitive (items 14, 17) and three metacognitive strategies (items 33, 34, 37). Overall, five full sessions of 2 hours were spent on engaging learners in a collaborative dialogue over finding the best ways of implementing these strategies in their learning process. The final session was dedicated to students’ oral reflection session during which they talked about their experiences of using the strategies and the effects that they had on promoting their learning. Since it was assumed that some of the learners’ lack of proficiency in English may hinder their speaking, all the sessions were held in Persian, although the students were allowed to speak English whenever they were willing. During the treatment, the strategies were negotiated and discussed by the group without any direct instruction by the teacher, although she was a negotiator too. The students shared their ideas, suggestions, personal feelings, and reflections about the strategies during the treatment. This research did not aim to instruct the strategies directly by the teacher, but it was assumed that encouraging learners to express and discuss their opinions openly through negotiation, listening to their friends’ ideas and experiences would make them aware of their differences, weak and strong points, and also raise their knowledge of the varied options and strategies they can take in learning English. At the end of every session, the students were asked to do some assignments using the proposed strategies and write their reflections for the next meeting. At the end of the five treatment sessions, all three questionnaires were administered to theses learners again as the posttest.

Data Analysis
To analyze the data regarding the first hypothesis, structural equation modeling (SEM) through Amos (version 20.0) was used. According to Dornyei (2007) SEM is applied to interpret the relationship among several variables within a single framework. He also mentions that SEM can show the directional relationship between variables including cause and effect relationships according to correlational data, so it is preferred over factor analysis. Dornyei also mentioned AMOS as one of the most popular statistical softwares to test SEM. In order to investigate the second and third hypotheses, the data were analyzed through paired sample T-tests. According to Dornyei (2007) paired sample T-tests are used when comparing two sets of scores that are obtained from the same group or when the same subjects are evaluated more than once.

In order to analyze the qualitative part of the study, qualitative content analysis was used through transcribing the data, pre-coding reflections and coding. As Dornyei (2007: 246) remarks content analysis is “a second level interpretive analysis of the underlying deeper meaning of the data” that he called it “latent level analysis”.

Results
The results of the Quantitative Part of the Study
The Relationships among Autonomy, Language Learning Strategy, and Language Learning Beliefs
Table 1 shows the fit indices of the conceptual model of the structural relationships among autonomy, language learning strategy, and language learning beliefs. In an acceptable model, the GFI should be more than 0.90, the CFI greater than 0.93 (Byrn, 1994), the RMSEA is less than 0.08 (Brown, Cudeck1993) and ideally less than 0.05 (Steiger, 1990).
Figure 1: Squared Multiple Correlation and Standardized Direct Coefficients for the Mediation Model of the Relationships among Model Variables

Note: Strategies of Language Learning (SLL), beliefs about language learning (BLL)

Results revealed that squared multiple correlation for autonomy was 0.58, showing that 58 percent of variance in autonomy was identified by BLL and SLL. It means that 58 percent of the reason of individual differences in autonomy was established by language learning beliefs and strategies. In addition, it was presented that BLL has a standardized direct effect on SLL (0.23, p=0.001) and SLL had a standardized direct effect on autonomy (0.76, p=0.001). Moreover these standardized direct effects were significant (p<0.05). In addition, BLL had a standardized indirect effect on autonomy (0.29, p=0.001) through the mediation of SLL.

Therefore, the hypothesis that language learning strategies were the mediators of the effects of language learning beliefs on autonomy was confirmed since the fit indices of the conceptual model of the structural relationships among variables were satisfactory and also the standardized direct and indirect coefficients were significant (p=0.001<0.05).

Since the value of significance for T– test was less than 0.05 (0.004), the difference between the pretest and the posttest was significant. In order to assure that the difference between the pretest and the posttest in language learning beliefs after the instruction was significant regarding the few number of the participants, a nonparametric test was used, applying Related Samples Wilcoxon Signed Rank Test. Since the value of the significance was lower than 0.05 (0.008), the difference between the pretest and posttest in language learning beliefs after the instruction was confirmed. So the instruction of language learning strategies had an effect on language learning beliefs and the hypothesis was confirmed.

The Result of the Qualitative Part of the Study
As Mackay and Gass (2005) remarked “qualitative research is often process-oriented and open ended with categories that emerge” (p.163). After transcribing, analyzing, pre-coding and coding the data, 17 initial codes were obtained. Next, second level coding was applied in order to understand “more abstract commonalities” (Dornyei 2007, p.252) and discover probable patterns that may emerge from the individual data.
Finally, 17 initial codes were recorded and categorized under three broader labels, language learning, environmental and personal factors that are in some parts similar to Benson and Lor's (1998) study.

These second leveled codes were subsumed under the general category of beliefs, as all the learners unanimously confirmed that all their actions and behaviors refer back to their beliefs. However, all these codes seem to be related to each other. Figure 2 shows the relationship between language learning beliefs and learners’ conceptions of teaching.

*Figure 2:* Relationship between Language Learning Beliefs and Learners’ Conceptions of Teaching Strategies.

**Note:**
- The effect of language learning beliefs on the factors involved in language learning
- The effect of teaching strategies on the learners’ beliefs about language learning through negotiation of learners’ conceptions
- The interrelationships among the categories

**Discussion**

**Discussion of the Quantitative Results**

*The relationships among Autonomy, Language Learning Strategy, and Language Learning Beliefs*

As mentioned earlier, autonomy is not in born and can be acquired, (Holec, 1981, Little, 2007). In order to help the acquisition of learner autonomy different points should be considered in which strategy and beliefs are important aspects. In the literature, beliefs are regarded as the key, guiding and shaping individuals’ behaviors and thoughts, influencing the way they internalize the world (Szöcs, 2017). The model in Figure 1 shows that beliefs about language learning had a direct effect on language learning strategies. Earlier studies also confirmed this finding, Abraham and Van (1987, cited in Chang, Shen, 2010), Wenden(1986), Yang (1998, 1999) reported that
the learners’ beliefs about language learning seem to have directed them in choosing learning strategies and provided the rational for their strategy choice and use. Gahungu (2007) also showed a significant relationship between strategy use and self-efficacy beliefs. In Iran, Abedini, Rahimi and Zare-ee (2011) presented that EFL learners with more positive beliefs use more strategies. Khaffafi Azar and Saedidi (2013) also concluded that understanding learners’ language beliefs are essential in order to understand language learning strategies they apply and also plan and implement appropriate language instruction.

As it seems beliefs are the factors that direct learners toward employing effective strategies. So as Wenden (1986) remarked in order to understand what includes good language learning, first we need to identify students’ beliefs and knowledge about their learning in order to offer activities that let them examine these beliefs and their influences on their learning process.

In addition, the model of this study presented in Figure 1 revealed that the learners’ strategies influenced their autonomy that is in line with the earlier investigations. Oxford (1990), Wenden (1991) and Winne (1995, cited in Griffiths, 2008) considered language learning strategies as the means to control and regulate learning, i.e. implement autonomy in learning. Some studies including Ceylan (2015, cited in Mohammadi, Alavi, 2016), Oxford (1990), Wenden (1991), and Yang (1998, 2003) indicated that in order to develop learners’ autonomy, learning strategies can be employed. So strategy instruction to direct learners to goal setting, monitoring and evaluating the process, and also assessing their success can be considered as a part of autonomy training. In addition, through reading about and discussing the strategies of successful language learners, students get an initial understanding of the concepts of learning strategies (Wenden, 1986). Also teachers should help learners increase the repertories of their strategies and not replace them. Moreover they are required to guide learners to consciously choose the best strategies that fit their styles, tasks, or contexts and involve them in choosing the materials and evaluating processes and outcomes. Through these activities learners may acquire strategies especially metacognitive strategies to take control of their learning and consequently move toward autonomy.

Further the current model shown in figure 1 displayed that language learning beliefs had an indirect effect on autonomy through the mediation of the effects of language learning strategies. It is generally accepted that beliefs affect actions and the ways to approach language learning. According to Ajze’s theory (SIM, 2007) of reasoned action, beliefs are considered as the roots in individuals’ action and thought. It seems in order to raise autonomy, first learners’ beliefs as the leading factors in every action should be noticed that has been confirmed by earlier studies. White (1995) suggested that to improve autonomy learners should develop their conceptions and understanding of language learning, their role in this process and also create appropriate strategies. Cotterall (1995) reported the influence of learners’ beliefs about language learning on variability in using the tactics to control autonomy. Abraham and Vann (Griffiths, 2008) presented a model in which learners’ conceptions and beliefs influence how they approach language learning, which subsequently have direct impacts on successful language learning. The present study confirms earlier findings and is in line with Abraham and Vann’s (Griffiths, 2008) investigation. It can be implied from the findings that before taking any interventions to provide activities and techniques to direct learners toward autonomy, learners need to experience different and even conflicting beliefs in order to raise their awareness of other viewpoints and options.

**Collaborative Learning Strategy Instruction**

Regarding the second question, the literature points to the importance of learning strategies to develop autonomy (Azimi, Baradaran, 2013; Cotterall, 2000; Kormos,
Csizer, 2014; Oxford, 2003). However it was also indicated that teaching language learning strategies explicitly does not ensure a successful learning experience. Learners should be metacognitively aware of what they are doing and also connect these strategies with their goals for learning (Van, Abraham, 1990, Wenden, 1998, cited in Davis, Elder, 2004). Therefore, the present study tried to apply negotiated interviews to raise the learners’ awareness of their problems, different options and choices they can take. However, the results of the paired sample T-test indicated that the instruction of language learning strategies through negotiations did not have any effects on the learners’ autonomy. The probable reason may be related to the limited period of the instruction that was provided during five sessions.

Regarding the third question, beliefs can be explained as “mental constructions of experience” (Sigel, 1985: 351), which are both cognitive and social, the constructs that result from experiences. The literature also points to the changes that may happen to beliefs as a result of new experiences (Dornyeie, 2005; SIM, 2007; Tanaka and Ellis, 2003). Yang (1998, 1999) proposed cyclical relationships between learners’ beliefs and strategy use, i.e. he mentioned that beliefs lead to applying a set of specific strategies, therefore, the use of strategies may also result in belief formation or change.

Human being is not the mere receiver of knowledge but in facing new conceptions and experiences, he refers back to his previous existing experiences and knowledge and accordingly constructs or reconstructs his knowledge. Through collaborations and interactions, individuals will be able to understand new, even conflicting and challenging aspects of life, and consequently revise their knowledge. In general language learning and in particular beliefs about language learning are parts of this individual knowledge that can be reshaped confronting new experiences. Language learning strategies are one type of these experiences. To meet these goals, teachers need to raise students’ awareness of different techniques and strategies they can employ in language learning through having discussions, negotiations, keeping diaries, journals and portfolios. Thus, one of the key preconditions to increase efficiency and quality of education (or education activities at schools) is mainly the teacher’s professional skills and their development (Gadušová, Hašková, Predanocová, 2019: 23; Hašková, Gadušová, 2017: 279, Usak, Masalimova, 2019). Moreover, involving learners in making decisions regarding their language learning including setting goals, choosing materials, evaluation and reflection can foster their understanding of different approaches they can take. Also teachers should provide enough space for learners to try new learning strategies and reflect on them, express their agreement, disagreement and their reasons for them. As Ewald (2004) in Griffith (2008: 126) stated, “instead of changing learners, we need to help them to see themselves” and through interactions guide them to develop their awareness of different behavior and conceptions that affect their language learning.

**Discussion of the Qualitative Results**

The importance of learners’ perspective can be captured from Marton and Ramsden (1988), and Benson & Lor, (1998:7) that “learning should be seen as a qualitative change in a person’s way of seeing, experiencing, understanding, conceptualizing something in the real world” rather than as simply a quantitative change in the learners’ knowledge. Moreover, Tanaka and Ellis (2003) pointed to the dynamic dimension of learners’ beliefs, proposing that “qualitative approaches are needed to gain a deeper understanding into how learner beliefs emerge and how they might interact with the language learning process” (p.69).

According to Benson and Lor (1998) listening to learners is the best way to approach their perceptions and readiness for autonomy. The learners’ reflections guided us to generalize their ideas as learners’ beliefs. White (2008) described
language learning beliefs as the beliefs learners have about themselves, about language and language learning, and about the context in which they act as a language learner and user. Similarly, as shown in Figure 2, the learners’ ideas are subsumed under the notion of beliefs and categorized as beliefs about language learning, beliefs about environmental factors and beliefs about personal factors. All the categories seem to be related to each other and overlap to some extent.

The category of beliefs about language learning means the learners’ perceptions of how to learn a language the best way that are independent of but also related to their beliefs about environmental and personal factors. Regarding this category, it seems that the learners are aware of their problems, but cannot turn this awareness into practice. They related their problems to some outside factors that they believed were not under their control; (A: I cannot plan because something unexpected happens. I know that plan does not work for me). It seems that they are not able to adapt themselves to contextual factors and control them that are the necessary conditions to exercise autonomy (Benson, Lor, 1998). White’s (1999; 2003 cited in Griffith, 2008) longitudinal study reported that good language learners are not those who have a set of beliefs, but are ones who able to adapt their beliefs and expectations to different possibilities and opportunities available in the context successfully.

In addition, the learners seemed unwilling to accept responsibility for their own learning as they ascribed their reasons for their avoidance of the strategies to some unexpected matters and others’ judgment (A: Maybe the thing that I am going to say is not attractive for the others and is not appropriate), while taking charge of one’s learning is an important aspect of learner autonomy. Moreover, as Griffiths (2008) explained strategies are selected by individual learners and cannot be dictated to them, so their involvement and willingness is important in instructing strategies. Further their fear of others’ judgment influences their motivation and willingness to collaborate and interact with others that is critical to raise autonomy.

Additionally, the learners disclosed some external motivation, particularly instrumental motivation such as marks in their speaking (AA: If there is a mark I engage in speaking.). This external and instrumental motivation can be related to environmental and situational factors since in the context of Iran, English has no place in daily affairs, but it is just used in educational contexts. Additionally, from a global point of view, another instrumental motive for students could be obtaining better opportunities because of their mastery over English. As Stranovská et al. (2016: 2142) assert “currently the need to speak foreign languages across the world has created a significant need for efficient methodologies, high quality resources and well-educated and qualified, interdisciplinary educated foreign language teachers for the development of foreign language competence. This overhaul is connected to the need for good communication skills in foreign languages as today, it is not enough to be able to read or write in a foreign language, but to be able to communicate authentically in a foreign language speaking world. Acknowledging these needs, foreign language teaching methodology has shifted its focus from grammar and traditional receptive teaching to communicative and community-based approaches with a wider focus on the interdisciplinary aspects of foreign language education.” Also Kormos and Csizer (2014: 291) in their study reported that “motivational factors exert their effect on autonomous learning behavior through the mediation of self regulation strategies”. Since the learners believe in external motivation such as marks or force, they do not employ the strategies such as planning and goal setting that are required to exercise autonomy. So the learners’ conceptions regarding language learning show that they are not ready, willing and able to accept responsibility and exercise autonomy for their learning.

The category of beliefs about environmental influences shows the learners’ ideas about the relationship between “self and others in a specific social context”
(Benson, Lor, 1998: 28). Since the learners have negative feelings regarding others’ judgment, they are not willing to collaborate and interact with others that are prerequisites to develop autonomy; (AA: If I start the conversation, the others may not like it and get disappointed, they may laugh at your question).

Regarding prior experiences about planning and note taking, the participants pointed to their unsuccessful experiences (L: One time I tried note taking but it didn’t work. For my university entrance exam the counselor specified the time for me to study, for one month I tried it, but I couldn’t continue). As Wenden (1986) stated, learners’ beliefs provide the rationale for their strategy use, these negative feelings, evaluations and beliefs may lead them in taking inappropriate strategies and techniques. Furthermore, these beliefs can decrease their confidence and motivation that according to Littlewood (1996:427) in turn, affect learners’ willingness. As Littlewood (1996) mentioned autonomy is related to “learners’ ability and willingness to make choices independently”, so this level of decreased motivation influences learners’ autonomy.

Moreover, Benson and Lor (1998: 2) stated, “the resources that learners draw out in making sense of autonomy are conditioned by the context in which they learn”. Al Ghazali (2011: 6) also explained that “the mediated characteristics of beliefs explain that they are influenced by situation, task and people one interact with”. So it seems that learners’ beliefs about environmental factors influence their conceptions of language learning and also personal factors.

Regarding learners’ beliefs about personal factors that display the learners’ evaluation about their roles and proficiency in the process of language learning, the participants’ expressions showed that they evaluated themselves negatively. If learners do not believe in their abilities, they do not put in enough effort since they believe it will be useless; (B: I’m not the sort of person to set goals. If I set a goal and cannot achieve it, I get nervous). As Benson and Lor (1998) remarked positive self-evaluations foster motivation, negative self-evaluation can also decrease learners’ motivation and consequently it may hinder autonomy.

Some of the learners pointed to their lack of knowledge as the probable reason for their unwillingness to start conversation; (AA: We don’t speak about the topic maybe because we don’t have enough knowledge about it). As Little (1994) remarked that “If learners are to establish a personal agenda for learning, the content of their learning must be relevant to their perceived needs and interests and thus accessible to them” (p. 439), teachers should provide activities that learners have knowledge about in order to encourage them to speak.

In addition, some of the learners mentioned that they do not trust themselves; (J: I don’t trust my notes; again I refer to the book). This distrust to one’s abilities and knowledge may act as a barrier toward their autonomy, since they never believe in themselves and are always dependent on others. Concerned with this point, Watkins (1996); Benson & Lor, (1998: 8) proposed that “…for students to want to adopt a deep-level approach to learning requires confidence in their own academic ability”.

As mentioned earlier, autonomy includes learners’ control over the process of learning (Benson, 2006). Learners’ personal factors are one aspect of this process that needs to go under the control of learners.

Finally, unlike the findings in which peer scaffolding to each other during a collaborative presentation task benefited learners, this study demonstrated that collaborative work did not create that much of learning conditions.

Generally, all of these categories and subcategories appear to be related to and influential on each other. So teachers should expose learners to different conceptions of language learning that other learners have through negotiations,
discussions and tasks. They also should help learners adapt themselves to the appropriate contextual opportunities and take control of their own learning. Referring to Riley (1996, cited in White, 2008) that beliefs will directly affect learners’ use of strategies and also their attitude and motivation and Benson and Lor (1998) that motivation can indicate autonomy, it can be concluded that investigating learners’ perceptions is critical and necessary to study language learning strategies and autonomy.

Conclusions and implications
In her definition of autonomy Sinclair (2000) in Kojima (2006) remarked that it has both individual and social aspects. Moreover, Oxford (2003: 90) stated that in order to explore autonomy different perspectives and frameworks should be combined and “no single perspective should be considered antithetical to any other”.

So using socio-cognitive theory, the current study tried to show the relationship among the three constructs and also the effect of strategy instruction on learners’ autonomy and language learning beliefs. This paradigm has more tendencies toward sociocultural theory and claims “higher psychological functions are internalized from social interaction” (Little, 2007: 22). So social interactions offer some structures and constructs that gradually become internalized as cognitive capacity (Little, 2007). The current study showed that language learning beliefs had an indirect effect on autonomy through the mediation of language learning strategies. Earlier studies also confirm this finding. Wenden (1986) used the term of metacognitive knowledge to define beliefs and later (2001) she stated that metacognitive knowledge is a prerequisite for using the self regulatory processes leading to autonomy. Learners evaluate self and others and tasks in hand and apply self-regulatory systems through their metacognitive knowledge in order to choose the strategies that they think fit the task (Alanen, 2003; Bernat, 2008). In addition learners need to be aware of the strategies they employ in order to take more control over their learning to develop autonomy. In the pre tests the learners’ conceptions about autonomy, language learning strategies and beliefs were evaluated as psychological cognitive concepts. Through the posttests the learners’ understanding of language learning beliefs and autonomy as cognitive constructs was investigated as the result of the treatment. This treatment was carried out through interactions in negotiated interviews and based on the sociocultural framework. So the result of the pre and post- tests explains the learners’ conceptions of autonomy and language learning beliefs through both cognitive and sociocultural theories.

During the treatment the learners negotiated their conceptions of language learning and the proposed strategies through interactions. As a result of these interactions, they faced new and even conflicting alternatives and their awareness of new options and concepts increased. Consequently, they abandoned, expanded, revised or reconstructed their conceptions of language learning. The findings of the post- tests about language learning beliefs showed that because of the learners’ interactions that led to their intermental development, the learners improved their psychological intramental and cognitive understanding of language learning.

However, Benson (2001) as cited in Mohammadi & Alavi, (2016: 42) states that “autonomy is a multidimensional capacity that will take different forms for different individuals and even for the same individual in different contexts or at different times”. Further Smith (2003), in Ertürka, (2016: 654) remarks that “autonomy is a multifaceted concept, susceptible to a variety of interpretations” (p.255). So people are different from each other and we cannot dictate a series of ideas to them since they have their specific preferences and willingness. Moreover, it should be mentioned that teachers and other stakeholders can adopt or use any model and form of autonomy only after they have evaluated its relevance to every specific context (Ertürka, 2016). In addition, the goal of autonomy is to help learners to
practice autonomy and get control even in different degrees. However, this goal cannot be met by force and dictation. Learners need to be guided to explore and construct their own conceptions of autonomy. Further, these conceptions and beliefs are context and culture bound, so teachers should be aware of and alert to these constraints. Generally, Teachers are required to help learners to raise their “conscious awareness of the learning process – i.e. conscious reflection and decision-making” Sinclair, (2000), in Borg & Al-Busaidi,(2012:5).

Finally, it should be mentioned that due to the lack of the learners’ participation, a control group was not included in the study and therefore, the results should be interpreted cautiously. Further although the overall reliability for BALLI was acceptable, the reliabilities for individual categories were not satisfactory. So some items of BALLI were omitted to achieve reliable results. Further investigations are required to study the reliability and internal consistency of BALLI items in EFL contexts, especially in Iran. Generally, in order to get a broader and deeper picture of learners’ autonomy, language learning strategies and beliefs more longitudinal and detailed investigations along with more instruments to collect data are required to show both the psychological and interactional nature of these variables.

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