Cognition, motivation and affect are the three dimensions of mental functioning, each having a share in determining learning processes including second language acquisition. Despite the extensive effort to explore cognitive processes involved in task performance within task-based language teaching research, the effect of task-related emotional and motivational states on learning achievements is a fairly unexplored area. The study reported here investigated the comparative effects of cognitive, emotional and motivational engagement with a reading-while-listening task on incidental acquisition of L2 vocabulary. The three types of task engagement strategies were applied as pretask activities to task procedure. Multivariate analysis of covariance and follow-up analyses revealed an enhancing effect for all three types of task engagement activities on immediate post-tests. However, the enhancement was not observed for measurements on delayed post-tests as a result of the remarkable decay in retention and ease of activation scores. Moreover, the effects of the three types of pre-task involvements were not differential. The findings have implications for integrating emotional, motivational and cognitive elements to form-focused tasks aimed at facilitating second language acquisition.

Keywords: incidental vocabulary acquisition; task engagement, emotional, cognitive and motivational involvement
The Effect of Three Types of Task Engagement …

1. Introduction

Since Plato's time, human mind has been conceived of functioning at three levels of cognition, affection and conation. However, in the tripartite partitioning of mental functions, the superiority has often been attached to cognitive aspects of mental functioning over emotional and motivational processes (Dai & Sternberg, 2004). This philosophical legacy has historically led to the formulation of psychological theories that unduly rationalize intellectual functioning by marginalizing the role of affect. Pure cognitivism, for instance, with its emphasis on the processing of information ignores the regulatory functions of emotion and motivation (Snow & Jackson, 1997). In the same vein, studies within task-based language teaching (TBLT), as a prominent methodological option for second language acquisition (SLA), have mainly focused on the cognitive processes involved in task-induced acquisition. However, tasks do not simply engage learners in cognitive gymnastics; rather, the emotional and motivational engagement induced by the task procedure can have an enormous impact on the learning procedure and outcome (Swain, 2011). The study reported here investigated the distinctive effects of cognitive, emotional and motivational involvements with a vocabulary enhancement task on incidental acquisition of vocabulary. The three types of involvement were applied to the task procedure through pre-task interventions.

2. Literature Review

2.1 Incidental Vocabulary Acquisition in TBLT Context

The issue of the relationship between the processing conditions upon exposure to unfamiliar words and the nature of the memory development of those words is not a new conception in language learning literature. As early as 1972, Craik and Lockhart proposed their thought-provoking theory of 'depth of processing' according to which semantic and conceptual processing of words led to a deeper processing of new words compared to the processing that involved only formal aspects of words. The duality of the focus whether on conceptual or formal properties of the linguistic input was later on crystallized as a general dichotomy between focus on form and focus on meaning within TBLT framework (Ellis, 2003).

Inspired by the focus on form movement, Laufer and Hulstijn (2001) offered their 'involvement load hypothesis' to account for the cognitive and motivational processes involved in the processing of new words as induced by the nature of activities assigned by the task in hand. Since then, a wide range of variables related to the processing of unfamiliar words through
meaning-focused tasks have been scrutinized by second language vocabulary acquisition researchers (see Kim, 2011 for a review). Context support (e.g., Webb, 2008), topic familiarity (e.g., Pulido, 2003), input mode (e.g., Brown, Waring & Donkaewbua, 2008) frequency of occurrence (e.g., Rott, 2007), dictionary use (Hulstijn & Laufer, 2001) and glossing (e.g., Rott, 2005) are some key factors deemed to contribute to input enhancement in the acquisition and retention of new words.

One of instructional techniques for the elaboration of input during text-based meaning-focused tasks, in the way suggested by Laufer (2005), was glossing. The main purpose in applying the technique of glossing into task design is to provide elaborative reference to the words' meaning without distracting learners from the main focus of the task. Although the research results about the effectiveness of glossing in incidental acquisition of vocabulary is not consistent, the bulk of findings tend to advocate the usefulness of glosses compared to no gloss conditions (Azari, 2012). The efficacy of input enhancement techniques through focused tasks in promoting incidental acquisition of vocabulary is in tune with the general definition of incidental vocabulary acquisition as "the process of learning one thing while intending to learn another" (Brown, et al., 2008; p. 136). Meanwhile, Hulstijn (2003) considered the absence of pre-announcing a vocabulary test prior to a task performance as the main criterion for incidental acquisition of vocabulary. Led by these two essential principles of incidental vocabulary acquisition, the current study employed within-text L1 translation glosses as the input enhancement technique to facilitate incidental acquisition of vocabulary.

2.2. Motivational Involvement

The situated approaches to L2 motivation (Dornyei, 1994) have underscored the relevance of learning-situation variables such as the teacher, classmates, task features and task implementation to learners' performance on language learning activities. In this perspective, state motivation (Tremblay, Goldberg & Gardner, 1995) refers to the transitory and temporary motivational responses of language learners to the characteristics of the immediate learning situation. With regard to tasks, 'state motivation' depends to a large extent on the characteristics of task design and implementation. The kind of motivation induced by task characteristics is known as 'task motivation' (Julkunen, 2001), and it is admitted that TBLT provides a favorable context to deal with L2 motivation 'in a situated manner' (Dornyei, 2002; p. 138).

An important variable of the TBLT situation in inducing state motivation is the motivational strategies applied by the teacher and learners to different phases of task performance (Dornyei, 2001). Given the central role of motivational attributes in the learning process, motivational strategies
can increase the chances of learning achievements intended by task designers (Cheng & Dornyei, 2007). The term 'motivational involvement' in this study refers to the instructional intervention in the form of pre-task activities to induce intrinsic elements of task motivation for the ultimate purpose of enhancing learners' engagement with the task.

The dynamicity of motivational constructs has been stressed more vehemently in recent conceptualizations on L2 motivation (Pawlak, 2012). Based on the dynamic task processing model, the three motivational phases postulated by process models of motivation (Dornyei & Otto, 1998), i.e., pre-actional, actional and post-actional stages can be matched to the three phases of task activities in L2 classes (Ellis, 2003). The pre-actional stage, which concerns choice issues such as the formation of goals and intentions, corresponds to the pre-task stage from TBLT perspective. In this study the intended motivational involvement is elicited by a selected number of motivational strategies suggested by Dornyei (2001) as follows:

- Present and administer the task in a motivating way
- Increase the learners' expectancy of success
- Make learning stimulating and enjoyable to the learners
- Use goal-setting methods
- Build learners' confidence in their learning abilities

2.3. Emotional involvement

The emotional state of a language learner plays a central role during task performance (Swain, 2011). In the SLA literature, the study of affective variables has been restricted to the impact of such variables as stress, anxiety and attitude toward target language and society. Meanwhile, a quick review of this research indicates that a big majority have focused on negative affects. As a matter of fact, studies concerning the role of positive affect in language learning are almost lacking (Fredrickson, 1998).

Traditionally, distinctive negative emotions have been linked with specific action tendencies (Fredrickson, 2001). For example, fear is associated with the tendency to escape and anger with the tendency to attack. In line with this argument, some researchers have tried to associate distinctive positive emotions with particular action tendencies such as joy being linked to aimless activation and interest with attention. Fredrickson evaluated these associations as vague and proposed instead a general theory to account for the effect of positive emotions on cognitive and behavioral changes which is known as The Broaden and Build Theory (Fredrickson, 2001). According to this theory, which is associated with positive psychology, negative emotions narrow down momentary actions as a result
of instinctive approach-avoidance tendencies while positive emotions broaden thought-action repertoires promoting the individual's personal resources including intellectual, social and psychological resources (Fredrickson, 2001; Fredrickson & Branigan, 2005).

'Broaden and build theory' is comprised of two complementary hypotheses: The Broaden Hypothesis states that positive emotions widen action-thought tendencies. Fredrickson and Branigan (2005) were able to demonstrate in laboratory conditions that positive emotions stimulated by short video clips broadened the scope of attention, an important cognitive phenomenon. A good number of empirical studies carried out by Fredrickson and her associates in her Positive Emotions and Psychophysiology Lab at the University of Michigan and later at the University of North Carolina are corroborative of the broadening effect of positive emotions on such cognitive processes as attention and perception (for a review see Fredrickson, 2012).

The second hypothesis within the 'broaden and build theory' is the Build Hypothesis according to which experiencing positive emotions leads to 'resourcefulness and optimal functioning' (Fredrickson, 2012). Put together, these two hypotheses advocate the observation that positive emotions are involved in broadening the scope of attention, cognition and action as well as building physical, intellectual and social resources in the individual. According to Fredrickson (2001), "experiences of positive affect prompt individuals to engage with their environments and partake in activities" (p. 219).

Common techniques employed in the empirical studies to provoke positive emotions in participants are showing video clips or pictures and playing music (Gross & Levenson, 1995). The present study used a film clip to induce positive emotion and provide the emotional involvement.

2.4. Cognitive Involvement

From cognitive perspective, focused tasks facilitate the acquisition of language forms by providing the conditions for cognitive processes involved in perceiving, storing and retrieving the linguistic knowledge (Ellis, 2003). Therefore, from cognitive point of view, the effectiveness of tasks depends to a large extent on the type and quality of mental actions involved in task performance (Moonen, de Graff, & Westhoff, 2006). In TBLT tradition, the cognitive challenge elicited by a task has been ascribed to task features and conditions particularly in oral and written production tasks (e.g., Robinson, 2001). Moreover, the cognitive load imposed by some other types of tasks is another key factor affecting task performance.

In the case of vocabulary acquisition through text-based tasks, the cognitive load of a task is typically attributed to the linguistic and schematic knowledge involved in completing a task (Robinson, 2001). Providing
learners with this knowledge prior to task engagement, according to cognitive views (Skehan, 1998), will facilitate task engagement and the learning that results from it. Therefore, for the purpose of the current study, cognitive involvement is defined as a pre-task intervention to provide learners with linguistic and schematic knowledge in order to reduce the cognitive load imposed by the input-based task.

3. Method

3.1 Operationalizing the Independent Variable

The three types of pre-task involvement strategies (motivational, emotional and cognitive involvements) comprised the independent variable of the study. These three types of intellectual involvement were operationalized through different kinds of pre-task activities described below.

3.1.1 Motivational Involvement

The motivational involvement entailed the operationalization of motivational strategies proposed by Dornyei (2001). The intended motivational strategies were pursued through a pretask package including teacher talk, questioning/answering and video show. First, the teacher presented a ten-minute lecture on the three phases of task, criteria for success in the task, how to improve their performance on the task as well as discussing the importance of vocabulary in daily success (the topic of the text was vocabulary of success). Then a short questioning and answering session focusing on students' personal experience went on between the teacher and students. Finally, a video clip made by the researcher containing some fascinating pictures displaying Anthony Robins' career and family life was shown to the class.

3.1.2 Emotional Involvement

In this study, emotional involvement is defined as involving learners in experiences of positive emotions through a pre-task which gets participants to watch a short video clip aimed at inducing positive affect. The instrumentality of the video clip in arousing positive affect is validated by means of a standard questionnaire for measuring positive affect (Thompson 2007).

3.1.3 Cognitive Involvement

The pre-task activity designed to induce cognitive involvement entailed the activation of schematic and linguist knowledge. The learners in the cognitive involvement group were first read out a short text presenting a biography of
Anthony Robins, the author of *The Giant Steps*, and the general theme of his publications. Then a whole-class brainstorming session went on about word power and effective communication in social relations and career success. Amid the brainstorming, some of the non-target words from the reading-while-listening text were written on the board and illustrated by the teacher.

### 3.1.4 Control

The control group was engaged in different kinds of activities for the pre-task phase. They read a passage on effective communication and answered 5 comprehension questions that followed. The activity took about twenty minutes.

### 3.2 Operationalizing the Dependent Variable

The dependent variable was incidental acquisition of SL vocabulary resulting from the engagement with a reading-while-listening task. The incidental vocabulary acquisition was measured at the level of its four subcomponents:

1. Short-term retention of vocabulary as measured with a test of passive vocabulary immediately after the task engagement
2. Short-term ease of activation of vocabulary as measured with a test of active vocabulary immediately after the task engagement
3. Long-term retention of vocabulary as measured with a test of passive vocabulary two weeks after the task engagement
4. Long-term ease of activation of vocabulary as measured with a test of active vocabulary two weeks after the task engagement

### 3.3 Research Questions and Hypotheses

The following three questions were the main focus of the study:

1. What is the effect of the three types of task engagement activities (motivational, emotional and cognitive involvements) applied to the pretask phase of a reading-while-listening task on short-term retention and ease of activation of second language vocabulary?
2. What is the effect of the three types of task engagement activities (motivational, emotional and cognitive involvements) applied to the pretask phase of a reading-while-listening task on long-term retention and ease of activation of second language vocabulary?
3. In case of effectiveness, is there any difference between motivational, emotional and cognitive involvements applied to the pretask phase of a
reading-while-listening task in affecting short-term and long-term acquisition of vocabulary?

3.4 Participants

The participants in the study were 106 junior students of English as a foreign language at the Islamic Azad University, Tabriz Branch from 4 intact classes. Then the 4 intact classes were randomly labeled as control group, motivational involvement (MI), emotional involvement (EI) and cognitive involvement (CI) groups including 24, 27, 26 and 29 students, respectively. One week before the study, the participants in all 4 study groups were given a pretest including reading, listening and vocabulary items. A one-way analysis of variance for the pretest scores indicated non-significant differences between groups. However, regarding the relatively small number of participants in each group and in order to counteract against the shortcomings of intact groups, it was decided to use the pretest scores as the covariate to account for the participants' pretreatment conditions.

3.5 Material

The main task was a reading-while-listening task. The text for the reading-while-listening task was extracted from a popular success book Giant Steps, written and read out by Anthony Robins (Robins, 1997). The 20 target words had been signified by L1 glosses within the text. The reading text was followed by a whole-class discussion of the topic of the text The Vocabulary of Success. The students were asked to use as many arguments and illustrations from the text as possible to ensure active participation in the discussion.

To choose the target words, 40 words from the reading-while-listening text which were thought to be less familiar to the students were selected and then put to a survey from the students. The survey asked whether students considered each word as familiar or not. If yes, they were supposed to provide an equivalent or explanation in L1. 20 words from among those which were checked as unfamiliar by all participants were selected for the study. The pretest included reading and listening comprehension items taken from archive versions of TOEFL iBT as the overall listening and reading skills were assumed to be relevant to the task performance.

The post-tests were comprised of a vocabulary retention test and a vocabulary ease of activation test. The retention test was a test of passive vocabulary including 10 four-option multiple choice items in which learners had to choose a Persian equivalent of the target words provided within a sentential context in English. In order to neutralize the effect of guessing, a
5th option stating 'I'm not sure' was added to the response options. The ease of activation test, on the other hand, included 10 fill-in-the-gap sentence translation items from Persian to English. The English translations of the sentences were provided except for the target words.

To elicit positive affect for the emotional involvement group, a humorous movie of about 15 minutes from the English comedy series, My Family was shown in the pre-task phase. To ascertain the validity of the pre-task video in inducing positive affect for the emotional involvement group, an internationally reliable short form the positive and negative affect schedule (PANAS-SF) developed by Thompson (2007) including selective 10 items measuring positive and negative affect was employed (Appendix A).

In order to ensure the validity of the pre-task intervention to motivational involvement group, the participants in this group were administered a self-report questionnaire designed specifically to assess task motivation, i.e. the learners' immediate reaction to the task procedure following the task completion. The task motivation questionnaire used in this study was taken from Ma (2009) including 20 items to assess language learners' motivation with respect to a language learning task they have just performed. The original Questionnaire in Ma's study included 24 items. However, items 2, 12, 17 and 18 were eliminated for the present study because these four items concerned cooperative/competitive conditions. Since the task used for the purpose of this study was an input-based individual task, the four items focusing on the cooperative nature of tasks was irrelevant. The questionnaire used a 7-point likert scale ranging from completely disagree to completely agree. Of the total 20 items, 14 items probed motivation and 6 items detected demotivation (Appendix B).

3.6 Data Collection Procedure

Both control and experimental groups participated in a text-based task preceded by a pre-task phase and succeeded by a post-task phase. The main task was a listening-while-reading task involving reading a text while listening to the text read out by the author. The target words had been highlighted using within-text L1 glosses. The post task entailed a whole-class discussion of the information presented by the reading-while-listening text. The discussion was stimulated by a set of triggering questions that summarized the main points in the text.

The two tests for measuring short-term retention and ease of activation of target vocabulary were administered immediately after the task completion. The tests for measuring long-term retention and ease of activation were administered two weeks later.
4. Results and Discussion

We investigated the comparative effects of three types of task engagement activities applied to the pre-task phase of a reading-while-listening task, i.e., emotional involvement (EI), motivational involvement (MI), and cognitive involvement (CI) on four dependent variables, i.e. short-term retention (STR), long-term retention (LTR), short-term ease of activation (STEA) and long-term ease of activation (LTEA) of L2 vocabulary. The descriptive statistics (means, standard deviations and number of participants) of measures for the four dependent variables are presented in Table 1.

Table 1
Means and Standard Deviations of Pre-Task Intervention on Dependent Measures

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STR</td>
<td>42.901</td>
<td>14.300</td>
<td>12.726</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td>STEA</td>
<td>23.171</td>
<td>7.724</td>
<td>9.085</td>
<td>.000</td>
<td>.995</td>
</tr>
<tr>
<td>LTR</td>
<td>5.478</td>
<td>1.826</td>
<td>2.617</td>
<td>.055</td>
<td>.626</td>
</tr>
<tr>
<td>LTEA</td>
<td>1.055</td>
<td>.352</td>
<td>.508</td>
<td>.678</td>
<td>.150</td>
</tr>
</tbody>
</table>

Preliminary assumption-testing was conducted to check for normality, linearity and homogeneity of variance-covariance matrices and no serious violation was noted. Kolmogorov-Smirnov test of normality, Box's test of equality of covariance matrices and Leven's test of equality of error variances all produced non-significant results. To detect the hypothesized differences between the three groups, a between-groups multivariate analysis of variance with pre-test as covariate (MANCOVA) was conducted using the scores on the four dependent measures. The MANCOVA results demonstrated an overall significant difference between the four groups on the combined dependent variables (incidental acquisition of vocabulary). Wilks' Lambda was significant at .000. Tests of between-subjects effects indicated significant differences across the four groups for short-term retention and ease of activation. However there was no difference between the groups in their long-term retention and ease of activation scores (Table 2).

These analyses indicated that there was a significant difference at least between two of the groups in terms of their STR and STEA scores. Follow up analyses for paired comparisons of mean scores of each dependent variable for involvement type groups separately indicated significant differences between the control group on the one hand and EI, MI and CI groups on the other. However, EI and CI groups were not different on their STR and STEA scores. On the other hand, between-groups analyses for LTR
and LTEA scores indicated no significant difference between any pairs of the groups. The results of the pair-wise analyses of the four groups are presented in Figure 1.

The results of data analysis confirmed that all three types of involvements elicited by pre-task interventions had enhancing effects on STR and STEA. But this enhancing effect was not observed for LTR and LTEA. In fact, EI, MI and CI improved both retention and ease of activation scores in the immediate post-test whereas they did not have any significant effect on the performance on the delayed post-tests. Therefore, Hypothesis 1 was accepted whereas Hypothesis 2 which predicted an enhancing effect for emotional, motivational and cognitive involvements on long-term retention and ease of activation of vocabulary was rejected. Since no significant difference was indicated between the three experimental groups, Hypothesis 3 which predicted lack of significant differences between emotional, motivational and cognitive task engagement activities in affecting incidental acquisition of vocabulary also proved to be acceptable.

TBLT must not be seen as a monolithic scheme in language pedagogy. The theoretical postulations and practical suggestions within task-based framework are versatile enough to integrate less attended aspects of intellectual functioning such as emotional and motivational processes into task procedure. In the study reported here, the differential roles of cognitive, emotional and motivational involvements applied to the pre-task phase of an input-enhancing task in facilitating the incidental acquisition of a set of unfamiliar words presented through a reading-while-listening text were put into scrutiny. The results demonstrated that all three types of task-

<table>
<thead>
<tr>
<th>Pre-task Intervention</th>
<th>N</th>
<th>STR</th>
<th>STEA</th>
<th>LTR</th>
<th>LTEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>24</td>
<td>2.08(1.558)</td>
<td>1.62(1.173)</td>
<td>1.79(1.215)</td>
<td>1.62(1.096)</td>
</tr>
<tr>
<td>Motivational Involvement</td>
<td>27</td>
<td>3.52(1.827)</td>
<td>2.74(1.457)</td>
<td>2.22(1.423)</td>
<td>1.96(1.192)</td>
</tr>
<tr>
<td>Emotional Involvement</td>
<td>26</td>
<td>3.54(2.044)</td>
<td>2.73(1.538)</td>
<td>2.00(1.386)</td>
<td>1.88(1.243)</td>
</tr>
<tr>
<td>Cognitive Involvement</td>
<td>29</td>
<td>3.66(1.987)</td>
<td>2.76(1.480)</td>
<td>2.31(1.491)</td>
<td>1.79(1.292)</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>3.24(1.95)</td>
<td>2.49(1.482)</td>
<td>2.09(1.384)</td>
<td>1.82(1.202)</td>
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Test of Between-Subject Effects for Four Independent Measures
The Effect of Three Types of Task Engagement...

Estimated Marginal Means of Short term retention

Pretask intervention

Covariates appearing in the model are evaluated at the following values: Pretest = 14.30

Estimated Marginal Means of Short term ease of activation

Pretask intervention

Covariates appearing in the model are evaluated at the following values: Pretest = 14.30
According to the Noticing Hypothesis, which is a founding theory of form-focused TBLT, the linguistic input must be noticed during a meaningful processing before it is acquired. Noticing linguistic elements of input during task engagement depends, to a large extent, on task characteristics and task conditions which may encompass cognitive, emotional and motivational aspects of task performance. Despite the wide coverage of the cognitive processes involved in task performance (e.g. Robinson, 2001; Skehan, 1998;
Rahimpour, Salimi & Farrokhi, 2012), there is a lack of studies investigating emotional and motivational aspects of task conditions. A partial recognition of motivational processes appears in the Involvement Load Hypothesis (Laufer & Hulstijn, 2001) according to which tasks eliciting higher levels of involvement yield better retention of vocabulary. Nevertheless, if placed in a general vision of task engagement, the motivational element of task performance can be expanded to other dimensions of motivation including enjoyment, expectancy of success, investment of effort and perceived value of the task in hand. These aspects of task motivation were operationalized in this study through motivational strategies applied to the pre-task phase of the task and proved effective in promoting vocabulary retention and recall.

On the other hand, the conduciveness of cognitive involvement to task performance has been well-recognized by cognitive theories of SLA (Skehan, 1998). According to these theories, attentional resources of learners in processing newly-encountered information are limited in capacity. Therefore, the cognitive processes of perceiving and storing the details provided in the input are facilitated when the cognitive load imposed by the task demand is lowered (Robinson, 2001). Activating some of the linguistic and schematic knowledge required to fulfill the purpose of the reading-while-listening task proved effective in decreasing the cognitive load of the task, setting the attentional resources free to be focused on the aspects of lexical knowledge related to the target words that had been introduced through the reading-while-listening task. Thus, the input-enhancement technique of glossing appeared effective when it was accompanied by the pre-task intervention to reduce the cognitive demands of the task.

Furthermore, the emotional involvement through pre-task intervention turned out to have an enhancing effect on short-term retention and ease of activation of target words. This finding is in line with Fredrickson's Broaden and Build Theory, according to which the experience of positive affect encourages the individuals to involve more and more in what is going on in the environment (Fredrickson, 2001). Involving learners in positive affect experience through pre-task activities promoted the learners' engagement with the subsequent learning situation, rendering learners capable to make an optimal use of their cognitive resources in attending to the input provided by the main task.

The third hypothesis intended to compare the effects of cognitive, emotional and motivational engagement with task on short-term and long-term retention and ease of activation of L2 vocabulary. The results (Table 2) did not indicate any significant difference between the three types of intellectual involvement in terms of their impact on the effectiveness of focused task designed to promote vocabulary acquisition. The lack of
superiority for any of the cognitive, motivational or emotional involvements over the others, as indicated here, provides further evidence for theories that advocate integrative and interdependent functioning of cognitive and affective processes in performing mental actions (Dai & Sternberg, 2004). This thinking is in contrast with the postulations cherished by advocates of pure cognitivism in overemphasizing the role of cognitive information processing at the cost of downplaying the effective role of emotional and motivational processes in perceiving, storing and retrieving knowledge. This point was reminded by Dai and Sternberg (2004) when they reiterated that "levels of intellectual functioning are typically not an invariant property of a cognitive system, but depend on one's motivational and emotional states" (p. 6).

On the other hand, motivational and emotional aspects of mental functioning can affect the learning process only indirectly through such cognitive process as attention, noticing and appraisal (Schumann, 1997). Hence, neither emotional nor motivational processes, by themselves, can gain supremacy over cognitive processes (Rahimpour, Ajideh, Amini, & Farrokhi, 2013).

This finding is in line with dynamic system view of mental functioning (e.g., Dolcos, Iordan & Dolcos, 2011) which considers cognition, affection and motivation in close interaction with each other in regulating human mind. The dynamic system view is supported by both neurobiological evidence (e.g., Gray, 2004) and cognitive psychological research (e.g., Eysenck & Kean, 2010; Fredrickson, 2001; Scherer, 2005). According to dynamic system views of intellectual functioning, cognition affects affective and motivational system through appraisal processes, and affective processes, on the other hand, have clear effects on such cognitive processes as perception, attention and memory. However, the dynamic system view contends that neither cognitive processes nor motivational and affective ones have primacy or supremacy over the others.

5. Conclusions and Implications

To sum up, the three types of task-engagement activities turned out to promote the short-term acquisition of vocabulary from an input-enhancing task. However, the promotion disappeared in the long-term measures. This finding provides further evidence for integrated views of mental operation in which the trilogy of mind operates in close interaction with each other (Dai & Sternberg, 2004). Here, the cognitive, emotional and motivational interventions in task procedure were examined discretely in isolated learning situations. Further studies are anticipated to scrutinize the three types of interventions in an integrated manner during the task engagement.
Ellis (2003) concedes that task-based language teaching is not a unified approach; rather, tasks can be applied to language pedagogy through different approaches (p. 31). He goes on to argue that the principles and techniques advocated by proponents of ‘humanistic language teaching’ were one of the earliest attempts to cherish the basic axioms of TBLT. Humanistic approaches underline self-actualization as the route for learners to achieve their full potential for growth (Stevick, 1990). Some of the axiomatic beliefs shared by humanistic education and TBLT include the emphasis on holistic development of the learner, personal relevance of the subject matter to the learner, relevance of imagination and creativity and goal-oriented classroom activities. From humanistic perspective then, TBLT is urgently in need of recognizing the significance of affective variables (both emotional and motivational dimensions) to permit self-actualization of learners. With this assumption in mind, there would be a theoretical urgency to integrate emotional and motivational concomitants of the learning process into the design and implementation of tasks. Not only do tasks engage learners in cognitive processes concerning input, output and interaction (Skehan, 2003), but also, in their authenticity, tasks procure the required conditions for the emotional and motivational aspects of the immediate learning situation to play a role in the acquisition process.

These findings convey significant pedagogical implications to all those who are involved in SLA practice including material developers, methodologists, teachers and teacher educators. Also, task-based language teaching is in urgent need to include a motivational element by adding situation-specific and task-related motivational strategies. The duty of promoting task-related motivation is incumbent upon syllabus designers and teacher educators. By and large, the inclusion of cognitive, emotional and motivational processes in a language teaching program can open up a new trend in SLA practice.

References


Appendices

Appendix A

Positive Affect Questionnaire
Adapted from the International Positive and Negative Affect Schedule Short Form (I-PANAS-SF) Question, Measure, and Item Order (Thompson, 2007)

Question: Thinking about yourself, how do you generally feel after having completed the task? (Circle the numbers to rate from 1, never, to 5, always)

Items in order:

1. Upset
2. Hostile
3. Alert
4. Ashamed
5. Inspired
6. Nervous
7. Determined
8. Attentive
9. Afraid
10. Active

Interval measure: never 1 2 3 4 5 always
Appendix B
Task Motivation Questionnaire

Participant's name: ……………………………………

Directions: Please read each item carefully and circle the number that best describes your ideas and feelings while you were engaging in this task according to the following scale. Circle numbers in the boxes from 1 (completely disagree) to 7 (completely agree). Just answer based on what first comes to your mind.

<p>| | | | | | | |</p>
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<tbody>
<tr>
<td>1. I feel pretty competent working at this task.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. This task is something that I have to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. I do this task, but I am not sure it is good thing to pursue it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4. I feel like it is my own choice to do this task.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. I do this task for my own good.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6. I do this task because I think that this task is interesting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7. I do this task, but I am not sure whether it is worth it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8. This is a task that I could do very well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9. If I had the opportunity, I would spend more time doing this task.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10. I am supposed to do this task.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11. I do this task because I think that this task is good for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12. I am pretty skilled at this task.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13. I do this task because I think that the task is pleasant.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14. I feel that I have to do this task.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15. I do this task because I believe that this task is important for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16. I do this task because I feel good when doing this task.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17. I don't know; I don't see what this task brings me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>18. If I had the opportunity, I would continue doing this task.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>19. I believe I have some choice doing this activity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>20. I do this activity because I want to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>