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Critical thinking and goal orientation among English language students

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Abstract

The purpose of the study was to determine the existence of any meaningful relationship between the psychological constructs of goal orientation and critical thinking. The three psychological levels of goal orientation are learning goal orientation, proving dimension of performance goal orientation, and avoiding dimension of performance goal orientation. This investigation has been pursued with the intention of possibly recognizing goal orientation as a related variable to English students’ critical thinking. Critical thinking is a determining factor in language learning and teaching which stresses its significance. The research has been conducted based on a descriptive correlational study in Iran that resulted in the existence of significant positive correlation between the learning goal orientation and critical thinking, and significant negative correlation between performance goal orientation and critical thinking.

1. Introduction

The quality of our lives and that of how we live depends thoroughly on the power of our cognition. In other words, excellence in thought increases the quality of life against Inferior thoughts which are detrimental to our hopes and dreams (Paul & Elder, 2001). Consequently, many believe that there is a great responsibility on the shoulders of educational institutions. Part of this responsibility is the development of pupils’ cognitive abilities and critical thinking. These are the abilities that strengthen the pupils’ perceptions of the world and consequently rectify the decisions they make (Gardiner, 1995).

Scriven and Paul (1992) describe critical thinking as the disciplined cognitive process of actively and skillfully conceptualizing, implementing, analyzing, synthesizing and evaluating information produced by observation, experience, reflection, reasoning, or communication that can be the lead to our believes and actions. Therefore, learning is a cognitive process which can be reinforced by critical thinking. Cognitivists believe that learning is

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an intellectual process that allows learners to add up new concepts to their schemata, the process which enriches their cognitive structure (Brown, 2007). Based on the theory, learning is a cognitive process which requires reflection and thought. That is why meaningful learning has always been emphasized in recent methodologies, the learning that can raise questions. These methodologies usually stress the use of activities and tasks which trigger the implication of reflection and thought through posing problems and asking for solutions.

Hence problem solving is at the heart of language teaching nowadays. It is obvious that the process of problem solving and using logical inquiry requires critical thinking. From this perspective, critical thinking is a move from viewing learning as memorizing and repeating words to a constantly evolving process of discovering, questioning and formulating hypotheses (Pennycook, 1996). Based on this significance, critical thinking training courses have been advertised as a boosting device to enhance language learning. This idea has been supported by many studies conducted on different aspects of language acquisition.

In order to design an appropriate and effective critical thinking training curriculum, conducting need analysis is significantly required. And the first step is having learner analysis in order to know the trainees and learners better. Among the learner variables which might affect the performance of the learners, goal orientation can be a researchable domain. The idea of goal orientation which was presented by Dweck and Elliot (1983) came about to define changeability in natural or inferred goal preferences that a person tacitly arranges for him/herself to accomplish a task. Language learners can be learning oriented or performance oriented. Learning orientation is the desire to obtain new knowledge or get more in-depth knowledge of a given task or matter, and performance orientation is the desire to display a person's capability or ability on a specified matter or assignment (Button, Mathieu, & Zajac, 1996).

Goal orientation and self-efficacy are nearly associated. It has been discovered that low-learning/low-performance persons have the lowest level of self-efficacy. On the contrary, high-learning/high-performance persons have the highest level of self-efficacy (Hsieh, Sullivan, & Guerra, 2007). Students low in learning orientation had lower levels of task involvement than students high in learning orientation (Pintrich, 2000). And students with performance goals less tend to share information (Swift, Balkin, & Matusik, 2010). Moreover, persons with learning goal orientation more tend to look for feedback but people with performance approach orientation will only look for feedback if they understand that the feedback will be positive and fruitful (Payne, Youngcourt, & Beaubien, 2007).

In the present study, an attempt was made to determine the possible meaningful relationship between psychological levels of goal orientation and critical thinking at Roudehen Islamic Azad University as an EFL (English as a foreign language) context. Therefore, the main hypotheses of the study can be worded as:

1. There is no significant relationship between learning goal orientation and critical thinking.
2. There is no significant relationship between the proving dimension of performance orientation and critical thinking.
3. There is no significant relationship between the avoiding dimension of performance orientation and critical thinking.

This can help us find possible ways to implement what we find about individual differences regarding goal orientation to develop better curricula for training critical thinking, the skill which can be a booster in language teaching and learning.
2. Methodology

The study benefits from the descriptive correlational design. Actually, this design enabled the researcher to find the degree of correlation between the constructs of the learners’ goal orientation as the independent variables and the learners’ self-assessed critical thinking as the dependent one at Islamic Azad University, Roudehen Branch.

The procedure of the study can be depicted in these steps briefly. First, the two reliable instruments of the study were organized and validated. Second, based on a multistage random sampling, a reasonable number of Iranian senior English students were selected. Finally, after the administration of the instruments, the scores were correlated. And out of the statistical procedures, the researcher got enabled to generalize, draw inferences and decide on the three proposed hypotheses.

The target population of the study included the subset of the student population at Islamic Azad University, Roudehen Branch. They were female and doing BA in the field of English language. The population was approximately 1400 students. Due to the research requirements, thirty classes at Islamic Azad University, Roudehen Branch were specified at random. And then out of these classes, 302 students were selected randomly. Apart from the main sample, fifty homogeneous students were also asked to take part in the pilot study with the intention of validating the instruments of the research.

There were two instruments implemented in the research, first, the Academic Goal Orientation Questionnaire (AGOQ) which was designed and validated by Vande Walle (1996). VandeWalle, Cron and Slocum (2001) elaborate on the questionnaire as:

It has three subscales: (a) four items that measure learning goal orientation, (b) four items that measure the proving dimension of performance goal orientation, and (c) five items that measure the avoiding dimension of performance goal orientation. (p. 635)

VandeWalle, Cron and Slocum (2001) also used a confirmatory factor analysis of the item responses and found that the three factor model was appropriate and well fit the data. Moreover, a 5-point Likert-type response scale, ranging from 5 (strongly agree) to 1 (strongly disagree), was utilized in the study.

The second instrument was the Self-assessing Critical Thinking Ability Questionnaire (SCTAQ) which was developed based on the Novice Professional Judgment: Ability and Habits Rating Form by Facione and his colleagues (1996). This rating form was also derived from The Holistic Critical Thinking Scoring Rubric. The questionnaire was revised with the help of a group of psychologists. Next, it was piloted to a homogeneous group of learners to enable the researcher to revise the items more practically in the EFL context. Undoubtedly, the content validity, the criterion related validity and the construct validity along with the reliability of the questionnaire were taken into consideration. The results of SCTAQ and the Novice Professional Judgment: Ability and Habits Rating Form were correlated. The correlation coefficient amounted to 0.852 which was highly significant at the 0.01 level. This high correlation between the two assured fairly high criterion related validity for SCTAQ. In the next step, the results of the two administrations of the SCTAQ were correlated in order to estimate the test-retest reliability. The correlation coefficient was 0.720 and significant at the 0.01 level. Finally, the Cronbach’s alpha approach was implemented to the results of the pilot study in order to estimate the internal reliability of the SCTAQ. The obtained alpha was equal to 0.7036 which was nearly high and significant at the 0.01 level.

3. Results

In the core of the study, the researcher has intended to examine the magnitude of possible correlations between the three psychological constructs of goal orientation (learning goal orientation, the proving dimension of performance orientation and the avoiding dimension of performance orientation) as the dependent variables and the learners’ critical thinking as the independent one.
In order to answer the first research question: “Is there any significant relationship between learning goal orientation and critical thinking?” the researcher correlated the scores of the learning section of the AGOQ with the scores of the SCTAQ. Based on the correlational analysis the r-observed was amounted to 0.319 (Table 1). This amount was positive, nearly high and significant at the 0.01 level.

Table 1. Correlation between the learning section of the AGOQ and the SCTAQ

<table>
<thead>
<tr>
<th>SCTAQ</th>
<th>Learning section of the AGOQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation</td>
<td>0.319</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>Correlation is significant at the 0.01 level (2-tailed).</td>
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</table>

The second research question of the study, “Is there any significant relationship between the proving dimension of performance orientation and critical thinking?” was also investigated. However, based on the obtained data, the correlational analysis between the proving dimension of performance orientation and critical thinking indicated a significant negative correlation between the two variables to the amount of -0.169 (Table 2). This correlation was significant at the 0.05 level.

Table 2. Correlation between the proving section of the AGOQ and the SCTAQ

<table>
<thead>
<tr>
<th>SCTAQ</th>
<th>Proving section of the AGOQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation</td>
<td>-0.169</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.027</td>
</tr>
<tr>
<td>Correlation is significant at the 0.05 level (2-tailed).</td>
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</tbody>
</table>

In the third research question, the relationship between the avoiding dimension of performance orientation and critical thinking was under investigation. This led the researcher to correlate these two variables based on the gathered data which ended in a significant negative relationship between the two variables at the 0.05 level (Table 3).

Table 3. Correlation between the avoiding section of the AGOQ and the SCTAQ

<table>
<thead>
<tr>
<th>SCTAQ</th>
<th>Avoiding section of the AGOQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation</td>
<td>-0.111</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.038</td>
</tr>
<tr>
<td>Correlation is significant at the 0.05 level (2-tailed).</td>
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</tbody>
</table>

4. Conclusion and implications

The main problem which triggered the researcher to open the study was considering goal orientation as an individual difference which enables the curriculum developers to have a better perspective on designing critical thinking courses. Through the investigation, the null hypotheses which stressed the non-existence of any significant relationships between the psychological constructs of goal orientation and critical thinking at an EFL context were investigated. In the course of these probes, the significance of the positive and almost high
correlation between the learning orientation and critical thinking was proven. Thus, in the light of this finding, the first null hypothesis was rejected and learning orientation was found related to critical thinking.

In the second endeavour to decide upon the second hypothesis, proving dimension of the performance orientation and critical thinking were taken as the two variables in question to be correlated. The related correlation coefficient was found to be -0.169 which was negative and low but significant. Hence, in consequence of the result, the second null hypothesis was also rejected which claimed the non-existence of any meaningful relationship between the two variables.

Then with the intention of deciding on the third hypothesis, the gathered data were examined to search for any meaningful relationship between the avoiding dimension of the performance orientation and critical thinking. The r-observed was found to be -0.111 which was also negative and low but significant. Hence, in consequence of the result, the null hypothesis which claimed the non-existence of any significant relationship between the variables was also rejected.

Based on the findings out of this EFL context, here on the one hand, language scholars should consider the fact that learning oriented learners can be better in critical thinking. But on the other hand, proving and avoiding performance oriented learners might be less powerful in critical thinking. Therefore, critical thinking courses can be advised for the second group. Or at least in critical thinking courses, the second group should be more focused. However, the fact should not be neglected that the study was a correlational one which does not allow us to decide on any cause and effect relationship between the variables. Hence searching the differences and not similarities can be a new searching domain for further studies.

Ford and his colleagues (1998) somehow support this study and believe that not only learning oriented learners are better in cognitive works but also they get more engaged in meta-cognitive works (planning, monitoring, and revising behaviours) in the process of learning. However, performance oriented people declared lower capability to pass on performance at the end of training and less tended to favour challenging tasks (Ford et al., 1998).

There is no doubt to say that these finding are very closely bound up with cultural aspects of the setting. Thus, there is a great need for further studies in other contexts in order to get a better understanding of the real position of goal orientation in training critical thinking and consequently in the realm of language teaching and learning.

Acknowledgement

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References


