THE EFFECT OF LEARNED HELPLESSNESS ON CHANGING GOAL ORIENTATION AMONG UNDERGRADUATE STUDENTS

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Abstract

The aim of the current study was exploring the effect of the academic learned helplessness on changing the personal academic goal orientations. The sample was 282 undergraduates, (116 male and 166 female) responded to learned helplessness scale (LHS) and the achievement goal orientation inventory (AGOI) and the experimental group was exposed to repeated failure experiences which led to learned helplessness that caused later to changing the goal orientations of the students from mastery goals into performance goals.

Key words: learned helplessness, goal orientation, undergraduate

Introduction

Learned Helplessness

Learned Helplessness is defined as the reaction on the part of some individuals to become frustrated and simply give up after repeated failures (Elliott, Kratochwill, Littlefield Cook & Travers, 2000). Seligman and Maier (1967) have systematically examined learned helplessness, a condition which has been attributed to motivational, cognitive and emotional deficiencies, developing due to exposure of an organism to a series of events independent of its behavior and not under its control (Overmaier & Seligman, 1967). Most of Seligman’s experiments were conducted on dogs, where they encountered one of three conditions, one group of dogs was exposed to inescapable electrical shocks while another group was exposed to controllable electrical shocks, the third group was not given electric shocks (control group). Findings showed that the dogs that were unable to stop the electrical shocks displayed passive behavior, lack of initiative, anxiety, anger and subsequently a performance decrease 24 hours after exposure. These behavioral changes sustained even after the dogs were transferred to a cage in which they were able to control the shocks. (Elliott et al, 2000).
Learned helplessness has also been found in humans; however, the aversive stimuli that was used not electrical shocks but rather sounds (controllable/uncontrollable) or motor/cognitive tasks (solvable/unsolvable) such as the Raven Progressive Matrices, Levine’s discrimination learning, storyline picture arrangement and mathematical questions (Hiroto & Seligman, 1975; Klein, Fencil, Morce & Seligman, 1976; Lubow, Caspy & Schnur, 1982). Helplessness is characterized by student passivity (Peterson et al., 1993) resulting from changes in cognition and emotion, a loss of motivation, and a reduction in behavioral effectiveness (Gentile & Monaco, 1988; Peterson et al., 1993).

**Goal orientation**

Goals are that which individuals attempt to accomplish (Was, 2006). Within the achievement goal perspective, different types of them are said to create the framework within which students construe and react to achievement tasks and their outcomes (Dweck & Leggett, 1988). Two classes of goals were proposed: mastery (learning) goals and performance goals. Mastery goals direct behavior in achievement tasks towards the development of competence, mainly through improvement, learning and challenge-seeking. Learning-oriented students exhibit strong mastery orientations regardless of their confidence in their present ability, and failures do not keep them from the pursuit of knowledge. They do not perceive that intelligence is a fixed quantity; in fact, their continued growth proves otherwise. Performance goals direct achievement behavior towards the demonstration of competence by outperforming others or by avoiding performing worse than others. Performance-oriented students react very differently to failure, especially if they have little confidence in their abilities (in which case learned helplessness is a likely outcome). (Dweck, 1990; Dweck & Leggett, 1988; Elliot, 1999; Nicholls, 1984).

Moreover, learning and performance orientation differ in the standards used to evaluate competence. Learning orientation makes use of an absolute or intrapersonal standard (i.e., improve own past performance) and performance orientation draws on normative comparisons (i.e., outperform others) (Elliot & McGregor, 2001; Elliot & Murayama, 2008).

Goal orientation is mostly seen as a relatively stable trait that may be influenced by situational characteristics (Button, Mathieu, & Zajac, 1996; Murayama & Elliot, 2009). Although learning and performance orientation were originally seen as opposing poles (Dweck, 1986), researchers have argued that individuals often have multiple competing goals (Button et al., 1996). Indeed, research has shown that learning orientation and performance orientation are best portrayed as separate and largely independent dimensions (Button et al., 1996; Payne et al., 2007). Elliot et al. (1999) expanded the goal orientation concept where they reported that it has two dimensions: approach and avoidance which resulted in three categories: performance-approach, performance-avoidance and mastery goals orientations. Thus, people can be high (or low) in both learning and performance orientation. This view was taken into account in this study.
Learned helplessness and goal orientation

Several researchers discoursed about the relationship between the learned helplessness and the goal orientation. Button et al. (1996) defined learning goal orientation as reflecting mastery-oriented behaviors, while performance goal orientation reflects maladaptive behaviors or learned helplessness. Gentry et al. (2006) reported that the possibility of learned helplessness resulting from an experiment situation (a game simulation) showing a dismal outcome for students with performance orientations. McKinny (2003) found that Learning goal orientation is associated with adaptive behaviors that reflect a mastery-oriented approach to tasks, while performance goal orientation is associated with maladaptive behaviors and a vulnerability to a learned helplessness. He found also that individuals with a positive self-concept are more likely to engage in adaptive behavior patterns that are characterized by a learning goal orientation. In contrast, individuals with a negative self-concept are more susceptible to engaging in maladaptive or learned helplessness behaviors that are characterized by a performance goal orientation. The consequences of performance goals, when faced with obstacles, are helplessness, anxiety, negative affectivity, risk aversion and low persistence (Ames & Archer, 1988; Butler, 1987, 1992; Dweck, 1986; Dweck & Leggett, 1988; Nicholls, 1984).

Goal-orientation theory suggests that learning goals elicit enjoyment, optimism and intrinsic interest (Butler, 1987; Deci & Ryan, 1985; Dweck, 1986; Dweck & Leggett, 1988) that seem to be related to high positive activation; whereas performance goals elicit helplessness, negative affect, anxiety and stress (Dweck & Leggett, 1988; Ryan & Stiller, 1991) that seem to be related to high negative activation.

Students with learned helplessness and performance goals see success as determined by factors such as luck which are outside of their control (Seligman, 1993). Furthermore, they generally believe they will never be successful at school for a variety of reasons including their perceived lack of ability and the difficulty of the tasks (Dweck & Repucci, 1973). By contrast, students who are mastery oriented tend to believe that success is determined by effort and are motivated, display more positive attitudes towards learning, use more effective learning and study strategies, and prefer challenging assignments (Ames & Archer, 1988).

The previous researches (Ames & Archer, 1988; Dweck & Leggett, 1988; Gentry et al, 2000; McKinny, 2003) investigated the correlation between learned helplessness and goal orientation and they found that there were positive relations between learning (mastery) goals and adaptive behaviors, and positive relations between performance goals and learned helplessness. Unlike the previous studies, the current study explored empirically what happened to students’ goal orientation when they experienced failure and helplessness.

The main purpose of this study was to examine the effect of the academic learned helplessness on changing the personal academic goal orientations.
Study question

1. Are there any significant differences on learned helplessness scale due to failure experiences?

2. Do students’ goal orientations order change because of learned helplessness they acquired?

Method

Participants

This study was conducted at The Hashemite University (HU) in Jordan. The study sample included 282 undergraduates, (116 male and 166 female), they were chosen as an available sample from the faculty of educational sciences, from different majors. They registered in the *Psychology of Childhood and Adolescence* course, the course which was taught by the first author, at the academic summer semester 2011-2012. Most of them were sophomore.

Instruments

*Learned Helplessness Scale (LHS)*: (Quinless & Nelson, 1988). The LHS is a 20-item, 4-point Likert scale strongly indicative of learned helplessness. It has suitable psychometric values, but for the purpose of this study new psychometric proprieties were formulated to be conducted on undergraduate students. Cronbach’s Alpha reliability was .859; the value was good to apply this scale on the study.

*Achievement Goal Orientation Inventory (AGOI)*: (AGOI) comprised 23 items, represents three goal orientation subscales: 8 items for mastery goals, 7 items for performance-approach goals and 8 items for performance avoidance goals. Items are rated on 5-point Likert scale ranging from 1 (*never*) to 5 (*always*) (Elliot & Church, 997).

Within the present dataset, Cronbach’s Alpha coefficient was 0.757 for the mastery-approach goal, 0.752 for the performance-approach goal, and 0.617 for the performance-avoidance goal.

Worksheets

Fifteen worksheets were distributed to the students during the summer semester which lasted for eight weeks from 3rd June to 25th July 2013. The themes of the worksheets were derived from the course, they contained different tasks from the psychology of childhood and adolescence, and the students were asked to answer them and delivered to the teacher next lesson.

Procedures

After specifying the aim of the study, the instruments of (LHS) and (AGOI) were prepared and the psychometric properties were extracted. The researchers got the IRB-HU approval to conduct the study on the students of the university. The sample was
divided into two groups, the experimental group \((n = 172)\) and the control group \((n = 110)\). The participating students informed about the instructions of the tasks. First of all, they completed LHS and AGOI, in order to explore the level of the learned helplessness levels and their goal orientations. The next lesson, the first author started to give the students the worksheets which were derived from the course. Each sheet contained a written task in the psychology of childhood and adolescence; the student might hand it to the teacher next lesson. When the tasks were delivered, the teacher took them home and corrected them, he provided a negative feedback for the experimental group, he and pretended that all task were not answered correctly, and they did not fit the norms that the teacher put, so they must repeat them, therefore the tasks were accumulated and the probability of the success decreased. On the other hand, he corrected the worksheets of control group regularly by providing them with positive feedback. In the sixth week, the students completed the instruments of (LHS) and (AGOI) again as a posttest. Taking the research ethics in account, and in order to not frustrate the students, they took counseling sessions by the second author, they were told that their works were good and right, the teacher provided the negative feedback for the purposes of the study. After getting back the measures, the data was entered into the Statistical Package for the Social Sciences to be analyzed.

**Statistical analysis**

Means and standard deviations were calculated, and series of \(t\) tests were used to assess the differences on the learned helplessness and the goal orientation among university students based on the study variables.

**Results**

To answer the first question of the study means, standard deviations and \(t\) tests of the pre-test and posttest were extracted and displayed in Table 1.

**Table 1**

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th>N</th>
<th>mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>experimental</td>
<td>172</td>
<td>30.49</td>
<td>4.512</td>
<td>-1.082</td>
<td>280</td>
<td>.280</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>110</td>
<td>31.07</td>
<td>4.281</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>experimental</td>
<td>172</td>
<td>69.35</td>
<td>8.937</td>
<td>42.712</td>
<td>280</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>control</td>
<td>110</td>
<td>30.54</td>
<td>4.124</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(P \leq 0.05\) Size effect of cohen's D = 69.35 - 30.54 = 38.81 / 8.937 = 4.35 which reveals a large effect.

Table 1 showed that there was no significant difference on the pre-test of LHS between the experimental and the control groups \((t=-1.082, df=280, p>.280)\) which revealed that they were equivalent before they were exposed to failure experiences, and they had not acquired learned helplessness yet, but there was significant difference on the posttest of
LHS between them in favor of the first one \((t=42.712, \text{df}=280, p<.000)\), which revealed that they acquired helplessness after they were exposed to failure experiences.

With regard to the goal orientations of the students, means and standard deviations were calculated before and after they were exposed to failure experiences and acquired learned helplessness, table 2 displayed the values

**Table 2**

*Means and standard deviations of the students’ scores on the GOS and the order of their GO according to the variables group (experimental - control) and the case of LH (before – after)*

<table>
<thead>
<tr>
<th></th>
<th>Before LH</th>
<th></th>
<th>Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>experimental</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MG</strong></td>
<td>25.13 9.010</td>
<td></td>
<td>25.54 9.341</td>
<td></td>
</tr>
<tr>
<td><strong>PAvG</strong></td>
<td>20.39 10.587</td>
<td></td>
<td>20.02 11.244</td>
<td></td>
</tr>
<tr>
<td><strong>PApG</strong></td>
<td>13.62 6.613</td>
<td></td>
<td>13.61 7.362</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>After Learned</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MG</strong></td>
<td>23.02 10.989</td>
<td><strong>PApG</strong></td>
<td>23.48 9.168</td>
<td></td>
</tr>
<tr>
<td><strong>PAvG</strong></td>
<td>21.42 11.143</td>
<td><strong>PAvG</strong></td>
<td>19.07 10.362</td>
<td></td>
</tr>
<tr>
<td><strong>MG</strong></td>
<td>13.69 3.096</td>
<td><strong>PApG</strong></td>
<td>14.80 6.238</td>
<td></td>
</tr>
</tbody>
</table>

\(P \leq 0.05\)

Table 2 showed that the students' goals in the experimental group changed after they acquired the learned helplessness, the goals of the experimental group were mastery, performance-avoidance, and performance-approach goals respectively, and the same order was for the control group. But after the experimental group was exposed to the failure experiences, its goals order became performance-approach, performance-avoidance, and mastery goals. On the other hand, the order of the goals of the control group didn’t change and remained as the same order.

**Discussion**

The results showed that the students acquired the learned helplessness because they were repeatedly exposed to failure experiences; they felt that they could not control the learning situation and they did not do anything toward the teacher and his norms of correct answers. This result assured what Overmaier & Seligman (1967) and Seligman (1995) found that people who are powerless to influence the outcomes of their learning and repeatedly expose to a series of events which are not under their control do not make effort to learn.
Moreover, the result of the current study showed that the exposure to failure experiences resulted in learned helplessness, which in turn led to transformation in goal orientations. The students changed their goals from mastery to performance-approach goals. This result may be explained that just to get rid from the embarrassing failure situations, and wanted to avoid incompetent students who performed worse than others, and they aimed at keeping their prestige in front of others. The students’ behavior reflect the normal relation between the performance goal and learned helplessness, this result was assured by (Ames & Archer, 1988; Butler, 1987, 1992; Dweck, 1986; Dweck & Leggett, 1988; McKinny, 2003 Nicholls, Gentry et al, 2006; 1984). This transformation in goals opposes what was found out in (Button et al, 1996; Murayama & Elliot, 2009) that the goal orientation is stable trait that may be influenced by situations, because the students of the study were influenced by failure experiences, they changed their goals.

The results may be explained by Higgins (2000) point of view that negative feedback is an outcome that fits prevention focus (performance goals), because the prevention system is most concern with avoiding negative outcomes. In contrast, positive feedback is an outcome that fits promotion focus (mastery / learning goals), because the promotion system is most concern with achieving positive outcomes. Based on that, Van-Dijk and Kluger (2004) tested the interactive effect of feedback sign and Higgin's regulatory focus on motivation. According to their hypothesis they found that under prevention focus (performance goals) negative feedback increases motivation more than positive one, whereas under promotion focus (mastery / learning goals) positive feedback increases motivation more than negative one.

**Limitations, applications, and suggestions**

This generalization of the results was restricted by some factors. The sample of the study was from one faculty at HU. Also, the period of the manipulation was restricted by the period of the semester which was eight weeks only.

In spite of the limitations above, there are some benefits of the results. Faculty staff may be benefit from the results by identifying the goals of their students and the factors that affect them. The results send a message to faculty staff to not expose their students to failure experiences, because they may acquire them helplessness, they must encourage them to get them to high level of achievement. Students also may benefit from the results by adopting identifying the properties of the mastery goals, they knew the relation between the goal orientations and learned helplessness, and they knew that exposing to failure experiences may drive them to adopt performance goals.

Researchers may find more findings if they study other variables such as gender differences, task difficulty level, and so on.
Acknowledgment

While quite a number of people have played a part in this accomplishment, there are a few special individuals that I would like to acknowledge and thank. The Hashemite University administration, students who participated and our colleagues.

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