The Relationship between Attribution Styles and Personality Traits, Gender and Academic Specialization among the Hashemite University Students

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Abstract
This study aimed to examine the correlation between attribution styles and personality traits (extraversion, introversion, emotion, poise and emotional), also aimed to identify the prevalence of attribution styles in the study sample according to the variable sex and academic specialization. The study sample consisted of (612) students among undergraduate students enrolled in the Hashemite University during the second semester 2011/2012. Results of study revealed that: A positive correlation relationship and statistically significant between positive attribution style and extroversion. And there is not statistically significant correlation relationship between negative attribution style and personality trait. No statistically significant differences between male and female, and there are statically significant differences at (\(\alpha=0.05\)) significance level between the humanities and scientific colleges students in the positive attribution style.

Key words: (Attribution, Attribution styles, Personality Trait, Hashemite University).

Introduction
Studies emerged from the Attribution Theory underlined the important role the attribution processes play as determinants of the human behavior. The theory, in its general framework, is a cognitive one provided visualization of the cognitive side of the human interaction with the ambient social environment. According to this theory, human being attempts to identify the reasons the rest behind the social environment situations (represented in the behaviors of the others, in addition to his/her personal behavior) to be able make the appropriate response to these events and situations.

As a result, the attempt to discover reasons serves an adaptive purpose aiming at understanding the social surroundings and knowing the principles it is subjected to. Thus, the individual deals with the events that occur in his/her social environment as a person who is a scientist by nature, led by the endeavor to interpret the events and approach conclusions about the others and the environment as well as the self, for the purpose of controlling the social environment. In the human's attempt to understand and have control over the environment, he/she collects information available about the certain event aspects, analyzes and interprets the information based on given rules that help him/her derive the meanings and reach causal judgments. This process of finding entails a wide range of conclusions that include expectations, passions and emotional states, as well as behaviors all of which will be affected by the causal conclusion approached by the individual (Heider, 1950). The method the students use to attribute reasons of their success and failure found an attention during the two past decades, because of its direct linkage to the learning and teaching processes.
This is also because the method the student uses to attribute his/her success and failure is related to the achievement motivation. Kelley and Michela, (1980) find that the attribution processes are affected by the type of motivation, and emphasized on the motivation for attribution, motivation for self upgrading, and motivation for self protection. However, students vary in their attribution of success and failure depending on the difference of the achievement motivation levels. Kukla, (1972), found that low motivated students attribute their failure to their low abilities, which is a constant factor, unlikely to change quickly, and it is not unusual then that they will give up. On the other hand, high motivated students of high motivation for achievement tend to perceive their failure in terms of the lack of the effort spent by them, which is a modifiable factor. Therefore, they persist in seeking success in spite of their repeated failure; they believe that that will succeed if they spend an actual effort.

The attribution perspective starts from these introductions, but they differ about the methods and rules pursued or applied by the individual. Heider's idea, (1958), on the causality center is one of the important features of the attribution process. In interpreting the behavior of a certain person, the cause is attributed to the stimulant, if such stimulant attracts similar responses from different person. The reason is attributed to the person if that person responds distinctively to the stimulant through other person. As such, he/she makes distinction between the internal and external stimulants of the behavior, by saying that the result of the behavior depends on two main types of factors: intrapersonal factors and factors concerning the situation. Therefore, the reasons are grouped in terms of the locus into internal reasons (the person), and external reasons (the environment and the others). Meaning that behavior could be ascribed to internal reason (intrapersonal characteristics) or external reasons (characteristics in the situation or assignment), (Weiner, 1974).

Still others are interested in the theoretical rules the person pursues in attributing the reasons to the individual and environment, or to the two reason locus proposed by Heider. For example, Kelley's pattern in causal attribution (Kelley, 1973), who sees that the individual's causal conclusions depend on the information available to him/her about three factors:

- **Distinctiveness**: of the behavior or event, i.e. about whether the observed behavior is frequented in response to a wide range of stimulants, or else a distinctive response to a certain stimulant.
- **Consistency**: recurrence of the emergence of the behavior in the presence of the stimulant in different situations and times.
- **Consensus**: the extent of the response generality among people, that is "do most people respond to the stimulant in the same way the individual does?" (Cooper and Burger, 1980).

Kelley believes that the individual sieves the information received about these factors to determine the cause of the observed behavior or event, and eventually ascribes it to intrapersonal factors or factors in the environment; and by this he/she reaches either an internal or external attribution.

Among the theoretical perspectives of the attribution process and the entailed behavioral, cognitive and emotional results, is Weiner's theory in the achievement behavior. He suggests a theoretical model that interprets the achievement behavior based on the perceived causes of success and failure. Weiner sees that the causes to which individuals tend to ascribe their success and failure determine their expectations on their future performance, and how persistent they will be after success and failure, as well as their passionate responses related to the results they obtain. The empirical studies indicated that people mostly attribute their success and failure to one or more factors which Heider proposed, namely: capability, effort, level of the assignment (difficult or easy), and luck. Still Weiner does not suggest that these are the only factors to which success and failure are attributed; rather, they are the most frequently used. In his analysis of the achievement behavior and its relation to the perceived causes of success and failure, Weiner found that it is useful to categorize these causes into dimensions that enable predict the achievement behavior. The four causes stated earlier may be categorized locus wise into two groups: internal (self) causes related to the individual, such as capability and effort, and external causes, such as level of assignment difficulty and luck. Further, these causes might be categorized in terms of stability/change: stable causes that are relatively unchangeable such as capability and level of the assignment difficulty (in terms of the individual) and changing causes (changeable), such as luck and effort (Weiner, 1974).

Empirical studies in this concern proved the usefulness of this categorization. In general, it had been found the success/failure-related emotional reactions are linked to the interior-exterior dimension.
Thus individuals' attribution of their success to internal reasons makes them feel proud following success and disappointed following failure. The studies further showed that causal attribution of success and failure is linked to the perseverance degree they show. So, for example, attribution of failure to the lack of effort (changeable internal factor), he/she spent on the assignment, will push toward future persistence. But, if the individual attributes failure to ability (a stable interior factor), then this attribution does not push to perseverance in future, because the person here anticipates that the possibility of success is low. Weiner further suggests that (stability-change) dimension is linked to the individuals' future expectations of success/failure. Accordingly, attributing a certain result to stable factors works toward raising the individual's performance expectations for future success, and toward lowering them in case of failure expectations (Weiner, 11980).

Although the intensive empirical research works in the attribution area provided an empirical support to the theoretical patterns suggested by the attribution theories, arguing that individuals actually pursue rational methods and ways in analyzing information and conclusion of causes; still, there are evidences showing that the attribution processes are vulnerable to the biases and distortion in a manner drifting them off the path of rationale proposed by the attribution theorists (Ross et al, 1974).

The most important biases the research work had shown in this concern are what were termed "Defensive Biases" and "Self Enhancing Biases". Studies indicated that individuals tend to ascribe the negative results to external causes, and the positive results to internal causes. As though, in case of failure, they hold the external conditions and other people responsible for failure, meanwhile they relate success to themselves.

Interpretation based on the motivation concept criticizes the cognitive bases provided by Miller, Ross and colleagues. The theorists of this interpretation relate the attribution phenomenon to motivation origins, such as self-preservation and protection motive, or motivation for control and surveillance over the environment. The perspective that relates the biases phenomenon in attribution to the self-esteem and protection motivation depends on Fistinger's theory on cognitive dissonance, and equilibrium theory by Heider, as both theories see that people are inclined to maintain the best possible self-image. Accordingly, the positive results attribution to the self maintains the individual's self-esteem; and attributing the negative results to the outside defends and protects the self. This conclusion is true if the concerned results are important to the individual, or in other words, defends and protects the self if he/she carries out an action of important relation to the self (Meyer, 1980).

Results of some studies that addressed the nature of people's perception of the behavior causes, whether their or others' behavior, but they differ in defining these causes and sources for enhancing them. In this definition process, they follow styles that are widely consistent with their cognitive representations and causal perceptions of the situation or environmental context as well as their personal experiences, which will lead into differences in their responses to people and events as well as the results of their works (Seligman et al, 1988).

It seems that the causal perception of behavior plays an important mediation role between the assignment perception and the final performance on this assignment. In addition, attribution styles made by the individual play a role in his/her motivation, passionate and adaptation strategies (Wiener, 1986).

Such a role is usually not limited to influencing the individual's disposition to define causes of his/her behaviors or others' behaviors, represented by the attribution styles he/she produces. It also influences his/her perception and understanding of the nature of live events he/she faces in general; and his/her rating of the malleability of these events for self-control or the extent of his/her ability to control, change or amend them (Gregory, 1981).

Results of the studies indicate that the control dimension (internal- external) and reliability (stable-changeable) are important to understand the emotional responses to the achievement success and failure; and to change the likelihood of the success and failure expectations in terms of the performance results on the future educational assignments (Frieze, 1977; Bar-Tal, 1978; Forsyth & McMillan, 1981). In this concern, Wiener shows that the control site dimensions have effect on a diversified number of general emotional experiences such as: anger, guilt, hopelessness, acknowledgment, shame, compassion, pity and self-esteem. Meantime, reliability affects the cognitive changes emerging on expectations that follow the success and failure experiences (Weiner, 1986).

Students' disposition to form certain attribution styles is somehow linked to some of their individual characteristics, such as: gender, achievement motive, self-conception, and achievement level (Bar-Tal and Frieze, 1977; Wagner and Vallacher, 1977).
From the aforementioned, it is clear that understanding the achievement causal attribution styles among the students contributes to understand some of their academic behavior aspects and their adaptation strategies that may practice in response to the success-failure experiences in their academic activities. In this regard, student who tends to form internal attribution indicating, explaining his/her results of achievement behavior, perceives the possibility of controlling the factors attributed to the behavior, such as the effort factor, and works toward improving his/her future achievement. On the other hand, student who tends to form an external attribution may perceive his/her inability to control the factors attributed to luck or nature of the educational assignment, because they fall within his/her personal control, which will preclude making new attempts aiming to develop his/her efforts and improve his/her future behavior results (Seligman et al, 1988).

Al-Tahhan & Nashawati (1989) conducted a study which aimed at identifying the causal achievement attribution styles among the male and female students of the first and fourth years in UAE University. It also aimed to explore the effect of gender and achievement in the formation of these styles. The study results showed that students crucially incline to assert the internal control site (capability and effort), more than their inclination to assert the external control site (assignment and luck) in defining the causes of achievement success and failure. There were significant differences among the male and female students in terms of attribution to internal factors. Female students were more inclined than male students to attribute achievement success and failure experiences to their academic abilities, their motivation and own efforts; meanwhile, these differences are unclear when attributing the failure situations. The results further showed that the gender and achievement variables do not explain (together) more than (0.180) of the variance in these styles.

Mitchell (1988) conducted a study aimed to identify the correlation between the personality styles and attribution styles. The study results indicated a statistically significant relationship between the personality styles and attribution styles, where the personality styles are positively correlated to the attribution styles (reliability, stability and comprehensiveness) for positive event attribution. On the other hand, they are negatively correlated to the negative event attribution. The results further showed that the personality styles (effectiveness, extroversion, emotional equilibrium) are correlated with the attribution styles through a statistically significant relationship.

Rim (1991) made a study to identify the relationship between the attribution styles (internal, stable and comprehensive) of the good and bad events with the neurotics and extroversion. The results of the study indicated that the females obtained lower scores on the neurotics, and on the other hand obtained higher scores in good styles of event attribution as compared with the bad events attribution.

Philip & Jeffrey (1996) conducted a study to identify the correlation between the attribution styles and personality traits. The study results showed no statistically significant correlation between the personality trains and the positive attribution of the good events. They further showed a negative correlation between the attribution styles and personality traits (lower extroversion, high neurotics, and high psychosis).

Cheng & Furnham (2001) conducted a study titled "Attribution styles and Personality as Predictors of the Welfare and Mental Health." The study results showed that the positive or negative attribution styles was the important predictor of the welfare and mental health. The results further indicated a statistically significant relationship between the attribution styles (positive and negative) and the extroversion and psychosis.

Poropat and Arthur (2002) made a study aimed at identifying the relationship between the attribution styles, gender and the five major personality factors. The results showed the internal attribution styles and general attribution styles interacted with gender to predict the personality traits (openness to experience, hope and extroversion).

Rigby and Huebner (2005) conducted a study aimed at identifying the relationship among the causal attribution, personality traits and the satisfaction of the comprehensive needs of students of the adolescence phase. The study results showed a statistically significant correlation between the attribution styles of the good events with the extroversion and emotional equilibrium; as well as a negative statistically significant correlation between the attribution style of the negative events and the extroversion and emotional equilibrium. The results showed further that the adolescent students’ causal attribution of the good events mediates the relation between needs satisfaction and the emotional equilibrium trait,
Khodayarifard, et al (2006) conducted a study aimed at exploring the relation between the attribution styles and anxiety trait. The results indicated a weak relation, but not statistically significant between the attribution styles and the anxiety trait. In addition, females were more anxious as compared to the males. The study further showed a strong correlation between the attribution styles and anxiety trait with the females, while no such correlation was found with the males. Also, older students tend to attribute the negative events to internal factors, and obtained higher scores than the females on the attribution styles scale in its negative form.

Statement of the problem
The study problem is represented in identifying the correlation between the attribution styles and personality traits with the university students. More specifically, the study problem is confined in answering the following questions:
- RQ1: What are the prevalent attribution styles among the Hashemite University students? And are these styles different in success cases than those in failure?
- RQ2: Do attribution styles differ by student's gender (male, female), by the academic specialization (faculties of science, faculties of humanities)?
- RQ3: Is there a statistically significant relationship between the positive attribution style and personality traits (extroversion, introversion, excitement, equilibrium)?

Study Importance
Many previous Arabic studies were carried out, which addressed the concept of the causal attribution of success and failure and its relationship with many of the other personal variables. But the theoretical importance of this study lies in its subject modernity, and the need to research it. It is anticipated that the study will add results to the scientific knowledge in this area. Thus, the theoretical importance of this study emerges from that it attempts to explore the prevalent attribution styles among the university students, and identify the difference in these styles in case of success from those in case of failure, as per the gender and educational specialization variables. The study further showed the correlation of the attribution styles with the personality traits.

Methodology
Participants
The study population consisted (20524) of all the BA degree stage male and female students in the Hashemite University who were enrolled in the second semester of the academic year 2011/2012. The study sample consisted of (612) male and female students who were randomly chosen. Eight sections were randomly selected out of the sections providing courses of the supporting humanities department, as well as the basic sciences department during the second semester if the academic year 2011/2012.

Instruments
Participants completed measures of attribution styles and personality traits. Each is described are following.

Attribution Styles Scale (ASS):
Portrait attribution style scale was used (study success and failure) which was developed by Al-Safi (2000). The scale consists of (42) items distributed over six attribution domains:
- Ability: represented by 7 items (1, 13, 23, 25, 30, 35, 39).
- Effort: represented by 7 items (2, 7, 12, 14, 26, 31, 36)
- Study Courses: represented by 7 items (3, 8, 15, 21, 27, 34, 40)
- Teacher: represented by 7 items (4, 9, 16, 22, 28, 37, 42)
- Luck: represented by 7 items (6, 11, 18, 20, 24, 33, 38).
- Mood: represented by 7 items (5, 10, 17, 19, 29, 32, 41).

Each item has a response grading consisting of five grades: Fully Applicable (5 grades), Applicable (4 grades), Applicable to some extent (3 grades), Inapplicable (2 grades) and Fully Inapplicable (1 grade). The arbitrators' validity was calculated by presenting it to a number of educational psychology, mental health, at the department of psychology, faculty of education and faculty of teachers in Saudi Arabia. The scale vocabularies and aspects were provided to them with the setting of the procedural definitions thereof. According to the directions and views of the arbitrators, some items were deleted.
The reliability coefficient was also calculated by reapplying the scale after a time interval. The researcher found that the correlation coefficient among their grades in the first and second times in terms of success and failure attribution was (0.81) and (0.77), respectively.

**Eysenck Personality Scale**

Eysenck personality scale (Eysenck and Eysenck, 1974) was employed. This scale is widely used by many of researches in the Jordanian setting such as: Shihab (1993), Al-Halasa (1996). The scale consists of (57) items that measure two of personality dimensions. First dimension was (extroversion-introversion) with (24) items to measure, given the following numbers: 1, 3, 5, 8, 10, 15, 17, 20, 22, 25, 27, 29, 32, 34, 37, 39, 41, 44, 46, 49, 51, 53 and 56.

The second dimension (equilibrium-passion) with (24) items to measure, given the following numbers: 2, 4, 7, 9, 11, 14, 16, 19, 21, 23, 26, 28, 31, 33, 35, 38, 40, 43, 45, 47, 50, 52, 55 and 57). The remaining items (n=9) were to measure lying were given the following numbers: 6, 12, 18, 24, 30, 36, 42, 48, and 54), with the responses to these items are "Yes" or No".

The appropriate response takes one grade and the inappropriate takes zero grade, the range of the individuals' grades on each of the personality dimensions between (0-24), with 13 and more indicating the first dimension of extroversion, and 12 and less indicating the same dimension of introversion.

As for the second dimension (equilibrium-passion), score 12 and more indicated the person's tendency toward passion, while 13 and less indicated tendency toward equilibrium. Items measuring lying using Eysenck scale, were given 5 grades as a maximum grade to accept the interviewees' responses, and those obtaining more than 5 grades were excluded.

Scale developer indicated that he carried out the validity of the collateral construction by comparing the results of his list with the those of Modsley's, and found them enjoying high validity significance, without mentioning any quantitative value. Al-Qudah, (2006) also presented the scale items to a number of professionals at Mutah University, and he relied on the consensus (80%) of 7 arbitrators, and all the items were approved because they all overran the 80% test limit.

Reliability also was approved by a number of researchers, and the scale developer calculated the reliability coefficient through retesting, and found it ranging between (0.84-0.94) (Eysenck & Eysenck, 1974). Furthermore, Al-Husseini (1993), calculated the Arabized version of the reliability coefficient, which amounted (0.80). Al-Halasah (1996) concluded the list reliability significances through retesting which ranged between (0.74-0.81). For the purposes of the current study, the researcher was satisfied with the reliability significances which the above mentioned two researches obtained, based on the fact that both coefficients were almost equal.

**Data Collection**

After acquiring the instructor permission, the questionnaire administrated was during regular class periods to student in the second semester of the 2011-2012 academic year. The students received written instruction that specified the purpose of the study and explained the procedure followed while responding to the questions. In particular, the students were told that there were no rights or wrong response. Students asked to return the questionnaires to the class instructor who passed them it on to the researcher.

**Data Analysis**

The data collected from all participants were coded, entered onto the SPSS spreadsheets, and analyses using software package SPSS version 17. Descriptive statistics for all variables in this study were examined using SPSS frequencies. The minimum and maximum values of each item were examined for accuracy of data entry by inspecting any out-of-range values. No out-of-range values were found. Missing subjects were not detected either. The results of the study are addressed by each objective.

**Results and Discussion:**

RQ1: What are the prevalent attribution styles among the Hashemite University students? And are these styles different in success cases than those in failure?
For answering this question, the means and standard deviations (M's and SD's) were calculated for the scale of positive and negative attribution styles of the responses of the study sample, as shown in Table (1).

Table (1) Means and SD's of Responses of the Study Sample Individuals on the Positive and Negative Attribution Styles

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Attribution Style</td>
<td>22.90</td>
<td>3.06</td>
</tr>
<tr>
<td>Negative Attribution Style</td>
<td>21.88</td>
<td>4.27</td>
</tr>
</tbody>
</table>

Table (1) indicates that the mean of positive attribution style scale degrees among the Hashemite University was (22.90). Meantime, the mean grade of the negative attribution style scale among those students was (21.88). In other words, the students tend to use the positive rather than the negative attribution style. This result may be due to that the study sample had reached a realistic and objective perception stage of the teaching-learning situation, as well as the factors that actually contribute to their success and failure. It seems that this has a very close relation with their passion experiences, their self-perception, and their self-conception. The use of the positive attribution style enhances self-confidence and self-esteem, and contributes to the development of a more positive self-conception than the use of the negative attribution style.

For answering the second part of the questions, the M's and SD's were calculated on the dimensions of the positive and negative attribution style, separately, as shown in Table (2).

Table (2) Means and SD's of the Study Sample Individuals' Responses on the Dimensions of the Positive/Negative Attribution Styles

<table>
<thead>
<tr>
<th>Scale</th>
<th>Dimension</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Attribution Style</td>
<td>Ability</td>
<td>25.13</td>
<td>4.14</td>
</tr>
<tr>
<td></td>
<td>Effort</td>
<td>24.16</td>
<td>4.79</td>
</tr>
<tr>
<td></td>
<td>Study Courses</td>
<td>22.36</td>
<td>5.39</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>21.87</td>
<td>4.49</td>
</tr>
<tr>
<td></td>
<td>Luck</td>
<td>21.23</td>
<td>5.28</td>
</tr>
<tr>
<td></td>
<td>Mood</td>
<td>22.65</td>
<td>4.37</td>
</tr>
<tr>
<td>Negative Attribution Style</td>
<td>Ability</td>
<td>23.42</td>
<td>5.15</td>
</tr>
<tr>
<td></td>
<td>Effort</td>
<td>20.77</td>
<td>5.40</td>
</tr>
<tr>
<td></td>
<td>Study Courses</td>
<td>21.14</td>
<td>4.84</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>22.06</td>
<td>5.32</td>
</tr>
<tr>
<td></td>
<td>Luck</td>
<td>22.84</td>
<td>5.59</td>
</tr>
<tr>
<td></td>
<td>Mood</td>
<td>20.91</td>
<td>5.28</td>
</tr>
</tbody>
</table>

Table (2) illustrates that the score mean of the positive attribution style dimensions were varying, with ability at the first rank with (25.13) mean, followed by effort (24.16), mood in the third rank with (22.65) mean, study courses ranked fourth with (22.36), teacher ranked fifth with (21.87) mean, and finally luck dimension ranked last with (21.23) mean.

On the other hand, Table (2) further showed that the negative attribution style dimensions were also varying. Similar to that of the positive, ability ranked first with (23.42) mean, followed by luck with (22.84) mean; teacher dimension ranked third with (22.06) mean, study courses ranked fourth with (21.14) mean, mood ranked fifth with (20.91) mean, and finally, effort ranked last with (20.77) mean.

Such results could be explained by that students ascribe the use of the positive attribution style to the effort and then the ability dimensions. Effort is an instable, internal factor, that could be controlled by students, and student spends more efforts in memorizing and learning their courses throughout the year to achieve success. The effort was followed by the ability dimension which indicates the understanding, concentration, attention and student's skill in prioritizing his/her thoughts and linking between subjects and thoughts, then extracting the most important points. The external, instable and uncontrollable attribution dimensions ranked last.
As for students attributing their use of the negative attribution style to the ability dimension, they have much in common with the use of the ability dimension of the positive attribution style. The other dimensions of the negative attribution style are stable or unstable, external controllable or uncontrollable factors. They attempt to impute the negative dimension far off their selves, rather they attribute it to the teacher, luck and study courses dimensions, an attribution, in turn, considered a defensive mechanism to maintain the self.

RQ2: Do attribution styles differ by student's gender (male, female), by the academic specialization (faculties of science, faculties of humanities)?

To answer this question, means and standard deviations were calculated for the grades of the study sample individuals on the Web Scale of both the positive and negative attributions as a whole, as shown in table (3).

Table (3) Means and SD's of the Responses of the Study Sample Individuals on the Positive and Negative Attribution Styles by the Two Variables: Gender and Academic Specialization.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Gender</th>
<th>Academic Specialization</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Attribution</td>
<td>Males</td>
<td>Humanities</td>
<td>23.76</td>
<td>3.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific</td>
<td>21.98</td>
<td>2.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>22.87</td>
<td>2.87</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Humanities</td>
<td>24.51</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific</td>
<td>22.37</td>
<td>2.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>23.44</td>
<td>3.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Academic Specialization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Attribution</td>
<td>Males</td>
<td>Humanities</td>
<td>21.34</td>
<td>4.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific</td>
<td>22.04</td>
<td>3.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>21.69</td>
<td>4.27</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Humanities</td>
<td>22.75</td>
<td>4.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific</td>
<td>21.96</td>
<td>4.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>22.36</td>
<td>4.36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Academic Specialization</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (3) indicates virtual differences in the level of the grades of positive and negative attribution styles among the Hashemite University students between the humanities and scientific colleges' students. The mean of the scientific college's students' grade mean on the positive attribution scale was (22.18) and the mean of the scientific college's students' grade mean on the negative attribution scale was (22). On the other hand, the mean of the humanities colleges students' grade mean on the positive attribution scale was (22.14) and the mean of the humanities colleges students' grade mean on the negative attribution scale was (22.05). Table (3) also shows virtual differences in the grade level of the positive and negative attribution style among the Hashemite University between the male and female students. The grade means of the male and female students' positive attribution style were (22.87) and (23.44), respectively. The male and female students' negative attribution style grade means were (21.69) and (23.36), respectively. In order to know whether or not these virtual differences in the statistically significant differences in the means that could be ascribed to the specialization and gender, we conducted analysis of duo variance of the (2x2) type of the positive and negative attribution styles scale, as shown in table (4).

Table (4) (2x2) Duo Variance Analysis of the Positive and Negative Attribution Styles.

<table>
<thead>
<tr>
<th>Variance Source</th>
<th>Total Squares</th>
<th>Freedom Degree</th>
<th>Squares Mean</th>
<th>F Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialization</td>
<td>122.9.748</td>
<td>1</td>
<td>1229.748</td>
<td>4.309</td>
<td>0.040*</td>
</tr>
<tr>
<td>Gender</td>
<td>402.208</td>
<td>1</td>
<td>402.208</td>
<td>1.406</td>
<td>0.238</td>
</tr>
<tr>
<td>Interaction</td>
<td>273.128</td>
<td>1</td>
<td>273.128</td>
<td>0.957</td>
<td>0.330</td>
</tr>
<tr>
<td>Error</td>
<td>41092.565</td>
<td>608</td>
<td>285.365</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2715479.750</td>
<td>612</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• at (α=0.05) significance level.
Table (4) shows statistically significant differences at (α=0.05) significance level between the humanities and scientific colleges students in the positive attribution style in favor of the humanities. The means further indicate that the scientific colleges' students tend to use the negative than the positive attribution style as compared to the humanities colleges students. This result may be explained by that the scientific college's students suffer emotional instability and are more worried than the humanities studies' students, whether at the time of memorization or examinations. This, in turn, may be due to the difficulty of the scientific specializations as compared to the humanities specializations. Table (4) also illustrates that there are no statistically significant differences between male and female students in the positive and negative attribution style. A result that could be explained by that both male and female students' use of the positive and negative attribution styles may be close.

**RQ3: Is there a statistically significant relationship between the positive attribution style and personality traits (extroversion, introversion, excitement, equilibrium)?**

To answer this question, the Pearson Correlation Coefficient values were calculated between the positive attribution style, as a whole on one hand, and Eysenck scale on personality with its different dimensions too, as shown in Table (5).

**Table (5) Correlation Coefficients between the Positive Attribution Style and the Personality Traits on Eysenck Scale of Personality.**

<table>
<thead>
<tr>
<th>Scale/Dimension</th>
<th>Extroversion</th>
<th>Introversion</th>
<th>Equilibrium</th>
<th>Passion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Attribution</td>
<td>*0.18</td>
<td>-0.001</td>
<td>0.050</td>
<td>-0.043</td>
</tr>
<tr>
<td>Negative Attribution</td>
<td>0.005</td>
<td>0.153</td>
<td>0.012</td>
<td>-0.064</td>
</tr>
</tbody>
</table>

- Statistically significant at (α=0.05) significance level.

Table (5) illustrates that the correlation coefficients between the positive and negative attribution styles on the personality traits were not statistically significant, except for on positive correlation between the positive attribution and extroversion at (α=0.05) significance level. This could be explained due to the fact that the extrovert individual's traits and characteristics, who is an adventurous, likes risks, impulsive, tends not to have control on his/her feelings, takes up the available opportunity, takes it easy. On the other hand, he/she is a social person with many friends, seeks relationships with others, seeks to talk with them, always having readily available answers to the questions, longs for excitement, tends to optimism and fun, fond of humor, his/her view of the self, others and life is positive, lives with simplicity. All these traits contribute or help in the positive attribution style. This was noted by Mitchell, (1989) who concluded that the personality styles are positively correlated with the attribution styles (reliability, stability and comprehensiveness) for attributing positive events. On the other hand, she found that they are negatively correlated with negative attribution event, and that the personality taints (effectiveness, extroversion, emotional equilibrium) are correlated in a statistically significant relationship with the attribution styles. Her findings are in consistent with those of Cheng and Furnham (2001), who concluded that there is a statistically significant relationship among the positive/negative attribution styles with the extroversion and psychosis. The study is also consistent with the findings of Rigby and Huebner (2005) on the existence of a statistically significant relationship between the good event attribution style with extroversion and emotional equilibrium; as well as a negative statistically significant relationship between the negative attribution styles and extroversion and emotional equilibrium.

**Recommendations**

- Preparation of remedial attribution programs based on the modern psychotherapy, especially for the attribution elements of the students which we can make control on.
- Preparation of guidance and awareness publications by the counseling offices at the student affairs deanships, that will urge students to spend more effort, and guide them on how to memorize and overcome study obstacles.
- Conducting other studies that deal with the attribution styles and their relationship with psychological, cognitive and social variables other than those addressed in this study.
References


Al-Safi, A. (2007). Study Success and Failure Attribution and its Relationship with Accomplishment Motivation. (A study on a sample of both the educationally top and lagging students in the City of Abha, Saudi Arabia); Umm-ul-Qura University Educational, Social and Humanitarian Journal, 12, (2) 79-106.


