

The Relationship between the Methods of Decision-making and the Locus of Control among the Students of Princess Alia University College

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Abstract

The objective of this study was to investigate the relationship of the Locus of control with the decision-making methods among the students of Princess Alia University College, it also aimed to investigate the decision-making methods used and the locus of control among them. The study sample consisted of (337) randomly selected students from the different academic levels in the first semester of the academic year 2015 / 2016. To achieve the objectives of the study, the researcher used the locus of control and the decision making scales. The results of the study indicated that the percentage of female students who used the hasty decision-making was high, as this percentage was (73.6%), while the percentage of female students who used a hesitant decision-making was slightly higher than those who used the thoughtful decision-making. The results also indicated that the percentage of female students with an external locus of control was very high at (92%). There are also significant differences between the students according to the academic year and the decision-making method in favor of the third year level students. The results indicated that the percentage of students with internal locus of control and using the hasty method of decision making was higher than that of students who use the external locus of control, and the percentage of female students with external and hasty decision-making was high, while no internal female student was hesitant in decision-making. The results also indicated statistically significant differences between the students according to the locus of control and the decision method used in favor of students with external locus of control.

Keywords: Decision Making Methods, Locus of Control, Princess Alia University College

Introduction

Decision Making

An individual passes through situations in his daily life that require him to make one or more decisions, decision-making process is an important process in every moment of life. Success in making many decisions depends on the extent of the individual's confidence in his abilities that helps him to move on with those decisions. The decision-making process is part of the decision making process. Every time he passes there are a number of decisions that require him to take from them what is simple, including what is linked to his life fateful, including what is at the level of the individual or groups or at the enterprise local and International level (Al-Tuwaijri and Al-Bari, 1997). It is an important human skill and has a strong and effective impact on the success and quality of life (Jarrah, 2004). This process has attracted the attention of many scientists. It has been studied by politicians, economists, administrators, psychologists and educators, and its definitions varied according to those who studied it. Jarwan (2005) defined as a complex thought process aimed at selecting the best alternatives or solutions available to the individual in a particular position to reach the desired goal. As Young defines it as a process of perception that includes individual and social phenomena and is based on facts and values that lead to the choice of one alternative, Harris also referred to in (Khalaf, 2005) has two definitions: study and identification the choice of alternatives depends on the values and preferences of the decision maker, which is the choice of decision that best suits the goals, wishes, preferences and better lifestyle. As well as accept the degree of uncertainty and doubt about the alternatives available to the surveyors by choosing a reasonable alternative between them. Decision-making is one of the most complex tasks of thinking, which requires mixing different types of thinking skills, including skills to generate, clarify, and evaluate ideas. It also requires the selection and use of information that is readily available (Kiwani, 2006). The researchers agree on the specific meaning of decision-making that there are a number of alternatives that need to be chosen to choose the most appropriate ones. Hence, the process of differentiation is the crux of decision-making (Tawfik and Salman, 1995). It is primarily a systematic process of thinking that follows organized steps and classified it as

complex reflective process (Al-Omari, 2000).

Habib (1997) points to three main trends in decision making: the first descriptive model where the focus is on describing the steps that are followed by individuals when dealing with the problem or the decision-making position to reach the best decision while the second trend focused on what helps the individual to reach a good decision in decision-making, while the third trend focused on the disclosure of the methods preferred by individuals in decision-making (Khalaf, 2005).

Decision-making requires a seven-step process, as Janis & Man (1997) points out: examining a wide range of alternatives, and a survey of the objectives that can be achieved by the resolution. Assess the risk of selecting any of the existing alternatives and search for information related to existing alternatives. And accommodate new decisions. And re-examine the results of all known alternatives to decisions. And determine the preferred conditions for the application and implementation of the actions taking into account the existence of an alternative emergency plan.

It is possible that the decision-maker can take these steps to enable him to choose the right alternative or take ready decisions that prove their effectiveness before they do not raise problems or inability to defend or warn exaggerated, and thus saves himself time and effort and conflicts that can be caused to him.

The theoretical literature of the decision-making phase model has identified two stages of decision-making; the first is research, investigation, information gathering, goal setting, values, generation and evaluation of alternatives. Second, the test and application is intended to select a preferred type of actions and to address the application of this test. In other words, the decision-making process can be applied in two phases: Friedman (1996) Thoughtful thinking: It is intended to guide mental abilities to identify and define the problem and develop alternative solutions and it includes three levels, low level: Includes lack of interest and thinking about the problem. Moderate level: refers to the reliance on the views of others, and superficial thinking about the problem and the solutions that exist. The high level: and refers to serious thinking about the problem to get to understand and develop different alternatives to solve and evaluate each alternative. Commitment: refers to the access to a specific, objective and consistent option to one of the alternatives that have been developed in advance: Low: indicates that no alternative is chosen from the available alternatives. Medium: indicates the choice of an alternative from the alternatives available but the degree of commitment is low. While the height is: indicating that an alternative of the available alternatives has been selected and the degree of adherence to it is high (Leong, Leong & Hoffman, 1987). Decision-making techniques are closely related to the concept of cognitive methods in decision-making (Thunholm, 2004), which is the preferred method of receiving and manipulating information, and translating that information into performance commensurate with the nature of decision-making (Riding, 1991) thus reflecting the way in which information is received, processed and taking the appropriate decision, the two terms were used as synonyms by researchers who studied the decision-making process (Al-Enezi, 2007).

The scholars differed in their determination of decision-making methods. Hareson and Pramson (1982) found that there are five decision-making methods: structural, ideal, analytic, real and practical. Individuals can be classified by their use of one or more of these methods, the individual who uses one method is called one-dimensional, the individual who uses two methods is called two-dimensional, while the individual uses these methods randomly and diversifies in their use and classifies his decision is called flat. While Keirsey & Bats reffered to in (Khalaf, 2005) have presented two modes of decision-making, namely emotional and rational, the individual who in decision-making focuses on the effects of this decision on others, is classified as emotional, but the one who focuses his attention on the objective and logical elements of the decision is classified as rational. While Friedman (1996) divided the methods of decision-making in the study of university students into three different methods namely (thoughtful, hasty and hesitation), according to the thoughtful thinking and commitment dimensions, the individual who is classified as a thoughtful decision-maker has the most effective decision-making style. He tends to use logical and planned strategies, clarifying the problem by collecting enough information about it, developing alternative solutions, weighing these solutions, and spends enough time to make the decision and is responsible for taking this decision (Leong, Leong & Hoffman, 1987).

The hasty approach to decision-making usually tends to rely on the use of intuitive or spontaneous strategies and is more motivated to make decisions and his decisions are emotional and based on his feeling at that moment that his decision is correct and does not indicate how he made his decision. However, he is responsible for the decision he has taken (Al-Tarawneh, 2004). Hence, their decisions do not depend on the careful examination of the alternatives and their decisions appear to be sudden, while the hesitant approach is seriously involved in the search for the causes of the problem and the possible solutions, but does not have the ability to make a firm and stable decision about the problem, he owns a high level of thinking and low level of commitment (Garitan, 2007).

Locus of Control

The concept of the Locus of Control (Rotter, 1996) is cited as one of the most important concepts

emphasized in his Social Learning theory, which he formulated on the basis of two large schools of psychology, the Behavioral School and the Cognitive School, His theory is also compatible with one of the aspects of cognitive motivation, namely, the direction of expectation - value, Rotter (1954) finds that individuals' preferences for events are determined by four factors and thus the behavior of individuals can be predicted according to these factors: first, the value of the desired reinforcements; this refers to the degree of preference of the individual for a certain reinforcement among several reinforcements the individual usually compares the reinforcements he gets from one position to another. Second, subjective estimates for the purpose of obtaining a specific type of reinforcement without other species are usually built on expectations based on past positions and experiences. Thirdly, the expectations are determined by the factors of the situation, since the individual's expectations of obtaining reinforcement depend mainly on comparison with similar positions encountered in the past. Fourthly, the reactions in the new situations depend on the generalized expectations developed through previous experiences and these expectations of behavior, even if the situation faced by the individual, he did not face the same as before (Petri & Govern, 2005).

An example of a generalized expectation is the extent to which the individual believes in the internal-external reinforcement, since there are differences among individuals as to who controls the source of reinforcement, some of whom feel that his behavior is responsible for the reinforcement he is receiving, others believe that the promotion of their behavior is controlled by external forces, individuals who are classified as having an internal locus of control believe that they control their actions and behavior (Petri & Govern, 2005), and thus realize that their reward or Punishment is the product of their behavior and they are responsible for what they do (Nasser, 1994). Individuals who classify their external locus of control believe that there are external forces and influences that control their behavior, such as chance, luck, fate, and people with strong influence, so that their reward or punishment is uncontrollable (Jibril, 1996). It is clear from the above that the locus of control reflects the beliefs in which the individual believes about the factors that control the results of his actions and the events in which he is going through (Habashneh, 1999). The locus of control also indicates the degree to which the individual accepts his personal responsibility for what happens to him (Gharaybeh, 2002). Therefore, one of the important dimensions of the human personality and the recognition of it in individuals can be understood by their personalities, their way of perceiving and thinking about their life situations (Zoghul, Smadi, and Al-Talafha, 2008).

Previous studies

In order to study the impact of the locus of control on individuals' preferences for the existence of information when making decisions regarding their healthy lives, Hashemite & Fukuhara (2004) conducted a study its results indicated that individuals with internal locus of control searched for information to reach a decision, their beliefs about their health are also less dependent on the opinions and influences of others, while individuals with an external locus of control are more likely to believe in the opinions of others, taking decisions made by others.

In order to identify the relationship between the locus of control and decision-making among nursing students, Naeves (1989) conducted a study showing that the locus of control is an important factor in decision-making and that students with internal locus of control have the ability to make independent decisions without relying on the opinions of others. The findings also indicate that individuals with an external locus of control can be professionals, assuming responsibility in the nursing profession and it is attributed to the fact that a large part of nursing work is through teamwork. In addition, the responsibility in medical decisions is closely related to the physician responsible for the patient.

In a study on the impact of decision-making on the locus of control and professional planning conducted by (Bartsch & Hachett, 1997), the results of the study indicated that members of the experimental group change their locus of control from external to internal and they are doing many actions to solve the problems they face in their career.

Delorenzo (2000) examined the relationship between collaborative education and self-efficacy in decision-making and locus of control. The results of the study indicated that the engineering and computer students have internal locus of control.

It is clear from the studies on the relationship between the locus of control and decision-making that there is a significant relationship between the locus of control and decision-making (Naeves, 1989; Kishor, 1981), and that individuals with an internal locus of control were more effective in decision-making because the correlation was statistically significant (Hashemite & Fukuhara, 2004; Naeves, 1989 & Lifshitz, 1973). It is clear that none of the studies dealt with has been concerned with the classification of individuals according to decision-making (thoughtful, hesitant, hasty) and the locus of control (internal / external), this is what distinguishes this study from other previous studies as well as the absence of Jordanian studies dealt with this study dimensions.

The problem of the study

Individuals are different in their decision-making methods according to their level of thinking about the problem they face. The decision-making process is related to the personal variables of the decision maker. The locus of control is an important variable that explains human behavior in different situations. Smith (1989) points out that individuals' perception of locus of control has a significant impact on psychological adjustment and mental health, and it seems that the classification of the individual that the locus of control is internal or external gives us an indication of his method of decision-making, the person whose locus of control is internal tends to take a thoughtful decision. On the other hand, the person whose locus of control is external tends to make a hasty decision without thinking in depth, since it depends on luck and chance in the face of confusing situations and therefore the problem of the study is to investigate the relationship of the locus of control with the decision-making methods among the students of Princess Alia University College, and more specifically this study tries to answer the following questions:

1. What are the types of decision-making methods (hasty, hesitant, and thoughtful) among students of Princess Alia University College?
2. Are the decision-making methods (hasty, hesitant, thoughtful) among the students at Princess Alia University College differ according to the academic year?
3. What is the type of locus of control (internal / external) among students of Princess Alia University College?
4. Does the locus of control (internal / external) differ among female students of Princess Alia University College according to the academic year?
5. Are the decision-making methods (hasty, hesitant, thoughtful) among Princess Alia University College students differ according to the locus of control (internal / external)?

Objectives of the study

- Detection of the decision-making methods (hasty, hesitant, thoughtful) among the students of Princess Alia University College.
- Knowing how different decision-making methods (hasty, hesitant, thoughtful) are among students of Princess Alia University College.
- Detection of the type of locus of control (internal - external) among the students of Princess Alia University College.
- Knowing the difference between the locus of control (internal / external) among the students of Princess Alia University College.
- Knowing the relationship between the decision-making methods (hasty, hesitant, thoughtful) and the locus of control (internal - external) among the students of Princess Alia University College.

Significance of Study

The importance of the study stems from the importance of decision-making in the lives of individuals of different ages and in the lives of students in particular and its impact on their ability to adapt to the environment in which they live and with the surrounding circumstances and experiences. And that it is examining an important factor influencing the development of an individual's ability to make decisions and a source of individual differences in decision-making, as the age of the students of Princess Alia University College is an important and influential period in shaping their personality and future life. By reviewing the personal characteristics of individuals in every decision-making method, it is clear to us that if the society is to progress, it is necessary to increase the proportion of its members who use the thoughtful method of decision-making, which will positively affect their lives in various aspects as well as through their research the relationship between the decision-making style and the quality of the locus of control to stand on it especially since the university student needs daily to take multiple decisions, including what is at the level of personal life or academic life under the system of credit hours adopted by the university, as the student to choose the material that he will study each semester and choose its instructor and the quality of activities that he will attend both inside or outside the university. The importance of the study is also highlighted by:

1. Identify the decision-making methods of Princess Alia College students and find out if there is a more prevalent style in decision-making methods since university students possess effective decision-making techniques that will improve their performance and thus give them a leading role in society. Thus contributing to the preparation of training programs to develop individual abilities to use the thoughtful method of decision-making.
2. Detecting the internal barriers that can prevent effective decision-making, which the locus of control is one of it and the most important one, and it is possible to predict the individual's failure or success in making effective decisions and contribute to the preparation of training programs to

- help the students to make their locus of control internal as this is considered one of the important aspects of the personality.
3. Contribution to fill the lack of studies that dealt with the relationship between the locus of control and decision-making in Jordan and the Arab world in general as the current study is one of the few studies in this area according to the researcher after conducting a research in the majority of the periodicals located in the libraries of Jordanian universities.
 4. The majority of the studies that dealt with decision-making in the Arab world were dealt with as an administrative process and did not address it as an intellectual process and therefore there is an urgent need to highlight this.
 5. This study can help guide staff at the extension centers to build training programs for students to guide them to have internal locus of control and users of thoughtful method of decision-making.

Conceptual and procedural definitions:

The following are the procedural definitions of concepts that will be repeated in the present study:

Decision-making: is the individual method the individual follows to decision-making that represents the individual's way of receiving and responding to decision-making skills, depending on the different levels of thinking and commitment dimensions measured by (Freidamn,1996) which includes sub-measures of decision-making :

- a. **Thoughtful method:** this method indicates that the individual can reach a specific, clear and constant decision, after a deep and serious reflection of the problem and its solutions, and expressed in terms of the degree that the student gets on the scale used in the study.
- b. **Hasty method:** It means that individuals make their decisions after a little thinking, but they show strong commitments to what they decide, and expressed in terms of the degree that the student gets on the scale used.
- c. **Hesitant method:** this method refers to the individual who spends a lot of time thinking about the problem and its solutions, but he does not have the ability to make a firm and stable decision about the problem, and is expressed in terms of the degree obtained by the student on the scale used.

Locus of control: refers to the degree to which the individual accepts his personal responsibility for what happens to him and attributing it to powers that are outside his control and cannot be adhered to. This is expressed by his performance on the internal-external Roter Scale of the locus of control which was developed for the Jordanian environment (Tubasi, 1994; Dwaikat, 1998).

- a. **Individuals with internal locus of control:** They are the individuals who attribute what happens to them to their own behavior and therefore they see that they can control the sources of their own strengths, and it is procedurally expressed in terms of the degree that the student gets on the scale used in the study.
- b. **Individuals with external locus of control:** They are individuals who consider that what happens to them is the result of chance, luck or other factors, and they see that they cannot control or understand it, and therefore are unable to control the sources of reinforcement by themselves, and it is procedurally expressed in terms of the degree obtained by the student on the scale used in the study.

Study Methodology

The study sample

The sample of the study consisted of (337) female students from Princess Alia University College from the undergraduate stage during the first semester of the academic year 2015/2016. The sections were chosen using the random stratified method.

Study Tools

To achieve the objectives of the study and to answer its questions, the researcher used two tools:

First: Scale of decision-making methods

The study used the (Friedmann, 1996) scale for decision making, after being adapted to suit the Jordanian environment. This measure consists of (17) items of Lekert hexagonal sections, the scale include three dimensions: thoughtful, hesitant, hasty.

Validity of the Scale

Friedman (1996) noted that he used several scales to measure the validity of decision-making methods, namely content validity, factorial validity, and validity through groups. For the purposes of the present study, the researcher presented the paragraphs of the scale to (10) members of the teaching staff in the fields of

measurement and evaluation, educational psychology and educational management, and asked them to judge the clarity of the language of the items and the extent of its belonging to the dimensions of decision-making methods and the wording of some items has been modified in accordance with the views of some arbitrators.

Reliability of the scale

Friedman used the alpha Kronbach method for internal consistency to extract reliability coefficients and the sub-reliability coefficients: hesitant (0.79), hasty (0.80) and thoughtful (0.83). This was an appropriate indicator of the samples. It was considered acceptable signs of reliability for the purposes of the study.

Second: Locus of Control Scale

Rotter (1967) scale for the internal-external locus of control was used; it has been codified to suit the Jordanian environment (Barhoum, 1979). This scale consists of (29) pairs of items, (23) pairs of which express internal- external trends towards reinforcement sources, and (6) pairs of them were placed for camouflage. The method of answering the items of the scale is that the respondent chooses on the scale one of the two items of each pair which he considers to be more proportional to his attitudes, the examined is given one score if he chooses the paragraph that expresses the external attitude while he is given zero for the paragraph expressing the internal attitude. Thus, the individual's score on the scale is the total number of degrees that express his external attitude. Therefore, the students are classified according to their performance on the scale into two categories: the first category: Includes individuals with internal locus of control, and the second category includes individuals with the external locus of control, who get the degrees of (10-23) degrees.

Validity of the Scale

Router (1967) found the validity of the scale by finding a correlation with other estimation methods that measure the same variable as the questionnaire and the Likert scale and estimates by the interview. The factor analysis and analysis of the items showed a high consistency for a collective measure such as this measure (Rotter, 1972, p. 293). Barhoum (1979) has verified the validity of the scale in its Arabic form by presenting the items to five arbitrators of the instructors of the Department of Psychology at the Jordanian University, the researcher asked the arbitrators to put the word internal or external to the right of each paragraph in the space allocated to it, he found that (35) items have been agreed upon by all arbitrators and considered that it has the concept validity with a percentage of (100%) while the rest of the items (11 items) the support of four arbitrators out of five, i.e. a percentage of (80%) it was also considered valid with a high degree, one item was agreed upon (60%), the last item was supported by one arbitrator, Barhoum amended its wording and won the support of all the arbitrators presented to them (Barhoum, 1979). For the purposes of the current study, the researcher presented the items of the scale to (10) members of the teaching staff in the fields of measurement, evaluation and educational psychology, and asked them to judge the clarity of the language of items and the extent of belonging to the dimensions of the locus of control and reached the degree of approval (90%).

Reliability of the scale

The signs of the reliability of the scale in its original form were extracted by applying it to multiple samples in different states in the American center and re-testing on a sample of university students in the United States where the results ranged between (0.49-0.83), the correlation coefficients extracted by Coder Richardson (0.70) for females and (0.73) for the whole sample were obtained. The correlation coefficients obtained by the split and corrected method of the Spearman Brown equation for the same sample were (0.65) for males and (0.79) for females and (0.73) for the whole sample the correlation coefficients ranged from (0.55 to 0.78) (Tobasi, 1994).

Barhoum (1979) extracted the reliability coefficient by re-applying the scale to a sample of (50) male and female students of different faculties at the University of Jordan. The period between the application of the test and its reapplication was seven days, the correlation coefficient reached (0.78), this result is acceptable for the research purposes. In addition, Maqableh and Jacob (1994) extracted the reliability of the scale by repetition using the Kronbach alpha formula on the sample of the university students, it consisted of (40) students. The coefficient of reliability was (0.74) and the value of Kronbach Alpha was (0.72). For the purposes of the present study, it was ascertained that the reliability of the scale was established using the α -Kronbach equation for internal consistency. The reliability coefficients of the scale (0.82) were returned and the signs of reliability were acceptable for the purposes of the study.

Study determinants

- The results of this study are discussed in the framework of its procedures as its population, sample and the method of its selection. It is also determined by the measurement tools used in terms of their validity and reliability and the statistical methods used in analyzing the data.

- The population and sample of the study were limited to the students of Princess Alia University College enrolled for the first semester of the academic year 2015/2016.
- The results of this study depend on the seriousness of the study sample members in answering the items of the study tools used.

Study variables

The current study includes two variables: the locus of control (internal - external) and the decision - making methods (thoughtful, hasty, and hesitated).

Results of the Study

The researcher reached the following results using suitable statistical methods

In order to answer the first question regarding the type of decision-making methods (hasty, hesitant, thoughtful) among students of Princess Alia University College, the percentage of female students was calculated according to their answer on the decision-making scale and table (1) illustrates this.

Table 1: Percentage of female students' numbers on the decision-making scale

Decision making methods	N	Percentage
Hasty	248	73.6%
Thoughtful	39	11.6%
Hesitant	50	14.8%
Total	337	100%

Table (1) shows that the proportion of female students who took decisions in a hasty manner exceeded the rest of the percentages, where this percentage was 73.6%, while the percentages of students who used a hesitant decision-making method were slightly higher than those who used the thoughtful decision-making method, where these percentages were 14.8% and 11.6% respectively.

As for the second question, which states: "Are the decision-making methods (hasty, hesitant, thoughtful) of the students of Princess Alia University College varied according to the academic year (first, second, third, fourth)? Only the percentage of female students in previous years was extracted depending on the decision-making method used (hasty, hesitant, thoughtful) and table 2 illustrates this.

Table 2: Percentage of female students' numbers according to the school year distributed according to the decision methods used

Academic year		1 st year	2 nd year	3 rd year	4 th year
Decision making methods	N	77	87	58	26
	Percentage	66.4%	74.4%	82.9%	76.5%
Thoughtful	N	11	16	8	4
	Percentage	9.5%	13.7%	11.4%	11.8%
Hesitant	N	28	14	4	4
	Percentage	24.1%	12.0%	5.7%	11.8%
Total	N	116	117	70	34
	Percentage	100	100	100	100

Table (2) shows that the highest percentage of female students who used the hasty decision-making method was for the third year students (82.4), where the percentage of students who used the hesitant method from the second and fourth years was (74.4%,76.4%), the percentage of female students who used the hasty decision-making method for first-year students was (66.4%) while the percentage of female students who used the thoughtful decision-making level was the highest for the second year students (13.7%), while the percentage of female students of the second and fourth year converged where it was (11.4%, 11.8%) respectively, while the lowest percentage of female students who used the thoughtful decision-making method for first-year students was (9.5%). As for the percentage of female students who used the hesitant decision-making method, table 2 shows that the percentage of first-year female students who used this method increased by (24.1%), while the percentage of second and fourth year students was (12% and 11.8%). The lowest percentage of students who used this method was for third year students (5.7%). To examine the differences between these percentages, the quasi-squared test was used and table 3 shows this.

Table 3: Kai square test to examine the significance of differences between previous ratios

Value	Df	Sig
14.128	6	*0.028
14.314	6	*0.026
7.58	1	**0.006

Table (3) shows that the differences between the percentage distribution of female students according to the academic year and the decision-making method were significant.

In order to answer the third question, which indicates the type of locus of control (internal and external) of the students of Princess Alia University College, the percentage of female students was calculated according to their locus of control and table (4) illustrates this.

Table 4: Percentages of Female Students by their locus of control

Locus of control	N	Percentage
Internal	26	7.7%
External	311	92.3%
Total	337	100%

Table 3 shows that the proportion of female students with an external locus of control was very high (92.3%), where this percentage was for female students having internal locus of control (7.7%) only.

To answer the fourth question, "Does the locus of control (internal / external) among Princess Alia College students differ according to the school year?" The percentage of the locus of control for each of the four study stages was extracted separately and table 5 shows this.

Table 5: Numbers and percentages of female students by school stage and locus of control

Academic year / Locus of control	1 st year	2 nd year	3 rd year	4 th year	Total
N	4	8	12	2	26
Internal ratio	3.4%	6.8%	17.1%	5.9%	7.7%
N	112	109	58	32	311
External ratio	96.6%	93.2%	82.9%	94.1%	92.3%
N	116	117	70	34	337
Total ratio	34.3%	34.7%	20.8%	10.1%	100%

Table 5 shows that the percentage of third-year students in their internal locus of control increased by (17.1%) compared to the second and fourth years (6.8% and 5.9% respectively). The percentage of first year students with internal locus of control decreased, this percentage was (3.4%). As for the external locus of control, the percentage of female students in the first, second and fourth years has increased where it was (96.6%, 93.2% and 94.1%) respectively, while the percentage of female students in the third year decreased where it was (82.9%). To examine the significance of the differences between this ratio, Kai square test was used to compare the significance of the differences, and table 6 shows this.

Table 6: Kai square test to examine the significance of the differences between the percentages of female students according to the academic year and the locus of control

Value	Df	Sig
11.992	3	*0.007
10.648	3	*0.014
4.637	1	*0.031

The table shows that all differences between the percentage of female students by year (1st, 2nd, 3rd and 4th) and their locus of control were statistically significant.

As for the fifth question of the study "Are the decision-making methods (hasty, hesitant, thoughtful) differ according to the locus of control (internal/ external) among the students of Princess Alia University College?" The percentages for the number of students with internal and higher locus of control were extracted according to the decision-making method used. Table 7 illustrates these ratios.

Table 7: Numbers and percentages of female students distributed according to the locus of control and decision-making

	Hasty	Thoughtful	Hesitant	Total
N	24	∴	2	26
Internal ratios	92.3%	∴	7.75%	100%
N	224	39	48	311
External ratios	72%	12.5%	15.4%	100
Total	N	248	39	50
	Ratio	73.6%	11.6%	14.8%

It is clear from table 7 above that the proportion of female students with internal locus of control who use the hasty method of decision making was higher than that of students who used the external locus of control. The percentages were (92.3% and 72%) respectively. The table also shows that the proportion of students with external and accelerated decision-making was high while there was no student with internal locus of control in the decision-making where this ratio was (12.5, zero) respectively.

Finally, it is clear from the table that the proportion of female students with external locus of control and hesitant decision makers was higher than that of female students with internal locus of control and hesitant decision makers, which was (15.4% and 7.7%) respectively. To examine the significance of the differences between these ratios, the Kai square test was used and table 8 shows this.

Table 8: Kai square test values to indicate the differences between the percentages according to the locus of control and the decision method used

Value	Df	Sig
5.571	2	*0.062
8.673	2	*0.013
3.485	1	*0.062

Table 8 shows that the differences between the percentages of female students by their locus of control and the decision-making method used were all indicative.

Discussion of the Results

The results indicated that the proportion of female students who took decisions in a hasty manner exceeded the rest of the percentages. The researcher attributed the current result to the age of the student, which is the stage of youth and this stage of the most important characteristics of impulsion and unaware of the consequences, especially since the students of this stage include a lack of experience, and that the youth stage and whenever it has the wisdom seen sometimes and in many situations, driven by the vigor of his youth, and his burning energy. The current result can be explained that it is attributed to the age variable because the students in the study sample are in transition and adaptation stage and seek to adapt to the university environment in terms of methods, and peers, so it is natural to be more proactive to discover the new educational environment. The current result was in line with the researcher's expectations; the researcher believes that the specificity of the study sample (undergraduate) and that the study was limited to girls without boys played a big role in this outcome. The university stage is a sensitive and important stage in the student's life, and any decision in it can have an impact on the students' life, and any decision in it can have an impact on the future of the student, therefore, because of this sensitivity, students may prefer to adopt a decision to ensure a better performance, regardless of time, or style of thinking which they are characterized by, in addition, the gender of the sample is females, females characterized by social and linguistic ability to communicate faster than males which leads to the formation of a social relationship that contributes to change the decision-making style commensurate with the subject. The present result is consistent with the results of the studies of (Hashemite & Fukuhara, 2004 Naeves, 1989 Bartsch & Hachett, 1997 Delorenzo, 2000). The results showed that the highest percentage of female students who used the hasty decision-making method were for the third year students (82.4) while the proportion of female students who used the hesitant method from the second and fourth years, the researcher can attribute the current result to parenting trends in the family formation of female students and the importance of caring for the social environment in which they are established in terms of dealing with tolerance, acceptability, training to assume responsibility, grant responsible freedom and democratic management in dealing with students' problems and issues. The result is an important educational fact in the educational literature that students often establish in homes where parents deal with their daughters with tolerance and acceptance and grant them responsible freedom and adopt a democratic approach in cooperation with their problems and their issues and train them to take responsibility, and the style of the decision making they have (Delorenzo, 2000). As

for the results of the study which indicated that the proportion of students who have an external locus of control was very high, this may be due to the fact that the Faculty of Education is characterized by the interaction of female students with each other regardless of their level of education due to the small size of the college. The system of credit hours in the faculty may create more interaction between the students of the same specialization regardless of the student's academic year. The current result can be explained among the students of Princess Alia University College in light of the fact that the students consider themselves different from what they were before they joined the university, and that they have a responsibility, and they have to be responsible for this, and raise their burdens and succeed in their tasks; because this stage of their lives, is a decisive stage and considered as economic and social destiny for their future. The present result is consistent with the results of the following studies (Naeves, 1989; Kishor, 1981), which indicated significant correlation between the locus of control and decision-making and that individuals with an internal locus of control were more effective in decision-making as the correlation was statistically significant. the high percentage of third year students in the internal locus of control is clear among them and perhaps this is due to the new experiences experienced by the university student, which represents a qualitative shift in the construction of personality, and adapt to the new data, and represents the university stage the beginning of stability of career orientation, and the belief in the future of the new life, and it may be natural at that stage the harmony of the individual with his outputs, whether academic or behavioral, as represented by the trends, whether internal or external on the assumption that progress in age is accompanied by an increase in experience, which impose on the individual to assume special responsibilities in building his life and the formation of a world of his own away from any pressures he may be exposed to, which leads to the research and planning and organization in all what is exposed to him using his mental and creative abilities in various ways in order to achieve himself. And the diversity of sources of knowledge and information due to the rapid growth in the media and technology as well as the different methods of teaching that the student has received, which requires him to form his own intellectual system that distinguishes him from other individuals and pay him to achieve his new lifestyle and all this is consistent with the principles of decision-making methods (Bartsch & Hachett, 1997). It is clear that the proportion of female students with internal locus of control and using the hasty method of decision-making was higher than that of students who use the external locus of control, the researcher attributes the current result to the qualitative shift that may lead to the removal of female students from the dependencies of the family to self-reliance where the students rely on their self-effort in confronting problems and the urgent need for logical strategies assigned to confrontation, if the students have a place in the family and live in an atmosphere full of love, care and attention, this is reflected in their external responses and behaviors, we find them more flexible in dealing with their colleagues, and have confidence in themselves and accept new situations. Relations with parents and communication in the family are key indicators of decision-making methods, in addition to the absence of students from diseases may make them more likely to participate in life activities with all their energies.

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