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# RELATIONSHIP OF HINDSIGHT BIAS WITH THE INTELLECTUAL ARROGANCE AMONG UNIVERSITY PROFESSORS

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**Abstract:** This article briefs is aimed to identify.

- 1. Identify the hindsight bias of university professors.
- 2. Identify the intellectual arrogance of university professors.

The significance of the differences in the correlation between the hindsight bias and intellectual arrogance among university professors.

To achieve the purpose of the current research, the researcher By building a Scale of hindsight bias and intellectual arrogance and applying it to a sample of (274) male and female professors, they were chosen in a simple random manner. After completion, the researcher used the appropriate statistical methods to analyze the data and extract the results. The following were concluded:

- 1. University professors have hindsight bias.
- 2. University professors have intellectual arrogance.
- 3. There is a correlation between intellectual arrogance and hindsight bias.

Keywords: Hindsight bias, Intellectual arrogance

#### **Research Problem**

Changing the individual's opinion after knowing the result and claiming that he knows that this will have many negative effects in various aspects of the individual's life, such as affecting decision-making; Therefore, it is imperative to study these variables in various fields and among different segments of society, especially the segment of university professors. The hindsight bias is one of the most intellectual processes that may lead to hidden traps in decision-making processes. (simth, 2010:42)

Hindsight bias is a common and strong cognitive error that has been documented across cultures in various fields. Hindsight bias provides an illusion of understanding the past and can lead to failure to learn from the past (Bernstein et al, 2011:378-379), among academics with arrogant attitudes. They display attitudes such as artificial self-perception, prioritizing themselves, not accepting their own mistakes, frequently providing personal references, and pointing out failures to others. The subject's frequent reference to oneself at the point of appropriating their accomplishments can be interpreted as a loss of awareness of reality. In other words, the person exaggerates his achievements beyond the real thing, which leads to a deficiency in the perception of reality, or the perception of reality is distorted and twisted. (See: Demirbilek.et al, 2022: 39) So the problem of the current study is determined by knowing the bias of hindsight and its relationship to arrogance Intellectuals of university professors.

# **Research Importance**

Today, the university is considered one of the important institutions in preserving and developing the identity of societies, and it shows the importance of the technical, cultural, economic and other challenges that the world is experiencing, and other challenges that require the ability of societies to employ them for the benefit of their development while preserving their cultural identity. (Abdullah, 133: 2022), and universities represent A value and a civilized Scale that expresses the extent of the sophistication of the societies to which it belongs, as it is located within the service community institutions that are most affected and sensitive to the requirements of development. Teaching skills, punctuality, and discussing students' mistakes without reprimanding or embarrassing them. (Abdullah and Ibrahim, 2010:14), Here stems the importance of studying the bias of hindsight because the individual can change all his memories, his arrangement of information for a specific event, and his solutions to a specific problem, once the result is known. Hindsight bias is an important subject of study because of the incredible difficulty of eliminating hindsight bias from people's decision-making. In fact, Fischhoff (1975) and others considered the so-called curse of knowledge to be deterministic and this supposed determinism supports intuition: that is, once a result or an answer is revealed, a person's outlook and patterns of interpretation and judgment can be fundamentally and in complex ways altered, and just as knowledge cannot be eliminated In the absence of accurate and costly cross-references of knowledge and ideas at different points in time, it can be very difficult to faithfully reconstruct one's past simple memory, judgments, and thought processes (simth, 2010:42). It is interesting to conclude that intellectual arrogance lies in the belief that one is superior. or better than others, such a conclusion, however, is wrong. It is not enough to believe in the alleged superiority that it would amount to arrogance, it is possible for a person to think of himself as better in some areas than others in his circle without being arrogant or arrogant, and this person may be confident of himself but he will do so in a way that does not make him feel others Even if this person's confidence in his superior abilities is misplaced because his beliefs about his abilities are wrong, it is entirely possible that this person has committed a mistake with sincere or good intentions, and if this is the case, it may not appear Attitudes and tendencies that characterize arrogance such as arrogance, complacency, arrogance, closeness, and a tendency to treat others. Contempt and dismiss their views without any consideration. (Gregg & Mahadevan, 2014: 7)

# **Aims Of Research**

- 1. Late perception bias among university professors.
- 2. Intellectual arrogance among university professors.
- 3. Significance of differences in the correlation between each of the hindsight bias and intellectual arrogance among university professors.

#### **Limits Of The Research**

University professors, male and female (2022-2023) in Wasit University.

#### **Terms And Definitions**

**Hindsight bias:** is the belief that a particular event or situation can be expected more after its occurrence, that is, the individual imagines that he was aware of that event before it occurred. (Roese & Vosh, 2012: 412)

**Intellectual arrogance:**is a behavior that is represented in the psychological inclination and the strong desire to impose opinions, ideas, or cognitive beliefs on others, and this behavior is the result of a set of characteristics, including the person's lack of logical accuracy, his adoption of preconceptions or convictions that have taken root in his mind as a result of what he learned previously, his arrogance and lack of humility, and his belief in his opinions, and his commitment with his thoughts. (YantirTanisini, 2016:72)

#### Theoretical Background

**First: the hindsight bias:**Hindsight bias has been widely studied, as this concept has appeared in more than 800 scientific papers, and hindsight bias can be clearly observed in people all over the

world and among young people and the elderly alike, and different fields of studies have addressed this concept where It dealt with various topics, including topics related to security, health, social conflicts, customer satisfaction with products, and various administrative matters related to work and job aspects, as well as in the fields of accounting, financial auditing, and business administration, as well as topics related to sports competition, public policy, political strategies, and legal matters and issues (Simth, 2010:42)

# Elements of hindsight bias

- A. **Memory distortion:** The level of memory distortion focuses on a misunderstanding of one's past judgment for example, "I said it would happen". It is scored when the recall attempt is Scale d directly against a previously recorded response, as an in-memory design.
- B. **Determinism:** The level of determinism includes beliefs about the objective state of the world or one's surroundings, as in the belief that a previous event was predetermined for example "should have happened". And it can be Scale d using Scale s and tests that focus on faith or belief in determinism, as determinism is governed by higher-order processes than logical processes (which collect beliefs about causal forces). The level of determinism is above memory distortion, which means that determinism accommodates memory distortion but also includes beliefs about causal forces that make certain outcomes seem more predictable than others.
- C. **Predictability**: The level of predictability is subjective in nature, and focuses on beliefs related to one's knowledge and ability, "I knew it would happen." It involves believing that you personally could have anticipated a factual event by now, thus feeling like "I knew it all along." Predictability is Scale d through self-report metrics and tests "The performance of the inventory was easily predictable when purchased" The level of predictability builds up above the level of determinism, meaning that it incorporates beliefs about the objective state of the world but additionally includes beliefs about one's ingenuity in understanding that world around them. (Roese&Vosh, 2012: 412-413).

# Effects and consequences of hindsight bias

- A. **Myopia**: includes an error in determining the cause of the problem, either by focusing on the wrong cause or by exaggerating the impact of the correct cause.
- B. **Overconfidence**: exaggerating one's ability to analyze situations, which leads to ignoring other points of view and reinforcing risky attitudes in incorrect decision making. on the many domains in which hindsight bias has been observed. (Roese&Vosh, 2012: 416)

**Second: Intellectual arrogance:** The intellectually arrogant person claims to know more than he deserves, and there is a great debate about how intellectual humility relates to intellectual arrogance or distinguishes it from it. (Meagher & T.al, 2015:37)

# Theories of intellectual arrogance

# 1. Merit theory

According to entitlement theory, intellectual arrogance is a "tendency" to infer "some illegitimate [intellectual] entitlement from a presumption of one's superiority, and to think, act, and feel on the basis of that claim. In the entitlement paradigm, what or how intellectual arrogance is explained, for example," There is a university president with two PhDs who believes he is qualified to speak properly and his opinion will always be correct in all areas of his college. This is not an exaggeration of his ability, per se, but more specifically this is his own personal inference from his opinion that he has the ability to act in certain ways towards others.

#### 2. Self-deception theory

According to the theory of self-deception, intellectual arrogance is a concept that is closely related to imaginary dreams and wishes, and in particular, through the acquisition of the mental framework in which the "essence of one's own idea" is considered to be a sign of its validity and belief. For example, the intellectual arrogance of supposing (All things being equal) It turns out that personal opinion should be given special weight compared to the opinions of others, and as a result intellectual arrogance is likely to generate self-deception and thus the individual has many wrong

ideas. I conclude with a suggestion that I unfortunately cannot defend and affirm that intellectual arrogance is a response to protecting self-respect towards others and people's real or imaginary challenges, so arrogance or daring in dealing with inappropriate matters and ignoring and rejecting facts is often adopted when an intellectual arrogant person prefers not to know that Many of the achievements attributed to him were achieved in part by unearned privileges. (Tanesini, 19, 2019).

#### 3. Personal model theory

Intellectual arrogance involves a high opinion of one's intellectual worth, on the basis of which one infers comparative intellectual superiority over others. As with the entitlement model, the personal relations model shows that intellectual arrogance is not found in the beliefs one has about one's competence and simplicity, but rather in the inferences one tends to draw from these beliefs. The entitlement model is neutral with regard to the subjectivity of intellectual arrogance (some conclude that there are entitlements that individuals are entitled to act toward others in certain ways, and others may not have such a conclusion). The most important characteristic of intellectual arrogance is in the comparative attitudes one infers of oneself in relation to others, and how this manifests itself in hierarchical and unreciprocal relationships with others. (Haggard et al., 2018: 185)

# 4. Tanciny's theory

Some view intellectual arrogance as a vice of superiority because people who are intellectually arrogant always assume that they are better than others. (Tanesini, 2018: 2018) Individuals with high self-esteem as explicitly Scale d through questionnaires seem to be very confident of their abilities, however. When Scale d indirectly, some of these people have low self-esteem. For example, these people dislike things associated with the self, such as their name or initial. They may also associate the self with negative or unpleasant things. These associations can be Scale d in implicit association tests. Those people whose self-esteem appears to be high on explicit Scale s and low on indirect Scale s are said to have levels of higher defensive self-esteem. They are very sensitive to threats. They appear alert to respond to such threats and tend to misjudge or classify non-dangerous situations as threats. and that their apparent confidence, which is captured in explicit Scale s of self-esteem, is a defensive response that belies their deeper fears that are exposed when self-esteem is Scale d indirectly. (Tanesini, 2016: 72)

#### **RELATED STUDIES**

# LeBourgeois.et, al, 2007

The study aimed to find out whether hindsight bias affects the analyzes of results among psychiatrists. In this study, 235 general and forensic psychiatrists reviewed hypothetical cases in which patients presented. The experimental approach was used, using chi-square tests for nominal Scale s, Mann-Whitney tests for ordinal Scale s, and analysis of variance (Anova). Results indicated that hindsight bias plays a role in risk perception but not neglect and that AAPL psychiatrists may be less likely to respond to hindsight bias than others.

#### Demirbilek.et al (2022)

An Evaluation of Arrogance Orientations of Academicians in Higher Educations According to Student and Aluminum Opinions, Evaluation of attitudes of arrogance among academics in postgraduate studies, according to the opinions of students and graduates. This study aimed at examining the arrogant attitudes of academics working in universities. The study sample consisted of (13) students, from undergraduate, postgraduate and graduate students. 10 of the participants in the study group were female and 3 were male,(Abdulsattar, 2022: 9). At the same time, 5 of the participants are undergraduates, 4 of them are graduate students, and 4 of them are graduate students. On the other hand, the use of descriptive method. Data obtained through focus group interviews were analyzed using semi-structured questions and qualitative data analysis software (Maxquda). The results obtained as a result of the analyzes revealed that academics' arrogance tendencies were collected under the dimensions of individualism, comparison, contempt, and defamation. Based on these results, it can be concluded that university professors have arrogance.

#### **METHODOLOGY**

The researcher depended on the descriptive approach that seeks to determine the current situation of the phenomenon under study, and describing the phenomenon means studying the

phenomenon as it is in reality and is concerned with describing it as an accurate description. (Melhem, 2000, 324)

**Research community**: The current research community consists of the teaching staff of the University of Wasit who hold a (Master's, PhD) degree and are distributed to (15) faculties of (scientific, human) specializations, and of both sexes for the academic year (2021-2022), and table (1) shows that

**Research sample**: The research sample of (274) students was chosen by simple random method from Wasit University.

# **Research tools**

#### Scaleof hindsight bias

The researcher built the scale according to the theory of Royce and Voess (2012), and the scale included three domains 1- Distortion of memory 2- Inevitability 3- Predictability. The researcher drafted (30) paragraphs, and it was taken into account in the formulation of the paragraphs that they be in the first person (Samara, 1989: 143) and that they excite the respondent so that they push him to answer in an explicit way, and that the paragraph does not include the negation of the negation, as well as the paragraph containing only one idea (Al-Zubaie et al. (1981: 69) The researcher chose the Likert method in the scale, because this method is one of the common methods used in constructing psychological scales (Imam et al., 1990: 325). A seven-step gradient corresponding to the alternatives to answering the paragraph starts from gradation (1) and ends with gradation. (7).

# Statistical procedures for the paragraph analysis of the hindsight bias scale

The process of analyzing the paragraphs is of a high degree of importance because of the benefit it performs that helps in coming up with correct Scale ment tools that work to Scale human characteristics and phenomena accurately. (Al-Nabhan, 2013, p. 220)

- 1. Item recognition: The t-test was used for two independent samples, and all items obtained statistically significant values. According to this procedure, all items remain statistically significant at the level of significance (0.05).
- 2. Homogeneity of the paragraphs The relationship of the paragraph with the total score: The total score of the scale represents immediate anecdotal Scale s through its association with the degree of individuals on the paragraphs(B. Kannan,2022:13), and then the correlation of the paragraph score with the total score of the scale means that the paragraph Scale s the same concept that the total score Scale s and in the light of this indicator The paragraphs are preserved (Lindauist, 1957: 286). The researcher concluded that there is a strong correlation of the paragraphs with the degree of its field and the overall degree of the scale. The table shows that:

Table 1: Correlation coefficients between the sum of domain scores and the total score of the hindsight bias Scale

| Standards            | Properties              | Inevitabilities | Prediction   | late Cognition |  |
|----------------------|-------------------------|-----------------|--------------|----------------|--|
|                      | Correlation Coefficient | 0,396           | 0,446        | 0,792          |  |
| Memory<br>distortion | p-value probability     | 0,000           | 0,000        | 0,000          |  |
| distortion           | Significance            | Significance    | Significance | Significance   |  |
|                      | correlation coefficient |                 | 0,605        | 0,804          |  |
| Inevitabilities      | p-value probability     |                 | 0,000        | 0,000          |  |
|                      | Significance            |                 | Significance | Significance   |  |
|                      | Correlation Coefficient |                 |              | 0,828          |  |
| prediction           | P-Value Probability     |                 |              | 0,000          |  |
|                      | Significance            |                 |              | Significance   |  |

# Psychometric properties of the hindsight bias Scale

**First: validity**: is the one that Scale s what it was set for

The researcher verified the validity of the hindsight bias Scale by extracting types of validity:

- **1. Face Validity**: The researcher verified this type of honesty in the current scale after presenting it to arbitrators specialized in education, psychology, Scale ment and evaluation.
- **2. Construction validity**: The method of the two end groups (Contrasted Groups) and the method (the correlation of the paragraph score with the total scale score) are considered indicators of this type of validity. This type of validity has been achieved by:
  - **a.** By conducting an analysis of the paragraphs by extracting the discriminatory power of the paragraphs.
  - **b.** In a way that the degrees of the paragraphs are related to the total score of the scale.

# Second stability: the researcher calculated stability Cronbach's alpha method.

Cronbach's alpha equation was applied to a sample of stability amounting to (274) students, and for the scale items amounting to (30) items. The stability coefficient extracted using the Cronbach alpha method refers to the internal correlation between the items of the scale (Ferrickson, 1991, 53), as this method depends on the consistency of the individual's performance. From one paragraph to another (Thorndike and Hagen, 1989, 790), and to calculate the stability in this way, the Cronbach alpha equation was used, and the alpha stability coefficient for the Scale of hindsight bias reached (0.89), which is a high stability coefficient, and the appropriate stability coefficient is (0.70) or more and low if It was less than that (Abu Hisham, 2006, 10).

# **Second Tool: A Scale Of Intellectual Arrogance**

The researcher determined the theoretical definition of intellectual arrogance by deriving the theoretical definition of the concept of intellectual arrogance in the light of the views of Tanseny (2016), which is a behavior represented in the psychological tendency and the intense desire to impose opinions, ideas, or cognitive beliefs on others, and this behavior is the result of a group of characteristics, including: For logical accuracy, his reliance on preconceptions or convictions that were entrenched in his mind as a result of what he learned previously, his arrogance and lack of humility, his pride in his opinions, and his commitment to his ideas.

**Scale domains:** Based on the aforementioned definition, five domains were identified for the scale: lack of humility, intellectual commitment, prior convictions, pride in opinion, and lack of logic. The Likert method was chosen because it is a common and followed method in constructing psychological scales because of its ease of construction and correction and the availability of a homogeneous scale. A seven-level gradient was developed for the answer alternatives, starting with gradation (7) and ending with gradation (1).

# Statistical procedures for Analyzing the items of the intellectual arrogance scale

main objective of paragraph analysis is to obtain data according to which the discriminatory power of the scale items is calculated, and the discriminatory power means the extent of the paragraph's ability to distinguish between high-ranking individuals in the characteristic Scale d by the scale, and low-ranking individuals in the same trait, and then works to maintain Good paragraphs in the scale (Eble, 1972: 392)

A. Paragraph Distinguishing: To find the discriminatory power of the intellectual arrogance scale items amounting to (25) items, the researcher applied the intellectual arrogance scale on a statistical analysis sample of (274) male and female professors who were selected using the random stratified method with equal selection and from 8 colleges: 1-College Sciences, 2- College of Education for Human Sciences, 3- College of Medicine, 4- College of Arts, 5- College of Law, 6- College of Basic Education, 7- College of Computer and Technology, 8- College of Fine Arts according to gender variables (male, female) And specialization (scientific, human), the discrimination equation was used to extract the discriminatory power of the paragraphs of the intellectual arrogance scale, and after the researcher applied the intellectual arrogance scale to the statistical analysis sample, which numbered (274) male and female professors, they were chosen by the stratified random method with equal selection and from 8 colleges: College of Science,(Asaad, 2022:13).College of Education for Human Sciences, College of Medicine, College of Arts, College of Law, College of Basic Education, College of Computer and Technology according to the variables of gender (male, female) and specialization (scientific, human)

and after correcting the questionnaires of the respondents, they were arranged in descending order from the highest degree Totally to the lowest score, then the highest (74) percent of the questionnaires amounting to (74) was taken as having the highest score and was called the upper group, and the lowest (27%) percent who obtained the lowest score and amounted to (274) and after correcting the test by giving the respondent the score on According to the correction key for the alternatives of the intellectual arrogance scale consisting of seven alternatives, and after using the discrimination equation for extracting the discriminatory power of the test items, it appeared that all items of the intellectual arrogance scale were distinguished in terms of the probability value. In order to extract the coefficient of distinction for each paragraph of the intellectual arrogance scale, the t-test was used for two independent samples to find out the significance of the difference between the upper and lower groups of the scores of each paragraph of the scale. According to this procedure, all the paragraphs remain for being statistically significant at the level of significance (0,05).

B. The consistency of the paragraphs The relationship of the paragraph with the total score: The consistency discrimination coefficient of the paragraphs is calculated in this way by calculating the correlation coefficient of the degrees of these paragraphs with the total score of the scale (Omar et al., 2010: 204) The consistency coefficients are correlation coefficients between the degree of each paragraph of the test items and the total score of the test as a whole, and this method is used for the purpose of determining the validity of the test items (Awad, 1998: 57). To achieve this, the researcher relied on the previous sample forms, and the results indicated that the correlation coefficients of the degree of each dimension with the total score of the scale,( R. John, 2022:11) as well as the relationship of the dimensions with each other, are statistically significant. The table 2 shows that:

Table 2: homogeneity of the paragraphs, the relationship of the paragraph to the total degree

| Standards                  | Properties   | Intellectual<br>Commitment | Prior<br>Convictions | Respect<br>Opinion | Lack Of<br>Logic | Intellectual<br>Arrogance |
|----------------------------|--------------|----------------------------|----------------------|--------------------|------------------|---------------------------|
| T 1 00                     | correlation  | 0.491                      | 0.295                | 0.421              | 0.412            | 0.701                     |
| Lack Of<br>Humility        | p-value      | 0.000                      | 0.000                | 0.000              | 0.000            | 0.000                     |
| Hummiy                     | Significance | Significance               | Significance         | Significance       | Significance     | Significance              |
|                            | correlation  |                            | 0.445                | 0.541              | 0.544            | 0.815                     |
| Intellectual<br>Commitment | p-value      |                            | 0.000                | 0.000              | 0.000            | 0.000                     |
| Commitment                 | Significance | Significance               | Significance         | Significance       | Significance     | Significance              |
|                            | correlation  |                            |                      | 0.401              | 0.499            | 0.698                     |
| Prior<br>Convictions       | p-value      |                            |                      | 0.000              | 0.000            | 0.000                     |
| Convictions                | Significance | Significance               | Significance         | Significance       | Significance     | Significance              |
|                            | correlation  |                            |                      |                    | 0.510            | 0.757                     |
| Respect                    | p-value      |                            |                      |                    | 0.000            | 0.000                     |
| Opinion                    | Significance | Significance               | Significance         | Significance       | Significance     | Significance              |
| T 1 00                     | correlation  |                            |                      |                    |                  | 0.785                     |
| Lack Of<br>Logic           | p-value      |                            |                      |                    |                  | 0.000                     |
|                            | Significance | Significance               | Significance         | Significance       | Significance     | Significance              |

# Psychometric properties of the Scale of intellectual arrogance

**Validity**: is the one that Scale s what it is designed for.

Virtual validity: this kind of validity is achieved by presenting the items of the scale to a group of experts who have experience that enables them to judge the validity of the test items in measuring the characteristic to be Scale d, and the provisions or observations that most of them agree upon are taken into account, after the researcher provided them with a specific, clear and comprehensive definition of the phenomenon that are Scale d.

**Construction validity**: The method (Contrasted Groups) and the method (the correlation of the paragraph score with the total score of the scale) are considered one of the indicators of this type of validity. This type of validity has been achieved by:

- 1. By conducting an analysis of the paragraphs by extracting the discriminatory power of the paragraphs.
- 2. In a way that the degrees of the paragraphs are related to the total score of the scale.

**constancy**: the stability was extracted using Cronbach's alpha and test-retest method:

Cronbach's alpha equation, the stability coefficient was (0.88), which is a good stability coefficient. **Retest method** (**stability coefficient**): The stability coefficient of the intellectual arrogance Scale by the retest method reached 0.81, which is a good stability coefficient.

# FINDINGS OF THE STUDY

To achieve this goal, the researcher applied the Scale of hindsight bias on a sample of university professors at the University of Wasit, which numbered (274) male and female professors, and after processing the data statistically, the arithmetic means and standard deviations of the scores of the sample members were extracted, and the arithmetic mean of the sample was (150,22). , and a standard deviation of (22,838), while the error of the standard mean was (1,380), and the results indicated that there was a statistically significant difference in the bias of hindsight, as the calculated T-value reached (32,774), which is a statistical function in favor of the arithmetic mean (150,22) This is because the value of (p) is smaller than (0,05), and the table shows this Evaluate the t-test for one sample to identify the significance of the difference in the delay perception bias between the theoretical mean and the mean calculated by university professors.

Table 3:One-sample post-test

| Medium<br>Default | Arithmetic<br>Average | Standard<br>Deviation | Mean<br>Square<br>Error | Calculated<br>T Value | Probability<br>Value | Indication   |
|-------------------|-----------------------|-----------------------|-------------------------|-----------------------|----------------------|--------------|
| 120               | 150.22                | 22.838                | 1.380                   | 32.774                | 0.000                | Significance |

We have been contacting professors who have hindsight bias, and this result can be attributed to the fact that this type of bias can affect each one of us (Al-Zubaidi, 793: 2022)

**second objective:** to identify the intellectual arrogance of university professors

To achieve this goal, the researcher applied a Scale of intellectual arrogance on a sample of (274) professors at the University of Wasit. A standard value of (20,722), while the standard mean error was (1,252), and the results indicated that there was a statistically significant difference in intellectual arrogance, as the calculated T-value was (27,976), which is statistically significant and in favor of the arithmetic mean (122, 52) This is because the value of (p) is less than (0.05), and the table shows this

Assessment of the t-test for one sample to identify the significance of the difference in intellectual arrogance between the theoretical mean and the mean calculated by university professors.

Table 4:Intellectual arrogance Scale on a sample of professors in the University of Wasit

| Medium<br>Default | Arithmetic<br>Average | Standard<br>Deviation | Mean<br>Square<br>Error | Calculated<br>T Value | Probability<br>Value | Indication   |
|-------------------|-----------------------|-----------------------|-------------------------|-----------------------|----------------------|--------------|
| 100               | 122.52                | 20.722                | 1.252                   | 27.976                | 0.000                | Significance |

This result refer to the fact that university professors have intellectual arrogance Intellectual arrogance is a widespread and diverse phenomenon, and this result can be attributed to the pressures and conditions experienced by society as a whole, and it is unique of its kind, which was reflected in particular on the segment of university teachers. In the atmosphere of the different regimes, and the current circumstances also had an impact on the university professors, despite their higher education and their acquisition of knowledge and academic and humanitarian experience, but they reject opinions and ideas that contradict their opinion even if they are convinced of their sincerity and validity. (Karmian, 2008: 8)

**Third objective**: the correlation between hindsight bias and intellectual arrogance among university professors.

In order to identify the nature of the relationship between the bias of hindsight and intellectual arrogance among university professors, the Pearson correlation coefficient equation was applied, as the correlation coefficient between the bias of hindsight and intellectual arrogance reached (0.2), and this value is a function at the level of significance (0.05), as the value of (p) calculated (0,001) at (272) degrees of freedom as in the following table 5:

Table 5: correlation between hindsight bias and intellectual arrogance among university professors

| Correlation Coefficient | Degrees Of<br>Freedom | Significance<br>Level | P-Value |
|-------------------------|-----------------------|-----------------------|---------|
| 0.2                     | 272                   | 0.05                  | 0.001   |

This result indicates the existence of a correlation between intellectual arrogance and hindsight bias, as hindsight bias is an important source of overconfidence (Simth, 2010:42), which leads to the imposition of opinions, intellectual commitment, assault of opinion, consolidation of prior convictions and lack of humility, and these individuals with intellectual arrogance interact in a manner Get defensive with alleged threats by trying to boost their self-confidence Confidence is a common factor between intellectual arrogance and hindsight bias.

#### **Conclusions:**

- 1. University professors have hindsight bias because hindsight bias is widespread and can be found in all age groups.
- 2. The university professors have intellectual arrogance, and this confirms that intellectual arrogance as a phenomenon is widespread in all fields and aspects of life and has a significant impact on decision-making.
- 3. There is a correlation between hindsight bias and intellectual arrogance among university professors because each of them generates excessive confidence in the individual.

# Recommendations

- 1. Developing programs or workshops by specialists in this field, the steps of which include reducing the bias of hindsight and intellectual arrogance among university professors.
- 2. Educating university professors about the importance of being a university professor enjoying intellectual humility through seminars.
- 3. Educating university professors about the negative effects of hindsight bias and intellectual arrogance on their lives
- 4. There should be tests through which the level of intellectual arrogance of applicants to teach at the university is determined.

# Suggestions

- 1. Conducting other studies dealing with the bias of hindsight and intellectual arrogance on other social segments and different age stages.
- 2. Conducting correlational studies between hindsight bias and other variables such as superstitious thinking, cognitive styles, and personality types.
- 3. Conducting correlational studies between intellectual arrogance and other variables such as dogmatism, decision-making, and delay behavior.

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