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Rumination of thinking among contract teachers

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Abstract---The aim of the current research is to identify rumination of thinking among contract teachers as well as statistical differences in rumination of thinking among contract teachers according to gender variables (teaching, teaching), certificate (Master's, PhD), and university (Karbala, Kufa, Qadisiyah, Babylon). The two researchers built the research tool: the rumination scale. The research tool was applied to the basic research sample consisting of 864) male and female teachers from the universities of the Middle Euphrates (PhD and MA) with a percentage of 10% of the original community by the random stratified method of proportional method, after data collection and statistical analysis. Using the SPSS statistical package for social sciences, the two researchers reached the following results: It appeared that the research sample (contract teachers in the universities of the Middle Euphrates) had rumination based on the differences between the arithmetic mean and the hypothetical mean. There were statistically significant differences in rumination of thinking among contract teachers in the universities of the Middle Euphrates according to the variables gender (teaching, teaching), certificate (Master's, PhD), and university (Karbala, Kufa, Qadisiyah, Babylon) respectively (first: contract teachers, secondly contracts teachers). (First: holders of a master's degree, secondly, holders of a doctorate). (First, the University of Kufa; secondly, the University of Babylon; thirdly, the University of Karbala; and finally, the University of Qadisiyah). Accordingly, the researchers presented a number of recommendations and suggestions.

Keywords---fragmentation self, relationship, students.

Introduction

The Problem of the Study

Many students today in Iraq are seeking suitable job opportunities that can fulfil their life necessities as well as the self-assertion resulting from the academic building they achieved throughout their period of higher university education in various disciplines and their diversity. Including graduates of higher degrees from master's and doctoral degrees, they are today in the field of temporary daily wages who are teaching in public and private universities. They are now unhappy with themselves and with the fact that job opportunities for college students are getting worse.

Davis and Nolen-Hoeksema (2000) showed in their study that individuals who suffer from rumination find it difficult to get along with others to change environmental stressors; they are less willing to engage in environmental activities; and they cannot prevent their rigid tendencies towards their moods and negative life events and become trapped in them. which leads to hardening and the abandonment of productive thinking. Davis and Nolen-Hoeksema 2000: 12). Once they believe they are working temporarily and on an unstable basis, many of them are pushed to cases of behavioural and emotional disorders, which may affect their educational tasks in universities and their personal future in some way. Based on the foregoing, the problem of the current research is formulated as follows:

Are contract teachers at Middle Euphrates universities characterised by rumination?

The Importance of the Study

The concept of rumination in the psychological literature is generally referred to as the tendency to focus on diverse situations rather than a single one. On this basis, a number of researchers focused in particular on the stressful situations experienced by the individual who ruminates in different and similar situations. Those that are associated with thinking during a particular incident. The literature has shown that rumination in a situation that requires retrieval will generate a distinct set of responses and behavioural tendencies. Including Bushman (2002) and Baumeister (2001), the state of rumination exacerbates and prolongs feelings in that situation. And by reviewing the Bushman study (2002)), which was concerned with performance and the state of rumination, he worked to put the study participants in a circumstance that required rumination, and all participants accepted negative feedback related to their performance in the experiment. It was concluded that individuals in the rumination condition later showed clear hostile behavior. and high levels of agitation for individuals in other groups that are not related to the stressful situation they were exposed to (Anestis et al. 2009:192). From this, rumination works to continue negative interpersonal processes and leads to the generation of hardship. For example, adults under pressure tend to ruminate, which generates less effective solutions to their interpersonal problems. Thus, rumination may prolong and exacerbate

interpersonal problems in individuals. Rumination affects the perception of support. People who engage in high levels of rumination perceive less support and are more isolated from others who are not ruminating. Awareness of low social support may lead to a number of negative interpersonal processes and generate stress and relationship conflict (Hoeksema 2012: 584–597 (McLaughlin, k &). Rumination may occur in response to negative life events or violations in relationships. Research has shown that rumination can be described as a trait such as response style. The method of rumination is a method that includes focusing on problems, which includes a negative mood while thwarting actions or thoughts that can keep us away from the problem or contribute to its solution. It has negative reactions that affect relationships, which means that rumination may cause negative moods, persistence of these states, or both (Senkans et al. 2016:27). which can be identified as acute behavioural responses.

Research Objectives:

The current research aims to identify the following:

1. The rumination of thinking among contract teachers in the universities of the Middle Euphrates
2. Statistically significant differences in rumination of thinking among contract teachers in the universities of the Middle Euphrates according to the variables: gender (teaching, teaching), certificate (Master's, PhD), university (Karbala, Kufa, Qadisiyah, Babylon).

Research Limitations

The current research is limited by the following limits:

- **Objective limit**
The current research variable includes rumination of thought among contract teachers.
- **Human Limit**
The research is limited to a sample of male and female teachers of contracts in the universities of the Middle Euphrates (Karbala, Kufa, Qadisiyah, and Babylon) according to their affiliation with the universities.
- **Spatial limit**
The research is limited to the universities of the Middle Euphrates (Karbala, Kufa, Qadisiyah, and Babylon).

The practical part

Research Methodology:

In the current research, the two researchers used the (descriptive) research method for its suitability in achieving the research objectives.

The research population

The current research community consists of contract teachers in the universities of the Middle Euphrates, each of which universities (Karbala, Qadisiyah, Babylon, Kufa) for the academic year (12022–2022), where the total number of teaching and teaching contracts reached 864), and in particular: the number of teachers (369), and the number of female teachers (495), distributed among the master's teachers (725), male and female teachers, and the doctoral teachers (139), male and female teachers.

A Sample of the Research: It included the following:

- 1 The exploratory sample (a sample of the clarity of paragraphs and instructions):
The purpose of the exploratory sample is to verify the extent to which the sample members understand the paragraphs of the scale and its instructions (Faraj 100: 1997), to calculate the time taken to answer it, and to identify the difficulties facing the respondent (Khattab: 2009: 43). The size of the exploratory sample was characterised by the presence of thirty (30) teachers from the universities of Karbala and Kufa, distributed in a random manner among (10) male and (20) female teachers equally.
- 2 Sample Statistical Analysis
The statistical analysis sample for the paragraphs was chosen in a stratified random manner with a proportional distribution of contract teachers in the universities of the Middle Euphrates. Al-Douri (2004), p. 68.
- 3 Basic application sample (final application):
The main research sample was chosen with a percentage of (10%) from the original community, which amounted to 346 male and female teachers, and this sample was selected using the Stratified Random Sample with a proportional distribution. Where the total sum of the basic research community reached 864) male and female teachers, distributed over the number of males (220) male and 150) female teachers, the number of master's teachers reached (251) male and female teachers, and the number of doctoral teachers reached (119) male and female teachers.

Search tool

Intellectual Rumination

- Defining the concept of rumination
The two researchers reviewed the literature related to the concept of rumination and related studies.
Therefore, they built a rumination-thinking scale based on the theoretical orientations of Nollen Hoeksema (Nollen Hoeksema 1991), adopting its definition as: negative repetitive thinking for one of the symptoms of negative mood and the possible causes and consequences of those symptoms (Nollen Hoeksema 1991: 43).
- Drafting the paragraphs of the rumination scale
After reviewing the literature and previous relevant studies, the two researchers formulated a number of (verbal declarative) paragraphs, taking into account the conditions for drafting the paragraphs that were also indicated by the researchers, and the result was the formulation of (40) paragraphs in anticipation of the paragraphs being deleted during the measurement (the psychometric characteristics of the paragraphs). It was divided into five alternatives that represent the nature of rumination when teaching contracts, which are: (represents me always; often represents me; sometimes represents me; rarely represents me; and does not represent me), and the following weights were set in sequence (1,2,3,4,5).
- Validity of the scale items (virtual validity)
The two researchers showed the 40 paragraphs of the rumination scale to a group of Iraqis and Arabs who were experts in psychology, measurement, and evaluation.that. and a Kai square to judge the validity of the paragraph and its statistical acceptance, to obtain a higher degree than the tabular Kai

square value of (3.84) at a significance level of (0.05) and with a degree of freedom of one.

In terms of: clarity in the paragraphs of the repetitive thinking component due to negative mood

* In terms of clarity in the paragraphs of repetitive thinking due to potential negative outcomes.

Prepare the rumination scale instructions:

The two researchers sought to make the scale's instructions clear and accurate for contract teachers, and the marking is marked () under the alternative that applies to the respondent. And that the answer is not seen by anyone but the researcher, and there is no need to mention the name in order to reassure the respondent of the confidentiality of his responses (Al-Nabhan 2013: 85). In order to ensure the clarity of the scale's instructions and paragraphs, the clarity of response alternatives, the detection and avoidance of difficulties facing the respondent, and the time it takes to respond to the scale, it was field-applied to (30) male and female teachers at random, previously mentioned in the survey sample, and it became clear that the scale's paragraphs His instructions were clear to the sample members, and the time taken for their responses on the scale ranged between 30 and 35 minutes.

Rumination Scale Correction:

After preparing the scale items, Likert method was adopted in formulating response alternatives. The two researchers set the degree of the examinee's answer for each paragraph of the scale and then added them up to get the scale's total score. They set the right degree for each paragraph based on the respondent's answer, with the weights going as follows: (1,2,3,4,5)

Statistical analysis of the rumination scale items: The following are the procedures for their verification:

The Discriminating Power of Items:

The two researchers verified the discriminatory power of the paragraphs using the Contrasted Groups method by applying the scale paragraphs to the statistical analysis sample, which amounted to (400) teaching and teaching contracts, and then determining the total score for each of the respondents' forms, then arranging the forms in descending order according to the total score, from the highest degree to the lowest degree, and finally assigning 27% of the forms with higher degrees and 27% of the forms with lower degrees. The number of members of each of the upper and lower peripheral groups reached (400) teaching and teaching contracts, and after applying the t-test to two independent samples to find out the significance of the differences between the upper and lower groups for the scores of each item of the scale, all items of the scale were by comparing them. The tabular T-value of (1.96) is distinguished at the significance level (0.05) and the degree of freedom (398). Thus, it was found that paragraphs (3-4-27-38) are not indicative, while the rest of the paragraphs retained their statistical

significance, and thus the number of paragraphs to the limit of this procedure became (32).

Correlation of the score of each paragraph with the total score of the scale

The two researchers carried out the procedure to verify the validity of the construction in the following: Finding the relationship between a continuous variable and two intermittent sub-variables using the Point Biserial Correlation Coefficient. Using the same analysis sample referred to in the previous paragraph, the statistical analysis sample consisted of (400) male and female teachers. After using the t-test for the significance of the association and comparing it with the tabular t-value of (2.58) at the significance level (0.01) and the degree of freedom (398), the scale was considered structurally valid according to this indicator. It turned out that all the items achieved a statistically significant correlation. Thus, the number of paragraphs for this procedure has reached 32.

Factorial Validity

The two researchers calculated the factorial validity of the scale by conducting an exploratory factor analysis of the total scale of ruminating thinking, its paragraphs to the limit of this procedure (32 paragraphs), and it was done according to the Principal Components method with oblique rotation by the Oblimin method, after applying it to a sample of statistical analysis consisting of (400) teaching and teaching (explained in the statistical analysis). The oblique rotation is appropriate for practical life due to the overlapping and correlation of variables in one subject and the inability to explain it with factors completely independent of each other (Gouda, 2008: 161).

The result of the exploratory factor analysis of the two components of the scale was that the efficiency of the model used to measure (KMO) was (0.494) with statistical significance, and the researcher relied on saturation (0.30) and above for each of the paragraphs according to the Guliford test (Guliford 1954:500). In the case of saturation of the paragraph on more than one factor at the same time, the highest saturation is taken as a statistical sign, but all the paragraphs of the scale saturation were higher than (0.5), and the results of the factor analysis revealed (2) factors whose value of the potential root Eigen value exceeded (0.5). This explained the total variance of the factorial matrix.

Psychometric properties of the rumination scale These two characteristics of the rumination scale have been verified as follows:

One: Validity Scale Indicators:

Through the following types of honesty:

Face Validity: This was done by following the steps outlined in the paragraph about checking the validity of the scale.

Construct validity: The validity of the construct was verified for the current scale through the previously mentioned indicators in the statistical analysis of the scale items.

Indicators of Reliability Scale

1 Test-Retest Method

The reliability coefficient was calculated by retesting the rumination scale. The scale (discriminatory power supplement) was applied to a sample of thirty male and female teachers, who were chosen randomly. Then the scale was re-applied to the same sample two weeks after the first application, and the results indicated that the reliability coefficient of the scale as a whole reached 0.843, which is a good indicator of stability.

2 Cranbach Alpha equation

To extract the stability in this way for the scale as a whole, the researcher used the Alpha Cronbach Formula, where the stability coefficient of the scale as a whole was 0.918. It is a good indicator of the scale's stability, as Cronbach confirmed that the scale whose stability coefficient is high is an accurate scale (Cronbach 1964:639).

Describe the final rumination scale

After verifying the standard characteristics represented by the indicators of statistical analysis, validity and stability of the scale, the rumination-thinking scale became in its final form, consisting of (32) items, distributed over five alternatives that represent the nature of rumination for contract teachers, which are: (represents me always, often represents me, sometimes represents me, it rarely represents me, it does not represent me), and the following weights were assigned in sequence (1,2,3,4,5), so the highest score that a respondent can get for his answer on the scale items is (160), and the lowest score he can get is (140). It is (32) degrees, and the hypothetical average of the scale is (96) degrees. Hence, those who obtain values higher than (96) enjoy rumination, and those who obtain values less than (96) do not have rumination, and thus the scale is ready to be applied to the basic research sample.

Results

The first objective is to identify rumination among contract teachers in the universities of the Middle Euphrates:

The results of the research showed that the arithmetic mean of the sample was (99,73) with a standard deviation of (27,266), while the hypothetical mean of the scale was (96), and for the purpose of knowing the significance of the difference between them, the t-test was used for one sample, as the t-value was calculated (4,312), and when compared with the tabular value of (1.98) at the level of significance (0.05) and the degree of freedom (345), it appeared that the research sample (teachers of contracts in the universities of the Middle Euphrates) had a rumination of thinking based on the differences between the mean arithmetic, the hypothetical mean, and table (1), illustrate this

Table (1) shows the results of the t-test to determine the significance of the difference between the mean scores of the sample and the hypothetical mean of the rumination variable

Variable	Sample size	Arithmetic mean	Standard deviation	Hypothesis mean	T-value		The significance level 0.05
					Calculation	Tabular	
ruminate	346	99,73	27,266	96	4,312	1,98	function

The second objective is to identify the statistically significant differences in rumination of thinking among contract teachers in the universities of the Middle Euphrates according to the variables, gender (teaching, teaching), certificate (Master's, PhD), and university (Karbala, Kufa, Qadisiyah, Babylon):

The two researchers used the Three Way ANOVA to reveal the results of statistically significant differences for the variables (university, gender, certificate), and for the two interactions between (university * gender) (university * certificate) (type * certificate). And for triple interactions (university * type * certificate), the following was found:

Table (2) Fisher's value of the averages between (universities) for contract teachers in the Middle Euphrates universities on the rumination scale

The university	arithmetic mean	Standard deviation	Fisher value
Karbala	94.223	.6363	5.782
Kufa	99.980	2.677	
Qadisiyah	91.056	1.662	
Babylon	97.056	2.097	

Second, the statistical differences in (teaching type): where the calculated t-values of (4.566) were greater than the tabular t-values of (3.841) at the level of significance (0.05). This shows that the types of contract teachers in the universities of the Middle Euphrates have different ways of thinking.

Table (3): Fisher's value for averages between (type)
For male and female teachers of contracts in the universities of the Middle Euphrates on the scale of rumination of thought

type	Arithmetic mean	Standard deviation	Fisher value
Contracts teacher	108.309	.8343	4.009
Contracts teacher	101.556	2.831	

Third: the statistical differences in (certificate): where the calculated t-values of (4.733) were greater than the tabular t-values of (3.841) at the level of significance (0.05). This indicates that contract teachers in the universities of the Middle Euphrates differ in terms of rumination, according to the testimony.

Table (4) Fisher's value for averages between (certificates)
For male and female teachers of contracts in the universities of the Middle
Euphrates on the scale of rumination of thought

Certificate	Arithmetic mean	Standard deviation	Fisher value
PhD	120.658	3.022	4.733
Master	123.003	3.294	

Fourth: The statistical differences in (university * gender) where the calculated t-values of (5.685) were greater than the tabular t-value of (3.841) at the level of significance (0.05). This indicates that the contract teachers in the universities of the Middle Euphrates differ in terms of rumination according to the bilateral interaction between (university + gender)

Table (5): Fisher's value of averages for male and female teachers of contracts in the universities of the Middle Euphrates on the scale of rumination of thinking

Binary Interaction	Arithmetic mean	Standard deviation	Fisher value
University	146.110	3.523	5.057
Type	126.304	3.622	

Fifth: The statistical differences in (University * Certificate) where the calculated t-values of (3.969) were greater than the tabular t-value of (3,841) at the level of significance (0.05). This indicates that contract teachers in the universities of the Middle Euphrates differ in terms of rumination of thinking according to the bilateral interaction between (university + certificate)

Conclusion

To check which difference between (university * certificate) is more used for rumination. The researcher used Scheffe's equation to extract the differences between them. Where the difference for the equation was (4.734), which means that there is a difference between the effect between the averages. Referring to the same averages, the researcher found that the average impact of the university on contract teachers with a value of (131.42) with a standard deviation of (2.216) was greater than the arithmetic mean, the impact of the certificate for contract teachers with a value of (96.844) with a standard deviation of (0.428). This indicates that contract educators in the universities of the Middle Euphrates tend to ruminate because of the impact of the type of university in which they work. Non-functional values in rumination

The significance was not evident in each of the binary interactions (type * certificate), where the calculated t-value of (1.104) was less than the tabular t-value of (3.841) at the level of significance (0.05). And the tripartite interaction between (university * type * certificate) was the calculated t-value of (0.778), less than the tabular t-value of (3.841) at the level of significance (0.05).

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