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TÍTULO: Comparación del efecto DRM y la información errónea sobre la creación de una memoria falsa.

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RESUMEN: El presente estudio tuvo como objetivo determinar la relación entre los dos factores efectivos en la memoria falsa, que son DRM y desinformación. Este estudio tuvo como objetivo investigar la producción de memoria falsa utilizando los factores en un estudio experimental, y también, determinar la relación entre dos paradigmas, que es una investigación de correlación. El estudio mostró que la falsa memoria fue creada por ambos métodos, pero no se encontró una relación significativa entre los métodos. El rol y los efectos de los métodos: DRM y la información errónea sobre la creación de memoria falsa son diferentes.

PALABRAS CLAVES: memoria falsa, efecto de desinformación, DRM.

TITLE: Comparing DRM and misinformation effect on creating false memory.

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ABSTRACT: The present study aimed to determine the relationship between the two effective factors on false memory, which are DRM and misinformation. This study aimed to investigate the production of false memory using the factors in an experimental study, and also, to determine the relationship between two paradigms in a Correlation research. The study showed that false memory was created by both methods, but no significant relationship was found between the methods. The roll and effects of both, DRM and misinformation on creating false memory are different.

KEY WORDS: false memory, misinformation effect, DRM.

INTRODUCTION.

False memory means having the clear memories of people, places, events, situations, etc. which have not been occurred or seen (Corsini, 1999). Today, researches about the false memory, has been respected in many clinical and law research fields. The accuracy of memory is an essential element in the court which is related to child abuse. It is also an important issue in psychotherapy and judgment in treatment environment (Loftus, 1993). The discovery of fragile memory has questioned the psychological methods, which are based on the repressed memories of childhood (Nichols, 2014).

One of the important issues which is related to memory is to examine the conditions in which the memory is distorted (Nichols, 2014). There are some methods to investigate false memory. Gallo and Lampinen (Gallo and Lampinen, 2015) used and introduced "DRM" and "Misinformation Tasks" as the most frequent methods of investigation of false memory. DRM is the simplest method for studying the false memory, which includes a list of relevant words that is given to people (like bed, rest, awake) that are strongly correlated with the non-presented word (sleep) that is counted as "Lure Term". In the memory test which is held after that, people wrongly remember the Lure word instead. The memory test in DRM practice is done in two ways which are "recall" and "recognition". In recall practice, the subject should state whatever he remembers about the words. In recognition practice, a

set of words including list, lure and non-relevant words are presented to the subject and he should recognize words of the main list.

The second way of examining false memory is the practice of misinform information. In this way, participants observe a natural event of a crime (for example, a video of a crime) and then the incorrect information will be given to participants (like using a knife, while this was not the case in the original video). In the test of memory then the subjects often claim that they saw incorrect information (using a knife) in the original video (Gallo and Lampinen, 2015).

One of the most important ideas about creating false memory is the source monitoring theory. Based on this view, information comes from many sources that differ from one another according to the location, time, the way that information is received and the occurrence of an event. Usually people are confused and mistaken in identifying the sources and the appropriateness of assignment of activities and conversations, and as a result the memory will be distorted. The researchers state that "There is no certain evidence to be confident to say different mechanisms are the infrastructure of the false memory" (Wade, et al. 2007).

These paradigms are methodologically distinctive and produce different types of memory in qualitative terms. But it's interesting that the component of monitoring is common in all of them, and the failure of monitoring, creates "false memory" in them. Such basic theoretical similarity in two methods and differences in methodology was a good starting point to see if performance in a paradigm could predict another performance (Wade, et al. 2007). In this way, studies have been conducted to investigate the relationship between these paradigms and discover the underlying mechanisms in each, while the results were inconsistent.

Some researchers, by reviewing one research and some with numerous studies, showed that there is a relationship between false event memory and DRM error, suggesting that people who have more error in the DRM method are more susceptible to false memory reports (Gallo, 2010; Platt, et al. 1998;

Clancy, et al. 2002; French, ey al. 2008; Meyersburg, et al. 2009; Clancy, et al. 2000; Geraerts, et al. 2009; Geraerts, et al. 2005; Otgaar, et al. 2012; Qin et al. 2008; Zhu, et al. 2013).

On the other hand, some scholars disregard this connection by investigating the relationship between DRM and false information. They have reported that there is no relationship between these two methods (Wilkinson and Hyman, 1998; Ost, et al. 2013; Monds, Paterson and Kemp, 2016). The researchers stated that transmission from researches which have used one method, to research that used other methods, and also to real life are false.

In the field of cultural research, the over-cultural aspect of DRM is mentioned, because due to its semantic structure it can be implemented in all cultures and regions (Roediger, et al. 2001). However, in the field of memory retrieval using the DRM method, studies have shown that the cultural difference not only plays a role in the correct retrieval of information but also in memory distortions (Roediger, et al. 2001). Similarly, memory studies show that event memory is emerging as a personal expression and a cultural product (Salehzadeh, 2015), and the Storytelling memory is different in both information encoding and the retrieval of information through various cultures. Westerners remember specific parts and details of events easily, but the Asians have more general information about the event.

Due to the importance of studying the issue of memory and its distortions, particularly in the legal and clinical context, as well as the disparity in the relationship between DRM and false information methods, it remains unclear whether these methods are identical in false memory. Besides, it is not clear whether the findings of researches that used the DRM method can be generalized to real life with false memory of an event. Therefore, in the light of the incompatibility of findings, the effects of culture on false memory and God study in the Iranian society, the present study seeks to investigate whether there is a relationship between the most widely used methods - the DRM assignment and the false information assignment- applied for false memory studies or not.

Methodology.

This research is an experimental study conducted to investigate the creation of false memory in any of the DRM methods and consider the effect of misinformation. For checking the hypotheses, there is a tendency to discover the relationship between methods.

Participants.

One hundred and twenty-five (125) students at Shahed University participated in this study, all of them were female (M: 23.88, SD :3.24). Sample size in research of Zhu et al. (Zhu, et al. 2013). Ost et al., (2013), Nichols (2014), Calvillo and Parong (2016), and Monds et al (2016). were 432, 120, 372, 160 and 67 subjects, respectively.

Measurements.

The DRM is a method which often is used to check memory errors for words, first it was created by Deese,s (Deese, 1959) and then by the Roediger and McDermott (Roediger and McDermott, 1995). and it is known as the DRM paradigm (Watson, et al. 2003). In this paradigm, for each list of words, there are 15 related words in a same family associated with a keyword lure. In a false memory test for non-presented Lure words, the false recognition level of individuals (72%) was higher than the correct recognition means (65%). There is a lot of evidence for false memory strength as the Lure words are automatically reproduced and retrieved in a free reminder process (Weinstein and Shanks, 2010). This test provides an easy and valid method for studying false reminders and recognition in associative processes. Stadler, Roediger, and McDermott (Roediger, et al. 1996). calculated the validity of the recall and recognition test by using the two-half method. This group of researchers reported a correlation coefficient of 0.8 for the recall test and 0.85 for recognition test. In a study in Iran, Cronbach's alpha of DRM tool was obtained as 0.96. In general, the validity and reliability of this test was confirmed in the general population of Iranian students and children (Ahmadi and Shole, 2011; Khosrowpour, et al. 2009; Abdollahi and Nasiri Moghaddam, 2001).

Nejati et al. (2015) provided Persian language people with 24 lists composed of 15 words in accordance with the Farsi language network (Wang, et al. 2009). In current study, according to the Nichols (2014), we have used the 15 lists with the highest average error in false recognition.

This way, the list of words with Lure words have been selected from Nejati et al.'s list.

DRM words are presented visually with PC in PowerPoint software. PowerPoint presentation is provided in PPSX format. Before the pictures be seen, the subjects are informed that they "see a series of words and they must try to remember them." Each word is displayed for one second and the interval between the lists of words is three seconds. After completing the images, subjects undergo an unrelated and irrelevant task to avoid the effect of precedence of the words of the list and their review. Then after 20 minutes, subjects received the DRM Recognition Test, which included 15 Lure words, 45 word which have been senn, and 60 new unrelated words. The participants should figure out and understand whether the words were presented in slides (old), or not (new).

The scoring is taken as zero and one, and three scores are obtained for calculating DRM credentials in creating false memory including: the observed (the sum of the correct answers to the 45 items which have been seen in the slides); the Lure (the sum of the incorrect answers to the 15 items of the Lure words) and not observed (Total false answers to 60 completely new items).

Misinformation paradigm.

In this study, we used a three-step paradigm adapted and base on the study of Takarangi et al. (2006). Many studies have used Takarangi's false information paradigms to measure the false memory approved its validation for false memory (Nichols, 2014; French, et al. 2011; Foster, 2012; Mori, 2007). In the first stage, the participants observe a 6 minutes and 28 seconds clip of "Eric, Electric Power" in a personal computer. In the video, Eric steals food and personal objectives from customer's home while he is doing electronic work. After playing the clip to prevent mental training about what happened in the clip, participants answer unrelated things for 12 minutes.

Then participants will be divided into two groups A and B (each one studied two texts of A or B), and read the description of Eric activities in the same order that happened. Each sub participant can read the text according to the speed of his own study. In this method, there are 8 items of misinformation generally (clothing, magazine, picture, hat, time, key, mug, drink). These 8 items get two different conditions of misleading and control for two groups of A and B. For participants in group A, 4 items (clothing, hat, time and drink) are set as misleading items and 4 items (magazine, image, key, glass) are set as control terms (free of misleading information).

For participants in group B, 4 items (magazine, image, key, mug) are set as misleading items and 4 items (clothing, hat, time and drink) are set as a control item. After the participants read the text, they spend 5 minutes to the math assignment (countdowns by subtracting 7 out of 1000) to prevent mental review of information in the video and text. At the end of the course, the participants will pass the recognition test in a 20 items-two options test, as pencil-paper, about the film events. Recognition test's period is 10 minutes. The test is performed individually and in 5-persons group according to the research background (Nichols, 2014). The test scores are zero and one. In order to examine the inter-effect of misinformation, two scores are calculated, including the score of the false information (the total number of incorrect answers, four items out of eight items of misinformation that the subject has been misinformed about them. The maximum score in this scoring is 4), the control score (Sum of incorrect answers, four items out of eight items of misinformation that the participan received correct information or no information about them).

Procedure.

According to the literature, simultaneous implementation of several methods does not produce syngeneic conditions (Nichols, 2014; Zhu, et al. 2013; Monds, et al. 2016). According to the literature, application of DRM, misinformation and inflation of creativity can be done both

individually and collectively (up to 5 people). (Nichols, 2014; Zhu, et al. 2013). First, participants perform DRM, and then perform the false information practices.

Results.

All participants were mistaken in performing the DRM practice, as one of the participants reported the minimum error (4 errors). But in the misinformation method, 7 participants did not report any errors in the 4 misleading items.

In order to determine the false memory creation by the DRM method, Mauchly's Test of Sphericity (0.989) was not statistically significant. As a result, default condition of repeated variance analysis was used. As it could be observed from the results of the analysis of variance in Table 1, there is a significant difference between the mean value of the correct answers to the observed items and the mean of the wrong answers to the Lure and not-observed items. So, the Bonferroni's Post Hoc tests were conducted for more accurate examination of these differences among these three mean groups. The results of Bonferroni's Post-Hoc test for comparing the means (Table 2) shows that there is a significant difference between the mean true response ratio to observed items and the average ratio of the wrong answers to the Lure items. This means that the subjects believe that they have seen the Lure words before. In addition, there was a significant difference between the mean of incorrect answers to Lure items and the mean of incorrect answers to unobserved items. Also, there is a significant difference between the mean of correct answers to the observed items and the mean of the wrong answers to the unobserved items. In fact, the subjects well distinguished the words not already listed and the words similar to the previous ones (such as Lure words) from previously provided words. Insignificant difference between the items of Lure items and observed items, as well as significance of differences between Lure and unobserved items, protects the creation of false memory in subjects affected by this method.

Table 1. Results of Analysis of Variance of the mean of the correct answer ratios to the observed items and the mean of the wrong answers to the Lure and unobserved items assuming the spherical significance level.

Effect size	Level of significance	Degree of freedom	F	Indicator
0.883	0.001	2	666.512	Size

Table 2. Results of Bonferron's Post-Hoc test between the average ratio of correct answers to observed items and the mean of the wrong answers to the Lure and unobserved items.

Item	Mean	Standard deviation	Difference of means	Level of significance
Lure	0.707	0.16	0.003	0.999
Observed	0.705	0.13		
Lure	0.707	0.16	0.561	0.001
Unobserved	0.146	0.11		
Observed	0.705	0.13	0.558	0.001
Unobserved	0.146	0.11		

In order to investigate the inner status of misinformation, the results of the comparison of the mean of items of misinformation and control have been reported in Table 3, in groups A, B and all subjects using the t-pair test, separately. Considering the significant value of t for groups A, B and whole population (it was 8.84, 0.70 and 11.82, respectively), there is a statistically significant difference between the errors of incorrect items of information and control. This finding supports the creation of false memory by incorrect information.

Table 3. T-pair test to compare the mean of misinformation and control in groups A, B and all subjects.

Group	Status	Mean	Standard deviation	Degree of freedom	T-value	Level of significance
A	Misinformation	2.35	1.23	56	8.84	0.001
	Control	0.70	0.70			
B	Misinformation	2.10	1.05	57	-0.70	0.001
	Control	0.74	0.73			
Whole	Misinformation	2.22	1.15	114	11.82	0.001
	Control	0.71	0.73			

According to the findings reported in Tables 1, 2, and 3, false memory was created by both practices in the research participants. In the next step, Pearson correlation test was used to study the relationship between the two methods of DRM and the effect of the misinformation. The results of this test are reported in Table 4. The results show that there is no relationship between these two methods of false memory creation.

Table 4. Results of Pearson correlation test of two paradigms of DRM and misinformation.

Indicator	**Pearson correlation test**	**Level of significance**
False memory of Lure words False memory of misinformation	0.09	0.343

Discussion.

The main hypothesis of this study was to determine whether performance in a false memory paradigm can predict performance in another paradigm. If the false memory will be created by either of these two methods, this hypothesis will be accepted and then the scores derived from the error of each method will be compared with each other.

The false memory can be created by the DRM wordlist. And it supports the creation of false memory in subjects. This finding is consistent with the mass of studies that used the DRM method to measure false memory (Gallo, 2010; Zhu, et al. 2013; Monds, et al. 2016; Nejati, et al. 2015).

Also, the false memory can be made by the paradigm of the misinformation and Many of researches confirmed the effectiveness of this method in creation of false memory (Nichols, 2014; French, et al. 2011; Mori, 2007; Roediger and McDermott, 2000).

Studies that compared the false memory by means of different methods are limited. Our research's result is in line with Ost et al., (Ost, et al. 2013) who investigated the relationship between DRM false reminder and false recognition, and the error of reminding and recognition of false information, and

did not report any significant relationship between them. Also, it is in line with the research of Mendez (Monds, et al. 2006) who investigated the relationship between DRM recognition and recognition of misinformation for negative stimuli and reported the correlation of (r=-0.18), which was not statistically significant. Some researchers, such as Zhu, Calvillo and Parong (2016) and Nichols (2014) reported a poor, but significant correlation between DRM errors and misinformation. It seems that since the sample size in the research of Zhu et al (2013) and Nichols (was 32 and 372, which is relatively high, there is a small correlation between DRM and misinformation methods. But in the study of Monds et al (2006) and OSt, there were 67 and 120 subjects. In this research ultimately analyzed 125 people, which was lower than the research conducted by Zhu and Calvillo, as a result of the correlation between the methods was not significant. Different test condition is another explanation that can be made for differences in research results.

In theoretical view, the effect of misinformation is generally explained by the theory of source supervision, which is to say: the weakness of supervision causes the people mistakenly recall the information behind the false event as occurring in the main event (Johnson, et al. 1993).

DRM method is explained by a combination of the theory of activation and supervision; the word "Lure" is cognitively activated through commons with the rest of the words in a list, and the supervision process for determining whether the word Lure is one of the words of the list or the result of cognitive processes becomes internally in trouble (Roediger and McDermott, 2000). Similarly, DRM error occurs due to a mistake in semantic memory, the error is incorrect information related to event memory. In addition, the DRM error is entirely created by the person himself, while the misinformation is an error created by external induction. As a result, although the source monitoring component is identical in both of these methods, different mechanisms are involved in these two paradigms. So, creation of a false memory under the experimental conditions in these two paradigms is different because of differences in methodology, phenomenology, and infrastructure.

To conclude, the results of this study prove that both two paradigms (DRM and Misinformation) can create false memory. Hence falsification in each of these paradigms, can anticipate the falsification in another paradigm. We suggest that in future researches, the other paradigms which create the false memory, such as imagination inflation will be compared with these two paradigms.

BIBLIOGRAPHIC REFERENCES.

1. Abdollahi, A; Nasiri Moghaddam. S.H. (2001) Remind and recall of false words and not provided representations visual stimuli. Progress in Cognitive Science, Year 3, No. 1,2.

2. Ahmadi, F., Shole (2011), Effect of imagination and replication in the false memory, Quarterly of recent of cognitive science, Year 13, No.3, pp 65-74

3. Calvillo, D. P., & Parong, J. A. (2016). The misinformation effect is unrelated to the DRM effect with and without a DRM warning. Memory, 24(3), 324-333.

4. Clancy, S. A., McNally, R. J., Schacter, D. L., Lenzenweger, M. F & ,.Pitman, R. K. (2002). Memory distortion in people reporting abduction by aliens. Journal of abnormal psychology, 111(3), 455.

5. Clancy, S. A., Schacter, D. L., McNally, R. J., & Pitman, R. K. (2000). False recognition in women reporting recovered memories of sexual abuse. Psychological Science, 11(1), 26-31 .

6. Corsini, J. R. (1999). The Dictionary of Psychology. Philadelphia, PA: Taylor & Francis Press.

7. Deese, J. (1959). On the prediction of occurrence of particular verbal intrusions in immediate recall. Journal of experimental psychology, 58(1), 17.

8. Foster, J. L., Huthwaite, T., Yesberg, J. A., Garry, M., & Loftus, E. F. (2012). Repetition, not number of sources, increases both susceptibility to misinformation and confidence in the accuracy of eyewitnesses. Acta psychologica, 139(2), 320-326.

9. French, C. C., Santomauro, J., Hamilton, V., Fox, R., & Thalbourne, M. A. (2008). Psychological aspects of the alien contact experience. Cortex, 44(10), 1387-1395 .

10. French, L., Garry, M., & Mori, K. (2011). Relative–not absolute–judgments of credibility affect susceptibility to misinformation conveyed during discussion. Acta Psychologica, 136(1), 119-128.
11. Gallo, D. A. (2010). False memories and fantastic beliefs: 15 years of the DRM illusion. Memory & Cognition, 38(7), 833-848.
12. Gallo, D. A., & Lampinen, J. M. (2015). Three pillars of false memory prevention: orientation, evaluation, and corroboration. The Oxford handbook of metamemory
13. Geraerts, E., Lindsay, D. S., Merckelbach ,H., Jelicic, M., Raymaekers, L., Arnold, M. M., & Schooler, J. W. (2009). Cognitive mechanisms underlying recovered-memory experiences of childhood sexual abuse. Psychological Science, 20(1), 92-98 .
14. Geraerts, E., Smeets, E., Jelicic, M., van Heerden, J & ,.Merckelbach, H. (2005). Fantasy proneness, but not self-reported trauma is related to DRM performance of women reporting recovered memories of childhood sexual abuse. Consciousness and cognition, 14(3), 602-612.
15. Johnson, M. K., Hashtroudi, S., & Lindsay, D. S. (1993). Source monitoring. Psychological bulletin, 1..3 ,(1)14
16. Khosrowpour, F.; Ebrahimi Nejad, G.; BaniAssadi, H.; Faryabi, M. (2009). Comparison of false memory of patients with post-traumatic stress disorder on the type of psychological treatment. Kerman University of Medical Sciences, 17, No.2, PP 154-160
17. Loftus, E. F. (1993). The reality of repressed memories .American psychologist, 48(5), 518 .
18. Meyersburg, C. A., Bogdan, R., Gallo, D. A., & McNally, R. J. (2009). False memory propensity in people reporting recovered memories of past lives. Journal of Abnormal Psychology, 118(2), 399 .
19. Monds, L. A., Paterson, H. M., & Kemp, R. I. (2016). Do emotional stimuli enhance or impede recall relative to neutral stimuli? An investigation of two “false memory” tasks. Memory, 1-8 .

20. Mori, K. (2007). A revised method for projecting two different movies to two groups of viewers without their noticing the duality. Behavior Research Methods, 39(3), 574-578

21. Nejati, V., Kamari, S., Shiri, E., Radfar, F. (2015). Determining the semantic network for selected Persian words and design of false memory scale (MAHAK), Cognitive recognition quarterly, Year 3, No.3, pp 1-11

22. Nichols, R. M. (2014). Not All False Memories Are Created Equal: UNIVERSITY OF CALIFORNIA, IRVINE.

23. Ost, J., Blank, H., Davies, J., Jones, G., Lambert, K., & Salmon, K. (2013). False memory≠ false memory: DRM errors are unrelated to the misinformation effect. PloS one, 8(4),

24. Otgaar, H., Verschuere, B., Meijer, E. H., & van Oorsouw, K. (2012). The origin of children's implanted false memories: Memory traces or compliance? Acta psychologica, 139(3), 397-403.

25. Platt, R. D., Lacey, S. C., Iobst, A. D., & Finkelman, D. (1998). Absorption, dissociation, and fantasy-proneness as predictors of memory distortion in autobiographical and laboratory-generated memories. Applied Cognitive Psychology, 12(7), S77-S89 .

26. Qin ,J., Ogle, C. M., & Goodman, G. S. (2008). Adults' memories of childhood: True and false reports. Journal of Experimental Psychology: Applied, 14(4), 373 .

27. Roediger III, H. L., Jacoby, J. D., & McDermott, K. B. (1996). Misinformation effects in recall: Creating false memories through repeated retrieval. Journal of Memory and Language, 35(2), 300-318.

28. Roediger, H. L., & McDermott, K. B. (1995). Creating false memories: Remembering words not presented in lists. Journal of experimental psychology: Learning, Memory, and Cognition, 21(4), 803.

29. Roediger, H. L., & McDermott, K. B. (2000). Tricks of memory. Current Directions in Psychological Science, 9(4), 123-127 .

30. Roediger, H .L., Watson, J. M., McDermott, K. B., & Gallo, D. A. (2001). Factors that determine false recall: A multiple regression analysis. Psychonomic Bulletin & Review, 8(3), 385-407 .

31. Salehzadeh, Z. (2015). Investigating Emotional Inhibition Suppression Strategies and Adoption on Memory Data Retrieval, Master's thesis, Clinical Psychology, Tehran, Iran: Shahed University.

32. Takarangi, M. K., Parker, S., & Garry ,M. (2006). Modernising the misinformation effect: The development of a new stimulus set. Applied Cognitive Psychology, 20(5), 583-590 .

33. Wade, K. A., Sharman, S. J., Garry, M., Memon, A., Mazzoni, G., Merckelbach, H., & Loftus, E. F. (2007) False claims about false memory research. Consciousness and cognition, 16(1), 18-28.

34. Wang, S.-H., de Oliveira Alvares, L., & Nader, K. (2009). Cellular and systems mechanisms of memory strength as a constraint on auditory fear reconsolidation. Nature neuroscience, 12(7), 905-912.

35. Watson, J. M., Balota, D. A., & Roediger III, H. L. (2003). Creating false memories with hybrid lists of semantic and phonological associates: Over-additive false memories produced by converging associative networks. Journal of Memory and Language, 49(1), 95-118 .

36. Weinstein, Y., & Shanks, D. R. (2010 .(Rapid induction of false memory for pictures. Memory, 18(5), 533-542.

37. Wilkinson, C., & Hyman, I. E. (1998). Individual differences related to two types of memory errors: Word lists may not generalize to autobiographical memory. Applied Cognitive Psychology, 12(1), 29-46 .

38. Zhu, B., Chen, C., Loftus, E. F., Lin, C., & Dong, Q. (2013). The relationship between DRM and misinformation false memories. Memory & cognition, 41(6), 832-838.

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