

Influence of emotional content of items on cryptomnesia

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Aims of the studies The objective of our two experiments was to examine the possible impact of emotion on inadvertent plagiarism which had never been investigated before. The Brown and Murphy's classical paradigm allowed us to investigate plagiarism either when a person remember an item and erroneously think that he/she was the generator of that item (RO task, unforced recall) or when the person erroneously thinks that he/she produces the item at the moment although, in fact, this item is a memory not recognized as such (GN task). The characteristics associated with the plagiarized responses such as confidence ratings (CR) and Remember-Know-Guess judgments (RKG) were also collected.

Procedure¹

1. Initial Generation (2 participants together) "Generate alternately something positive / neutral / negative for you" For each orally generated word, both participants made valence (-3 "highly negative" → +3 "highly positive") & arousal (1 "unexciting" → 6 "very exciting") judgments

After a one week delay

2. Recall-Own task (2 participants separately) "Recall as many words as you can that YOU personally produced last week." CR (exp.1 & 2) (1 "Not sure" to 5 "I said that word last week") and RKG judgments (exp.2 only)

3. Generate-New task (2 participants separately) "Generate four new items for each category." CR (exp.1 & 2) : (1 "Not sure" to 5 "I'm sure no one has produced that word last week")

Results

Exp. 1 (N=48; 24 females)

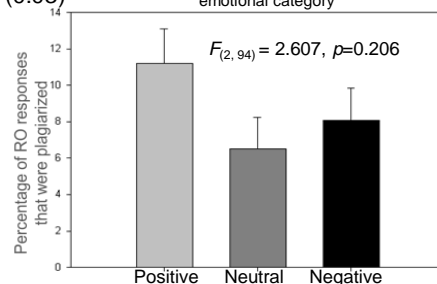
Recall-Own task

Mean plagiarism rate : 8.59%

Percentages RO Responses

	Positive	Neutral	Negative	$F_{(2, 94)} (p)$
	Mean (SEM)	Mean (SEM)	Mean (SEM)	
Correct R.	47.14 (2.88)	36.44 (2.83)	44.27 (2.55)	6.47 (0.01)
Intrusions	7.81 (1.46)	14.10 (1.69)	11.72 (2.00)	3.69 (0.03)

Percentage of RO plagiarism for each emotional category



Confidence Ratings

	Positive	Neutral	Negative	Mean
Correct R.	4.41	4.39	4.55	4.45
Plagiarism	3.42	3.03	3.35	3.27
Intrusions	2.82	2.79	3.09	2.90

$p < 0.01$
 $p = 0.05$

Generate-New task

Mean plagiarism rate : 7.64%

Percentage GN Responses

$F_{(2, 94)} = 1.607, p = 0.206$

	Positive	Neutral	Negative
	Mean (SEM)	Mean (SEM)	Mean (SEM)
Plagiarism	9.38 (2.03)	8.85 (2.27)	4.69 (1.75)
Self-Plagiarism	3.65 (1.27)	5.73 (1.84)	2.08 (1.24)
Other-Plagiarism	5.73 (1.52)	3.13 (1.19)	2.60 (1.33)

Confidence Ratings

	Positive	Neutral	Negative	Mean
Correct R.	4.26	4.42	4.36	4.35
Plagiarism	3.75	4.08	3.36	3.73

$p < 0.01$

Exp. 2 (N=48; 24 females)

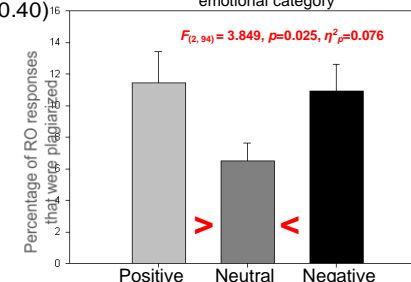
Recall-Own task

Mean plagiarism rate : 9.64%

Percentages RO Responses

	Positive	Neutral	Negative	$F_{(2, 94)} (p)$
	Mean (SEM)	Mean (SEM)	Mean (SEM)	
Correct R.	39.58 (2.86)	30.99 (2.52)	37.50 (2.52)	3.21 (0.05)
Intrusions	12.24 (1.82)	10.42 (1.82)	9.11 (1.79)	0.92 (0.40)

Percentage of RO plagiarism for each emotional category



Confidence Ratings

	Positive	Neutral	Negative	Mean
Correct R.	4.27	4.74	4.19	4.40
Plagiarism	3.43	3.52	3.43	3.46
Intrusions	3.06	2.83	3.32	3.07

$p < 0.01$
 $p = 0.01$

Generate-New task

Mean plagiarism rate : 9.09%

Percentage GN Responses

$F_{(2, 94)} = 1.425, p = 0.246$

	Positive	Neutral	Negative
	Mean (SEM)	Mean (SEM)	Mean (SEM)
Plagiarism	9.90 (2.15)	11.11 (2.33)	6.25 (2.59)
Self-Plagiarism	4.17 (1.70)	5.21 (1.47)	2.08 (1.00)
Other-Plagiarism	5.73 (1.84)	5.90 (1.88)	4.17 (1.34)

Confidence Ratings

	Positive	Neutral	Negative	Mean
Correct R.	4.24	4.44	4.10	4.26
Plagiarism	2.54	2.87	2.90	2.77

$p < 0.01$

Conclusion The emotional content of the to-be-remembered material was found to affect the rates of plagiarism in the RO task. That is, neutral words were less plagiarized than both positive and negative words. These results do not support the Paradoxical Negative Emotion hypothesis² which predict higher rates of correct responses and plagiarism for negative materials. In addition, probably because of a floor effect, we failed to obtain an effect of emotion on rates of plagiarism in the GN task. Participants were more confident in their correct responses than in plagiarized responses (RO & GN) and more confident in their plagiarized responses than in intrusions (RO).

References ¹Brown, A. S., & Murphy, D. R. (1989). Cryptomnesia: delineating inadvertent plagiarism. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 15, 432–442.

²Porter, S., Bellhouse, S., McDougall, A., ten Bricke, L. & Wilson, K. (2010). A prospective investigation of the vulnerability of memory for positive and negative emotional scenes to the misinformation effect. *Canadian Journal of Behavioural Science*, 42(1), 55–61. doi: 10.1037/a0016652