

# The Influence of Emotional Schema and Color Congruency on the Trustworthiness of News

111-1 CAPSTONE COURSE

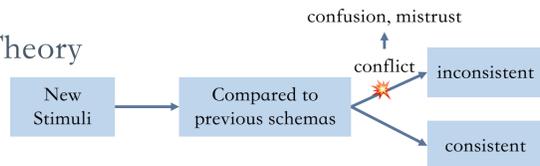
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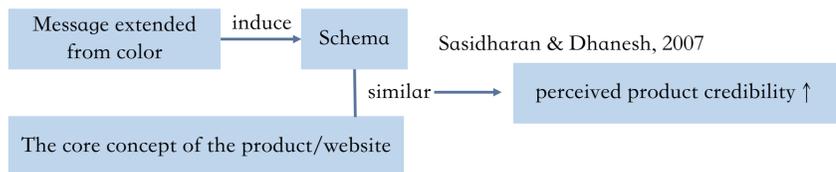
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## Introduction

### • Schema Congruity Theory



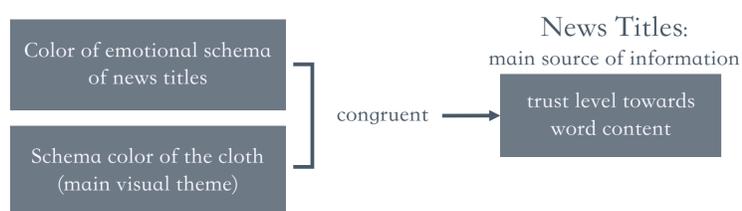
### • Color Schema and Trust



### • Emotional Valence and Color on Trustworthiness

- Emotion Valence on Trustworthiness: Positive emotion > Negative emotion (Dunn et al., 2005)
- Association between color and trust: Blue > red (Su et al., 2019)

## Research Purposes & Hypotheses



- H1 Cloth color has a main effect 🏆 Blue cloth
- H2 Congruency has a main effect 🏆 Congruent
- H3 Emotional Valence has a main effect 🏆 Positive affect

## Methods

### Participants

	Number			Age			
	Total	Male	Female	Mean	SD	Media	Range
Pre-test	32	10	22	21.9	1.48	22	20-25
Formal experiment	70	13	57	21.23	1.4	21	20-27

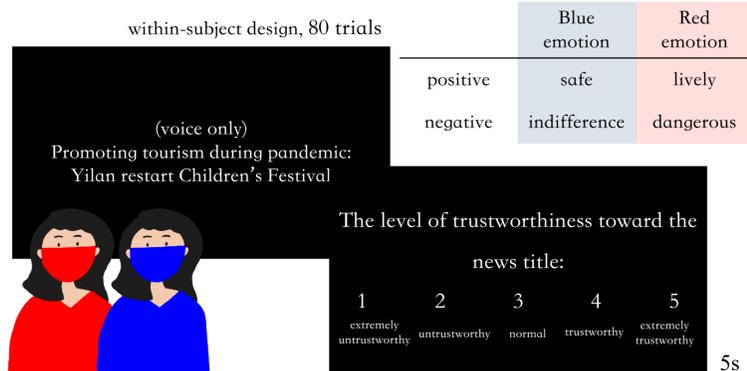
### Experimental Design

#### Pre-test

- Independent Variable
  - Color of Emotional Schema of News Titles: Red/Blue
  - Emotional Valence: positive/negative
- Dependent Variable
  - categorize emotions
  - level of understanding
  - level of trustworthiness

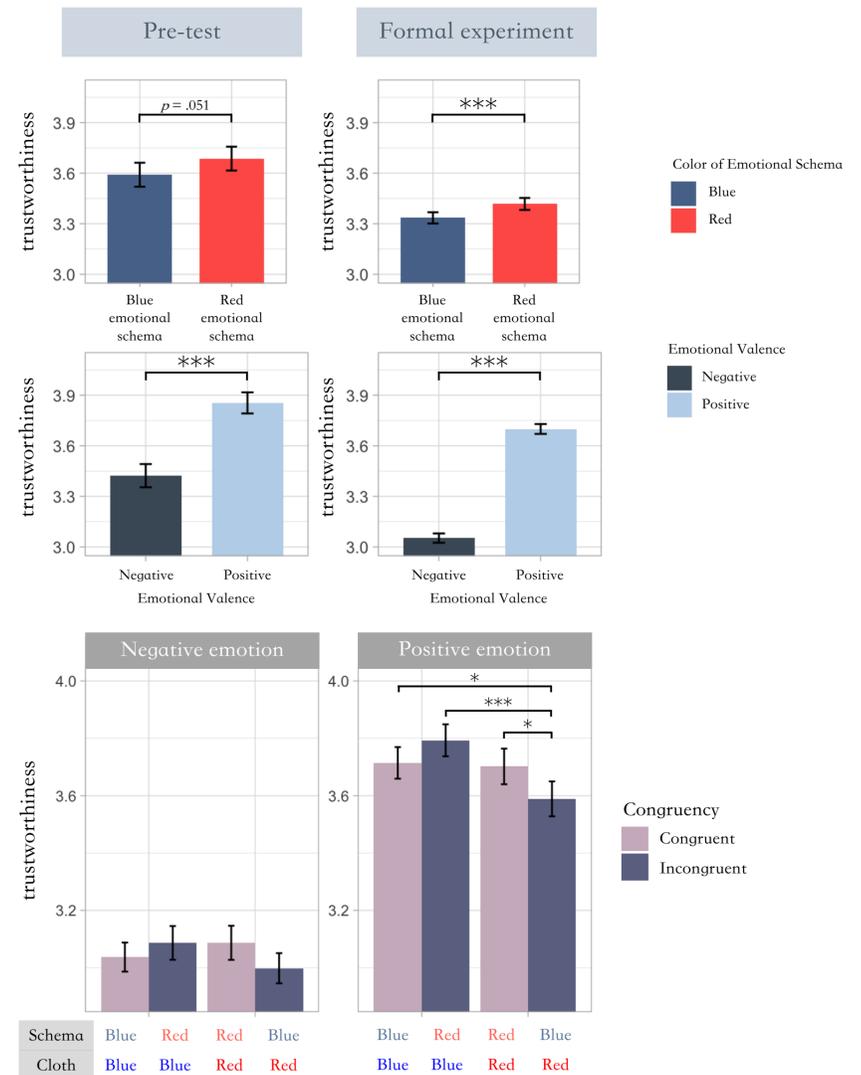
#### Formal experiment

- Independent Variable
  - Cloth Color of the Anchor: Red/Blue
  - Color of Emotional Schema of News Titles: Red/Blue
  - Emotional Valence: positive/negative
- Dependent Variable
  - level of trustworthiness



## Results

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$



Variance Source	SS	df	MS	F	p
Between subject	63.39	69			
Within subject	122.726	490			
Cloth Color	0.57	1	0.57	4.685	.034 *
Residuals	8.395	69	0.122		
Congruency	0.047	1	0.047	0.9	.346
Residuals	3.609	69	0.052		
Emotional Valence	58.66	1	58.66	146.5	< .001 ***
Residuals	27.64	69	0.4		
Cloth Color × Congruency	0.952	1	0.952	6.66	.012 *
Residuals	9.863	69	0.143		
Cloth Color × Emotional Valence	0.279	1	0.279	4.8	.032 *
Residuals	4.004	69	0.058		
Congruency × Emotional Valence	0.0002	1	0.0002	0.007	.934
Residuals	1.97	69	0.029		
Cloth Color × Congruency × Emotional Valence	0.025	1	0.025	0.259	.613
Residuals	6.716	69	0.097		
Total	186.116	559			

## Conclusions

- Cloth color has a main effect (H1): blue cloth trustworthiness > red cloth trustworthiness
- Emotional Valence has a main effect (H3): positive affect > negative affect
- The effect of congruency (H2) exists in positive emotion with red cloth.
  - trustworthiness: congruent > incongruent
  - In negative emotions: floor effect, hence schema congruency or cloth color (environmental) cues cannot influence participants' distrust towards negative news titles.
  - Blue cloth has a soothing effect (Lubos, 2008), reducing the distrust caused by incongruent conflict.

## References

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- Sasidharan, S., & Dhanesh, G. (2007). The Role of Color in Influencing Trust in E-Commerce Web Sites. *MWAIS 2007 Proceedings*. 16. <https://aisel.aisnet.org/mwais2007/16>
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