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LEVERAGING EXEMPLIFICATION EFFECT FOR RISK COMMUNICATION

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Abstract. *This research aims to evaluate the relative impact of each visual, text, and visual and text exemplars taken from Kompas.com COVID-19 news on how it is perceived as a factor in influencing risk. The means of exemplar though versatile and uses widespread in media presentation to provide information and attractiveness of phenomenon for the audience, has received little attention in communication research, especially in Indonesia. An experimental study using post-test only group design in two sub-districts at South Jakarta red zone area followed by ANOVA analysis found that visual, text, and visual and text exemplars exposed to each group have significantly induced risk of contracting COVID-19. A further means plots were also conducted to investigate the tendency that may emerge from previous results. Moreover, the essence of this research also reveals age 18-25 has the lowest perceived risk level, while age 40-50 indicates the highest level. Further, women are seen to have more tendency to have perceived greater risk compared to men. These findings provide new insight into the impact of messages, particularly when engaging exemplification effect in risk communications.*

Keywords: *Perceived risk, Exemplification, COVID-19, Exemplar, Persuasion*

1. INTRODUCTION

One of the most common characteristics of journalistic writing is that it frequently focuses on specific events and individuals (D. Zillmann & Brosius, 2000). When discussing more abstract or general issues or phenomena in news reports, isolated cases are leveraged to illustrate and highlight the subject reported, for example short opinions expressed on a particular issue by ordinary citizens—so-called *vox populi* (Beckers, 2017, 2019; Daschmann, 2000). An excellent example of conveying information about a "bigger idea or issue" is called exemplar that produces exemplification effects (D. Zillmann, 1999). Teachers often use exemplifications to demonstrate new ideas and concepts regarding organizations, governmental policies, health hazards, criminal risks, natural catastrophes, popular culture, and other occurrences. Exemplification has been mentioned in a number of fields of communication throughout the years, most notably those dealing with media and message impacts (Bigsby et al., 2019). Despite the breadth and increasing popularity of exemplification theory in the communication literature, no analysis of exemplification studies in Indonesia applied to COVID-19 phenomena has been conducted to the best of the researcher's knowledge to acquire a better grasp of how exemplification theory may be used to research, conceptualization, operationalization, and evaluation.

The mass media is the primary source of information for people in high-risk circumstance to return orders since there is a basic need for knowledge to create a feeling of order, reduce uncertainty, and control (Schwarz et al., 2016). In the 4.0 era, there is a vast flow of information such as news coverage, press conferences, news analysis, debates, broadcast messages, and social media postings. It is possible to create a perspective that is affected by mass media, primarily digital media. Indonesia, Southeast Asia's most populous country, struggling to decrease fatalities and rapid COVID-19 transmission, especially in the dense population, scored a 33,2% positivity rate, 1.012.350 active cases, and 29.726 numbers of death by the end of January 2021. Despite the local government's large-scale social restrictions, Jakarta, as the densest

city in Indonesia, recorded 26% active national score cases with 269.718 people infected and a 1.7% mortality rate (COVID-19 Response Acceleration Task Force data on 30 January 2021). The social restriction had increased unprecedented news consumption rates through online local news portals.

Risk is a complicated, psychological, and socially regulated phenomenon that is influenced by many variables such as “possibility, seriousness, controllability, dread, disastrous probability, and risk” (Renn & Rohrmann, 2000; Slovic, 1987). According to one study, people's behaviour may alter significantly in the presence of COVID-19. As a result, risk perceptions regarding COVID-19 differ substantially among people and locales, suggesting that risk perception may be a significant driver of pandemic evolution since it influences the frequency of new confirmed cases (Cori et al., 2020). By examining risk situations from the lens of exemplification theory, this research will seek how that exemplified communication in the form of text, visual, and combined text and visual exemplar related to COVID-19 in one prominent online news portal; Kompas.com affects people's perceptions of risk.

2. LITERATURE REVIEW

1.1 Exemplar in Exemplification

In his original theory explanation, Zillmann (D. Zillmann, 1999) put strength on defining exemplars and describing the process of exemplification, showing that the existence of exemplars impacts people’s comprehension of broader events. Several studies indicate that exemplar in news reports had greater and even longer-term impact on public viewers' comprehension of events portrayed in news stories, for example, quantitative data ranging from precise figures to ambiguous assertions in amounts, for example, "most" or "few" (D. Zillmann, 1999).

He also claimed that exemplars captivate our attention and, as a result, affect our views and judgements about one phenomenon. In other words, people make assumptions about the frequency of individuals, events, or outcomes that may not be accurate. For example, after research participants had read the news articles about individuals murdered in carjackings, their perceptions of carjacking's prevalence and danger become higher than base-rate statistics given, though the news stories included contained the base-rate information (Gibson & Zillmann, 1998). Other early exemplification study showed that emotionally intense contained in one exemplar had proven caused a lasting impact on one’s beliefs and cognitive memory than less intense emotional or non-emotional contained exemplars, and that of its impact could grow with time (Aust & Zillmann, 1996; D. , Zillmann & Gan, 1996).

Exemplars are meant to replace anything other than the given particular exemplar or cases in the exemplification theory (Bigsby et al., 2019). An exemplar, functioned as informational agent, is differentiated by essential traits that enable it to be distinguished (such as a smoker as a case among the smokers). On the level of secondary and tertiary, included low-level exemplar qualities may vary as long as the main feature illustrates broader groups (D. Zillmann, 2006). For example, despite their demographic disparities on at least one dimension, male and female who smoke categorized as exemplars of smokers.

Communicators utilize exemplars to affect how their audience receives information. The primary underlying pathways in exemplification, according to exemplification theory, are structures in exemplars which draw attention, facilitate processing, and elicit emotion, paving way to subsequent perception and persuasion. Exemplification effects are analyzed based on information processing psychology theories, particularly cognitive perspectives that rely on representativeness, quantification, and availability heuristics (D. Zillmann, 2006; D. Zillmann & Brosius, 2000).

Based on exemplification tenets, when people experience or recollect an exemplar, the heuristic called quantification helps us in keeping what is basically an informal tally of exemplars within that group or broader phenomena. This quantification heuristic is constantly on the search for newer exemplars (and possibly counter exemplars if any) and classifies them according to their main characteristics (D. Zillmann, 2002, 2006). Because of this process, people may predict – even if erroneously – the frequency of

circumstance in a certain situation or instance and draw conclusions of larger phenomena in accordance with exemplars that are provided. For example, one had in their mind an estimation of how many incidents of gun violence they have read, witnessed, or heard about (few, some, a lot). The so-called representativeness heuristic involved in this generalization process (D. Zillmann, 2002, 2006; D. Zillmann & Brosius, 2000).

On the other hand, exemplification studies have shown that people form judgements or predictions of greater population according to an exemplar, although a detailed base-rate data presents (Gibson & Zillmann, 1994; D. Zillmann et al., 1996). While representativeness and quantification heuristics drive awareness to the exemplars one's encounter, they may not affect beliefs, attitudes to further action unless accessible in cognitive (D. Zillmann, 2002). Engaging its availability heuristic, exemplars are considered to be easier to recall than abstract and complex information as base rates (Bigsby et al., 2019).

2.2 General View of Exemplified Text and Visual

Exemplifications of many modalities such as text and visual are often included in news stories (Tukachinsky et al., 2011). Many information studies of visual and text exposure on television news have shown inconsistency between visual and the accompanying spoken statement (Bucy & Grabe, 2007; Grabe & Bucy, 2010). Hence, while media customers tend to develop overall views upon based on verbal and visual communications, certain examples may be more important than others in general opinions. In particular, numerous theoretical models and results from empirical studies in communication, neuroscience and cognitive psychology have proved pictorial visual is processed quicker than written communications if compared with spoken information (Lang, 1995; McCarthy & Warrington, 2016). In addition, exemplar-modality effects, defined as the impact of an exemplar supporting each side of a story, are likely to have serious implications for media professionals, as news reports that present an equal number of pictures and text stories exemplars may still bias readers' perceptions of the topic depending on the modality of exemplars (Tukachinsky et al., 2011).

Having a direct impact to their recipient, visual media signals are tangible sensory sensations (Messaris & Abraham, 2001). Both physically present (non-mediated) visual stimuli and visual media processing utilize the same neural exercises (Detenber & Reeves, 1996). In comparison to verbal message processing, which requires a more refined and arduous linguistic ability that requires higher cognitive processing level, visual processing is a primal, well-developed capability that depended on innumerable neural circuits that enable rapid perception and incorporation of visual information (Rapin, 2002).

2.2 Communicating Risk Perception

Typically, a way to communicate risk may include evidence in visual, statistical, and/or narrative form. People can adjust to new situations if they are at danger of becoming infected with a disease that can bring severe health effects (Slovic, 1987). In a severe pandemic, message's emphasis is changed from precautionary support to crisis communication (Sandman, n.d.).

In this research, the risk perception conceptualized on measurement method is following seven risk factors (Slovic, 1987) : (1) Voluntariness, degree of assessment of a risky activity is done voluntarily, (2) Dread, degree of fear in doing a risky activity, (3) Control, how much a person performing a risky activity has to control over the impact of the activity, (4) Knowledge, level of knowledge that a person has on the risks of carrying out these risky activities, (5) Catastrophic Potential, likelihood level of disaster that can occur as a result of carrying out a risky activity, (6) Novelty, level of assessing whether a risky activity being carried out is a new activity/not, (7) Equity, level of risk due to carrying out a risky activity whose impact is felt by other people other than the perpetrator.

3. RESEARCH METHODS/METHODOLOGY

This research was conducted in South Jakarta Municipality of DKI Jakarta Province, at Mampang Prapatan district, which was narrowed down to two sub-districts,

namely Bangka and Mampang Prapatan. Mampang Prapatan district was selected as a study location since it was the first positive verified case in Indonesia and remains a red zone. The participants in the study were evenly divided between men and women in total 90 respondents randomly assigned from each sub-district to participate in the direct true experiment method. This research required a range age of 18-50. Participants were divided into three groups representing different manipulated stimuli of COVID-19 related text, visual, and text and visual articles taken from actual articles in Kompas.com. Each exemplar was carefully manipulated to have such emotionally aroused, depicting in the vivid image of COVID-19 coffin monument placed in the research area and personal testimonial of a coffin maker whose family member died from COVID-19 infection.

After the participants were exposed to each printed stimulus, they were asked to fill a set questionnaire developing according to exemplification theory and Slovic's risk perception factors. The questionnaire using in this research has passed the pre-test stage on a different population to ensure its reliability (r_{11} = 0.77 to 0.91). The data were analyzed using SPSS.

4. RESULTS AND DISCUSSION

This research has proven to support numerous previous findings that exemplars (in this study presented in the form of text, visual, and text and visual separately) can influence participants' risk perception. First, the researcher summarized demographic characteristics as below:

Participants Demographic

Variabel	Text Stimulus Group (n=30)		Visual Stimulus Group (n=30)		Text & Visual Stimulus Group (n=30)	
	f	**%**	**f**	**%**	**f**	**%**
Sex						
Man	15	50.0	15	50.0	15	50.0
Woman	15	50.0	15	50.0	15	50.0
Age						
18-25	8	26.7	8	26.7	9	30.0
26-39	14	46.7	10	33.3	12	40.0
40-50	8	26.7	12	40.0	9	30.0

Table I

Second, from the dataset, using SPSS, regression analysis was conducted to check the magnitude of each exemplar's impact as the following:

The Magnitude of Exemplar Impact

Post-Test	β1	p-value (F)	p-value (t)	R2
Exemplar text	0.691	0.000	0.000	0.552
Exemplar visual (photographic)	0.709	0.000	0.000	0.505
Exemplar text & visual	0.971	0.000	0.000	0.714

Dependent var: risk perception of contracting COVID-19

Table II

Table II undoubtedly tested the exemplar impact of exemplar according to exemplification theory and compared the magnitude impact of each different modality to risk perception. Thus, confirmed that words and images speak louder than words and pictures alone, despite the difference being insignificant. But it is essential to highlight that text exemplar has a little higher impact than visual exemplar, possibly due to careful information processing since the participants were given four minutes to each stimulus, enough time to read the emotionally laden text exemplar. Moreover, the findings support the argument that past experiences of all participants who live in the area of research that has seen the coffin monument confirmed that the exemplar was stored

(quantification heuristic) and recalled (availability heuristic) by the time this research taken (D. Zillmann & Brosius, 2000). The text and visual took the highest impact position since the combined quantification and availability heuristic made twice processing of intake and utilization.

Third, this research investigated whether sex and age had significantly different impact results or any tendency to risk perception in COVID-19 situations. The researcher used a separate t-test preceded by Levene test (F = 0.108, Sig = 0.7430) to recognize any difference between the two sexes to risk perception from these exemplars. The result shown a p-value = 0.554 > 0.05 (standardized p-value <α = 0.05) which translated that there was no difference between man and woman to risk perception in COVID-19 situation. To make this research more thorough, the researcher did a tendency-check using Means Plot to investigate whether any shifts or distinct patterns confirmed a distinct pattern of women participants had higher risk perception (Mean = 3.7514) than men participants (Mean = 3.6556). Since risk perception differs across and within cultures and genders, insignificant differences in cognitive elements of risk perception between men and women are expected (de Zwart et al., 2009). Further, to confirm should there any differences in age-related to risk perception, an ANOVA analysis was done resulted as follows:

Age-Related to Risk Perception

	SS	df	MS	F	Sig.
Between Group	2.407	2	1.240	1.562	.214
Within Group	90.145	117	.007		
Total	92.553	119			

Table III

According to the above, there was no significant risk perception difference level between age groups (p-value = 0.214 > 0.05). Again, to check whether there was any shift or distinct pattern of the result, a Means plot was conducted. The result was the age group 18-25 had the lowest mark in risk perception level (Mean = 3.5552), while age group 26-39 slightly higher (Mean = 3.7022) and age group 40-50 bear the highest in risk perception level (Mean = 3.8999). It is possible that to a certain degree age group of 40-50 have more concerns of risk that might threaten their wellbeing to perform their myriad responsibility as the message receivers influence resource allocation in ways that are consistent with their motivation (Lang, 1995).

CONCLUSION

Findings presented in this paper have significantly tested the use of text, visual, and text and visual exemplar and its impact on risk perception. The results of this research provide a view of how the media could function in communicating risk by inducing risk perception levels on its audience as the audience's opinions on major societal issues might lead to realization in expected behaviour.

As the COVID-19 pandemic has put government, particularly public health systems, to the test, communicating effectively with the public to implement the most effective collective response is a must. Risk communication also required to target these age groups and gender to be effective by leveraging risk perception resulted from exemplified information. Despite the limitation of this research, the heuristic cognitive process in exemplification theory research plays a vital role as a mechanism that produces influence. Further research is expected to analyze the heuristic process in exemplification to achieve a desirable impact in risk communication.

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