

Effects of Same-language Subtitles on Video Advertisements: The Moderating Role of Advertising Skepticism

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Abstract

Same-language subtitles on video advertisements are increasingly prevalent, not only in video websites but also in social media. As a new advertising tactic, same-language subtitling is gaining higher and higher attention from marketers. However, little research has explored the effectiveness of subtitles in the advertising field. Therefore, this study aims to examine the effects of same-language subtitles on consumer reactions to subtitled video advertisements and to reveal the relationship between subtitles and advertising skepticism. With a sample of college students ($n = 156$), a 2 (presence of subtitles: subtitles vs. no subtitles) \times 2 (advertising skepticism: high vs. low) experimental design was used. The results of ANOVA showed that same-language subtitles had no significant effects on the dependent variables (content comprehension, brand attitude, brand trust) when compared to non-subtitled video advertisements. However, advertising skepticism had a significant main effect on all variables, where low advertising skepticism showed a more favorable response to subtitled advertisements. Moreover, there was an interaction effect between the presence of subtitles and advertising skepticism on brand trust. People with high advertising skepticism had a more negative reaction to subtitled video advertisements, confirming its moderating role. Despite that adding subtitles is an easy method to enhance the accessibility of video advertisements, it may not always be effective and useful enough to attain the desired communication, especially for consumers with high advertising skepticism. The findings of this study provided useful implications for the marketers and help them to decide whether and how to add same-language subtitles.

1. Introduction

Currently, video advertisements are used in very different places, not only on video websites like YouTube, but also on other social networks like Facebook, Twitter, and television. In many places, video advertisements also appear with subtitles to make sure that they are clearly understood under any condition, not only where the sound is used but also in those places where silence is appreciated, as subtitles help viewers gain information from text.

In this paper, subtitles are defined as captions that transcribe the script of the video. Their use is especially beneficial for hearing-impaired people (Jensema et al. 2000), children who are short in vocabulary knowledge (Linebarger et al. 2010), and foreigners who do not fully understand the local language (Mitterer and McQueen 2009). As part of the overall visual stimulus, subtitles can grab the viewers' attention naturally (D'Ydewalle et al. 1987), even though they are often redundant as they repeat the audio information (D'Ydewalle and Gielen 1992).

Today, with the popularization of mobile technologies, subtitles are even more useful for all individuals who wish to watch videos on their devices in noisy surroundings, or in places where the sound is not welcomed. Subtitles not only improve the accessibility of video content; they also often enhance the overall value of the delivered advertisements. Due to these advantages, subtitles are gaining higher and higher attention from advertisers.

Despite the wide use of captions (audio and subtitles in the same language) in the advertising field, there is unfortunately little academic research to assess the effects on the viewers. Almost entirely the research on subtitles has focused on educational and entertainment content, rarely related to the advertising field. Among the limited research in the advertising field, Brasel and Gips (2014) examined that same-language subtitles have a positive effect on brand recall, verbal memory, and behavioral intent. However, in that research, the effects of subtitles on brand attitude and the advertisement itself were not explored.

In video advertisements, it is important to make sure that consumers understand the message while enjoying the visual effects (Kawamura 2007). Unfortunately, subtitles can affect the visual elements appearing on the screen and damage the atmosphere or image aesthetics that the original video was designed for. That can make consumers feel that subtitled video advertisements are more cluttered in their presentation and, lead to an overall negative effect. Subtitles can thus affect advertising effectiveness in positive or negative ways. Additionally, it is unknown how the consumer personality traits will moderate the effects of

subtitles on advertisements; therefore, it is significant to examine how same-language subtitles on video advertisements affect viewers' perceptions.

Thus, this research uncovers how same-language subtitles, used on video advertising, affect consumer reactions on content comprehension, brand attitude, and brand trust. In addition, the relationship between the presence of subtitles and a personality trait called advertising skepticism is explored. The results show advertising skepticism can be a moderator to help shed light on the overall effects of subtitles and provide implications for future research.

2. Theoretical Background and Hypotheses

Effects on Content Comprehension

Same-language subtitles play a significant role in the process of obtaining knowledge for hearing-impaired people (Josélia 2009). Since information acquisition from the auditory sense is difficult or impossible for them, they effectively obtain information from the visual sense instead. For them, video information processing is a “reading” process, so watching subtitled videos is a type of reading task (Jensema et al. 2000). It was also found that it is much more effortless to process video information when one combines text with visual information (Yuviler-Gavish et al. 2011). When subtitles and video are displayed at the same time, the subtitles can enhance content comprehension (Yoon and Kim 2011) and improve the overall efficiency of the information processing (Cintas 2003).

Moreover, in early experiments, the results also demonstrated that subtitles are useful for hearing persons as well (Nugent 1983). Franco and Araújo (2003) showed that subtitles are helpful for understanding video content, regardless of whether the person viewing the multimedia content is hearing impaired or not. Koolstra et al. (1999) researched subtitled programs for children who could hear. The children who watched the subtitled program were able to decode the words of the characters more accurately and quickly, thus acquiring higher decoding skills. Other researchers who investigated subtitles also saw the benefits of hearing adults who are learning to read (Kruger et al. 2007). More recently, Kothari and Bandyopadhyay (2014) suggested that people who often watch subtitled programs gain an overall higher level of literacy.

Why do subtitles affect content comprehension? As claimed by the cognitive theory of multimedia processing (Mayer 2009), the human brain does not interpret a multimedia stream of words, pictures, and auditory information in a mutually exclusive fashion, instead, it pro-

cesses this multimodal stream in parallel. So, if verbal and visual information are displayed simultaneously, it is much useful to help viewers categorize their emotions efficiently (Focker et al. 2011). For same-language subtitled videos, the same information is provided by different stimuli (audio, visual) achieving a reinforcement effect. Furthermore, the visual information from the “moving” pictures will also complement the “text” information, so that the viewers have multi-channel to process the information (Koolstra and Beentjes 1999).

Effects on Visual Attention

Subtitles can further increase the visual attention of the viewers even if the action of reading subtitles can generate a minimal cognitive overload when both video and same-language subtitles are simultaneously displayed on the same viewing screen (D’Ydewalle and Gielen 1992). It also appears that subtitles can capture the viewer’s visual attention automatically, even though they are redundant to the audio information (Gielen and D’Ydewalle 1991). Gielen (1988) conducted an eye-tracking experiment to explore how it works. The result showed that viewers had a “viewing strategy” that makes the eye focus on the most crucial thing while reading the subtitles approximately at the same time. Additionally, it was found that reading subtitles and processing visual information, can occur efficiently and automatically with little effort (Rayner 1998; Zhou 2004).

On the other hand, some authors oppose to the previous results, as they claim that subtitles can be considered as textual information and based on the visuospatial load theory (Moreno and Mayer 1999), once the text is displayed on the screen, the visual and textual channels must compete, interfering with each other. Thus, when the viewer’s attention is concentrated on the subtitles, the subtitles may distract the viewer’s attention away from other information being shown on the screen. As a result, the information presented in the picture may be missed (Koolstra et al. 2002). Even though the video producers try to avoid this situation by placing the subtitles at the bottom of the screen, the subtitling can cover part of the visual picture. So, if subtitles cover some part of the original picture, the information processing can be affected due to visual interference with the position of the subtitles (van Driel 1983). This is further critical in the advertising field. By presenting subtitles on video advertisements, it is possible to destroy consumers’ viewing experience, then this would degrade the advertising outcome. Evaluating the impact of subtitles is one of the objectives of this paper.

Effects in the Advertising Field

Although the effects of subtitles have been researched on educational and entertainment videos, the effects in advertisements are not well known because the viewers' attitudes toward subtitles differ from educational and entertainment contexts to advertising. Surrounded by educational and entertainment contexts, viewers have high motivation to process video information quickly, accurately, and efficiently to understand the contents. Thus, they tend to pay more attention to video information consciously and unconsciously (Alexander and Winne 2006), so subtitles would be welcomed. But what about in advertisements contents? Usually, many advertisements are of low relevance to viewers, so consumers have little motivation to process the advertisement information (Ducoffe 1996), thus, it can be assumed that there is also less motivation to process same-language subtitles as the information is the same as the audio information.

Adding same-language subtitles in the advertising field, it is possible to catch the viewers' attention automatically and facilitate advertisements information processing. According to the perceptual fluency/misattribution model (Fang et al. 2007), when people feel that processing a stimulus is easier than expected, they misattribute this fluency to a secondary cause that is present at the time of perception. Then same-language subtitles on video advertisements may positively affect consumers. On the other hand, presenting same-language subtitles in conjunction with video advertisements can also affect the visual processing of the advertisements, by destroying the visual aesthetic image and atmosphere that the advertisements attempt to convey. Then, this kind of unpleasant experience may degrade the attitudes toward the brand, affecting the consumer perceptions of the advertising in a negative way.

For same-language subtitles, Brasel and Gips (2014) conducted studies on the effects of subtitled commercials among general hearing people. The results confirmed that same-language subtitles still grab viewers' visual attention in advertising contents even with less motivation to process it, which is in line with prior research results. It also showed the viewers' perceptions may thus become somewhat overwhelmed and the subtitling can make the video seem cluttered to the viewers, especially, if both verbal and visual complexity are high. Moreover, the studies demonstrated that same-language subtitles can heighten brand recall. The results confirmed the subtitles' positive effect on memory. However, this research did not involve the attitudes toward the brand and the advertisement, which is an important moderator to understand the consumer reactions.

Thus, to understand the total effects of subtitles on the consumer reactions toward sub-

titled video advertisements, the following hypotheses were developed:

H1a: Same-language subtitles can affect consumer perceptions of video advertisements in a positive way.

H1b: Same-language subtitles can affect consumer perceptions of video advertisements in a negative way.

Advertising Skepticism

In general, many consumers believe that advertisers' claims are dubious, and advertising tactics are manipulated, so they feel distrustful of advertising. Obermiller and Spangenberg (1998, 160) defined this phenomenon as advertising skepticism, which is the propensity for disbelief of advertising. This disbelief among individuals dictates how the marketplace operates through different media, including advertising claims, the advertisers' motives, and advertisement information.

Obermiller and Spangenberg (1998) pointed out that higher-level advertising skepticism decreases the consumer motivation to engage with the advertisements, especially if it requires a heavy cognition overload. Moreover, people with high advertising skepticism more tend to avoid advertising information (Obermiller 2005). Diehl et al. (2007) research on prescription drug advertisements found that it is probable for skeptical consumers who are seeking information on their health condition to take drug advertising as an important information source. This result suggests that higher-level advertising skepticism deters certain consumers from processing the advertising content. Advertising skepticism negatively affects consumer conceptions toward advertisements. In Manuel et al. (2014), the study on functional matching effect in course-related marketing, advertising skepticism was tested as a moderator which can affect the correlation of the functional matching of arguments and persuasion. The result showed low advertising skepticism produced more positive responses to the matched message in comparison with the higher-level advertising skepticism.

Obermiller et al. (2005) noted that the skeptical people showed a more negative reaction towards informational advertisements compared to emotional advertisements. Callister and Stern (2007) compared hyperbolic advertisements to no hyperbolic advertisements to figure out how rhetorical in advertising would affect consumer perceptions. The results of the research found that hyperbolic advertisements had a more favorable attitude than no-hyperbolic advertisements, however, people with high advertising skepticism generated more negatively toward the hyperbolic advertisements.

This type of consumer response can be illustrated by psychological reactance theory (Brehm 1966). The psychological reactance is explained as a state of motivation that is evoked when a person is infringed on specific freedom, aimed to recover it. So, when advertisers try to conduct persuasive communication, the consumer perceives that his freedom of choice has been violated, so he reacts by repelling the message. This consumer behavior has also been verified on how advertisers display messages. As it was previously described, by adding subtitles to video advertisements, the subtitles become part of the video information, either via text information or visual information. Either way, it is believed that the attitude towards the subtitles may vary with their level of advertising skepticism.

As prior work showed, subtitles as verbal information can enhance content comprehension. People with low advertising skepticism, positively elaborate on advertising information and may take subtitles as a useful information source to be collected and may display a positive attitude to ad content comprehension. However, subtitles can also interfere with visual processing, so for people with high skepticism who are less likely to process the advertising information, may feel confused about subtitled advertisements. Adding subtitles may change the attitudes toward the ads in terms of content comprehension.

Moreover, subtitles on video advertisements are part of advertising tactics. For hearing people, who can gain information from audio information, subtitles will be taken as an attention-getting tactic. People with high skepticism may be more likely to take the subtitles as persuasion messages from advertisers. Prior work (Obermiller and Spangenberg 1998; Obermiller et al. 2005; Callister and Stern 2007) already showed that viewing advertisements skeptically will produce a negative effect on the attitudes toward the brand and brand belief. Then, people with high skepticism viewing subtitled video advertisements may dislike the brand and feel more dubious about the brand. Based on the previous discussion, the following hypotheses were developed:

H2: There is an interaction effect between subtitles and advertising skepticism on consumer reaction ((a)content comprehension, (b)brand attitude, (c)brand trust).

H2a: People with high advertising skepticism will display more negative responses to subtitled video advertisements, compared to non-subtitled video advertisements.

H2b: People with low advertising skepticism will display more positive responses to subtitled video advertisements, compared to non-subtitled video advertisements.

3. Method

To test the hypotheses, this research used 2 (presence of subtitles: subtitles vs. no subtitles) \times 2 (advertising skepticism: high vs. low) between-subjects factorial design. The dependent variables were content comprehension, brand attitude, and brand trust.

Stimuli Development

The advertising stimuli used in this research were created as follows.

First, a product was chosen for this survey. To choose the appropriate product, semi-structured interviews were conducted among 12 college students, to obtain information about “what kind of advertisements do you expect to have subtitles added and why do you think so”, “what kind of advertisements do you think subtitles would not be needed and what makes you think like that”. Then, according to their answers, some good candidates suited for subtitles were given, such as insurance, finance, mobile plans and so on. These products had something in common; the interviewees were not familiar with them, so they had poor knowledge about the products. Besides, there was so much information in the advertisements that without subtitles it would be difficult to understand its contents. Among the candidates, insurance advertisements were the most common answer. Finally, it was decided that an insurance advertisement should be the appropriate stimulus product choice for the research. Therefore, a 30-second advertisement from the insurance brand “Aflac” was chosen, and for this study, two types of advertising stimuli were prepared, one with subtitles and the other one without subtitles.

Measures

The author developed a scale to measure each variable described in the preceding methods section (content comprehension, brand attitude, brand trust). All scales were adapted from prior studies and used 7-point scales.

In the questionnaire, content comprehension was measured with three items, “easy to understand” vs. “difficult to understand”, “straightforward” vs. “confusing”, and “the meaning is certain” vs. “the meaning is ambiguous”, developed by McQuarrie and Mick (1999). The brand attitude was estimated with the sum of three semantic differential scales, anchored by “good” vs. “bad”, “pleasant” vs. “unpleasant”, and “favorable” vs. “unfavorable” (Mackenzie and Lutz 1989). Following the brand attitude, the brand trust was gauged using four items,

to explore to what extent they felt, “I trust this brand”, “I rely on this brand”, “this is an honest brand”, “this brand is safe”, developed by Chaudhuri and Holbrook (2001). As a moderator, advertising skepticism was measured by nine items developed by Obermiller and Spangenberg (1998). These (content comprehension, brand attitude, brand trust, advertising skepticism) scales were then translated into Japanese.

To verify the reliability and validity of these items, the questionnaire was pre-tested with forty-two college students. The study also conducted an exploratory factor analysis with varimax rotation, and the results were used to refine the wording and reliability of the items.

Sampling and Procedure

A total of 161 undergraduate respondents at a university in Tokyo were recruited (Mage = 21.6, 63% male, 100% listed Japanese as their primary language). The intercept surveys were carried out in several student unions. We asked students one by one whether they were willing to participate in an experiment about advertising. After gaining their consent to cooperate with the research, respondents were told that they would watch a video advertisement, and afterward, they would need to answer some questions about the advertisements. Then, they were shown one of the videos, either with subtitles or without subtitles. The video advertisements were played with sound, using a 13-inch tablet computer. When the video advertisements finished, the students were immediately asked to answer the questionnaires. The respondents were divided into two groups, one for the advertisement with subtitles ($n = 80$), and the other for the advertisement without subtitles ($n = 81$).

4. Results

Measurement Reliability and Validity

In this study, as a first step, a Confirmatory Factor Analysis was conducted to evaluate the reliability and validity of the measures. An acceptable solution of dimensionality was obtained ($X^2(df) = 167.67(135)$, $p < .03$, GFI = .902, CFI = .987, RMSEA = .039) (Hu and Bentler 1995; Hair et al. 1998; Voorhees et al.2016). The internal consistency reliability and construct reliability for each multi-item dependent measure were high ($\alpha > .9$, CR > .9). In addition, the average variance extracted (AVE) for each measurement was calculated and convergent validity was confirmed (AVE > .5) (Hair et al. 2010). Discrimination validity was further confirmed because the square root of AVE exceeded the correlation between two

measures for each measurement pair (Fornell and Larcker 1981) (see Table 1).

Table1. Estimates of Reliability and Validity

Variables	α	AVE	CR	1	2	3	4
1 Content Comprehension	0.91	0.77	0.91	0.88			
2 Brand Attitude	0.90	0.76	0.90	0.52	0.87		
3 Brand Trust	0.95	0.85	0.95	0.43	0.76	0.92	
4 Ad Skepticism	0.90	0.53	0.90	-0.32	-0.49	-0.55	0.73

Note1: Square Root of AVE shown in bold as the diagonal

Note2: AVE – Average Variance Explained. CR – Composite Reliability

After reliability and validity were evaluated for all variables, the study calculated the level of advertising skepticism, the respondents were split into two new groups based on their median values, namely, a high advertising skepticism group ($n = 82$) and a low advertising skepticism group ($n = 79$). Then we computed the mean values for each dependent variable and compared them using a two-way ANOVA with IBM SPSS Statistics 25.

Subtitles Effects on Consumer Perceptions

H1a and H1b hypothesized the presence of subtitles may have a positive effect or a negative effect on consumer perceptions. First, the main effects of subtitles were examined. Opposite to our expectation, no significant differences were observed on content comprehension ($F(1, 157) = 1.298, p > .1$), brand attitude ($F(1, 157) = 0.000, p > .1$) and brand trust ($F(1, 157) = 0.490, p > .1$). Respondents who watched subtitled advertisements evaluated equally to those who watched no-subtitled advertisements. It implied the presence or absence of subtitles on video advertisements does not have any positive effects, nor does it have any negative effects. Thus, H1a and H1b were rejected.

Moderating Effects of Advertising Skepticism

Significant main effects of advertising skepticism were observed in all dependent variables (content comprehension: $F(1, 157) = 8.073, p < .05$); brand attitude: $F(1, 157) = 26.393, p < .001$; brand trust: $F(1, 157) = 39.253, p < .001$). Respondents with lower-level skepticism showed more favorable attitudes towards the advertisement content comprehension ($M_{low} = 5.31$ vs. $M_{High} = 4.72$), the brand ($M_{low} = 5.39$ vs. $M_{High} = 4.63$), and greater brand trust ($M_{low} = 5.37$ vs. $M_{High} = 4.39$) than those with high advertising skepticism.

H2 predicted the moderating effects of advertising skepticism between the presence of

subtitles and all dependent variables. This study tested the interaction effects between advertising skepticism and the presence of subtitles for the dependent variables. The significant interactions between advertising skepticism and the presence of subtitles were observed for brand trust ($F(1, 157) = 5.455, p < .05$) (see Table 2).

Then, multiple comparisons were tested only for this variable as an interaction effect was found. Specifically, this result for brand trust shows that the simple main effect of the presence of subtitles was found only for people with high advertising skepticism (see Table 3). The high advertising skepticism respondents who watched no-subtitled advertisements showed positive reactions for brand trust compared to those who watched subtitled advertisements ($M_{\text{Sub}} = 4.15$ vs. $M_{\text{NoSub}} = 4.63$; $F(1, 157) = 1.313, p < .05$), therefore H2a was supported. On the contrary, the low-level advertising skepticism respondents who watched subtitled advertisements showed greater brand trust than those who watched non-subtitled advertisements. However, there was no statistically significant simple main effect for the

Table 2. Main Effects and Interaction Effects of Each Independent Variable

	Presence of subtitles			Ad skepticism			Interaction effect
	Subtitles	No Subtitles	Main effect	Low	High	Main effect	
Content	4.89	5.13	$F(1, 157)$	5.31	4.72	$F(1, 157)$	$F(1, 157)$
Comprehension	1.41	1.27	= 1.298	1.11	1.48	= 8.073*	= 2.390
Brand Attitude	5.00	5.01	$F(1, 157)$	5.39	4.63	$F(1, 157)$	$F(1, 157)$
	1.07	0.94	= 0.000	0.88	0.98	=26.393***	= 0.320
Brand Trust	4.81	4.93	$F(1, 157)$	5.37	4.39	$F(1, 157)$	$F(1, 157)$
	1.13	1.11	= 0.490	0.88	1.11	= 39.253***	= 5.455*

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

Note2: Top:Mean value; Bottom:Standard deviation.

Table 3. Simple Main Effects between Presence of Subtitles and Advertising Skepticism

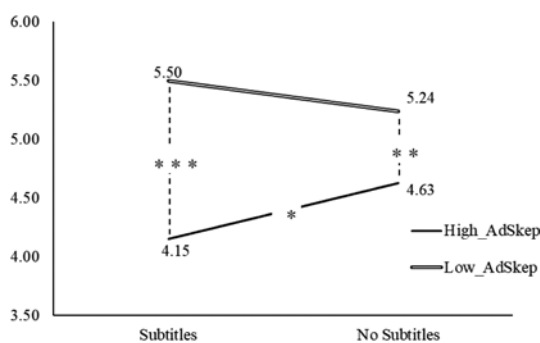
	Low_Ad Skepticism			High_Ad Skepticism		
	Subtitles	No Subtitles		Subtitles	No Subtitles	
Content	5.35	5.27	—	4.45	5.00	—
Comprehension	1.52	1.41		1.12	1.11	
Brand Attitude	5.44	5.35	—	4.59	4.68	—
	1.02	0.95		0.95	0.82	
Brand Trust	5.50	5.24	$F(1, 157) = 1.313$	4.15	4.63	$F(1, 157) = 4.695^*$
	1.00	1.18		0.82	0.94	

Note: * = $p < .05$, ** = $p < .01$, *** = $p < .001$

Note2: Top:Mean value; Bottom:Standard deviation.

presence of subtitles among them ($F(1, 157) = 1.313, p > .1$) (see Table 3), then, H2b was rejected. Based on these results, for content comprehension and attitudes towards the brand, H2 was rejected, and for brand trust, H2 was partially supported. The interaction effect on brand trust was shown in Figure 1.

Figure 1. Interaction Effect on Brand Trust



5. Discussion

Findings and Implications

This study revealed the effects of same-language subtitles on consumer reactions to video advertisements, integrating the concept of advertising skepticism. In this study, two hypotheses were evaluated. First, the results of ANOVA exhibited no statistically significant differences between subtitled video advertisements and non-subtitled video advertisements on all dependent variables. The finding showed that subtitles do not affect the consumer reactions to video advertisements under this condition of this study.

Moreover, this study found that advertising skepticism has a strong main effect on content comprehension, brand attitude, and brand trust. It also extends previous research on skepticism by showing that advertising skepticism can be a personal trait to moderate attitudes toward the advertisement and the brand. This finding is in line with other scholar's research that advertising skepticism has a negative effect on consumer perceptions (Obermiller and Spangenberg 1998). People with low skepticism generate more positive attitudes toward the advertisement and the brand than those with high skepticism (Ozdogan and Altintas 2010).

In addition, this study extends previous research on skepticism by showing that adver-

tising skepticism can be a personal trait to moderate brand trust. A significant interaction effect was observed on brand trust. This finding indicated that for those people with high skepticism, subtitles had a strong negative effect on consumer perceptions of brand trust. However, for people with low advertising skepticism, subtitled video advertisements had no positive nor negative effect on brand trust. In this study condition, subtitles are not strong enough to affect the people with low skepticism, but for people with high advertising skepticism, the impact of subtitles is very obvious. By incorporating advertising skepticism as a moderating role, this study broadens our knowledge by telling us that the effects of subtitles are more prominent for consumers with high advertising skepticism.

There is limited theoretical research that has addressed subtitles in the advertising context. This study examined the effects of subtitles in the advertising field, and how personal traits that are related to the tendency toward advertising disbelief plays a moderating role. This research contributes to the limited studies on subtitles research in the advertising field and provides some interesting implications. According to the previous research on subtitles in educational and entertainment contexts, subtitles have a strong positive effect on content comprehension. However, subtitles in the advertising context showed no effects on consumer perceptions. In spite of so much research on subtitles in the educational and entertainment field, it becomes apparent that research on subtitles in the advertising field is still necessary and important to work on. Additionally, this study is one of the first to explore the role of personality traits in the impact of subtitles for advertising. In prior studies on subtitles, it is common to find that subtitles have a positive effect on consumer perceptions as they enhance content comprehension. However, this study found out that subtitles in the advertising field may affect some consumers negatively.

In practice, the results of this research imply that when subtitling is taken as an advertising tactic, subtitles are likely to affect some consumers in a negative way. Thus, managers need to be aware that adding subtitles on video advertisements is not always efficient, and useful enough to obtain the desired communication, even though subtitling is a low-cost method, very easy to implement, and can achieve higher accessibility. When managers have to decide to add subtitles or not, they could consider what the objective of the communication is, and who would be the targeted consumers. If the objective is related to enhance brand trust, it may not be a good idea to add subtitles, while for other objectives, it would be fine to present the message in either way. Also, if the targeted consumers have a high-level advertising skepticism, it is not effective to add subtitles. So, managers should find other ways to appeal to these particular consumers.

Either way, as subtitles are part of the creative elements, special care needs to be placed regarding the size, font, color, position, and timing so that the dialogue can be put forth effectively. By doing so, the message, that advertisers want to express, can be conveyed precisely to the audience in the most effective way.

Limitations and Future Research

This study made several contributions, however, there are still several limitations that could be addressed in future research.

First, the current sample was restricted to students, and the total number of subjects was not large. In future research, a broader investigation that involves more people is suggested, for instance, the elder generation, businesspersons.

Second, the study only adopted a specific product category, insurance advertising. This particular product is rare to generate brand bias, but, at the same time, it is very difficult to make the respondents pay attention to the advertisements and process the information. Future work would also explore different product categories, such as high-involvement products, and control for prior brand attitude. Also, specific advertisement features (e.g. ad content and appeals) should be considered.

Third, reconsider the method as the advertising was only shown once. Other research shows that the repetition of novel television commercials leads to better advertising effectiveness (Rethans et al. 1986). The research in the future can investigate the repetition effect and the way subtitles may affect consumer perceptions. Moreover, in this study, we did not check how viewers watched the video advertisements, whether they noticed the subtitles or not. Since the respondents were selected one by one in the student union, it is highly possible that the respondents did not read the subtitles. In future work, it would be necessary to use eye-trackers to check how the viewers watch the video advertisements, especially the subtitles.

Fourth, future research could explore the effects of subtitled video advertisements in different viewing contexts, for example, mobile phones versus computers, or in a soundless environment as these different situations may affect the consumer motivation, the ability, and the opportunity of consumers to pay attention to and react to an advertisement.

Finally, this study concluded that people with high-level advertising skepticism display a negative perception to subtitled video advertisements, however, the process of how the presence of subtitles affect consumer perceptions and which variable would play a mediation role is still unclear. Either the visual aesthetic aspect or content comprehension aspect

could be the mediation variable. Thus, in the future, it is significant to explore the mechanisms, for marketers to reduce the negative effects of subtitles in the advertising field.

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