



The relation between the effects of testimonials' sources and the cognitive, affective and behavioural changes

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Abstract

Purpose – Endorsement strategies have a well-known potential of generating good results and there are various studies which refer to the endorsement sources as either a contextually effective or ineffective strategy.

The present study is a new approach on this topic and it aims at identifying whether there are significant attitude changes towards the service category after the exposure to different types of service brand testimonials or not. The service category is represented by cosmetic treatments. The attitude structure in this study specifies three distinct components: the affective, the behavioural and the cognitive one.

Design/methodology/approach – The study was conducted on a sample of 426 males and females from Romania. Each subject was exposed to testimonials coming from experts, celebrities and satisfied customers who were endorsing a branded cosmetic treatment. Measurements included endorsers' perceived credibility and changes in affective, cognitive and behavioural attitudes towards the service category.

Findings – Credibility derived from brand testimonials has an impact on the service category, as all three changes have been significant. The change in behavioural attitude was the most affected by perceived credibility, closely followed by the change in affective attitude and the change in cognitive attitude. Gender differences were also discussed.

Research limitations/implications – The measurement of the endorsement's effect was performed only through the instrumentality of credibility. Another limitation is the survey context in which subjects got in contact with testimonials.

Originality/value – This research is useful for both academics and practitioners, offering insights for those who are interested in attitude research and for those activating in the field of beauty service industry.

Keywords: Testimonials, Affective, Behavioural, Cognitive, Attitudes

JEL Classification: M31 Marketing, M37 Advertising

1. Introduction

The aim of the study is to explore the endorsements' effects of a branded service on the changes in behavioural, affective and cognitive attitudes towards the service category.

In the first section of this article, a brief overview of the current research on attitudes and the use of testimonials in advertising are provided. The second section offers a description of the methodology used. The main results can be found in the third section, while the fourth section provides a summary of the main findings, including limitations and future research directions.

1.1 Affective, cognitive and behavioural attitudes

The basic affective, cognitive and behavioural dimensions of attitude were established by Rosenberg and Hovland. Affective attitudes have an emotional base. These attitudes are relatively short lasting and form rapidly as subjects are exposed to stimuli. Cognitive attitudes last longer than the affective ones and are formed based on the rational facts of the stimuli presented. Behavioural ones include thoughts about future plans, about the service or the products and are

often formed based on the cognitive and affective components of attitudes (Rosenberg and Hovland 1960). Classically, it is considered that attitudes have three distinct components – affective, cognitive and behavioural (Ostrom, 1969). Breckler assessed the validity of a prevalent model of attitude structure and did an empirical validation of affect, behaviour, and cognition as distinct components of attitude (Breckler, 1984).

The emotion - cognition duality is widely debated in the scientific area and there are three major different perspectives. Firstly, there are the scholars who suggest that emotions form separately from cognition (Zajonc, 1980; Izard, 1992); secondly, there are authors who state that emotions do not depend on cognition (Ashforth and Humphrey, 1995) and the last perspective is that emotions and cognitions are antagonistic (Weber, 1946). Another perspective is offered by Lazarus who states that there is a bidirectionality of this relationship – it is impossible to have emotions without cognition and cognition triggers an emotional response (Lazarus, 1991). Behavioural change is considered by some

authors to be the result of cognitive and affective changes of structure (KarkSmollan, 2006).

1.2 Testimonials

Testimonials, long used in marketing communication, are considered to be impactful on audiences, being viewed as experience-based information (Hoch, 2002). The importance of the endorser's perceived credibility, in attitude changes, is highlighted in numerous studies. Since 1973, McGinnies has examined the interactive effects of source credibility and the subjects' initial attitudes on persuasiveness (McGinnies, 1973). The existing literature suggests that an endorser's credibility significantly influences respondents' attitudinal and behavioural reactions. There are studies that claim that the effect of a third-party's endorsement, for instance a customer's testimonial, is stronger than the endorsement coming from a company spokesperson, as measured by perceived credibility of information (Howes and Sallot, 2013). Both effects are positive, but the one that was triggered by an external source was the most intense. Many researchers have demonstrated that endorsers, such as celebrities or customers, play significant roles in persuading consumers (Misra and Beatty, 1990; Gotlieb and Sarel, 1992). Particularly, when these spokespersons display credibility in the ads they endorse, they positively influence recipients' attitude towards the respective ads. (Yoon, Kim and Kim, 1998).

Braverman studied the differences between testimonials and persuasive information and conducted her work especially in the healthcare industry. She defines testimonials as scenes where the main characters tell stories of successful personal experiences and directly or indirectly encourage the public to follow their example (Braverman, 2008). Upon completion of the study, Braverman concluded that testimonials are convincing because they appeal to emotions and not only to rational thinking. It is easy for the public to identify with the main character of a testimonial even if he or she may not be the most reliable source of information. Braverman also concluded that the testimonial messages were well received by less involved participants (Braverman, 2008).

The message sent by a testimonial may be more persuasive, since the status of an uninvolved third party adds credibility to the statement (Wang, 2005). Wang's study showed that 64.9% of those exposed to an endorsement from a third party showed willingness to buy. He also illustrates that consumers will typically consult others and thus would reassess their own positions when a risk or potential risk occurs. Therefore, testimonials are not just convincing, but they can also help overcoming the problems related to perceived risks (Wang, 2005). Velour, Heuvelman and Verhagen have found that viewers are becoming more emotionally opened if the content enhances social interaction with others. Once viewers are emotionally open, they become more susceptible to mood and attitude changes. (Verleur, Heuvelman, Verhagen, 2011).

This study offers insights for practitioners activating in the field of beauty service industry. In this industry, advertising plays a vital role in attracting customers. Faced with increased competition, cosmetic treatment producers constantly strive to develop effective advertisements in order to promote their brands.

2. Methodology

360 females and 66 males from Romania participated in an online survey. Initially, only the attitudes related to cosmetic treatments have been evaluated. Then, each subject was exposed to testimonials, in which experts, celebrities and satisfied customers recommended *Intraceuticals* - a branded cosmetic treatment (Intraceuticals, 2015).

There was a total number of 12 testimonials. Two international and two Romanian celebrities were used for the celebrity endorsement strategy (Madonna, Justin Timberlake, Antonia and Andreea Marin). For the experts' endorsement, 2 dermatologists and 2 plastic surgeons were used, of which one was Canadian, one from the USA and 2 were Romanian. The typical satisfied consumer was represented by 3 females and one male, of different age groups. All testimonials were real - the respondents could very simply check them with a quick search on the Internet and were selected to minimize the importance of the message, as we wanted to separate the effect from the source.

A pseudo-experimental method was used, as the subjects participated in an online survey. In the beginning, the initial affective, cognitive and behavioural attitudes towards the cosmetic treatments were measured. Afterwards, each subject was exposed to all three endorsement strategies. Then, the final attitudes were measured, along with the perceived credibility and demographics. Approximately 10 minutes were necessary for completing this online survey.

The endorsements' effects were measured by a Credibility scale with 12 items on a 9 point Likert scale. The scale was adapted from Ohanian and it integrated sincerity, honesty, trustworthiness and credibility (Ohanian, 1990). Behavioural attitudes towards the service category were measured by 3 items on a 9 point semantic differential scale (Would you have a cosmetic treatment in the next 4 months? *unlikely/likely*; Would you have a cosmetic treatment in the next 4 months? *definitely/not definitely*; Would you recommend a cosmetic treatment to a friend, regardless if you use it or not? *definitely /not definitely*). Affective attitudes were measured by 1 item on a 9 point semantic differential scale (What is your opinion on cosmetic treatments? *negative/positive*). Cognitive attitudes were measured by 2 items on a 9 point semantic differential scale (What is your opinion on cosmetic treatments? *not worth the money/worth the money, bad for the skin/good for the skin*). Initial and final attitudes (measured before and after the exposure to endorsement sources) were measured through cognitive, affective and behavioural attitudes. After the mean values have been calculated, changes in cognitive, affective and behavioural attitudes were

computed by subtracting the initial score from the final one.

3. Analysis and Results

Scales were found to be internally consistent, according to Cronbach's Alpha coefficient. For Credibility scale (12 items) $\alpha = 0.969$. For Initial cognitive attitudes (2 items) $\alpha = 0.879$, for Final cognitive attitudes (2 items) $\alpha = 0.942$, for Initial behavioural attitudes (3 items) $\alpha = 0.975$, for Final behavioural attitudes (3 items) $\alpha = 0.915$. Using a Wilcoxon test, it was concluded that the cognitive, affective and behavioural changes were significant ($p = 0.000$ for behavioural change, $p = 0.005$ for affective change and $p = 0.000$ for cognitive change).

As Table 1 indicates, most of the subjects (225/426) did not change their affective attitudes towards the service category, but positively changed their cognitive attitudes (255/426) and their behavioural attitudes (189/426). The mean rank for those who negatively changed their cognitive attitude is 132.17 and for those who positively changed it, the mean rank is 182.46. The mean rank for those who negatively changed their affective attitude is 100.20 and for those who positively changed it, the mean rank is 102.29. The mean rank for those who negatively changed their behavioural attitude is 149.66 and for those who positively changed it, the mean rank is 156.71.

Table 1: Ranks for changes in behavioural, affective and cognitive attitudes

		N	Mean Rank
Final behavioural - Initial behavioural attitudes	Negative Ranks	118	149.66
	Positive Ranks	189	156.71
	Ties	119	
	Total	426	
Final affective - Initial affective attitudes	Negative Ranks	124	100.20
	Positive Ranks	77	102.29
	Ties	225	
	Total	426	
Final cognitive - Initial cognitive attitudes	Negative Ranks	84	132.17
	Positive Ranks	255	182.46
	Ties	87	
	Total	426	

Through a Mann - Whitney Test, significant differences ($p < 0.05$) were observed only regarding the initial and the final behavioural attitudes between male and female respondents. Depending on the respondent's gender, there are no significant differences for behavioural change. While the mean rank for female respondents' initial behavioural attitudes was 222.71, for male respondents' was 163.24. It was similar for the final behavioural attitudes (221.84 and 168.00).

Both initial and final affective attitudes ranks are higher for women (216.35 compared to 197.95 and 217.96 compared to 189.17), although the difference is significant only for the change ($p < 0.05$). Men scored higher in affective change (242.21 compared to 208.24) and the difference is significant ($p = 0.037$).

Females have higher scores regarding initial and final cognitive attitudes towards the service category (222.71 compared to 163.24 and 219.17 compared to 182.59) and the differences are significant ($p < 0.05$). Also significant is the difference between genders as for the cognitive change ($p = 0.046$) and males scored higher (241.15 compared to 208.43). The demographic variable *Age* did not significantly influence any of the attitudes.

Non parametrical correlations were calculated using Spearman's rho coefficients. Credibility has a weak correlation with all the changes (Cohen's effect size - 0.10 small, 0.30 moderate, 0.50 large) (Cohen, 1988). The behavioural change ($r_s = 0.203$, $p < 0.05$) has the strongest link, it follows the affective change ($r_s = 0.190$, $p < 0.05$) and the cognitive change ($r_s = 0.161$, $p < 0.05$) - see Table 2.

Table 2: Correlations between perceived credibility and changes in behavioural, affective and cognitive attitudes

		Behavioural change	Affective change	Cognitive change
Credibility	Correlation Coefficient	.203	.190	.161
	Sig. (2-tailed)	.000	.000	.001
	N	426	426	426

As Table 3 illustrates, from 426 respondents, 118 negatively changed their behavioural attitudes, 119 did not change their behavioural attitudes at all and 189 positively changed their behavioural attitudes.

For those who positively changed their behavioural attitudes there is a moderate correlation between behavioural change and perceived credibility ($r_s =$

0.349). For those who negatively changed their behavioural attitudes there is a weak correlation between credibility and behavioural change ($r_s = 0.232$). The endorsers' perceived credibility had a larger effect on those who positively changed their behavioural attitude.

Table 3: Correlations between credibility and changes in attitude according to how the behavioural attitude changed

Neg/Neut/Pos Behavioural change				Credibility	Behavioural change
Negative	Spearman's rho	Credibility	Correlation Coefficient	1.000	.232
			Sig. (2-tailed)	.	.011
			N	118	118
Neutral	Spearman's rho	Credibility	Correlation Coefficient	1.000	.
			Sig. (2-tailed)	.	.
			N	119	119
Positive	Spearman's rho	Credibility	Correlation Coefficient	1.000	.349
			Sig. (2-tailed)	.	.000
			N	189	189

From 426 respondents, 64 negatively changed their affective attitudes, 116 did not change their affective attitudes at all and 246 positively changed their affective attitudes.

For those who positively changed their affective attitudes there is a weak correlation between affective

change and perceived credibility ($r_s = 0.267$). The endorsers' perceived credibility had an effect on those who positively changed their affective attitude. There is no correlation between credibility and affective change for those who negatively changed their affective attitudes (see Table 4).

Table 4: Correlations between credibility and changes in attitude according to how the affective attitude changed

Neg/Neut/Pos Affective change				Credibility	Affective change
Negative	Spearman's rho	Credibility	Correlation Coefficient	1.000	.237
			Sig. (2-tailed)	.	.060
			N	64	64
Neutral	Spearman's rho	Credibility	Correlation Coefficient	1.000	.
			Sig. (2-tailed)	.	.
			N	116	116
Positive	Spearman's rho	Credibility	Correlation Coefficient	1.000	.267
			Sig. (2-tailed)	.	.000
			N	246	246

As Table 5 illustrates, from 426 respondents, 84 negatively changed their cognitive attitudes, 87 did not change their cognitive attitudes at all and 255 positively changed their cognitive attitudes.

For those who positively changed their cognitive attitudes there is a weak correlation between cognitive

change and perceived credibility ($r_s = 0.209$). The endorsers' perceived credibility had an effect on those who positively changed their cognitive attitude. There is no correlation between credibility and cognitive change for those who negatively changed their cognitive attitudes.

Table 5: Correlations between credibility and changes in attitude according to how the cognitive attitude changed

Neg/Neut/Pos Cognitive change				Credibility	Cognitive change
Negative	Spearman's rho	Credibility	Correlation Coefficient	1.000	.119
			Sig. (2-tailed)	.	.282

			N	84	84
Neutral	Spearman's rho	Credibility	Correlation Coefficient	1.000	.
			Sig. (2-tailed)	.	.
			N	87	87
Positive	Spearman's rho	Credibility	Correlation Coefficient	1.000	.209
			Sig. (2-tailed)	.	.001
			N	255	255

4. Conclusions and discussions

Although there are various studies that link the source credibility to positive changes in attitudes (Hovland and Weiss, 1951; Harmon and Coney, 1982; Pornpitakpan, 2004), there is not a focus on the effects of a specific ad towards the perceptions of the whole category.

The changes in affective, cognitive and behavioural attitudes were significant, thus credibility derived from brand testimonials has effects on the whole service category. All three changes were positive and while the behavioural and affective attitudes were just slightly changed, the cognitive attitudes considerably improved.

This could mean that a strong endorsement strategy for one brand would benefit the entire category in terms of rational reasons for buying. In this particular case of cosmetic treatments, the data suggest that the exposure to the testimonials of one brand could induce the idea of health benefits and reasonable expense towards all the cosmetic treatments on the market. This is an interesting finding for the beauty industry and it implies that the vendors could collaborate if a change in the perception of the services they sell is needed.

There are also other important dimensions of endorsement, besides credibility, that could explain the changes in attitude, especially the change in the attitudinal cognitive component. Therefore, a limitation of this research is the measurement of the endorsement's effect only by the instrumentality of credibility. At the same time, even though measures have been taken in this regard, there could be other components of testimonials which could influence the changing in attitude besides the sources of endorsement. Future research could investigate the relation between changes in attitudes and perceived credibility of endorsers in other context or using other stimuli than testimonials. Another limitation is the survey context in which subjects got in contact with testimonials.

For the subjects that positively changed their affective and cognitive attitudes there is a link between perceived credibility and these changes, while for those who negatively changed their affective and cognitive attitudes, such a link could not be identified. Therefore, once again, credibility appears as an important factor when a change in attitudes is desirable.

For the respondents that negatively changed their behavioural attitude there is a weak correlation between change and perceived credibility, but there is a moderate correlation between change and perceived credibility for those who positively changed their

behavioural attitude. Therefore, perceived credibility generally improves all three components of attitude and it is mostly connected with the behavioural one.

There were significant gender differences regarding the behavioural and cognitive attitudes, and females have higher scores. This was predictable bearing in mind the nature of the service. However, there were significant gender differences regarding the cognitive and affective changes and men scored higher in both situations. Females know more about cosmetic treatments and have more experience in using these types of services. Males have considerably less knowledge and experience in this area, but they are likely to easily change their cognitive and affective attitudes towards the service category, than females. There were no significant differences between genders and age regarding perceived credibility. The subjects' age did not significantly influence any of the attitude components.

The links between perceived credibility and changes in attitudes revealed that endorsers' credibility affects all three changes, the most affected being the change in behavioural attitude followed by the change in affective attitude and the change in cognitive attitude. This means that when a company wants to increase sales and the word of mouth, a greater effort has to be put in an extensive research on the credibility of the endorsers that will take part in the campaign.

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