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HOW HUMOR CAN PROMOTE CENTRAL-ROUTE PERSUASION

The role of ambivalence

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One of my students recently asked a group of research participants to watch a video of British comedian Russell Howard. The video shows Howard on stage, telling the true story of a 14-year-old boy who has terminal cancer. The boy's parents send Howard an e-mail asking him to come and see the boy. During the visit, the boy turns out to have a great sense of humor. He shares with Howard a list of his favourite Russell Howard performances, including Mr Dildo, a TV show in which Howard dresses up in a six-foot-high phallus costume. The boy invites Howard to his funeral, and he asks Howard to come dressed as Mr Dildo. Russell hesitates but eventually agrees. By a miraculous turn of luck, however, the boy survives his cancer. At the end of the video, the boy joins Howard on stage, smiling broadly and dressed as Mr Dildo.

The research participants reported that they found the comedy piece very funny, but also 'touching' and 'moving.' It induced a reflective state in them. One participant reported the story had taught her 'to celebrate life.' Others wrote that the story convinced them that 'people should plan their funerals' and 'humor is the best way to fight fear.'

The example suggests that comedy can make people think and change their perspective on serious issues. But which aspect of the story made this happen? Was it the humor? To what extent was it important that the story also moved the viewers? Under what circumstances can humor persuade people to change their opinion about important matters?

Persuasion researchers generally assume that humor does not change people's perspective on significant topics. This assumption is based on the idea that humor reduces motivation and ability to elaborate on messages and thereby precludes high-involvement persuasion. In this chapter, I challenge the generalisability of that position. I discuss theory and evidence suggesting that humor can provoke mixed emotions (e.g., of sadness and joy). Research on ambivalence illustrates that

the experience of mixed feelings mobilises effortful information processing. Based on these notions, I propose that to the extent humor elicits ambivalence, it encourages central-route processing and high-involvement persuasion.

I first review a research program illustrating the persuasive role of one-sided (i.e. purely positive) humor in advertising low-involvement products. I present studies showing that one-sided humor only persuades in low-involvement contexts, not in high-involvement contexts. Then, I provide preliminary evidence for the idea that two-sided humor (i.e. humor that elicits both positive and negative feelings) elicits effortful information processing and promotes high-involvement persuasion. The reviewed studies draw from a variety of communication settings, from advertising to political satire to stage comedy. I end with open questions and promising avenues for future research.

The Elusive Persuasive Effect of Humor

Persuasion can be defined as the process by which attitude change is brought about (Colman, 2015). Several strands of research suggest that humorous messages have more impact on people's thoughts, feelings, and behaviour than serious messages do. There is broad agreement among persuasion researchers that humor helps to draw attention to persuasive messages (e.g., Hansen, Strick, Van Baaren, Hooghuis, & Wigboldus, 2009; Madden & Weinberger, 1982). People generally have a better memory for humorous than non-humorous advertisements (Cline & Kellaris, 2007). Humor can increase the motivation of perceivers to process a message (Zhang & Zinkhan, 2006), and can positively bias thoughts about persuasive arguments (Eisend, 2011).

Yet, the persuasive effect of humor is not consistently found across different types of messages and contexts. A meta-analysis on humor in advertisements found that humor had a positive effect on persuasion in five studies, had mixed results in eight studies, and harmed persuasion in one study (Weinberger & Gulas, 1992). One problem is that humor may distract and thereby harm memory for persuasive arguments (e.g., Krishnan & Chakravarti, 2003). Humor is found to be persuasive when viewers have a pre-existing positive attitude toward a message, but not when their pre-existing attitude toward a message is negative (Chattopadhyay & Basu, 1990).

Another prominent moderator of the persuasive effect of humor, which is the focus of this chapter, is *involvement*: the extent to which the topic of a persuasive message has personal relevance and significant consequences for the viewer's own life (Petty & Cacioppo, 1986). For example, if a persuasive message is about a political candidate running for president in the viewers' own country, involvement will be high. If a persuasive message is about a political election in a faraway country, involvement will be lower. Research and theorising suggest that humor is effective for persuading people on low-involvement topics, not on high-involvement topics (e.g., Weinberger & Campbell, 1991; Weinberger, Spotts, Campbell, & Parsons, 1995; Zhang & Zinkhan, 2006). This is in line with predictions of a prominent theory about persuasion: The elaboration likelihood model.

Humor and Information Processing: Peripheral versus Central

Social-psychological research indicates that people process persuasive messages according to the *least effort principle* (Chaiken, Liberman, & Eagly, 1989). The principle holds that people are ‘cognitive misers’: they have a preference for efficiency and only spend cognitive effort when it is truly needed. In low-involvement contexts, the consequences of forming an inaccurate judgment are low, dissuading people from investing cognitive energy. In high-involvement contexts, however, the consequences of forming an inaccurate judgment are substantial, encouraging people to think harder about the message.

The dynamic between involvement and information processing is reflected in the elaboration likelihood model (ELM; Petty & Cacioppo, 1986). According to the ELM, persuasion may happen through two routes: a peripheral route and a central route. The routes differ in a) their focus of attention: peripheral cues vs. message arguments, and b) their depth of processing: superficial vs. deep. In peripheral route persuasion, the focus of attention is on peripheral cues associated with the message and the processing is rather superficial and effortless. Peripheral route persuasion depends on the presence of peripheral cues such as likeable communicators, source expertise, and message length. In central route persuasion, the focus of attention is on the quality of message arguments and the processing of that information is deep and effortful. Based on the level of argument strength, people will formulate cognitive responses that can be either positive or negative (e.g., ‘I like this political candidate because of her focus on education’; ‘I disagree with this candidate’s ideas about foreign policy’). In central route persuasion, people are only persuaded when positive cognitive responses outweigh negative cognitive responses.

Humor reduces processing depth by eliciting a positive mood which comes with a sense of comfort and certainty (Schwarz, 1990; Tiedens & Linton, 2001). As feeling certain is an internal cue that one is already correct and accurate, it undermines people’s motivation to process a message effortfully. On top of this, humor distracts and thereby reduces people’s ability to fully process the underlying message arguments. One of the most important features of humor is incongruence, a violation of expectations or norms (Martin & Ford, 2018). Incongruencies draw on people’s limited cognitive resources, which comes at the expense of processing other information presented in the context of humor, such as persuasive arguments. This reduces the level of message elaboration even more.

It should be noted that the problem of distraction is reduced by applying *related* humor, which is relevant to the message and directly tied to the persuasive arguments (Cline & Kellaris, 2007). Consider the health-slogan ‘Drinking can cause memory loss, or worse, memory loss.’ Elaborative processing of the humorous portion of this slogan automatically means elaborative processing of the central message that drinking is bad for memory because the joke and the message are strongly connected (Blanc & Brigaud, 2014). In more than 40% of humorous

advertisements, however, humor is paired with a persuasive message without the two being meaningfully related (Weinberger & Campbell, 1991). In such cases, humor distracts perceivers from the underlying message arguments and reduces their ability to engage in effortful processing.

For these reasons, humor is generally thought to encourage peripheral route processing and discourage central route processing, thereby reducing persuasion of messages that require complex reasoning (central route processing). A study by Moyer-Gusé, Mahood, and Brookes (2011) illustrates this problem. They investigated a media campaign designed to warn people against the severe consequences of unsafe sex. The story of a young woman experiencing the negative consequences of unplanned pregnancy was integrated into a comedy series and presented in the context of pregnancy-related jokes. Viewers needed to go through a complex thought process to understand the intended message ('Ha-ha, this is funny! But wait ... what if this would happen to me, wouldn't it be devastating? Yes, it would.'). However, as humor undermines critical thought, the message was bound to be misunderstood ('Ha-ha, this is funny! Unplanned pregnancy doesn't seem too bad'). Indeed, compared to a more serious control condition, watching the unplanned pregnancy storyline in a humorous context led viewers to be *more* inclined to engage in unprotected sex.

This effect of humor could be problematic since peripheral persuasion is superficial and not grounded in substantive reasoning. It is generally found to produce weak and fleeting attitudes that fail to guide behaviour when people think before they act. Indeed, there is general agreement among persuasion researchers that central route-processing generates more substantial and lasting attitude change than peripheral route-processing does (e.g., Wagner & Petty, 2011).

However, some studies show that humorous messages can – under some circumstances – be persuasive in high-involvement contexts. For example, humor had positive effects in persuasive messages about the importance of a healthy lifestyle (Blanc & Brigaud, 2014), the benefits of vaccination (Moyer-Gusé, Robinson, & McKnight, 2018), and, indeed, the risks of unprotected sex (Futerfas & Nan, 2017). Furthermore, humor is an essential ingredient of political satire, a genre that plays a significant role in informing people about issues in the political sphere (Hardy, Gottfried, Winneg, & Jamieson, 2014). Recent studies show that political satire influences learning, understanding and behaviour towards complex political issues, and can have a considerable effect on agenda-setting (Boukes, 2019). It thus seems that in some conditions, humor can elicit elaboration and persuasion on high-involvement topics.

What are these conditions? In this chapter, I highlight the possibility that the *two-sidedness* of humor (i.e., the extent to which humor elicits not only positive but also negative feelings), is an important moderator. I assume this is the case because, in contrast to one-sided (i.e., purely positive) humor, two-sided humor evokes uncertainty and consequently stimulates additional deliberation. Two-sided humor may therefore motivate people to reconsider and eventually abandon their pre-existing opinion. Before elaborating on this new idea, however, I will

review an extensive research line in which my colleagues and I studied the persuasive effect of one-sided humor in low-involvement conditions.

Persuasion in Low-Involvement Contexts

One-sided humor is among the most employed strategies in advertising. Approximately 24% of television advertisements try to be funny, and advertisers apply humor to a similar extent in other media (e.g., Beard, 2005). In line with the notion that such humor elicits peripheral route processing, humor is more often used in advertisements for low-involvement products like soft drinks and candy than in advertisements for high-involvement products such as insurance and corporate identity (e.g., Weinberger & Campbell, 1991).

In a four-year research program comprising 17 experiments (summarised in Strick, Holland, Van Baaren, Van Knippenberg, & Dijksterhuis, 2013), my colleagues and I examined how humor affects attention, memory, attitudes, and behaviour towards low-involvement consumer products. We chose to study brand-unrelated humor because it is commonly applied in advertising for low-involvement products (Weinberger & Campbell, 1991). Furthermore, we studied only novel rather than familiar brands to get a clear view of the impact of humor on persuasion without having to take pre-existing brand attitudes into account.

We derived our experimental method from studies on evaluative conditioning, a research area that examines changes in the liking of stimuli due to pairing the stimuli with other positive or negative stimuli (De Houwer, Thomas, & Baeyens, 2001). A common experimental procedure in this field is to repeatedly pair neutral stimuli (e.g., an unknown brand) with positive stimuli (e.g., pictures of cute puppies) or negative stimuli (e.g., pictures of dangerous snakes), and afterward measure how the pairing affected the liking of the neutral stimuli. In our studies, we paired unknown brands with humorous or non-humorous stimuli and observed how this affected the attention, memory, attitudes, and behaviour towards the brands.

In a study that was representative of our experimental approach (Strick, Van Baaren, Holland, & Van Knippenberg, 2009, Experiment 3), we arranged a situation in which one unknown (but truly existing) energy drink brand was repeatedly paired with humor, while another unknown (but truly existing) energy drink brand was repeatedly paired with non-humor.

We asked our research participants to 'browse' through a digital magazine presented full screen on a computer monitor (Figure 1.1 gives an illustration of the stimulus presentation). Two pages were presented on screen for ten seconds, after which the computer program automatically jumped to the next two pages. From the perspective of the participants, it looked as if they were skimming through a magazine, with the pages turning automatically at a regular pace.

A picture of one of two energy drink brands (Enorm or Energy Slammers) was consistently shown on the same page as a humorous cartoon. A picture of the other energy drink brand (Energy Slammers or Enorm) was consistently shown on

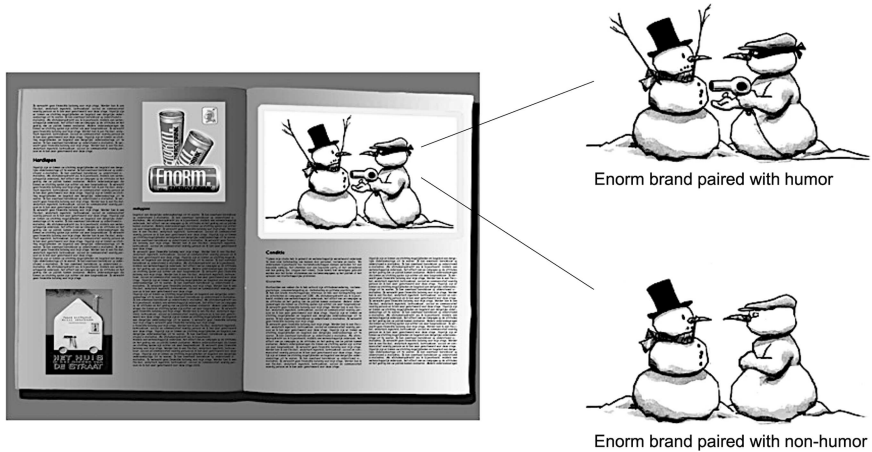


FIGURE 1.1 Illustration of the pairing of a brand with humor and non-humor in the ‘magazine paradigm’ used in Strick et al. (2009, Experiment 3).

the same page as a non-humorous cartoon (i.e., a cartoon with the humorous clue removed). This pairing of brands with humor (or non-humor) occurred on ten different pages per brand. Thus, throughout the magazine, one brand was paired with humor ten times, using ten different humorous cartoons. The other brand was paired with non-humor ten times, using ten different non-humorous cartoons. The pairing of brands with humor or non-humor was varied between participants to avoid the influence of differential liking of the two brand names.

After leafing through the magazine, brand attitudes were measured using an evaluative priming task (Fazio, Sanbonmatsu, Powell, & Kardes, 1986). In this task, participants are repeatedly asked to categorise target words (e.g., rainbow, headache) presented on a computer monitor into positive or negative categories by pressing a left ‘negative’ or right ‘positive’ key. Before each target word appears on the computer screen, a picture is presented that serves as *prime* (in this case, a picture of one of the two energy drink brands). The primed brands are thought to activate evaluations, and thereby facilitate responses to target words that are evaluatively similar and inhibit responses to target words that are evaluatively dissimilar. For example, if an energy drink brand activates a positive evaluation, responses on subsequently presented positive target words will be faster, and responses on subsequently presented negative target words will be slower. Brand attitude is calculated by subtracting the response time to positive target words from the response time to negative target words after priming with the brand. Higher numbers indicate a more positive brand attitude. As expected, the results showed that the participants had a positive attitude toward the brand paired with humor, but not towards the brand paired with non-humor.

In a later phase of the experiment, we measured overt brand choice. Participants were escorted to a room where a stack of cans of both energy drink brands (in equal numbers) was presented. Participants were asked to choose a can

and take three sips. As justification for this task, we told the participants we wanted to measure the effect of energy drink consumption on reaction time task performance. After consuming the energy drink, participants completed a reaction time task to lend credibility to the cover story. However, our true interest was in the brand choice. In line with the assumption that humor is persuasive in low-involvement contexts, participants were twice as likely to choose the energy drink brand that was paired with humor compared to the brand paired with non-humor.

These findings show that one-sided humor in advertising positively influences attitudes and behaviour towards low-involvement consumer products (Strick et al., 2013). The positivity of such humor directly injects a positive attitude and behavioural preference towards brands.

When Attitudes Matter

Based on the ELM, one can predict that the strong persuasive power of one-sided humor in low-involvement conditions does not apply to high-involvement conditions. Indeed, experimental research on advertising generally confirmed this assumption.

In one study, research participants were given a booklet containing several articles and ads, including a target ad promoting a fictional brand of camera (Zhang & Zinkhan, 2006). In the low-involvement condition, participants were simply asked to skim through all ads and articles in the booklet. In the high-involvement condition, participants were informed that one of the ads featured a new camera that would be test-marketed in their own city, and for which they would receive a discount coupon. This experimental manipulation of involvement was crossed with an experimental manipulation of one-sided humor: for half of the participants, the camera ad was made humorous by including a funny cartoon. For the other half, the camera ad was made serious by including a non-humorous picture.

After reading the booklet, participants' attitudes towards the camera brand were measured. In line with the predictions of the ELM, the results indicated that the effects of humor varied across the different involvement levels. The humorous ad elicited a more positive attitude than the non-humorous ad under low-involvement conditions, not under high-involvement conditions.

The study by Zhang and Zinkhan (2006) confirms that humor is persuasive in low-involvement contexts, not high-involvement contexts. They provided evidence for this pattern in commercial advertising. However, humor is also often used in other types of persuasive communication like public service announcements, health promotion messages, and political satire. The opening example of the Russell Howard comedy illustrated that even stage comedy can have persuasive effects. To what extent do the predictions of the ELM apply to these domains?

In a recent study (Strick & Dijksterhuis, 2017), we explored the interplay between humor and involvement in political satire, a humorous genre that ridicules politicians and political institutions to stimulate societal change. As a

humorous stimulus, we used a satirical video of Dutch comedian Arjen Lubach about U.S. President Donald Trump.¹ The video was an alleged tourism advertisement from the Dutch government introducing the ‘tiny country’ of the Netherlands to President Trump. As ‘America First’ was the slogan of Trump’s presidential campaign, the Lubach video asked Trump whether the Netherlands could be second. The voice-over closely imitated Trump’s speaking style, words, and mannerisms. Meanwhile, the video also ridiculed Trump’s proposed policies such as his plans to build a wall against Mexican immigrants, as well as other controversies such as his alleged tax evasion, his mocking a disabled reporter, and his *Grab-‘em-by-the-pussy* remark.

At the time of our research, Donald Trump had just been inaugurated as the 45th president of the United States and was destined to lead the country in the upcoming years. We therefore reasoned that the election of Trump was a high-involvement topic to U.S. citizens. We also reasoned that The Netherlands, a faraway country with little direct consequences for the United States, would be a low-involvement topic for U.S. citizens.

We designed two experiments to examine whether the humorous video would change the attitude toward President Trump (Study 1) and toward The Netherlands (Study 2) among U.S. citizens of different political backgrounds (i.e., those who had voted for Hillary Clinton and those who had voted for Donald Trump). More specifically, we investigated the extent to which the perceived humorousness of the video predicted potential attitude change. Based on the predictions derived from the ELM that humor is not persuasive in high-involvement contexts, we hypothesised that the perceived humorousness of the video would not predict the level of attitude change towards President Trump but would predict the level of attitude change towards The Netherlands.

In the first study, we compared the humorous video with a non-humorous video criticising President Trump and to a no video control condition. First of all, the results showed that U.S. citizens found the Lubach video very funny. The perceived humorousness rating was $M = 5.54$ on a scale from 1 (*Not funny at all*) to 7 (*Very funny*). Even Trump voters found it reasonably funny ($M = 4.32$). However, as expected, the humorousness of the video did not predict attitude change towards President Trump, among Clinton voters or Trump voters.

In the second study, we used the same satirical video by Arjen Lubach to explore its persuasive potential toward The Netherlands. In line with our expectations, the humorous video caused a positive attitude change towards the Netherlands, compared to a no video control condition. Further in line with our predictions, perceived humorousness was a significant predictor of this attitude change. These results confirmed that humor was a working ingredient in the attitude change towards The Netherlands.

In summary, the results of the research by Strick & Dijksterhuis (2017) imply that the findings from the ELM can be applied to the political satire of Arjen Lubach. Humor had persuasive power for low-involvement topics (e.g., The Netherlands), but not for high-involvement topics (e.g., President Trump).

The results so far suggest that humor has persuasive potential in commercial advertising and political satire, but only for persuasion on low-involvement issues, not on high-involvement issues. In what follows, I will propose that this limitation can be lifted by applying two-sided humor.

Ambivalence and Elaboration

Many studies in social psychology have investigated how the elicitation of an emotion by a first task (e.g., watching comedy or drama) affects the depth of processing in a second task (e.g., the processing of a persuasive message). A general finding is that negative emotions cause deep information processing, while positive emotions cause shallow information processing (e.g., Mackie & Worth, 1991; Schwarz, 1990). A prominent explanation is that positive emotions carry information that the situation is benign, and hence, that critical processing is not necessary (e.g., Schwarz, 1990).

A contrasting perspective that has gained support in recent years is that emotions affect information processing depending on the level of confidence or certainty they elicit. This idea is based on appraisal theory, which classifies emotions on the basis of their cognitive components or *appraisals*. According to this view, emotions differ on various cognitive dimensions such as the level of responsibility, pleasantness, control, and confidence they elicit (e.g., Smith & Ellsworth, 1985). The appraisal view crosscuts the categorisation into positive and negative emotions. For example, emotions like anger, disgust, contentment, and happiness are all accompanied by a sense of certainty, even though the first two are negative and the latter two are positive. Emotions like worry, shame, surprise, and hope are usually accompanied by a sense of uncertainty.

Studies show that the level of certainty or confidence elicited by an emotion affects the depth of processing a persuasive message. In one study (Tiedens & Linton, 2001, Experiment 2), students were induced to feel anger, contentment, worry or surprise. The first two emotions are high-certainty emotions, while the latter two are low-certainty emotions. Next, the students read an essay in which the author criticised 'grade inflation' and opted for harsher grading at universities. The essay was ostensibly written by a student from a nearby community college (low expert source) or by a distinguished professor of education (high expert source). The extent to which source expertise (a peripheral cue) influenced persuasion was taken as a measure of processing depth. In line with the expectations, participants who were induced to feel certainty emotions agreed more with the high expert source than the low expert source, indicating peripheral route processing. In contrast, source expertise had no influence on those who were induced to feel uncertainty emotions.

Within the emotional-appraisal framework, humor can be classified as a high-certainty emotion. Incongruity-resolution theories describe the understanding of a punchline as a moment of sudden insight providing a sense of control and being 'in the know' (e.g., Suls, 1972). Superiority theories contend that the essence of

humor lies in the experience of sudden glory from which people derive a sense of pride and confidence (e.g., Gruner, 1978). Humor is a form of play that creates an atmosphere of levity in which actions are low-risk and inconsequential (Mulkay, 1988). Research has illustrated that humor creates a 'humor mindset' not to take information seriously, which undercuts effortful information processing (Martin & Ford, 2018).

However, a closer look suggests that humor is not necessarily purely positive, nor does it always elicit a sense of high confidence. Several scholars have noted that humor is an emotion that essentially derives from pain or sorrow. A classic theory on humor, ambivalence theory (Gregory, 1924) holds that humor stems from the simultaneous experience of incompatible emotions such as sadness and joy, envy and malice, or shame and pride. Laughter is the mechanism by which these conflicting emotions resolve themselves. Yet, the inner conflict caused by humor is not always completely removed and a feeling of uncertainty may linger. A more recent account of humor, benign violation theory (McGraw & Warren, 2010), proposed that humor arises when we experience something that physically or psychologically threatens our sense of how the world ought to be, while at the same time we appraise the situation as benign. Hence, this framework also assumes that humor is essentially two-sided and involves conflicting emotions.

Anecdotal evidence further suggests that the experience of humor can indeed be accompanied by feelings of inner contradictions and conflict. People find humor at funeral ceremonies of intimate loved ones, experiencing deep sadness and joy at the same time. People can thoroughly enjoy a sexist or racist joke, and simultaneously feel ashamed by their response. People can dread their own mistakes or setbacks and at the same time find humor in them.

A large body of research has mapped the nature and consequences of ambivalence, which can be defined as 'a psychological state in which a person holds mixed feelings (positive and negative) towards some psychological object' (Gardner, 1987, for a review see Van Harreveld, Nohlen, & Schneider, 2015). Research shows that ambivalence is associated with less confidence in one's evaluation. It is generally assumed that people mobilise cognitive resources to reduce ambivalence, which leads to the thorough processing of new information (Van Harreveld et al., 2015). Indeed, ambivalence is associated with systematic reasoning (Jonas, Diehl, & Broemer, 1997), higher activity of brain regions associated with elaboration (Cunningham, Johnson, Gatenby, Gore, & Banaji, 2003), and increased discrimination between strong and weak arguments (Maio, Bell, & Esses, 1996). Studies confirm that this heightened elaboration is functional, as increased receptiveness to a strong message reduces subsequent feelings of ambivalence (Maio et al., 1996). Furthermore, attitudes formed through ambivalence-induced processing tend to be strong and firmly grounded in reasoning. Consequently, although ambivalence itself is associated with doubt and uncertainty, it eventually leads to strong attitudes that are predictive of future behaviour (Jonas et al., 1997; Maio et al., 1996).

These findings suggest that the general assumption that humor elicits peripheral route processing may need further qualification. Humor is not always clearly positive and may elicit conflict and uncertainty. Here, I propose that to the extent humor induces ambivalence, it promotes effortful information processing (see Figure 1.2 for the proposed model). If evidence confirming this idea were found, it would mean that the range of persuasion contexts where humor can be fruitfully applied extends beyond messages on low-involvement topics. Humor could be used to evoke critical thought and contemplation, guiding people into awareness and attitude change towards important issues.

Preliminary Evidence for the Hypothesis

First evidence comes from a study using the Russell Howard comedy about the boy suffering from cancer, which I discussed at the start of this chapter (Verhoeven & Strick, 2018). In our study, we measured the extent to which the comedy ‘moved’ viewers, a feeling that is colloquially defined as ‘crying for joy.’ Being moved has recently been identified as a distinct emotion involving both positive and negative components (Cova & Deonna, 2014; Zickfeld, Schubert, Seibt, & Fiske, 2019). Based on the assumption that ambivalence predicts effortful processing, we reasoned that to the extent the comedy piece moved viewers, it would stimulate elaboration.

After watching the video, participants (100 university students) indicated their level of elaboration by indicating their agreement with three statements: ‘This video sets me to thinking’; ‘This video has made me reflect’; and ‘This video made me stop and think,’ on 7-point Likert scales ranging from 1 (*Totally Disagree*) to 7 (*Totally agree*). Because the reliability of the three items was excellent, they were averaged into one elaboration variable. Participants also rated the level of perceived humorousness (‘I thought this video was funny’; ‘This video made me laugh’; and ‘I thought this video was humorous’) and the level of being moved (‘This video touched me’; ‘I thought this video was moving’; and ‘This video evoked emotions in me’), again by indicating their agreement on 7-point scales. The three humor items and the three being moved items were merged into single perceived humorousness and being moved variables, respectively.

The participants rated the video as highly humorous ($M=5.06$) and highly moving ($M=4.69$). The video also elicited high elaboration ($M=5.20$). We

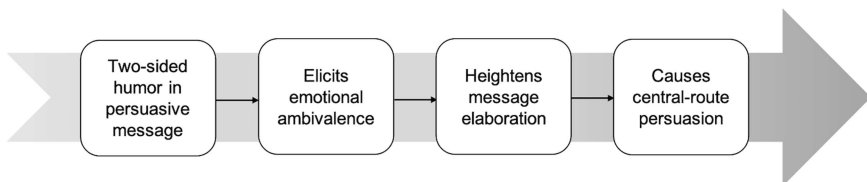


FIGURE 1.2 Illustration of the proposed theoretical model.

regressed elaboration on perceived humorousness and being moved. The data revealed no association between perceived humorousness and elaboration. However, as expected, higher levels of being moved related to higher levels of elaboration, providing preliminary evidence that ambivalence predicts heightened elaboration.

It should be noted that the Russell Howard study suffered from a number of limitations. While being moved has positive and negative components, it is not the same as ambivalence. Moreover, the study did not measure persuasion. A full examination of the proposed model would entail a more extensive analysis of the mediating role of elaboration between ambivalence and persuasion (see Figure 1.2).

We tested the complete model in a different study, which benefited from the help of Dutch comedian Guido Weijers (Strick & Weijers, 2017). The study revolved around Weijers' *Oudejaarsconference*, a Dutch tradition in which a prominent comedian creates a show especially for New Year's Eve as a way to round off the year. The comedian typically conveys his or her viewpoint on topical issues in Dutch politics and society in a humorous way, and hence, the *Oudejaarsconference* can be considered a humorous persuasive message on high-involvement topics.

From September to December 2017, Weijers performed try-outs in theatres with live audiences to fine-tune his show. During this period, audience members could voluntarily participate in our study by clicking on a link on Weijers' website, which led to our online questionnaire.

Weijers' routine consisted of 14 thematic 'pieces,' each lasting about five to ten minutes and addressing a different societal topic in a different emotional tone. Examples of topics were gender neutrality, animal rights, Dutch political elections, Turkish President Erdogan, and the Fipronil scandal (a worldwide incident in 2017 involving the spread of a toxic pesticide contaminating chicken eggs destined for human consumption). We chose to collect data at the level of a single piece. This was operationalised in the questionnaire by asking participants to first select one of the 14 pieces from a dropdown list and to focus all their answers on this bit of the show.

A total of 98 participants filled out the questionnaire. Participants indicated the level of perceived humorousness of the piece they had selected by answering the question 'How funny did you find this piece?' Then they indicated the extent to which the bit evoked ambivalence by answering the question 'To what extent did the piece release mixed feelings in you (i.e., both positive and negative)?' Elaboration was measured with two items: 'To what extent did the piece make you aware of a societal issue?' and 'To what extent did the piece induce you to societal reflection?' of which the scores were merged. Persuasion was measured with one item: 'To what extent did the piece change your attitude on a societal issue?'

The participants rated the selected piece as highly humorous ($M=3.95$, on a scale from 1 to 5, with 5 indicating high humorousness). The level of ambivalence ($M=3.04$), elaboration ($M=3.10$), and persuasion ($M=2.61$) fluctuated around the mid-point of the scale.

We used a bootstrapping procedure (Preacher & Hayes, 2008) to estimate the indirect effect of ambivalence on persuasion via heightened elaboration. The results corresponded with the hypothesised mediation model (see Figure 1.3 for a graphic representation). The level of ambivalence predicted more elaboration, and more elaboration predicted more persuasion. When heightened elaboration was included in the model, ambivalence no longer predicted persuasion, which is in line with a full mediation model.

The mediation was not found when ambivalence was replaced with perceived humorousness in the analysis. This confirms that humorousness itself does not promote high-involvement persuasion via elaboration. Overall, this study provided preliminary evidence for the full model: two-sided humor in persuasive messages elicits ambivalence, which increases elaboration, which in turn promotes persuasion on high involvement topics.

Next Steps

The Guido Weijers study provided evidence for the full model, but replication using solid research methods is needed to draw firm conclusions. The evidence presented here is correlational, and control conditions with one-sided humor and no humor are needed to establish causality. Future studies may measure persuasion behaviourally instead of using self-report. A useful procedure would be to elicit ambivalence in a first task (e.g., having participants watch the Russell Howard comedy show), and measuring persuasion in a second task using the ELM framework (e.g., assessing differentiation between strong and weak arguments or the influence of peripheral cues).

Another challenge for future studies is to pinpoint the kind of ambivalence that elicits elaboration. Ambivalence can refer to cognitive conflict, emotional conflict, or conflict between cognitions and emotions (Van Harreveld et al., 2015).

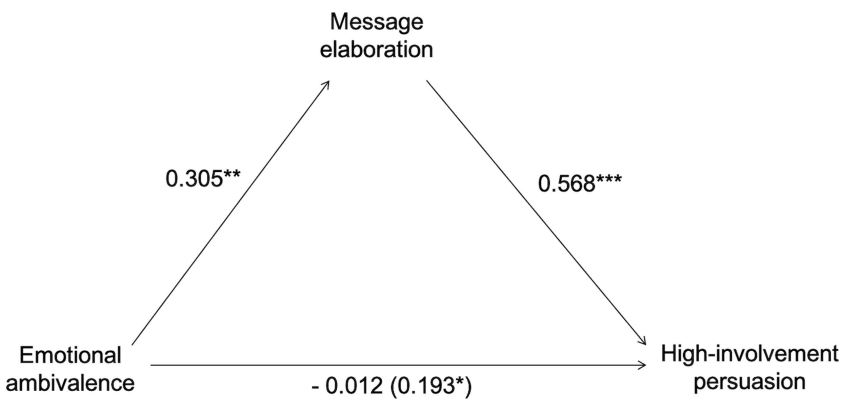


FIGURE 1.3 Graphic illustration of the mediating effect of heightened elaboration between emotional ambivalence and persuasion on high-involvement topics in Strick and Weijers (2017). * $p < .05$, ** $p < .01$, *** $p < .001$.

Ambivalence may be held with respect to events, attitude objects, goals, or behaviours. Some measures tap the existence of positive and negative evaluative responses (objective ambivalence, e.g., 'How positive (negative) are your feelings with respect to X?'), others tap the experience of conflict (subjective ambivalence, e.g., 'I feel torn between the two sides of X').

It would also be valuable to explore the impact of different emotion combinations. Based on appraisal theory, we may predict that humor elicits most ambivalence when combined with uncertainty-emotions, such as sadness, shame, or concern. Sadness may be elicited by the tragicomedy in the style of Charlie Chaplin or Woody Allen. Concern may be elicited by socially critical comedy. Shame may be elicited by harsh humor, especially when it succeeds in making people laugh and feeling ashamed about their amused response at the same time. In contrast, aggressive and disgusting humor will probably not heighten elaboration, as anger and disgust are certainty-emotions (Tiedens & Linton, 2001).

Another avenue for future research is to compare effects of different types of humor. Current theorising identifies two humor varieties (e.g., Ruch, 1992). Incongruity-resolution humor is the variety where the conflict elicited by the joke can be completely resolved leaving the perceiver with the subjective certainty of 'getting the point.' Nonsense humor, in contrast, is the variety where the incongruity cannot be completely resolved, leaving the listener with a sense of bizarreness or absurdity. Based on the framework presented here, nonsense humor may elicit heightened elaboration and cause central route processing, while incongruity-resolution humor may not. As explained before, however, improved elaboration only benefits persuasion if the humor is meaningfully related to the persuasive message.

It would also be interesting to examine whether citizens of Western and Eastern cultures respond differently to two-sided humor in persuasive messages, as Eastern cultures are found to have a greater tolerance for ambivalence (Peng & Nisbett, 1999). This difference appears to be based on the Eastern tradition of dialectical thinking, a thought process that recognises the importance of opposites.

A question that lingers is whether the model advanced here is specific to humor or could be accommodated within the broader literature of non-humorous ambivalence. I am inclined to think there is something special about the ambivalence elicited by humor. Feelings of sadness, shame, or concern create an unusual context for humor. A cheerful joke expressed in the midst of tragedy can be highly surprising and therefore have strong emotional impact. Indeed, the emotional response to positive events is elevated when they occur in a negative context (Strick & Van Soelingen, 2018). Thus, comedy may be a particularly fruitful vehicle for eliciting strong ambivalent feelings, and consequently, for eliciting contemplation.

The best stories make us laugh while also touching us on a deeper, more serious level. In this chapter, I have argued that the same can be said about the most impactful persuasive messages. Persuading people on high-involvement topics is not easy and cannot be done based on humor alone. A more complex emotional experience combining joy and sorrow may be required to make people feel, think, and eventually change their mind.

Note

- 1 For the Lubach video with English subtitles see <https://www.youtube.com/watch?v=pD7xIxLWjNc&t=13s>.

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