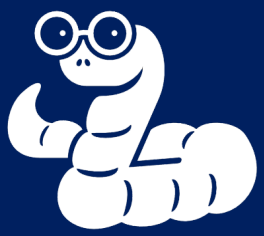

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Emojis to conversion on social media: Insights into online consumer engagement and reactions

Dušan Mladenović [a], Kamil Koštiál [b], Nikolina Ljepava [c], Ondřej Částek [d], Yash Chawla [e*]

[a] Department of Corporate Economy; Faculty of Economics and Administration; Masaryk University; Lipova 41a; 602 00; Brno; Czech Republic | dusan.mladenovic@econ.muni.cz

[b] ROI Hunter, Milady Horakove 13, 602 00; Brno, Czech Republic | K.Kostial@seznam.cz

[c] Department of Management, Marketing and Logistics; College of Business Administration; American University in the Emirates; Dubai Intl. Academic City; 503000, Dubai, UAE | nikolina.ljepava@aue.ae

[d] Department of Corporate Economy; Faculty of Economics and Administration; Masaryk University; Lipova 41a; 602 00; Brno; Czech Republic | ondrej.castek@econ.muni.cz

[e] Department of Operations Research and Business Intelligence, Faculty of Computer Science and Management, Wrocław University of Science and Technology, 50-370 Wrocław, Poland

* **Corresponding Author**: Email: yash.chawla@pwr.edu.pl | Address: Łukasiewicza 5/507, 50-370 Wroclaw, Poland

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Abstract

Emojis have become extremely popular in online marketing. Marketers use emojis to humanize their voice and elicit an emotional response from their target audiences. However, little is known about how emojis are perceived and what kind of reactions they evoke in consumers. The aim of this study is to examine whether exposure to emojis leads to an increased purchase intention, and whether its use leads to higher revenue generation and campaign effectiveness. The results show that the use of emojis had a negative effect on purchase intention; however, it was positive when mediated by positive affect. Emojis increased the effectiveness of marketing campaigns for hedonic products and had a strong impact on the return on advertising spend. However, for utilitarian products, the effect was marginal. The findings have theoretical and practical implications, particularly for the type of products emojis are most effective in promoting, gender differences, and real-life consumer behavior.

Keywords

Emojis; online marketing; social media; campaign effectiveness; revenue generation; Return on advertising; Return on investment; Hedonic product; utilitarian product;

1. Introduction

The content of marketing communication has been a key area of interest for researchers and marketers this century (Ferrell & Hartline, 2014). The literature emphasizes that different kinds of marketing content lead to varied outcomes and brand attitudes among consumers (Chawla et al., 2019.; Chawla & Chodak, 2021; Müller & Christandl, 2019). Since the on-set of COVID-19 pandemic, there has been a sharp increase in consumer use of social media for searching for products, gathering information about products, evaluating/reviewing products, and making purchases (Mason et al., 2021). Hence, for businesses, the importance of social media marketing has increased, as has the competition for visibility (Cutolo et al., 2021).

In a trend pre-daing the pandemic, an growing number of companies have started using emojis in their online advertising and marketing communication (Jaeger et al., 2017; Luangrath et al., 2017). Well-established brands such as Burger King, Coca-Cola, and Sony have strategically incorporated emojis into their marketing communication (Lee et al., 2021; McShane et al., 2021) and have even devised their own emojis (Arya et al., 2018). By using emojis in their marketing communication, companies are assumed to be trying to “humanize” their voice, trigger an emotional response from customers, and establish casual relations with them (Luangrath et al., 2017). This is understandable, as approximately 90% of the online community uses emojis in everyday communications (Lohmann et al., 2017). Nevertheless, some unanswered questions remain. How do emojis influence the purchase intentions of consumers? How does this influence differ between genders? What is the impact of emojis on online conversions? To what extent do emojis influence the effectiveness of online advertising campaigns? These are some of the questions that will be addressed in this study. Essentially, the emoji can be defined as a pictograph that is used instead of character or text (McShane et al., 2021). Over 3500 different emojis are currently in use (Unicode, 2021).

The relatively small body of knowledge on the impact of emojis on consumer behavior indicates that emojis have a positive impact on various cognitive states of consumers, including purchase intention (Arya et al., 2018; Das et al., 2019; Ganster et al., 2012; Lohmann et al., 2017; McShane et al., 2021). Despite the recent increase in academic interest in emojis in various domains (Bai et al., 2019), in-depth empirical insights in the consumer domain are still scarce. Many essential strategic and business issues have yet to be addressed (Ge & Gretzel, 2018), including the influence of emojis on real-life consumer behavior, gender differences, campaign effectiveness, and conversion potential. Therefore, this study attempts to examine whether emojis influence the purchase intentions of consumers, and in what direction, for consumers of Generation Z. Moreover, the literature points to gender differences in this context. Men and women are known to react to and perceive online marketing communication differently (Ganster et al., 2012; Prada et al., 2018). Therefore, this study will observe differences between gender clusters. As far as the authors of this study are aware, from a strategic and business perspective, no study to date has investigated the relationship between emojis and the effectiveness of marketing communication. This is an important focus of investigation insofar as it is necessary to capture the real-life measure of success or failure when emojis are used in marketer-generated content (Bai et al., 2019). Therefore, the study also aims to examine the relationship between exposure to emojis and purchase intentions. Furthermore, it will quantify, formalize and investigate the relationships between exposure to emojis, conversions, and campaign effectiveness.

The structure of the article is as follows: There will be a brief introduction to the study in section 1, followed by the literature review and hypotheses development in section 2. Section 3 describes the methodology used in the two parts of this study and is followed by the results of the experiment and survey in Section 4. Section 5 contains a detailed discussion of the findings of the study. The conclusions, theoretical and practical implications, and limitations and potential directions of future research are laid out in Section 6. The references cited in this study and appendices are to be found at the end of the paper.

2. Literature review and hypotheses development

Social context of emojis and relevance for online advertising

The emoji is a small digital icon or, as Smith and Rose (2020) define it, a pictograph that replaces facial expressions, emotions, places, things, or even people. In this broad definition, its use extends across disciplines and it has received the attention of researchers in various contexts. Emojis are either made up of symbols, such as :), :(, etc., or appear in graphical form, such as 😊, and ☹ (Ganster et al., 2012). They originated in Japan and their main purpose was to replace or supplement written communications (words, images, symbols, etc.) (Das et al., 2019). Many confuse emojis and images, but there is a major distinction, since the emoji is essentially embedded in language and communication (Luangrath et al., 2017). Sometimes, whole paragraphs can be accompanied by a single emoji. Some see this as a great opportunity to look into in the future (Bai et al., 2019). Others believe that emojis are effective in conveying emotions in a similar way to face-to-face contact (Lohmann et al., 2017), which may be considered an almost untapped field in terms of marketing communication and advertising (Kim et al., 2021). By their nature, emojis tend to convey emotion or feeling more effectively than normal text (Luan et al., 2021). According to Cheshin et al. (2011), emojis are more often used in socioemotional contexts than in task-oriented ones. This claim is attributed to the fact that it is more appropriate to express emotions to a socially close individual than to a stranger or a socially remote one. Similarly, the same authors found that there are more positive

emojis in use than those that represent negative feelings. The use of emojis helps individuals meet the need to fill the gaps that have emerged from continually growing computer-mediated communication (CMC) (Skovholt et al., 2014).

Consequently, marketers have identified a new and strategic communication vehicle, as over 90 % of people online use emojis on a daily basis (Lohmann et al., 2017). There is also a continually growing number of emojis indicating a wide spectrum of emotions, situations, and feelings (Jaeger et al., 2017). Large companies have responded quickly to this trend and incorporated emojis into their digital communication activities (see the example in Figure 1), as one of their fundamental goals is to improve the quality of interactions with online consumers in real time. Marketers are now able to use the abundance of emojis to enhance and modify their communication with the targeted audience (Mungai & Pradiptarini, 2011). With increasing numbers of people present on SNSs, communication via nonverbal forms has become popular (Cheshin et al., 2011). SNSs have emerged as particularly fruitful venues for the use of emojis for marketing communication purposes (Arya et al., 2018). Marketers sometimes deliberately use emojis to address a particular cluster (e.g. Generation Z) for ease of communication, as they are commonly used in certain digital environments.

By providing additional context (Steinhart et al., 2014), the emoji has greatly shortened the decision-making process. The most attractive advertisements use emojis extensively to trigger emotions that overrule rational consumer behavior (Bai et al., 2019; Lohmann et al., 2017; McShane et al., 2021).

Influence of emojis on positive affect

One of the main emotional effects related to the influence of emojis on communication receivers is positive affect (Lohmann et al., 2017). In its essence, it can be defined as the extent to which an individual feels enthusiastic, active, and alerted (Watson et al., 1988). In terms of theory, there has only been one significant attempt to investigate the relationship between emojis and positive affect, namely, the concept of emotional contagion (Smith & Rose, 2020). As Riordan (2017) notes, it implies a tendency to automatically synchronize postures, movements, facial expressions with those of another person and to eventually converge at one point. The concept can be seen as a parallel to conformity or homophily in the social psychology domain (Huang et al., 2008). Essentially, the concept of emotional contagion seeks to identify the emotions senders aim to convey and to reflect on whether those emotions are present or consistent with those of the receivers (Smith & Rose, 2020). In practical terms, the use of a smiling emoji (☺) implies that the sender wants to communicate positive, affirmative and joyful emotions, or simply happiness. In this regard, a relatively recent study by Ganster et al. (2012) found that emojis do have an effect on the emotions of receivers, which was supported by a study by Skovholt et al. (2014), who also claimed a direct positive relationship between emojis and positive affect and the pivotal role of the emoji in suppressing negative feelings.

Similarly, an experiment by Das et al. (2019) investigated whether and to what extent positive affect can be the result of the originally used emoji. Their results, which were in the context of SNSs and focused on hedonic and utilitarian products, confirmed the aforementioned findings. However, the authors concluded that the precise reasons for the influence of emojis on emotions in marketing communication were open to debate. Previously, Lohmann et al. (2017) had found that when someone receives a message with a negative emoji (e.g., ☹) it generally

induces negative feelings (e.g., less joy, distress, worries, etc.) in the receiver. They attributed these findings to the fact that emojis increase or decrease the emotional intensity of the communication (similar to the later findings of Smith and Rose, 2020).

Generally, the above-mentioned authors agree that emojis influence emotions and consumer behavior in the direction they depict (e.g. positive emojis trigger positive emotions). Thus, based on the above arguments and in the context of online advertising, the following hypothesis is proposed.

H1: Using emojis in online advertisements has a statistically significant positive influence on positive affect.

Emojis, mediation of positive affect, and purchase intention

Although it is important to ascertain how emojis can potentially trigger positive affect or emotions, from the business perspective, it is more important to understand how it affects the actual purchase intentions of customers. From the standpoint of online advertising or marketing communication, there are a small number of relevant studies in the literature that focus on emojis (Das et al., 2019; Dehghani & Tumer, 2015; Lee et al., 2021; Okazaki et al., 2017; Zhang et al., 2011). Most of these studies were conducted in the context of the service sector and investigated customer perceptions of service providers who used or did not use emojis. On this basis, it is difficult to unambiguously ascertain the nature of the relationship between the variables (emojis, positive affect, and purchase intention). As with the study by Das et al. (2019), this study aims to capture the relationship between emojis and purchase intentions. A clear link between increased positive affect and increased purchase intention has already been established in the literature. Babin and Andreea (1995) found that customers who feel more positive are more likely to commit themselves to a purchase (or, at least, they perceive it that way – as noted by Ge and Gretzel (2018)). Hence, as emojis trigger positive affect, they should also have a similar impact on purchase intention. On the basis of the reasoning that the inclusion of emojis in online advertisements should have a positive effect on purchase intention, it should also be mediated by positive affect. Therefore, these relations are formalized in the following hypotheses:

H2: The use of emojis in online advertisements has a statistically significant positive influence on purchase intention.

H3: Positive affect will mediate the effect of emojis on purchase intention.

Emojis and campaign effectiveness

Effectiveness can be described as the degree to which the intended goals are achieved (Shen et al., 2016). In online advertising, a campaign's relevant goals are those related to increasing website visitors, click-through, generated sales and revenue, raising awareness, etc. The precondition for a person to engage with a campaign (e.g., click, purchase) is that they actively expose their interest in searching for information about a specific product or service (Dehghani & Tumer, 2015; Namin et al., 2020). This particular moment is related to when an individual engages with an advertisement and is redirected to a landing page with additional information (Järvinen & Karjaluoto, 2015) or commits to a desired action (e.g. order placement, subscription). As Lorente-Páramo et al. (2020) note, the active expression of interest occurs when individuals click on an online advertisement and are redirected often to a specifically designed landing page. The question is how to measure whether a campaign has been effective or not.

The effectiveness of an online advertising campaign may be defined as the degree to which advertisers are successful in their marketing communication efforts to persuade individuals to engage with an advertisement (Lorente Páramo et al., 2021). In practical terms, it means how successful advertisers are in inducing individuals who have expressed an active interest (e.g. by searching for keywords/phrases) to engage with their marketing communication (e.g. online advertisements). The literature (e.g. Chawla & Chodak, 2021; Kim et al., 2021; Kim et al., 2015; Mungai & Pradiptarini, 2011) and marketers (Google, 2021) refer to several measurement units suitable for this purpose, which offer significant benefits as they represent actual behaviour in a real-life business environment, can be collected unobtrusively and are free of researcher bias (Peters et al., 2013). This study uses E_n, the measure used by Chawla and Chodak (2021) to measure the effectiveness of a campaign, whereby the effectiveness of a campaign is the ratio between the total sales (S_n) generated and the total number of clicks (C_n) on the advertisement:

$$En = \frac{Sn}{Cn}$$

With regard to the conversion behavior of individuals, the effectiveness of a campaign can be measured by calculating the click-through rate (CTR_n). CTR is the ratio between clicks (C_n) on an online advertisement and the number of impressions or views (I_n) (Bonfrer & Drèze, 2009). CTR varies considerably between different products and services, and certain elements must be taken into account when assessing the effectiveness of a given campaign.

$$CTRn = \frac{In}{Cn}$$

Furthermore, this study calculates the return on advertising spend (ROAS), which is another measure widely used by marketers to benchmark the effectiveness of online advertising campaigns (Chen et al., 2018). It measures the amount of revenue/sales generated for each monetary unit invested (e.g., per dollar or euro) (Chen et al., 2018).

$$ROAS = \frac{Sales}{Cost}$$

Although there is a body of literature that supports the notion that emojis have an impact on the intention to purchase and positive affect (see, Bai et al., 2019; Das et al., 2019; Jaeger et al., 2017; McShane et al., 2021), there is a void when it comes to formalizing the relation between emojis and campaign effectiveness (e.g. actually generated sales, number of real-life conversions). For instance, the study by Arya et al. (2018), based on the Indian context, concluded that when customers interact with marketer-generated content that contains emojis, their attachment to the brand and purchase intention increases. This was later supported by Coyle and Carmichael (2019) in their study on emojis and perceived responsiveness. While Smith and Rose (2020) observed a similar tendency in the relation between smiley emojis and purchase intention, Das et al. (2019) went further in deciphering the nature of the purchase intention–emoji relationship, whereby they concluded that, for hedonic products (e.g. digital cameras) in particular, there is an evident increase in purchase intention.

However, scholars have not investigated the nature of the relationship between emojis and actual purchase behavior. There is an evident lack of understanding of how emojis influence actual commitment in the context of a real business environment. This is surprising considering that emojis increase engagement with SNS

advertisements from 33% to 57% (McShane et al., 2021). The digital agency Sproutsocial investigated the impact of emojis on CTR and reported a massive effect in favor of the emoji condition, whereby a 241% increase in CTR was recorded, although under what control variables is not known (Aboulhosn, 2020). Another industry based study reported that over 70% of respondents across all generational cohorts consider emojis a suitable (even welcomed) "humanizing" addition to marketer-generated content (Price, 2021). In a practical study, Hubspot reported a positive influx of emojis in brand engagement. They measured engagement with push notifications and recorded a 30% increase in engagement in one year (Flight, 2020).

Although several studies and industry reports have indicated an evident influence of emojis on consumption, they have failed to identify how and in what direction they trigger real-life behavior. This is important to observe, as it is a common occurrence that people fail to act in accordance with their stated intentions (Ajzen et al., 2004). To explain this evident intention–behavior gap, it can be assumed that the symbolic situation (e.g. stated or perceived intentions) activates more favorable or fewer unfavorable considerations than the real behavior does (e.g. conversion, subscription, order placement, etc.)(Kim et al., 2021). For instance, if a person states an intention to a specific commitment, it requires fewer resources and has hardly any consequences (material, human, etc.) when compared to actually committing to a purchase.

Hence, on the basis of above-mentioned argumentation and the reasoning in Babin and Andreea (1995), that persons who feel positive are more inclined to commit themselves to the desired action (e.g. click-through, purchase, or subscription), the following hypotheses are put forward:

H4: The use of emojis in online advertisements has a statistically significant positive influence on CTR_n.

H5: The use of emojis in online advertisements has a statistically significant positive influence on E_n.

Emojis, CTR mediation, and order placement

There are several studies that indicate that emojis positively influence consumers' purchase intentions (e.g. Das et al., 2019; Dehghani & Tumer, 2015; Lee et al., 2021). However, from the strategic marketing perspective, the nature or relation between emojis, CTR and campaign effectiveness has not been ascertained. There is a solid reason to believe that emojis will increase CTR (formalized in H_4), given the theoretical support that people who feel more positive are more likely commit themselves to a certain course of action (e.g. click or purchase). Similarly, those who experience pleasurable emotions are more likely place an actual order (indirectly affecting campaign effectiveness) (formally stated in H_5). Given a technical configuration whereby only those who click on the online advertisements can place an actual order (as those not exposed to the online advertisements are excluded), it is to be assumed that CTR will fully mediate the effect of emojis on advertising effectiveness. Thus, the following hypothesis is put forward:

H6: CTR will mediate the effect of emojis on the effectiveness of a campaign.

Incorporating all the hypotheses put forward in this study, the research framework model to be tested is presented in Figure 2.

3. Methodology

The study was divided into two parts and employed two respective scientific methods. In the first part, the hypotheses H_1, H_2, and H_3 were tested, regarding the impact of emojis on positive affect and purchase intention and the mediation of positive affect between emojis and purchase intention. This was facilitated by a self administered online survey. In the second part, an experiment in a real business environment was conducted to test the remaning hypotheses (H_4, H_5, and H_6) related to actual consumer behavior. Data from the Czech Republic was collected simultaneously for the two parts of the study over a period of 30 days in February and March of 2020. Two real e-commerce businesses participated in the study, whose primary target customers were located in the Czech Republic. The total cost of online advertisements amounted to slightly over 900 USD, which was covered by the aforementioned e-commerce enterprises. No other online advertisements were placed for the same products at the same time by the businesses that took part in the study.

Pretest

Initially, in order to select the products suitable for both parts of this study (utilitarian and hedonic), a pretest was conducted in the form of a self-administered survey. Similar to the study by Klein and Melnyk (2016), four products were selected for the pretest (batteries, tea, a swimming pool, and video games). A total of eight texts were created describing these products (two for each product). The participants were required to evaluate all the variants. A total of 48 participants completed the pretest. A filter question ensured that the participants were representatives of Generation Z. They were contacted primarily via SNS and received no compensation. Participants were required to rate the hedonic and ulilitarian descriptions of products. Scale items from Voss et al. (2003) were used, and, based on the results of the t-test, it was concluded that tea had been largely perceived by respondents as a utilitarian product, while the swimming pool was viewed as a hedonic product.

Control Variables

Based on the pretest, two product types were adopted (as per Das et al. (2018): hedonic (swimming pool) and utilitarian (tea)). The tested online advertisements contained the following emojis: 💚, 🌍, ✅, 😊, ☀️, and 😰.

The emojis were deliberately selected to accompany and informationally support the type of product they were attached to. All of them convey positive emotions, as both genders more often use positive emojis than negative or neutral ones (Al-Rawi et al., 2020). For example, a green heart and /or planet represent a healthy lifestyle that can be associated with the consumption of tea (following the reasoning in Al-Rawi et al. 2020). Similarly a sun, heat, or sweating emoji can be used in an online advertisement that promotes swimming pools. To ensure consistency, we used the same text in both the versions of the online advertisement, i.e. the one with the emojis and the one without.

Self-administered online survey

Two versions of the questionnaire were created which featured the online advertisements that were the subject of testing. The advertised products included tea (utilitarian) and a swimming pool (hedonic), following the procedure developed by Das et al. (2018). The first version was the condition with no emoji, while in the second version an emoji was included in the advertisment (see Appendix A). To measure positive affect, a four-item, seven-point scale (1 - Not at all; 7 - Very much) was used, which was developed by Watson et al. (1988), while to capture purchase intention a three-item, seven-point Likert scale (1 - Not at all; 7 - Very much) was used, similar to that in

Steinhart et al. (2014). The order of the questions was randomized to check for consistent and relevant answers (as per Gehlbach & Barge, 2012), and a double-translation procedure was followed when translating the survey into the Czech language.

The survey was disseminated to 1272 randomly selected students (of Generation Z). All repondents were informed that the collected data would be completely anonymous, that participation was voluntary, and that they were free to abandon the study at any point in time. Each respondent who gave informed consent to their participation was randomly assigned to one of the two versions of the questionnaire (as in Das et al. (2019)). The survey included filter questions, so that the results would only pertain to Generation Z. To assess the data quality, we incorporated an instructional manipulation check into the survey to identify any disengaged respondents (as per Oppenheimer et al., 2009).

Experiment in a real business environment

This part of the study had a 2 (utilitarian and hedonic product) x 2 (with and without emoji) between-subjects design. As there was virtually no previous research that had examined the relationship between emoji exposure and campaign effectiveness, it was aimed at extending knowledge in this area and investigating the interplay between emojis and CTR (H_4), and emojis and campaign effectiveness (H_5). It also attempted to formalize the relationship between emojis and campaign effectiveness by observing the mediating effect of CTR. Finally, it also captured the nature of relationship between emojis, ROAS and type of product.

For this part, online advertisements were run on the Facebook pages of the two e-commerce businesses that took part in this study. Both e-commerce platforms already had a Facebook page, Business Manager, and dedicated Facebook Ad account, which are the necessary preconditions for launching campaigns (Dehghani & Tumer, 2015). Dynamic carousel type advertisements were run for the two products (tea – utilitarian and swimming pool – hedonic) that had been selected from the pretest. The A/B testing method was used to test the two versions of the advertisements (with and without emojis). The respective advertisements were placed on both Facebook and Instagram (as they are predominantly used by the observed population). In terms of targeting and based on pixels, the e-commerce businesses possess large quantities of data of their customers, so on this basis we opted for lookalike audiences to extend the outreach of the marketing communication (Sapiezynski et al., 2019). As with the target population for the survey in the first part of the study, the audience was narrowed down to only Generation Z (up to 25 years of age). The Advanced Location Targeting (ALT) tool was used, so that the advertisements only appeared to those living in the Czech Republic. The control advertisement and the advertisement with emoji included were run under separate advertising sets and the allowed spend for each set was defined using Facebook's A/B experiment feature to make sure that both ad versions spent the same daily budget. Various metrics (sales, costs, impressions, clicks, conversions) were captured for calculating CTR, campaign effectiveness, and other relevant indicators. The proposed hypotheses were tested by means of a Z-test which was suitable for A/B testing with binary variable (Hoffmann & Wagenmakers, 2020).

4. Results

Emojis, positive affect, and purchase intention

The study observed multiple relations between emojis, positive affect and purchase intention. It indicated why exposure to emojis seemingly lead to higher purchase intention by observing the mediation effect of positive affect. Only fully completed surveys were considered for further analyses, which came to a total of 318 valid responses (a 25% response rate). This sample consisted of 71.1% females and 28.9% males. Cronbach's alpha was computed for the measured items to assess the internal consistency of the scales (Appendix B). All the alpha values for the observed variables, ranging from 0.833 to 0.939 indicated good reliability (Tavakol & Dennick, 2011). Next, the existence of a statistically significant direct influence of the emoji condition on positive affect was tested ($t(142)=3.51$; $p=0.012$; $n_p^2=0.05$), which supported the first hypothesis (H_1), and implied that the presence of emojis in advertising messages leads to higher positive affect. The next step was to test whether there was a statistically significant relationship between the emoji condition and purchase intention. It was found that respondents who were exposed to the emoji condition ($M=3.96$) did not report substantially higher purchase intention than those who were not exposed to emojis ($M=3.91$). Surprisingly, the statistical outputs did not support the H_2 hypothesis ($t(141)=3.93$; $p=0.301$; $n_p^2=0.12$).

To ascertain whether positive affect mediates the effect of the emoji condition on purchase intention (H_3), the study used the the procedure that was followed by Hayes (2017). Essentially, the model included the presence versus the absence of emojis as independent variables, positive affect as a mediator, and purchase intention as the dependent variable. The outputs indicated that the index of mediation was significant ($b=0.71$; 95%; CI [0.18-0.77]). Although the model reported no significance in the direct relationship between emojis and purchase intention ($b=0.40$, 95% CI [−0.38–0.81]) when positive affect was included, it fully mediated the hypothesized relationship between emojis and purchases intention. Therefore, it can be concluded that the results support H_3, i.e. positive affect fully mediates the relationship between emojis and purchase intention.

Additionally, the study examined whether there were any significant differences between genders and, if so, the extent of their significance (Figure 3). Initially, the mean values (M) were observed to descriptively analyze the differences. It was found that females were influenced significantly more by the emoji condition for both positive affect and purchase intention (respectively ($F(1, 165)=19.80$, $p=0.002$) and ($F(1, 147)=17.380$, $p=0.004$)).

Emojis and Campaign Effectiveness

In total, 907 US dollars were invested in two online advertising campaigns, which resulted in 201,839 unique impressions, with 5,886 clicks on the presented advertisement (CTR 2.91%) (Table 1).

H_4 formalizes the relationship between emojis and CTR. From the descriptive statistics, there were no major differences in the case of hedonic products. However, there was a difference in the case of utilitarian products (the emoji condition induced higher CTR). A Z-test was run in order to verify whether this difference was statistically significant, which the outputs confirmed (Z-score 2.019, p-value=0.0218).

Next, the effects of the emoji condition on campaign effectiveness (E_n) were examined. This relationship is formalized in H_5. As seen in Table 1, there is a clear difference with the hedonic product. E_n was calculated as per the formula in section 2.4 and a Z-test was performed to statistically verify whether the discrepancy was

significant. The outputs confirmed that there were statistically significant differences with the emoji condition for hedonic products and that the emoji condition influenced E_n (Z-score 3.2157, p-value=0.0375).

Additionally, to check whether CTR mediated the effect of the emoji condition on campaign effectiveness, the procedure in Hayes (2017) was followed. The outputs indicated that the index of mediation was significant (b=0.66; 95%; CI [0.22-0.86]). In the case of the hedonic product, the statistics reported a significant indirect effect, which implies that the emoji condition significantly increased campaign effectiveness via increased CTR (b=0.59; 95%; CI [0.37-0.91]). Moreover, when the direct effect of the emoji condition on E_n was included in the model, there was still a significant effect (b=0.27; 95% CI [0.11–0.65]). In the case of the utilitarian product, however, there was no statistically significant mediation (b=0.36; 95% CI [−0.04–0.89]). Therefore, it can be concluded that CTR does not mediate the effect of emojis on campaign effectiveness. Similarly, when we included the direct relationship between the emoji condition and campaign effectiveness in the model, the outputs indicated insignificance (b=0.36; 95% CI [−0.04–0.89]).

In terms of ROAS, as opposed to CTR, the emoji condition had a significant influence, although the influence was marginal in the case of the utilitarian product (see Figure 4). This relationship was subject to testing and the results confirmed an unambiguous effect (respectively (F (1, 178)=21.12, p=0.022) and (F (1, 178)=7.482, p=0.065)). The results of all tested hypotheses in the overall framework of the research model is presented in Figure 5.

5. Discussion

Given the widespread use of emojis, their accelerated incorporation into marketing communication and the insufficient understanding of their influence on consumer behavior, the aim of this study was to provide more insight into this phenomenon. The first part of the study investigated the interplay between emojis, positive affect, and purchase intention. It was found that exposure to the emoji condition led to higher positive affect, but did not have a direct effect on purchase intention, with only an indirect path (emoji–positive affect–purchase intention) showing a statistically significant effect. These findings confirm the claims of Das et al. (2019) in terms of positive affect, i.e. emojis are positively linked to the affirmative cognitive states of consumers. Surprisingly, the direct effect on purchase intention was negative, which was not consistent with the initial expectations. It was assumed that exposure to the emoji condition would lead to higher purchase intention. This anomaly may eventually be attributed to the notion that only emojis that trigger a sufficient level of positive affect can generate greater purchase intention (McShane et al., 2021), which means positive affect fully mediates the initial effect of the emoji condition on purchase intention. To fully comprehend consumer behaviour patterns, the informative, emotional and symbolic distinctions between emojis must be taken into consideration. Given the fact that over 3500 emojis exist (Unicode, 2021), this presents a major obstacle for future research. Another interesting finding was that women were significantly more influenced by emoji exposure in marketing messages than men (for both types of products). This can be attributed to the fact that women more often use emojis in their communications on SNSs (Jones et al., 2020), and are better at decoding emojis than men (Tossell et al., 2012). It can be assumed that women's higher emoji usage makes them more accustomed to and influenced by them. Moreover, women tend to seek contextual clues to emotionally comprehend messages (Coyle & Carmichael, 2019; Prada et al., 2018). In this sense, the emoji can be seen as a informational vehicle to provide greater context. One benefit of this part of the study was that it surveyed the population in which the use of emojis is most widespread and therefore offers

significant theoretical extensions in the areas of marketing communication and online consumer behavior. Nevertheless, as it was designed to quantify consumer intentions and perceptions, it was limited in terms of evaluating actual behavior and the impact of emojis, particularly in terms of campaign effectiveness, conversion potential, etc. Therefore, the second part of this study was designed to address this limitation by means of an experiment to better comprehend the nature and direction of relations between emojis and campaign effectiveness.

The second part of the study found that the presence of emojis only increased CTR for the utilitarian product. In the case of the hedonic product, it only had a marginal influence on CTR, although it had a statistically significant effect on campaign effectiveness. These results add to the findings of Chawla and Chodak (2021) with regard to the planning of content on the basis of campaign goals and type of product. In terms of ROAS, every invested dollar in advertising the hedonic product induced 26 USD of sales in the emoji condition as opposed to 14 USD for the absent emoji condition. In the case of the utilitarian product, there was no significant difference, as both conditions generated around 6 USD in sales. This indicates that emojis may increase ROAS for certain products, but not others. Given that the content with emojis did not result in lower ROAS for either product, it suggests that the use of emojis may be the better option. Nevertheless, it would be interesting to conduct such a study with a wider range of products.

6. Conclusions

This study was focused on Generation Z and provided evidence to support some previous findings (e.g. the influence of emojis on positive affect) and, notably, it found that the emoji condition had a negative influence on purchase intention. The findings indicate that there is great potential for the use of emojis in online advertising. Essentially, emojis lead to higher positive affect and purchase intention (although only indirectly in the latter case). Moreover, in the case of hedonic products, there was empirical evidence that indicates that emojis increase campaign effectiveness and CTR and have an almost exponential influence on ROAS. The use of emojis may be more effective for marketers when targeting the female population, as this segment is more receptive to emoji-based messages. The results of this study are far from conclusive. Nevertheless, this research has provided some solid evidence that has theoretical and practical implications and adds to previous observations that the emoji can be a very influential strategic and emotional vehicle for approaching specific market segments.

Theoretical Contributions

From a theoretical point of view, the results of this study extend the knowledge in multiple domains. The findings provide empirically verified inputs in the paralanguage domain, which was originally developed by Luangrath et al., (2017). Whilst their theoretical framework requires more empirical verification, this is the first study to empirically test and extend (by observing actual behavior) the proposed emoji–actual behavior relationship. By observing the relationships between emojis, purchase intention, and actual conversions, this study attempted to demystify the real-life influence of emojis (on actual behavior) together with stated intentions (purchase intention) in a real business environment.

The observations for CTR, ROAS, and E_n in terms of emojis, represent a pioneering effort to formalize the relations between emojis and the effectiveness of online advertising campaigns. As the effectiveness of online advertising is an significant issue (Chawla & Chodak, 2021; Kim et al., 2015), the findings contribute directly to the emerging

field of online advertising and performance marketing. This is one of the first attempts to capture the causal relationship between emojis and measurements of effectiveness in an authenthic environment, which makes these research findings relatively groundbreaking. The findings suggest that emojis increase CTR only for utilitarian products (tea), while for the hedonic product (swimming pool) they have a substantial influence on both ROAS and campaign effectiveness. The findings also suggest that women are more affected by emojis in advertising messages. This confirms the notion that there are significant differences between men and women in their respective reactions to marketer-generated content (Lin et al., 2019). Moreover, the study directly contributes to the literature on SNS messaging by observing this from the emoji perspective and highlighting the role of the emoji in decision-making and conversion. In addition, this theoretically contributes to segmentation and targeting domains by highlighting gender clusters that are more engaged and committed when exposed to emojis.

The study was demographically designed to study members of Generation Z, who are reportedly the most frequent users of emojis (McShane et al., 2021) and the largest group of users of SNSs (Eger et al., 2021). The findings of this study extend the knowledge of the consumer behavior, intentions, and perceptions of this particular generation. The differences (if there are any) between this and other generations have yet to be explored.

Although marketers are inclined towards continuous experimentation (e.g. A/B) in order to find the optimal configuration for executing online advertisements, scholars largely refrain from this approach due to its complexity and the resources required to run effective online business experiments (Chawla & Chodak, 2021). Methodologically, this research contributes to the evolving literature on online experimental design. Moreover, it raises important methodological points (e.g. targeting, advertisement creation, emoji selection, budget allocation) that may be of use in overcoming the many challenges in designing and performing efficient experiments (Banks et al., 2016). Essentially, this is the first experiment to quantify and examine the effect of emoji exposure on campaign effectiveness. The design of the structure of the experiment is such that potential replication may include a variety of modifications, such as those highlighted in the limitations and potential directions of future research section below.

Practical Implications

Marketers have been using emojis extensively to humanize their targeted communication and promote their brands to customers. However, there is little or fragmentary knowledge on the circumstances in which marketers can effectively use emojis in online advertising (Kim et al., 2021). In addition to the theoretical contributions, this study has a number of practical implications. Through its observations of a real-life business environment, the study has found that emojis have considerable value in online advertising. First, the findings can be used as a guide to when emojis should be used in online advertising. Emojis are particularly effective in increasing the conversion of hedonic products (e.g. perfumes, flowers, watches), while they have marginal influence in the online promotion of utilitarian products (e.g. calculators, microwaves, detergents). Secondly, the findings highlight that the female segment is more receptive to emojis. Therefore, marketers should use emojis to emotionally enhance and humanize their communications when targeting women of Generation Z, primarily when promoting hedonic products. Nevertheless, companies need to be cautious when using emojis and factor in all relevant contextual elements that may lead to deviations (e.g., relationship norms, type of market, brand perception) (Li et al., 2019). These results also underline the importance of the suggestion by Chawla & Chodak (2021) that business managers should

experiment with their target audience and products to deduce personalized recommendations. Our framework provides marketers with a solid base on which to run experiments and surveys for their products for their target audience.

Limitations and potential directions of future researchs

Despite the findings and contributions of this research, there were certain limitations of the study that indicate potentially fruitful research directions in this under-researched domain. The first limitation of the study was that it was based solely on members of Generation Z. Given the considerable differences in consumer behavior across generational cohorts (Kim et al., 2018), further studies should extend the scope and investigate how different generations (e.g., Y, X, baby boomers) perceive and react to emojis. Moreover, the experimental design should be verified and replicated in various contexts. For example, known brands could be used in the advertising, as there is evidence that indicates that consumers react differently when they encounter a well-known brand (Peters et al., 2013). Additionally, replication studies could use different kinds of emojis. Given that emojis are related to particular emotions (Skovholt et al., 2014), including various emotions/emojis in a study could extend our understanding of the role emojis have in the domain of consumer behavior. This study was platform-specific, which means that Facebook was used as the primary advertising platform to reach the respondents. Given the platform-related features and the platform audience (e.g. digital natives, mostly frequent users of Instagram – Bai et al. 2019), future studies should include cross-platform comparisons to verify whether the same emojis have a similar influence. This study was carried out in the Czech Republic, which is an appropriate context given that the Czech Republic has the highest number of businesses that advertise online per capita in the European Union (EU, 2019). Nevertheless, cultural differences strongly influence consumers behavior and decision-making and, therefore, it is suggested that future replications and modifications be conducted in more culturally distant societies.

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Figures

Figure 1: A Domino's Pizza online communication based exclusively on emojis (Source: https://staenz.com/best-performing-emojis-digital-marketing-facebook-ad-campaign)

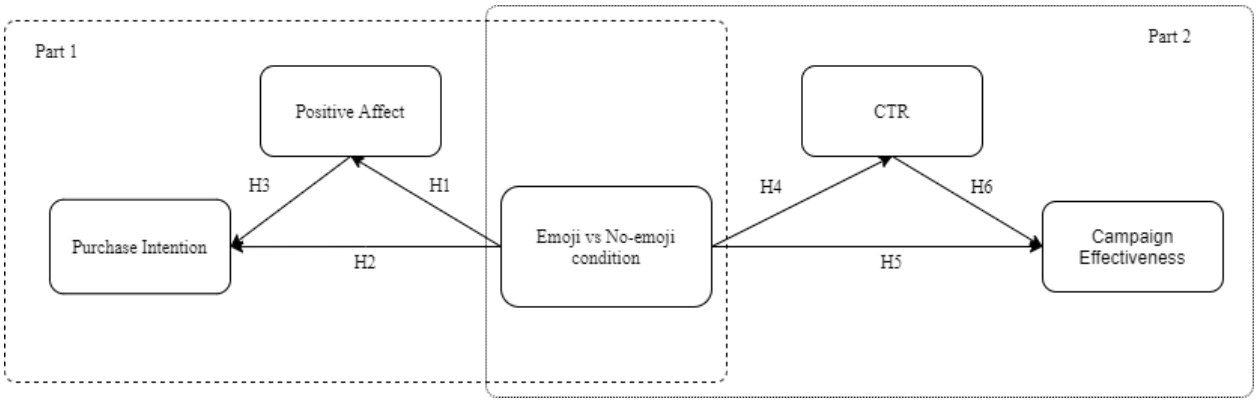

Figure 2: Research framework and hypothesized relations (Source: Authors' own elaboration)

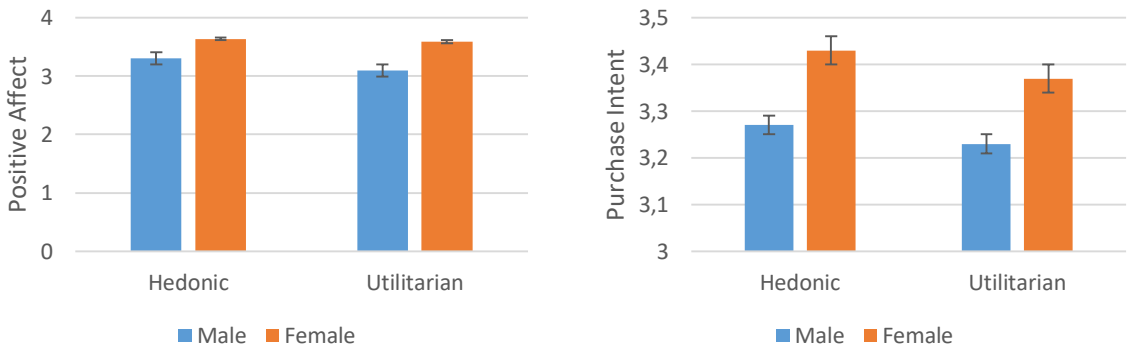

Figure 3: Influence of the emoji condition on positive affect (left) and purchase intention (right) by gender

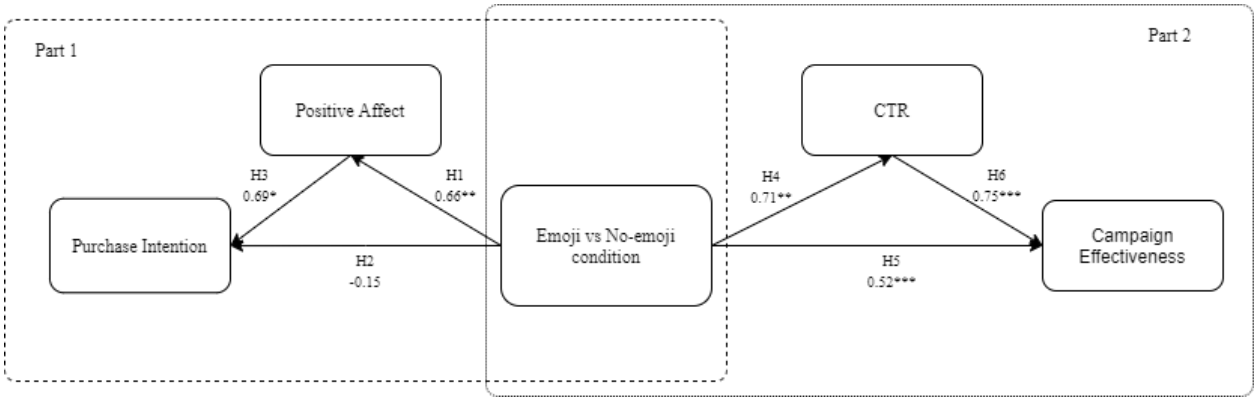

Figure 5 Hypotheses overview with betas

Note: Unstandardized betas are reported; Significance at: * - 0.05, ** - 0.01, *** - 0.001

Tables

Table 1: Key Performance Indicators – Descriptive Overview

Product	Sales ($)	Cost ($)	Clicks	Impressions	Conversions	CTR (%)	E_n	ROAS ($)
Utilitarian no emoji	1853	277	1623	58 220	46	2.79	1.142	6.69
Utilitarian emoji	1868	278	1632	54 596	43	2.99	1.145	6.72
Total utilitarian	*3721*	*555*	*3255*	*112 816*	*89*	-	-	
Hedonic no emoji	2422	177	1280	43 370	9	2.95	1.893	13.68
Hedonic emoji	3842	175	1351	45 653	13	2.96	2.844	21.95
Total hedonic	*6264*	*353*	*2631*	*89 023*	*22*	-	-	
Grand Total	*9985*	*907*	*5886*	*201839*	*111*			

Appendix A

Online advertisement for (left – emoji not present; right – with emoji condition):

(a) utilitarian product (tea)

(b) hedonic product (swimming pool)

Appendix B

Operationalization of constructs and variables

Positive Affect - α 0.88 - Watson et al. (1988)	**While exposed to the advertisement, how did you feel?**	
	Happy	α 0.873
	Delighted	α 0.833
	Excited	α 0.910
	Enthusiastic	α 0.901
Purchase Intention - α 0.92 - Steinhart et al. (2014)	How likely would you be to buy the advertised product?	α 0.939
	How inclined are you to buy the advertised product?	α 0.856
	How willing are you to buy the advertised product?	α 0.899
Hedonic and utilitarian framing - α 0.90 - Voss et al. (2003)	Please indicate the extent to which you believe that the described product is:	α 0.798
	Exciting*	α 0.802
	Fun*	α 0.800
	Delightful*	α 0.889
	Thrilling*	α 0.902
	Enjoyable*	α 0.899
	Effective**	α 0.941
	Helpful**	α 0.922
	Functional**	α 0.852
	Necessary**	α 0.867
	Practical**	α 0.870

Note: * Indicates hedonic features; ** Indicates utilitarian features