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LOL! Can textual paralanguage be useful in marketing?*

LOL! Czy tekstualny parajęzyk może być użyteczny w marketingu?

Abstract

Textual Paralanguage (TPL) is widely used in marketing practice. However, there is no consensus on its effectiveness. Since mimicry is a good proxy for communication effectiveness, we set out to determine if TPL is in fact being mimicked (in spoken or written form: "hm," "aaaa," "lol" which are exemplars of the TPL), and consequently, whether TPL is an effective tool in marketing communication. In three studies, participants took part in interviews and were randomly assigned to two condition groups. In the experimental group, the experimenter incorporated elements of TPL in the conversation. The control group had no exposure to TPL. We used several measures of the tendency to mimic TPL. The experiments were run at a university in Poznań (Poland), at the turn of 2017 and 2018. We found that TPL, often used in marketing communication, was not mimicked at all, and thus may not be beneficial to the agent using it. The findings of this paper contradict the everyday practice of marketing communication. The results are consistent across all three experiments. In light of the reported experiments, people do not imitate TPL in communication, which may signify that the expected benefits are lacking.

Keywords

mimicry, imitation, written communication, textual paralanguage, emoji in marketing

Streszczenie

Tekstualny parajęzyk (TPL) jest powszechnie stosowany w praktyce marketingowej, lecz nie ma pewności czy jest skuteczny. Ponieważ mimikra jest dobrym wskaźnikiem skutecznej komunikacji, autorzy artykułu postawili sobie za cel zbadanie, czy TPL jest naturalnie naśladowany (w mowie lub piśmie: „hm”, „aaaa”, „lol”), a w konsekwencji czy jest skutecznym narzędziem w komunikacji marketingowej. Uczestnicy trzech opisanych w artykule badań brali udział w wywiadach, gdzie byli losowo przydzielani do jednego z dwóch warunków. W warunkach eksperymentalnych eksperymentator włączał do rozmowy elementy TPL. Warunki kontrolne były wolne od tych ekspozycji. W badaniach mierzono skłonność uczestników do naśladowania TPL. Eksperymenty przeprowadzono na jednej z poznańskich uczelni wyższych na przełomie 2017 i 2018 roku. Uzyskane wyniki są spójne we wszystkich trzech eksperymentach. Stwierdzono, że TPL nie był naśladowany, w związku z czym może nie być korzystny dla osoby stosującej ten element podczas komunikacji. Wnioski przedstawione w artykule zaprzeczają codziennej praktyce komunikacji marketingowej. W świetle raportowanych eksperymentów ludzie nie naśladowują TPL, co może świadczyć o braku oczekiwanych korzyści.

Słowa kluczowe

mimikra, imitacja, pisemna komunikacja, tekstualny parajęzyk, emoji w marketingu

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Introduction

A Facebook advertisement by KFC states, "When you are sharing a burger so looong, what do you say? Meet me halfway! ☺ #KFCLonger." One customer replied, "lol they call it long 😂😂😂😂." Domino's Pizza likewise appealed to pizza-loving couples with the claim that "Pizza-loving pairs can now eat happily ever after ♥♥💍." In these three sentences, we observe the use of emojis, a particular type of textual paralanguage (TPL). Other examples of TPL include written expressions of verbal utterances, grimaces or gestures conveyed through words, abbreviations, punctuation, images, photos, memes, or combinations thereof. TPL plays an important role in online communication and social media, where there is a lack of face-to-face symmetrical communication (Rodríguez-Hidalgo et al., 2017).

There is a growing interest in TPL in marketing communication and consumer research (Li et al., 2019). However, the effectiveness of TPL is still a topic under intensive debate (Leung & Chan, 2017). The assumption is that TPL — based advertisements help to create a bond between a company and a customer or, more generally, between people. On the one hand, research shows that the use of emojis may lead to more purchases and has an overall positive effect on customers (Das et al., 2019). On the other hand, TPL use on social media has a negative effect on consumer perceptions of brand competence (Luangrath et al., 2017a). Similarly, customers perceive employee online chat communication using TPL as warmer, but less competent (Li et al., 2019). Interestingly, however, the mimicry of TPL has not been a topic of academic research.

More companies than ever now incorporate TPL into their advertisements. TPL is one of the tenets of influencer marketing (Ki & Kim, 2019), and a fast-growing field of marketing communication (Ge & Gretzel, 2018). It is thus essential to evaluate the effectiveness of TPL in marketing. Since its aims are not just increased sales, but also bonding, and since communication mimicry is a good proxy for bonding, we analyze the level of mimicry in TPL communication.

Textual paralanguage

In a recent article, Luangrath et al. (2017b) define TPL as an expression intended to replace physical interaction through a variety of methods, including emojis and abbreviations, which are designed to replace facial reactions, such as in the

KFC and Domino's statements. Kellogg's started using TPL such as ☺ in its ads for products in 2014.

There are three categories of TPL: auditory, tactile, and visual (Luangrath et al., 2017b). Auditory TPL is the use of voice qualities and vocalization. Voice qualities are defined by characteristics of the sound of the words being communicated that indicate how the word should be spoken, such as "BEST" and "looooooooong." Vocalizations are fillers: sounds that can be spoken or written (e.g., hmm, umm or haha). They can be spoken or produced by the body and result in an audible and comprehensible noise (Johar, 2015). Tactile TPL refers to tactile kinesics, such as an emoji of a man and a woman holding hands: "👫."

Studies argue that the intimacy of a relationship depends on communication (Suvilehto et al., 2015). Visual TPL includes body language such as facial expressions, the second-best source of communicative messages after speech. There are two types of TPL — visual (☺, the dancing lady emoji) and artifacts, such as space, color, and the hamburger emoji (Luangrath et al., 2017b).

With the advent of technology (e.g., social media), social media users have developed these TPL as surrogates for nonverbal cues (Ganster et al., 2012). Researchers have argued that these surrogates serve similar purposes to face-to-face nonverbal communication cues (Rivera et al., 1996; Walther & D'Addario, 2001). Although companies are increasingly using TPL to communicate with their customers (Sumer, 2017; Hayes et al., 2020), it has not yet been proven that TPL creates bonds, or that it is beneficial in any way.

Mimicry

More than two decades ago Chartrand and Bargh (1999) showed that people (especially those with high empathy scores) present a tendency to mimic specific gestures of their interlocutors (experiment #1). For example, if one person touches their face, the other may do so as well. In a second experiment, it was shown that mimicked participants report greater positive affect toward the mimicker. The list of positive outcomes for mimickers is not limited to this alone. Mimickers also receive more tips (van Baaren et al., 2003), and sell more (Jacob et al., 2011; Kulesza et al., 2014). Mimickers are perceived as more persuasive (van Swol, 2003), receive more help (van Baaren et al., 2004), are more trusted (Swaab et al., 2011), and are considered more physically attractive (Guéguen, 2009). A mimickee is also more likely to answer intimate questions after being mimicked (Guéguen

et al., 2013). From this perspective, many scholars conclude that without mimicry, relationships between people would not start and existing ones would collapse. Thus, since mimicry is so beneficial it is called a "social glue" (Dijksterhuis, 2005; Lakin et al., 2003).

Communication accommodation theory

From the perspective of Communication Accommodation Theory (Giles, 1973), more can be found to support the claim of social glue as a result of mimicry. This theory claims that people are motivated to accommodate or to mimic others for various reasons, including a desire to strengthen social relationships. In other words, mimicry not only activates the same representations between two parties of an interaction, but also serves an important social function. Thus, from this perspective, one may assume that TPL should be mimicked since mimicking these patterns of communication may be responsible for — as supposed by the companies mentioned above — creating relationships/rapport with the client.

Goal of the paper

Taken as a whole, since mimicry is a good proxy for communication effectiveness, we set out to determine if TPL is in fact being mimicked (in spoken or written form: "hm," "aaa," "lol"), and — consequently — whether it is truly an effective tool in marketing communication.

General methods

Four research assistants from the SWPS University of Social Sciences and Humanities in Poznan (Poland) participated in the data collection process. To rule out the possibility that the pattern of the results was not due to the experimental manipulation but rather the specific experimenter, experiments were carried out by different research assistants blind to the hypothesis. The exception was the first experiment, which was performed by two simultaneously working assistants. Thus, four assistants worked on the data collection process, one in the second (female) and third (male) experiment, and two in the first experiment (both female). In the first and second experiment, participants were recruited via leaflets distributed

at the university. In the third experiment, the research assistant conducted fieldwork. The data collection process was carried out at the turn of 2017 and 2018.

Statistical analysis and open practices

The statistical software JASP (Version 0.16 — JASP Team, 2021) was used to run the analysis with a combination of the R programming language (R Core Team, 2021) with the MASS library (Venables & Ripley, 2002), BFpack library (Mulder et al., 2019), and "sm" package (Bowman & Azzalini, 2018).

All materials and data are publicly accessible at the Open Science Framework (OSF: <https://osf.io/hkqgy/>). All experiments were approved by the local ethics committee (opinion number: 08/P/03/2020). Informed consent was obtained from all participants before enrollment in the experimental procedures and data collection.

Experiment 1

Participants

One hundred participants (64 women, 36 men; age: $M = 26.6$, $SD = 4.8$) took part in a 10-minute experiment. Participants were randomly assigned to the two condition groups. Each group had 50 participants; no data was excluded from the analysis. Participants were not offered any compensation.

Variables

The independent variable was the presence of TPL. The experimenter presented or refrained from using (in writing) affirmative TPL: "Yhm." In the experimental group, the TPL was presented exactly 10 times (once per minute); in the control group it was absent.

The first dependent variable was the tendency to mimic the exact TPL statement presented by the experimenter ("Yhm"). To rule out the possibility that this example of TPL might elicit participants' tendency to present other expressions of TPL, the second dependent variable was the tendency to eagerly present any TPL statements other than "Yhm".

Procedure

To ensure that participants experienced (or did not experience) the presence of TPL, the

interaction took place in writing via instant messaging (for this method, see Hartsuiker et al. 2008), with the two experimenters randomly assigned to the interactions. This enabled the direct experience of TPL. The ostensible theme for the interaction was a fully scripted interview about social relationships, the results of which would be included in a master's thesis in psychology. For example, participants were asked if they had experienced decreased satisfaction due to a worsening of social relations with others and what personality traits help initiate meaningful relationships. During the interaction, participants were present at their homes or workplaces, not at the research facility.

During the interaction in the experimental group, the experimenter presented the TPL ("Yhm") statement signifying agreement, stating that the person using the TPL is listening. Such elements of language may have a crucial function in communication (Jakobson, 1971). It is primarily used to establish, extend, or maintain communication, to emphasize that the contact between interlocutors has not been interrupted. Yngve and Victor (1970) concluded that in conversation, listeners often create background responses ("back-channel responses"), such as "Yhm," as an integral part of communication maintaining linguistic contact between the sender and the recipient.

In the experimental group, possible misunderstandings were avoided by the presence of TPL. However, in the control group, participants may have misunderstood certain interactions because TPL was avoided. Such misunderstandings have previously been reported in the literature on mimicry (van Baaren et al., 2003). For this reason, we adopted procedures to minimize those misunderstandings. In both groups the experimenter gave confirmations such as "of course," and "I understand."

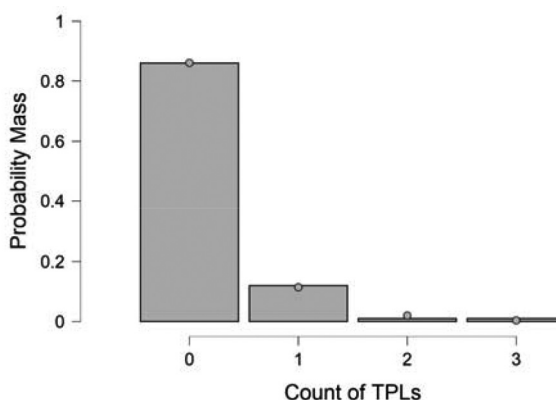
To exclude the possibility of the effect of the experimenter (the manipulation having an influence only with respect to one specific experimenter, making the experimenter the key factor), the experiment was led by two experimenters, both of whom were blind to the hypotheses. No differences between experimenters in dependent variables were found, and we dropped this factor from further testing and reporting. Finally, participants were debriefed and asked if they suspected that the experiment had a goal other than the one presented to them. None did.

Results and discussion

Data were analyzed and visualized using JASP v. 014 and R programming language with MASS and

BFpack library. The number of specific TPLs proved to be too small to analyze separately. This variable contained an excessive number of "0" and followed a negative-binomial distribution: $\chi^2 = 1.53$ (1, $N = 100$), $p = .670$, see Figure 1. We therefore analyzed only the sum of TPL expressions.

Figure 1. Histogram vs. theoretical PMF of the fitted negative-binomial distribution (dots)



To answer the research questions, we used a generalized linear model for negative-binomial distribution with log link. The number of all TPL expressions was a dependent variable and the experimental condition (no-TPL vs. TPL) was a predictor. This model proved incapable of predicting the number of dependent variables: $b = -.61$, $z(98) = -1.08$, $p = .280$.

To investigate this surprising result, we conducted a Bayesian analysis, the goal of which was to compute the evidence in favor of the null hypothesis. The Bayesian analysis with the prior uniform compared the hypotheses that the true value of the regression coefficient is $b = 0$ vs. $b \neq 0$. The approximated Bayes factor was in favor of the null-hypothesis ($BF = 5.59$). The posterior odds under the obtained data was .85 for $b = 0$ and .15 for $b \neq 0$.

In summary, the results of the first experiment suggest that when one interlocutor expresses certain TPLs, it might not lead the second one to mimic them. A TPL's appearance was much more likely to be totally independent of the experimental conditions. The obtained data cast reasonable doubt on the mimicking mechanism of TPL expressions.

Experiment 2

Our first study delivered surprising results. As it demonstrated that there might be one specific

aspect of human communication that is not spontaneously imitated, we made two significant changes to the methodology. To rule out the possibility that our methodology was responsible for this effect, in our second experiment we presented several different TPL statements instead of just one ("Yhm"). In other words, we assumed that in natural settings people tend to present various TPL statements. Hence, the designed interaction should reflect this tendency. During the interaction, three additional TPL expressions were presented: ("Hm," "Aa," and "Wow" in a random order, 3 times per minute each + 1, in sum 10 times per minute).

Participants

Participants were recruited via leaflets distributed at a local university. One hundred participants (82 women, 18 men; age: $M = 27.36$, $SD = 4.28$) took part in a 10-minute experiment and were randomly assigned to the two condition groups. The number of participants was fixed, equal, and balanced between groups, with 50 in each. No data was excluded from the analysis. Again, participants were not offered compensation for their participation.

Variables

The independent variable was the presence of TPL. The experimenter randomly presented or omitted (in writing) the TPL statements "Hm," "Aaa," and "Wow." In the experimental group, TPL was presented 10 times; in the control group, it was not.

As in the previous experiment, we counted the number of TPL expressions in the messages provided by the participants. Again, we also measured the number of total TPL expressions to check whether the presence of the TPL statements expressed by the experimenter elicited presentation by the participants of other examples of TPL.

Procedure

The experimenter employed TPL statements in the same place during the conversation and such statements appeared 100 times in the course of a 10-minute interaction. The ostensible theme for the conversation was a 14-question interview about trust. For example, participants were asked: What does it mean to trust? Is it possible to create relationships without trust? What does it mean to gain trust? The questions were always asked in the same order to reduce interchangeability between conditions and participants.

Results and discussion

As with the previous experiment, specific types of TPL expressions were extremely rare among participants, so only the total sum of TPLs could be analyzed. This variable once again followed the negative-binomial distribution: $\chi^2(1, N = 100) = 1.13$, $p = .580$). Again, a generalized linear model analysis was performed with the sum of TPL expressions as a dependent variable and experimental conditions (no-TPL vs. TPL) as a predictor.

Again the model failed to predict the counts of the dependent variable: $b = -.31$, $z(98) = -.73$, $p = .480$). This time, we conducted a Bayesian analysis with informed priors, derived from the posterior odds obtained in Experiment 1 (.85 for $b = 0$ and .15 for $b \neq 0$).

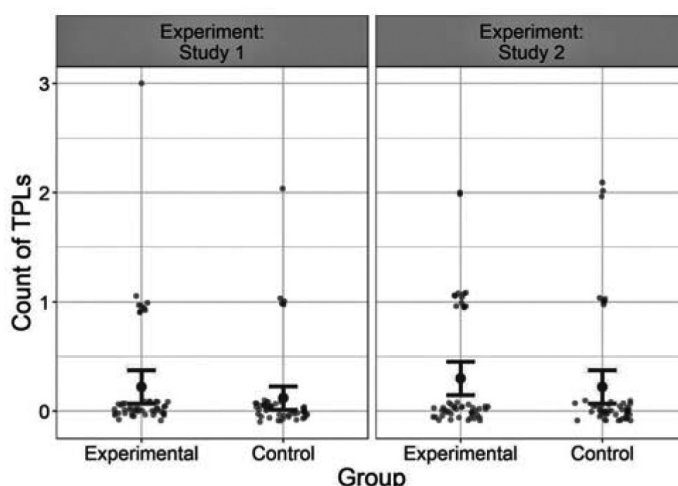
Once again, we compared two hypotheses: regression coefficient $b = 0$ vs. $b \neq 0$. This time we obtained even stronger evidence in favor of the absence of the effect. Approximated Bayesian factor provided moderate evidence for $b = 0$ hypothesis ($BF = 7.67$). The posterior odds under the analyzed data were .98 for $b = 0$ and .02 for $b \neq 0$.

Combining the results from the two first experiments, we can conclude that the absence of the effect of the experimental manipulation is a sufficient explanation for the pattern of results. It is still possible that due to the measurement error, some actual effect remained undetected, but it is largely improbable for such an effect to be more than very weak. See Figure 2.

Experiment 3

In the next study, we applied several changes to rule out the possibility that our previous results were a product of our methodology. First, we changed the way the dependent measures were calculated by changing the duration and percentage of TPL relative to the interaction. In other words, we used more sophisticated and precise measurements for TPL production. Second, the experimenter presented a new TPL statement, "Mmm," to check if a different TPL form would produce different results. Third, the first two experiments were based on conversations about socially loaded topics (e.g., trust) resulting in more formal language which might have excluded TPL, which is rather informal. In the next study, an informal, less personal topic was introduced. Fourth, we changed the group of people we examined. Up to that point, in the first and second experiments, participants were students at a local university; this time we

Figure 2. Distribution of TPL counts across experimental conditions in two studies



Note: The y-axis represents the amount of TPL expression by participants. The jittered, partly transparent points represent cases (participants). The density of the points exhibits how often participants expressed a certain number of TPLs (0,1,2,3) in the given condition. The grey dots and whiskers indicate the median value and standard errors.

conducted a field experiment on a more diverse population.

Finally, null results might have stemmed from the fact that the interactions took place in written form. Therefore, the interactions of the next study took a face-to-face form to verify whether TPL occurs only in spoken form and in face-to-face interaction.

Participants

There were 100 participants in this study: 50 in the control group and 50 in the experimental group, 66 women and 34 men (age: $M = 41.44$, $SD = 14.62$), selected randomly. No data were excluded from the analysis. The number of participants was fixed prior to the initiation of the experiment.

Variables

The participants were divided into two groups: an experimental group (exposed to TPL) and a control group (not exposed to TPL). Manipulation of the independent variable was followed by the experimenter who either used or refrained from using TPL.

In the experimental group, the experimenter used TPL elements during the conversation. The same TPL element was presented in the conversation 20 times. The frequency was two exposures per minute during a 10-minute conversation. We used only one TPL expression in order to calculate the tendency to mimic a specific TPL expression vs. a higher tendency to present

any TPL regardless of the one presented by the experimenter. In the control group, there was no exposure to TPL.

There were six dependent variables: (1) A sum of all TPL elements pronounced by participants (any TPL). (2) A sum of the same TPL elements imitated by participants (the same TPL "Mmm"). (3) Total duration (sum of seconds) of all TPL expositions presented by the participant. (4) Total duration (sum of seconds) of the same TPL expositions presented by the participant. (5) Percentage of all TPL elements relative to the total length of all statements used by participants. (6) Percentage of the same TPL elements relative to the total length of all statements used by participants.

Apparatus and materials

Each participant of the field experiment voluntarily agreed to take part in an interview. Participants were not compensated. The selection of the groups was random. Each interview took precisely 10 minutes before the experimenter interrupted the conversation. The interviewer was blind to the hypothesis. During each interview the same prepared script was used based on a structured sequence of questions progressing from general to detailed, so regardless of the experimental conditions, the only difference in the script was the presence of TPL. The experimenter interviewed participants about their views on higher education, a topic that was not relevant to the study. It was chosen because of its

noncontroversial nature, allowing the participants to speak regardless of their level of knowledge, mood, or other factors.

Coding results

The coder counted the number of TPLs in each respondent's statement, including the minute when each TPL appeared. As in the previous experiments, the experimental TPL "Mmm" was taken into account, along with other TPL vocalizations identified by Luangrath et al. (2017b) such as "umm," "hmm" and "ahh."

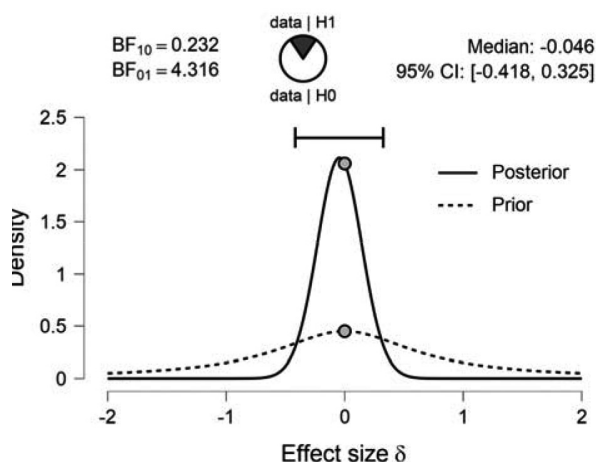
Results and discussion

In this experiment we had three types of dependent variables to analyze — the raw number of TPLs, duration of TPLs in seconds and proportion of TPL duration relative to the duration of all statements. All three types of variables were computed with respect to specific and non-specific TPLs.

Dependent variables followed different, often bimodal and always non-normal distributions. For the sake of maintaining both adequacy and cohesion, we opted for Mann-Whitney Bayesian comparison of groups in respect to every dependent variable. The grouping variable was control group (no-TPL) vs. experimental group (TPL). We used default prior, zero-centered Cauchy probabilities with scale parameters set at .707.

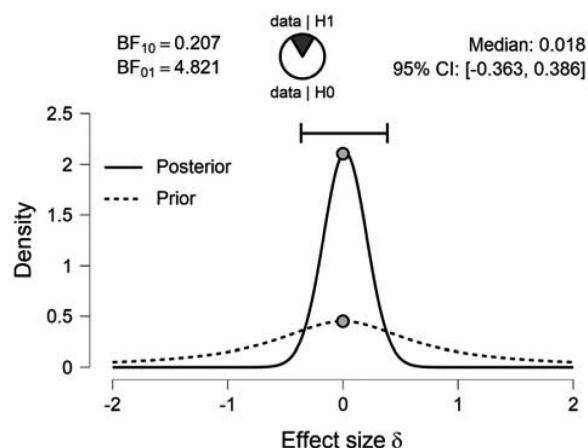
At first, we examined whether the exposure to experimenters' TPLs led participants to express more TPLs in general. For the sum of all expressed TPLs, the posterior distributions of effect size had a median at $\delta = -.05$ (Glass's delta). The Bayesian factor in favor of the null hypothesis was $BF = 4.32$, which can be interpreted as moderate evidence for a lack of difference between the control and experimental group (see Figure 3).

Figure 3. The effect of the experimental condition on the sum of all TPL expressions



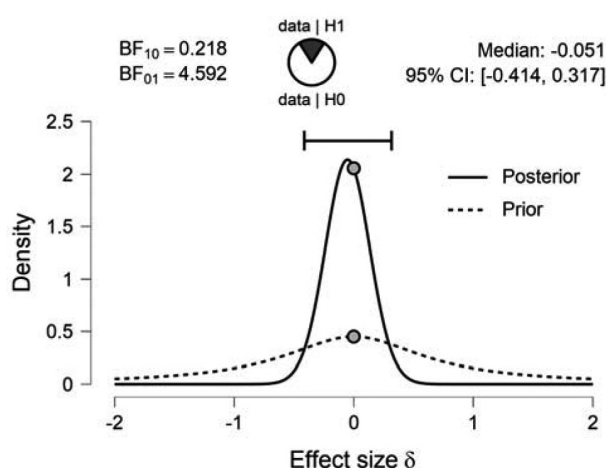
A similar analysis was performed in respect to the duration of all TPL expressions. The analysis produced similar results. The posterior distributions of effect size had a median at $\delta = -.02$ (Glass's delta). The Bayesian factor in favor of the null hypothesis was $BF = 4.82$, which could also be interpreted as substantial evidence for the lack of difference between the control and experimental groups (Wagenmakers et al., 2011). See Figure 4.

Figure 4. The effect of the experimental condition on the duration of all TPL expressions



The third analysis was performed in respect to the relative duration of TPL expressions relative to the duration of all statements. Conclusions were identical. The posterior distributions of effect size had a median at $\delta = -.05$ (Glass's delta). The Bayesian factor in favor of the null hypothesis was $BF = 4.59$, which could also be interpreted as moderate evidence for the lack of difference between the control and experimental groups. See Figure 5.

Figure 5. The effect of the experimental condition on the relative duration of all TPL expressions

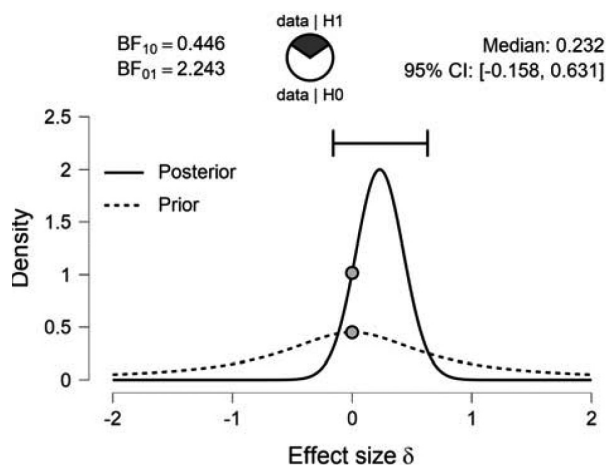


For each measure of general TPL expression, the Bayesian factor tends to favor the null hypothesis and the averaged effect sizes are too small to be meaningful.

Specific TPL

At the second stage, we examined whether the exposure to experimenters' TPLs led participants to express identical TPLs to those expressed by the experimenter. The posterior distributions of effect size had a median at $\delta = .23$ (Glass's delta). The Bayesian factor in favor of the null hypothesis was $BF = 2.24$, which can be interpreted only as far as anecdotal evidence for the lack of difference between groups (Wagenmakers et al., 2011). See Figure 6.

Figure 6. The effect of the experimental condition on the sum of experimental TPL expressions



In respect to the duration of experimental TPL expressions, the analysis yielded similar results. The posterior distributions of effect size had a median at $\delta = .29$ (Glass's delta). The Bayesian factor in favor of the null hypothesis was $BF = 1.53$, meaning that the possibility of the obtained data being under the null hypothesis is equal to being under the alternative one. See Figure 7.

Similar results were obtained when analyzing the proportion of experimental TPL duration relative to the duration of all statements. In respect to the duration of experimental TPL expressions, the posterior distributions of effect size had a median at $\delta = .24$ (Glass's delta). The Bayesian factor in favor of the null hypothesis was $BF = 2.21$, which provides, at best, only anecdotal support for the null hypothesis. See Figure 8.

Figure 7. The effect of the experimental condition on the duration of experimental TPL expressions

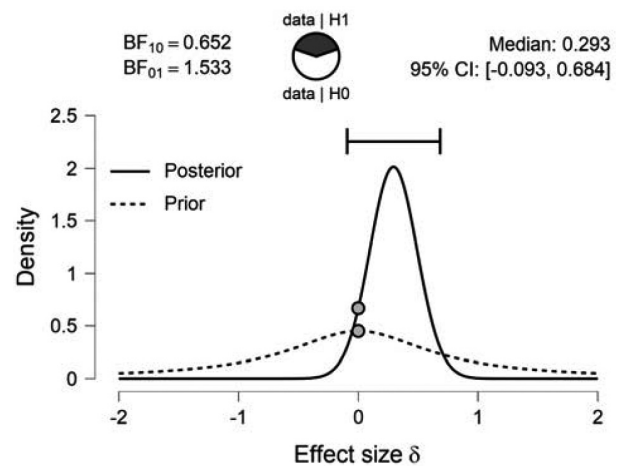
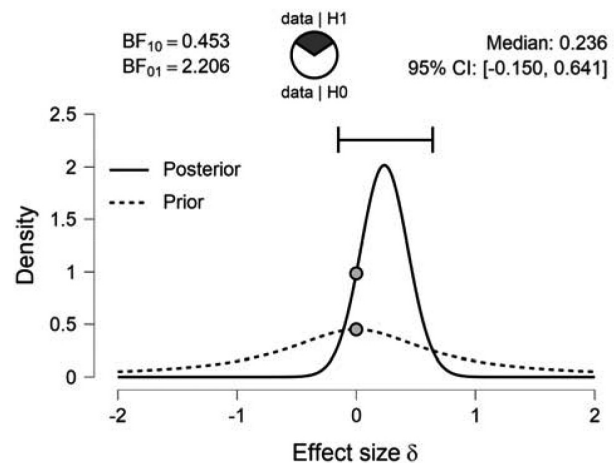


Figure 8. The effect of the experimental condition on the relative duration of experimental TPL expressions



Summing up, the analysis of specific, experimentally manipulated TPLs provided slightly different results than the analysis of non-specific TPLs. This time the analysis should be interpreted as altogether inconclusive. The Bayesian factor favored neither the alternative nor the null hypothesis clearly enough. It is noteworthy, however, for the specific TPLs, the median effect sizes in posterior distributions were consequently higher than in the case of non-specific TPLs.

Specific vs. non-specific TPLs

Two sets of analysis suggested that the effect of the experimental manipulation is either null or

very weak. Nonetheless, the differences between the results of specific and non-specific TPLs posed an important question: do participants mimic the specific TPLs expressed by the experimenter, when we control for the occurrence of TPLs in general? To address this question, we conducted a non-parametric analysis of covariance (ANCOVA). An "sm" package for R programming language was used for this analysis. In the analyses, we included the measurement of specific TPLs as a dependent variable, a grouping variable (TPL vs. No-TPL) as a fixed factor and corresponding measure of general TPLs as a covariate. As a consequence, three analyses were performed, one for each type of TPL measurement (sum, duration and proportion). In all three analyses, there was no significant effect of the experimental condition on the specific TPLs, when controlling for the presence of non-specific TPLs. The values of the h-test of equality were $h = 6.55$ (1, 97), $p = .210$ for the sum of TPLs, $h = 6.94$ (1, 97), $p = .120$ for duration of TPLs and $h = 1.73$ (1, 97), $p = .320$ for the % of TPLs. Summing up, there is no evidence for the mimicking of specific, experimentally manipulated TPLs, when controlling for the presence of non-specific TPLs.

General discussion

We ran three experiments as a line of research. In the first experiment we established the effect, whilst in the second study, due to a lack of significant effects in the first study, we changed the methodology by broadening the exposure to different TPLs. In the third experiment we once again changed the methodological approach to rule out the possibility that the lack of significant results was rooted in imprecise dependent measures. We changed the TPL exposure to ensure that the lack of supposed differences was not rooted in the specificity of the TPL statement. We also changed the topic of the conversation, and the sample from students to the general population.

Limitations

This study is not free from methodological flaws. The first issue that we should point out is that not all respondents followed the same pattern of conversation. To avoid a feeling of artificiality in the conversation, the experimenter adapted to the interlocutor's statements so that the experimenter's questions were not always posed to each respondent in the same way.

A wide variance in the average length of responses was obtained. Some people offered

detailed and complex answers; other respondents were more succinct and straightforward. In future studies, experimenters should prioritize the number of questions to be asked during the interview.

A third issue is the sensitivity of results coding. In our study, the coding of the duration of spoken TPL expressions was done with an accuracy of one second. Perhaps increasing the sensitivity of coding to one-tenth of a second will reveal effects that were not observed previously due to technical constraints. Therefore, in future research, it is recommended that laboratory equipment be used. For example, a Roland R-07 high-resolution audio recorder, or a Zoom H-6 professional audio recorder will allow more precise measurement of the length of responses.

Another issue for no effects for tendency to mimic is the possibility that the scenarios provided in all of the experiments did not create any bond with the agent, thus tendency to mimic could not appear. Of course this might be a precise and correct assumption, but one should keep in mind that in previous studies mimicry always appeared, even among people who could and did not have any interaction (for example, while watching another person on a screen, participants mimicked behaviors presented by the second visible person, e.g., Martin et al., 2010). Another explanation may be that TPLs described in the introduction (like "When you are sharing a burger so looong, what do you say? Meet me halfway! #KFCLonger"; "Pizza-loving pairs can now eat happily ever after ♥♥") were at least positive and clearly welcoming. In our study TPLs were simpler, like "yhm" thus this context may be responsible for no effect on mimicry.

Conclusions and directions of future research

This paper contradicts the everyday practice of marketing communication with consistent results across all three experiments. From this perspective, using TPL in marketing communication may be ineffective. In light of the reported experiments, people might not imitate this form of communication, and as a result repeating it will not lead to the highlighted benefits.

On the one hand, the careful review of the literature outlined in the introduction shows the presence of TPL in human communication. Moreover, many studies indicate that in communication, people imitate verbal behavior, such as tone of voice, emphasis (Giles & Powesland, 1975), rhythm of speech and pauses in utterances (Cappella & Planalp, 1981). Mimicry is called

"social glue" since it is responsible for starting and maintaining social relationships (e.g., Dijksterhuis, 2005). Research over the last two decades has produced an impressive number of findings indicating the importance of this behavior in social interactions (for reviews, see Duffy & Chartrand, 2015). People tend to mimic each other during social interactions (Chartrand & Bargh, 1999). Thus, it could be reasoned that people should mimic every aspect of social interaction in order to start (in these three experiments) a new interaction. Given the rather low sample size ($N = 100$) for each of the three experiments, we cannot conclusively claim that confederates do not mimic TPL, or that they mimic it much less than what can usually be found in research. In this context an important question may arise: why does this process take place? Maybe people do not accommodate every situation, and they may be motivated to diverge rather than converge in their behavior. If so, why did participants — contrary to the literature — choose to diverge when establishing a new relationship with another person? Perhaps the lack of mimicry was because participants had no motivation to build the relationship. Again, the question about the roots emerges. One possibility is the impersonal nature of the interaction: instant messaging in Experiments 1 and 2 (anonymously)

and in all experiments an interaction with a researcher for scientific purposes (i.e., no personal conversation). We are unable to answer these critical questions at this time.

Maybe people do not imitate TPL word manifestations (e.g., "Hm") because TPL is a very different form of communication from purely verbal and nonverbal communication. Maybe people would imitate graphic symbols (as discussed in the introduction), emoticons or emoji. Finally, it is possible that people avoid imitating TPL because of its adverse effects, repercussions, or consequences.

In conclusion, from many studies we know that mimicry benefits the mimicker, so mimicking TPL would be extremely beneficial for companies while projecting marketing communication. Our research shows that it is not natural for people to imitate TPL, which may indicate that combining TPL with mimicry in marketing may not have the expected results. We should, however, keep in mind that TPL may still be beneficial but not from the scope of mimicry research. It is possible, for example, that a salesperson using paralanguage is seen by the customer as more competent, trustworthy or nice. For the same or other reasons, he or she can also have more influence on customer decisions. Thus, additional studies of TPL in marketing, on different theoretical grounds, are needed.

Notes/Przypisy

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