Cywilizacja i Polityka
2022, nr 20, s. 88–110
https://doi.org/10.15804/cip202205
ISSN 1732-5641

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Now You See It, Now You Don't – The effect of visual, auditory, and multimedia brand partnership disclosure on TikTok

Teraz to widzisz, teraz nie – efekt wizualnej, dźwiękowej i multimedialnej informacji o partnerstwie marki na Tik Tok

Słowa kluczowe: Tik Tok, marki partnerskie, intencje zakupu, rozpoznawalność reklam, wiarygodność

Keywords: Tik Tok, partner brands, purchase intentions, ad recognition, credibility

Streszczenie

Artykuł ma na celu zbadanie związku partnerskich marek na Tik Tok i ich wpływu na intencje zakupu oraz rozpoznawalność reklam, a także czy w którejkolwiek z tych relacji pośredniczy wiarygodność influencerów. Badanie wykorzystuje jednoczynnikowy projekt między badanymi i zostało przeprowadzone w formie eksperymentu ankietowego, w którym uczestnicy zostali losowo przydzieleni do jednego z trzech warunków ujawnienia partnerstwa marki (BPD).

Abstract

Article aims to explore the relationship between the partnership disclosures on Tik Tok and its effect on purchase intention and ad recognition, and whether either of those relationships is mediated by influencer trustworthiness. The research employs a one-factor between subjects design and was conducted in the form of a survey experiment where participants were randomly assigned to one of the three brand partnership disclosure (BPD) conditions.

In recent years a Chinese Bytedance app called TikTok has taken the internet by storm amassing over 3 billion mobile downloads in only four years[1]. With its short videos format and the increasingly shorter attention span of average media users, TikTok has become the ideal advertising platform as evidenced by their rapidly increasing advertising revenue[2].

One may compare TikTok to Instagram, however, there are quite a few key differences between the two. One big difference between Instagram and TikTok is its algorithm. Instagram's algorithm is follower based and it only feeds its users content from accounts they already follow, or who's content they have previously liked or saved. However, TikTok's algorithm uses hybrid filtering based on content from accounts the users have never previously interacted with but may be interested in based on their previous activities on the app or based on their profile thus allowing for a much greater reach. Due to this integral difference in the type of content delivered to its users, research done into platforms such as Instagram simply does not transfer over, especially research regarding influencer marketing, specifically focusing on influencer trustworthiness and its effect on purchase intention as on TikTok users are likely to see influencer brand partnership content of users they have never previously interacted with and thus have no parasocial relationships with in contrast to Instagram where you choose the content you see by following influencers and users you like.

Additionally, due to the interface of most social media platforms, like Instagram, TikTok or Facebook, the viewer is unable to view the entirety of the caption, if it exceeds a certain number of characters, unless they click on it themselves. Therefore, if the influencer does not explicitly disclose the partnership in the video, for instance auditorily, and only chooses to include it at the end of their long caption the viewer may remain unaware of the partnership as a whole and remain under the impression that the influencer is simply recommending a brand or product without receiving monetary compensation for doing so.

Therefore, many 'disclosed' partnerships may remain not recognized as ads by the viewers[3]. As aforementioned, simply mentioning the partnership at the

[1] B. Dean, *Tiktok User Statistics,* Backlinko, Retrieved February 24, 2022; ByteDance Inc. *Tik Tok, a global music video platform and Social Network, launches in Indonesia*. Tik Tok, a Global Music Video Platform and Social Network, Launches in Indonesia – PR Newswire APAC. Retrieved February 24, 2022.

[2] S. Lebow, *Tiktok's ad revenues climb*. Insider Intelligence. Retrieved June 5, 2022.

[3] N.J. Evans, *Pinpointing persuasion in children's advergames: Exploring the relationship among parents' internet mediation, Marketplace Knowledge, attitudes, and the support for regulation,* Journal of Interactive Advertising 2014, 14(2), pp. 73–85.

end of the caption is in accourcaden with current regulations, however, as we presuppose many viewers may not see it. This promotes unfair communication as users may not see the disclosure if they don't read the full caption, however, if there was mandatory audio or multimedia (auditory and visual) disclosure then each user would be made aware of the advertising intent of the video. Therefore, research into this new platform is highly relevant to both the scientific community, as well as to the brands who are conducting TikTok partnerships who may be hindered by influencers lack of explicit disclosure, the influence partaking in said partnerships whose trustworthiness may be hindered by their lack of explicit disclosure, as well as to the general TikTok audiences who have the right to know whether they are watching an advertisement or not.

Therefore this paper will set out to determine to what extent do auditorily and visually disclosed partnerships in TikTok videos, as opposed to solely visually disclosed partnerships, affect ad recognition and purchase intention. As well as whether these relationships are moderated by the viewers perceived influencer trustworthiness.

At the time of writing this research paper there is no legislation specifically focusing on influencer marketing at the EU level, however, at the national level the legislations greatly vary. However, under the framework laid out by the Unfair Commercial Practices Directive (UCPD), influencers who act as sellers or advertisers are lawfully obligated to disclose a myriad of information to their viewers in compliance with the Consumer Rights Directive (CRD)[4]. Furthermore, under Articles 6 and 7 of the UCPD influencers are subject to transparency requirements, thus including overt advertising disclosure and failure to disclose such information may render the content in question illegal under the DSA[5].

When it comes to auditory disclosure it is overt in contrast to visual disclosures, which in case of the TikTok captions are covert unless the viewer seeks them out. The main reason influencers make use of this legal loophole is that employing covert marketing is a way to minimize consumers' skepticism towards the product or service[6]. By not directly and openly disclosing the partnership the advertisement appears less suspicious and disguises itself as genuine

[4] F. Michaelsen, F. Collini, L. Jacob, C. Goanta, C. Kettner, S.E. Bishop, S. Hausemer, P. Thorun, C. Yesiloglu, *The impact of influencers on advertising and consumer protection in the single market*, Policy Department for Economic, Scientific and Quality of Life Policies 2020.

[5] Ibidem.

[6] C.L. Brown, A. Krishna, *The skeptical shopper: A metacognitive account for the effects of default options on choice*, Journal of Consumer Research 2004, 31(3), pp. 529–539.

unpaid promotion[7]. There is very little research into the effect of auditory partnership disclosure in comparison to visual disclosure. While most of the research into the topic focuses on the effect of disclosure timing, the little research that is available mainly focuses on children whose media literacy greatly differs from adults thus it is interesting to investigate whether these results translate over.

Additionally, viewers tend to question creators' trustworthiness when it comes to partnerships, as it is considered to be one of the key factors in the persuasive process[8]. As aforementioned, with Tik Tok's algorithm, you often see videos of creators you do not know and whose content you have not previously interacted with. Therefore, the assessment of perceived creator trustworthiness occurs within a span of the video. Moreover, once the covert disclosure is unmasked it may lead to a further decrease in creator trustworthiness resulting in lower purchase intention as viewers may feel deceived[9].

Theoretical Framework

The Effect of Auditory Brand Partnership Disclosure on Ad Recognition

One study found that visual warnings were more effective than auditory warnings[10], however, this research was conducted on children under the age of 10, whose media literacy can not be compared to individuals over 18 who by that point have spent years engaging with various media platforms and experienced and observed a variety of marketing strategies. Nevertheless, the same research paper concluded that placing the visual or auditory disclosure at the beginning of the promoted content increased ad recognition. However, in this study the visual warning was placed overtly in the middle of the video, while in the case of TikTok captions the visual brand partnership in the captions may not have the same effect as the disclosure is covert.

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[7] F.F.Y. Chan, *The perceived effectiveness of overt versus covert promotions,* Journal of Product & Brand Management 2019, 29 (3), pp. 321–334.

[8] L. Hudders, S. De Jans, M. De Veirman*, The commercialization of social media stars: A literature review and conceptual framework on the strategic use of social media influencers,* International Journal of Advertising 2020, 40 (3), pp. 327–375.

[9] N.J. Evans, B.W. Wojdyński, M. Grubbs Hoy, *How sponsorship transparency mitigates negative effects of advertising recognition*, International Journal of Advertising 2018, 38(3), pp. 364–382.

[10] P. De Pauw, L. Hudders, V. Cauberghe, *Disclosing brand placement to young children*, International Journal of Advertising 2018, 27(4), pp. 508–525.

Moreover, according to the visual-superiority effect processing visual information is more automatic than processing of auditory information, however, this effect may be mitigated if the disclosure is hidden in a long caption[11]. However, if auditory disclosure were placed at the beginning of the video along with a visual disclosure in this caption, the combined effect should increase ad recognition regardless of whether the visual disclosure is not explicitly visible and is amongst the caption.

Additionally, people approach and process a message differently if they believe it to be an ad, or simply of persuasive nature, however, this process does not kick-in if the viewer does not recognize the message as an advertisement[12]. For this very reason advertising disclosure is so important because it facilitates the recognition of the message as persuasive in nature and acts as a recall trigger of persuasion knowledge kickstarting appropriate coping mechanisms[13].

The presence of the brand partnership disclosure (BPD) indicates the following message is an advertisement and thus has a persuasive intent on the viewer. Furthermore, research has concluded that the presence of an overt disclosure increases one's advertising recognition[14]. Additionally, a study concluded that detection time for sound ranges between 140 and 160 milliseconds, while its approximately 180 to 200 milliseconds for visual stimulus, however, a second study found contradicting results that reaction time is faster to visual than auditory stimuli[15]. However, factors such as age, sex, and duration of exposure to the

[11] S. An, S. Stern, *Mitigating the effects of advergames on children*, Journal of Advertising 2011, 40(1), pp. 43–56; D.R. Rolandelli, J.C. Wright, A.C. Huston, D. Eakins, *Children's auditory and visual processing of narrated and non narrated television programming*, Journal of Experimental Child Psychology 1991, 51(1), pp. 90–122.

[12] S.C. Boerman, E.A. Van Reijmersdal, P.C. Neijens, *Using eye tracking to understand the effects of brand placement disclosure types in television programs*, Journal of Advertising 2015, 44(3), pp. 196–207.

[13] N.J. Evans, J. Phua, J. Lim, H. Jun, *Disclosing Instagram influencer advertising: The effects of disclosure language on advertising recognition, attitudes, and behavioral intent*, Journal of Interactive Advertising 2017, 17(2), pp. 138–149.

[14] C.T. Carr, R.A. Hayes, *The effect of disclosure of third-party influence on an opinion leader's credibility and electronic word of mouth in two-step flow*, Journal of Interactive Advertising 2014, 14(1), pp. 38–50.

[15] P.D. Thompson, J.G. Colebatch, P. Brown, J.C. Rothwell, B.L. Day, J.A. Obeso, C.D. Marsden, *Voluntary stimulus-sensitive jerks and jumps mimicking myoclonus or pathological startle syndromes,* Movement Disorders 1992, 7(3), pp. 257–262; Y. Yagi, K.L. Coburn, K.M. Estes, J.E. Arruda, *Effects of aerobic exercise and gender on visual and auditory p300, reaction time, and accuracy,* European Journal of Applied Physiology and Occupational Physiology 1999, 80(5), pp. 402–408.

stimuli all can affect this, therefore, it can be hypothsized that by incorporating both auditory and visual disclosure participants ad recognition will increase due to the duality of the disclosure in various formats[16].

H1 The presence of multimedia brand partnership disclosure will increase ad recognition compared to (a) sole visual brand partnership disclosure, or (b) sole auditory brand partnership disclosure.

The Effect of Auditory Brand Partnership Disclosure on Purchase Intention

There are a myriad of definitions of purchase intention, for the sake of this paper a definition provided by Spears and Sings (2004) stating "an individual's conscious plan to make an effort to purchase a brand" will be adopted.

A study has concluded that a clear and overt BPD makes the persuasive intent clear to the viewer aiding them in identifying the persuasive purpose of the message[17]. Moreover, as overt BPDs (in this study both multimedia and auditory BPD are overt while visual BPD remains covert for it is integrated at the end of the caption) provide an explanation of the relationship between the brand and the influencer making the video, overt BPD is likely to lead to a positive increase in purchase intention. Therefore, purchase intention should be higher for the multimedia disclosure while lower for sole auditory and sole visual BPD, as it may appear as more genuine by its overt transparency.

H2 The presence of multimedia brand partnership disclosure will increase purchase intention, compared to (a) sole visual brand partnership disclosure, or (b) sole auditory brand partnership disclosure.

The Effect of Influencer Trustworthiness on Ad Recognition

For the purpose of this study a definition of trust proposed by Moorman, Deshpandé, and Zaltman will be adopted "a willingness to rely on an exchange partner in whom one has confidence"[18], therefore, a person who is trustworthy is

[16] J. Shelton, G.P. Kumar, *Comparison between auditory and visual simple reaction times,* Neuroscience and Medicine 2010, 1(01), pp. 30–32.

[17] E. Rozendaal, M.A. Lapierre van, E.A. Reijmersdal, M. Buijzen, *Reconsidering advertising literacy as a defense against advertising effects*, Media Psychology 2011, 14(4), pp. 333–354.

[18] C. Moorman, R. Deshpande, G. Zaltman, *Factors affecting trust in market research relationships*, Journal of Marketing 1993, 57(1), p. 82, pp. 81–101.

someone one has confidence in and a willingness to rely on. Trustworthiness impacts customers behavior and plays a role in the decision making process[19]. Studies have shown that one of the central key factors influencing whether we perceive someone as trustworthy is whether they appear to be selfless, meaning they are objective in their opinion and not influenced by third parties or biased by the offer of financial compensation for a positive review[20]. Therefore, with high influencer trustworthiness one is more likely to purchase the recommended product, however, high influencer trustworthiness in a video with no overt BPD may lead the viewer to have lower ad recognition as they did not see the disclosure and thus not realize they are watching a paid advertisement. Thus, in the multimedia condition, which features both visual and auditory disclosure, with high influencer trustworthiness ad recognition should be higher compared to the remaining two conditions.

H3 The presence of multimedia brand partnership disclosure will increase ad recognition and the indirect effect of influencer trustworthiness will mediate this relationship.

The Effect of Influencer Trustworthiness on Purchase Intention

In the context of influencer marketing influencer trustworthiness plays a major role in influencing purchase intention[21]. Furthermore, research results seem relatively in agreement with one another on the positive effect of trustworthiness on purchase intention[22]. Moreover, research has concluded that trustworthiness influences customers' purchase intention[23]. Source trustworthiness not only in-

[19] L. Hudders, S. De Jans, M. De Veirman, op.cit., International Journal of Advertising 2020, 40(3), pp. 327–375.

[20] E. Walster, E. Aronson, D. Abrahams, *On increasing the persuasiveness of a low prestige communicator,* Journal of Experimental Social Psychology 1966, 2(4), pp. 325–342.

[21] I. Erkan, C. Evans, *The influence of ewom in social media on consumers' purchase intentions: An extended approach to information adoption*, Computers in Human Behavior 2016, 61, pp. 47–55; K. Sokolova, H. Kefi, *Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions*, Journal of Retailing and Consumer Services 2020, 53, p. 101.

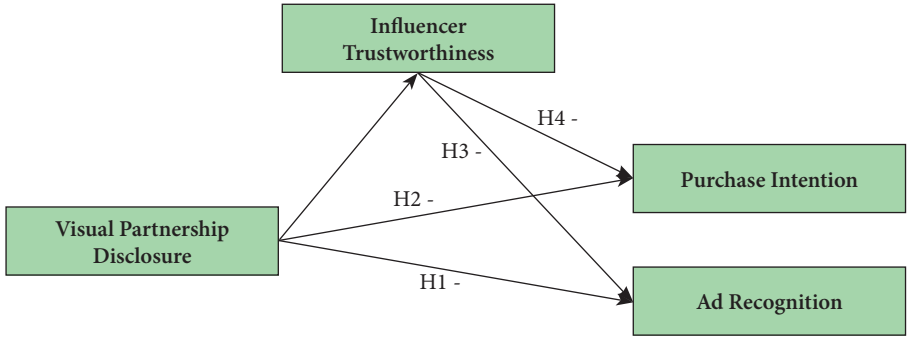
[22] D.D. Gunawan, K.-H. Huarng, *Viral effects of social network and media on consumers' purchase intention*, Journal of Business Research 2015, 68(11), pp. 22–41; S.W. Wang, A.C. Scheinbaum, *Enhancing brand credibility via celebrity endorsement*, Journal of Advertising Research 2016, 58(1), pp. 16–32.

[23] P. Chao, G. Wuhrer, T. Werani, *Celebrity and foreign brand name as moderators of country-of-origin effects,* International Journal of Advertising 2015, 24(2), pp. 173–192.

fluences purchase intention but also facilitates a positive relationship between the sourse and the consumer, as well as the brand but only when the viewer can identify with the influencer or their needs and find them genuine[24]. Thus, in the multimedia condition high influencer trustworthiness should result in higher purchase intention compared to the remaining two conditions. Based on aforementioned literature the following hypothesis was generated. Furthermore, the relationships between all four variables are illustrated in Figure 1.

H4 The presence of multimedia brand partnership disclosure will increase purchase intention and the indirect effect of influencer trustworthiness will mediate this relationship (multimedia, auditory, and visual BPD).

Figure 1. A Conceptual Model That Visualizes the Relationships Between the Variab



The study was conducted in the form of a survey experiment, using convenience sampling, where participants were randomly assigned to one of the three conditions. A survey experiment was the optimal method taking into account financial time of prestrictions as well as time constraints relating to the completion of this research. Additionally, it allowed for several individuals to participate in the study at the same time, at their own pace, and at their own availability.

[24] J. Temperley, D. Tangen, *The Pinocchio factor in consumer attitudes towards celebrity endorsement: celebrity endorsement, the Reebok brand, and an examination of a recent campaign*, Journal of Innovative Marketing 2006, 2 (3), pp. 97–106. Retrieved from https://www.proquest.com/scholarly-journals/pinocchio-factor-consumer-attitudes-towards/docview/2622623505/se-2?accountid=14615 (12.13.2021).

Participants

The survey was sent out to the researchers online network via social media platforms, as well as Survey Swap, thus employing a convenience sample. In order to prepare the raw data for analysis all incomplete responses were marked as missing. Therefore, the final number of valid responses totaled up to 99 participants from 30 different countries. Participants from the Netherlands made up 27.3% of total respondents, while 13.1% came from Poland. Furthermore, 76.8% participants identified as female, 20.2% indentified as male, 2.02% identified as non-binary, and 1.01% of participants prefered not to disclose their gender. Additionally, the youngest participant was 18 while the oldest was 48, and the mean age of all participants was 25 years old (SD = 6.32). The age distribution in the study is a somewhat accurate reflection of the age demographic distribution of TikTok viewers which improves the external validity of the study[25]. Lastly, 41.4% of the participants completed an undergraduate degree, 28.3% completed a master education, and 22.2% completed a high school or equivalent education at the time participating in the study.

Procedure

Participation in this study was entirely voluntary and no compensation was provided. Primarily, the participants filled out a consent form and indicated their age along with their gender, educational background, and country of birth, after which they were randomly assigned to one of the three conditions. In each condition participants viewed four identical TikTok videos and one TikTok video which was manipulated to reflect the condition they were assigned to. Following the viewing of the stimulus material the participants were asked a series of questions regarding their ad recognition, purchase intentions, and perceived influencer trustworthiness. Next, the participants were asked to indicate whether they always read the TikTok video captions, whether they are familiar with the influencer prior to taking part in the survey, as well as knowledge and affinity of the brand and knowledge and purchase intention of the product featured in the video in order to control for their effect on the dependent variables.

[25] https://www.statista.com/statistics/1095186/tiktok-us-users-age/ (1.03.2022).

Stimulus Material

The four non-manipulated filler TikTok videos featured in each condition were identical. In order to try for the content to remain neutral and not skewed towards either male or female preferences and interests, the non-manipulated filler TikToks were funny videos of animals seeing as entertainment is the most popular genre on TikTok with 535 billion hashtags views and #comedy is the most popular hashtag within that category[26].

Moreover, the same video was used as the stimulus for all three conditions, with the manipulation consisting of adding an auditory disclosure to, or removing a visual disclosure from the original video. In all conditions the participant viewed five consecutive TikTok's in order to mimic a genuine interaction with the app.

In one condition one of the five TikTok videos contained a brand partnership solely disclosed in the video caption (which was visible all throughout the video), while the remaining four videos were non-manipulated fillers to facilitate a genuine interaction with the app. In the second condition one of the five TikTok videos contained a brand partnership solely disclosed in the video audio, while the remaining four videos were non-manipulated fillers. Finally, in the third condition one of the five TikTok videos contained a brand partnership disclosed in the video caption as well as the video audio (multimedia condition) with was disclosed at the beginning of the video, while the remaining four videos were non-manipulated fillers. As for the manipulated material a pretest was conducted in order to select the stimulus.

Pretest

The pretest featured four influencer partnership TikToks followed by questions to determine the most liked video (in terms of content and product featured) across both sexes and various age groups. In order to get an even distribution the pretest consisted of 30 participants, five males and five females per each age group 18–29, 30–39, and 40–49. The most liked TikTok with the highest scores across both sexes and age groups was selected as the stimulus material for the survey. The mean scores between the three age groups and across both sexes

[26] https://www.statista.com/statistics/1130988/most-popular-categories-tiktok-worldwide-hashtag-views/ (15.04.2022); https://influencermarketinghub.com/top-tiktok-hashtags/#toc-3 (14.12.2021).

were compared for all four videos. Based on the results (Table 1) Video 3, featuring a brand partnership with the brand Lovesack, was selected as the stimulus material for the study. Furthermore, the participants from the pretest were asked not to participate in the subsequent study.

Table 1. Mean comparison for the stimulus material pretest

Manipulation Material Pretest

	Video 1		Video 2		Video 3		Video 4	
	M	SD	M	SD	M	SD	M	SD
Female	3.17	1.21	2.60	0.60	3.60	0.91	1.84	0.92
Male	3.63	0.63	2.97	0.42	3.95	0.85	2.95	0.90
Age								
18–29	3.93	0.40	2.55	0.60	3.97	0.50	2.88	1.25
30–39	3.20	1.28	3.03	0.48	3.77	1.25	2.42	1.04
40–49	3.07	0.89	2.77	0.48	3.60	0.82	1.90	0.66

Measures

Manipulation Check

In order to ensure the participants recognized and observed the manipulation one additional question was added to the survey: "What type of brand partnership disclosure did the TikToks feature?" with four possible answers: "only auditory", "only visual", "auditory and visual", and "there was no brand partnership disclosure".

Ad Recognition

Ad recognition was measured on a 5-point Likert scale (M = 9.71, SD= 1.43). Furthermore, due to a lack of a fitting scale in already existing literature the scale was created for the purpose of this study.

Influencer Trustworthiness

Trust worthiness was measured on a 7-point Likert scale adapted from Magno and Cassia (2018) (M = 4.46, SD = 1.20). A principal axis factor analysis with direct oblimin rotation was conducted with three items that measure 'influencer trustworthiness'. The Eigenvalue-criterion (bigger than 1: Eigenvalue of factor 1 is 2.49) and the Score Plot shows that there is one factor. In total the factor ex-

plains 83.1% of the variance in the three items. The reliability for the factor is good (α= .90). From this, the variable influencer trustworthiness was created using the average of all three variables.

Purchase Intention

Participants' purchase intention was measured on a 7-point Likert scale (M = 3.74, SD = 1.47)[27]. The last statement was adjusted for the purpose of this study to remove the words "in store" so as not to exclude the possibility of the participants wanting to order the product online. A principal axis factor analysis with direct oblimin rotation was conducted with four items that measure 'purchase intention'. The Eigenvalue-criterion (bigger than 1: Eigenvalue of factor 1 is 3.17) and the Score Plot shows that there is one factor. In total the factor explains 79.2% of the variance in the four items. The reliability for the factor is excellent (α = .91). From this, the variable purchase intention was created using the average of all four variables.

Control Variables

Four variables which were deemed to potentially have influence on the independent, dependent, or the moderator variable, therefore they were controlled for. Due to a lack of fitting scales in already existing literature the scales for caption viewing, prior knowledge of the TikToker, prior knowledge of the brand, and prior experience with the product were created for the purpose of this study.

Caption Viewing

Participants' typical caption viewing preferences were measured on a 7-point Likert scale (*M* = 3.87, *SD* = 1.67). A principal axis factor analysis with direct oblimin rotation was conducted with two items that measure 'caption viewing tendencies'. The Eigenvalue-criterion (bigger than 1: Eigenvalue of factor 1 is 1.80) and the Score Plot shows that there is one factor. In total the factor explains 89,8% of the variance in the two items. The reliability for the factor is good (α = .89). From this, the variable caption viewing was created using the average of the two variables. The same steps and analysis was conducted for the other three control variables.

[27] M.J. Baker, G.A. Churchill, *The impact of physically attractive models on advertising evaluations*, Journal of Marketing Research 1977, 14(4), pp. 538–555.

Prior Knowledge of the TikToker

Participants' prior knowledge of the TikToker was measured on a 7-point Likert scale (M = 1.93, SD = 1.37). The Eigenvalue of factor 1 is 2.34 and the Score Plot shows that there is one factor. In total the factor explains 77.9% of the variance in the three items. The reliability for the factor is good (α = .85).

Prior Knowledge of the Brand

Participants' prior knowledge of the brand was measured on a 7-point Likert scale (M = 3.13, SD = 1.55). The Eigenvalue of factor 1 is 1.39 and the Score Plot shows that there is one factor. In total the factor explains 69,4% of the variance in the two items. The reliability for the factor is low (α = .56).

Prior Experience with the Product

Participants' prior experience with the product was measured on a 7-point Likert scale (M = 1.88, SD = 1.15). The Eigenvalue of factor 1 is 3.23 and the Score Plot shows that there is one factor. In total the factor explains 64.7% of the variance in the five items. The reliability for the factor is good (α = .84).

Results. Manipulation Check

In order to check whether the manipulation was successful a Chi-Squared analysis was conducted with the stimulus variable (multimedia, auditory, and visual BPD) as the independent variable and the variable which indicated what BPD the participants believed the video featured as the dependent variable. Based on the output the results were non-significant χ^2 (6, N = 98) = 4.85, p = .564, φ = .38. As per Table 2 48,4% of participants correctly identified the type of BPD they were exposed to, compared to 5,9% in the auditory condition, and 51,5% in the multimedia condition. Additionally, 15 participants stated that they did not recall the videos featuring any BPDs, amassing 15.3% of participants. Lastly, throughout all three conditions 64 participants were unable to correctly identify the manipulation condition they were exposed to. In conclusion, the manipulation check was not successful.

Table 2. Manipulation check scores

Manipulation Check Ch-Square Analysis

What type of brand partnership disclosure did the Tik Toks feature?		Stimulus Material Multimedia			
			Visual	Auditory	Total
Only visual (in the caption)	Count	8	15	11	34
	%	24,2%	48,4%	32,4%	34,7%
Only auditory (in the audio)	Count	3	1	2	6
	%	9,1%	3,2%	5,9%	6,1%
Visual and Auditory	Count	17	11	15	43
	%	51,5%	35,5%	44,1%	43,9%
There was no brand partnership Disclosure	Count	5	4	6	15
	%	15,2%	12,9%	17,6%	15,3%
Total	Count	33	31	34	98
	%	100,0%	100,0%	100,0%	100,0%

Randomization Check

A randomization check was performed by conducting a one-way ANOVA between type of BPD and age, with type of BPD as the independent variable and age as the dependent variable. The analysis of variance showed a non-significant weak effect of age on type of BPD, $F(2,96) = .05$, $p = .956$, $\eta 2 < 0.01$. Post hoc comparisons (Bonferroni corrected) indicated a non-significant difference between the multimedia BPD condition ($M = 25.2$, $SD = 6.70$) and visual BPD condition ($M = 25.2$, $SD = 6.12$) with a mean difference of .01 ($SE = 1.58$, $p = 1.000$). The case was similar between the multimedia BPD condition ($M = 25.2$, $SD = 6.70$) and auditory BPD condition ($M = 24.8$, $SD = 6.28$) with a mean difference of .41 (SE 1.55, p=1.000).

References

Lastly, there was a non-significant difference between the visual BPD condition ($M = 25.2$, $SD = 6.12$) and auditory BPD condition ($M = 24.8$, $SD = 6.28$) with a mean difference of .40 ($SE = 1.58$, $p = 1.000$). In conclusion, since none of the post hoc comparison results were significant the randomization check for participant age was successful as there were no significant differences in participant age between the three BPD conditions.

A second randomization check was performed by conducting a Chi-Squared analysis with type of BPD as the independent variable and sex as the dependent variable. For the sake of the analysis male was coded as 1, female as 2, non-binary as 3, and abstinance from answering as 4. Based on the output the results were non-significant χ^2 (6, N = 99) = 3.66, p =.723, φ = .23. As per Table 3 the female participants in the study consisted of 76,8% of participants, with males making up 20,2%, and the remaining 3% identified as non-binary or abstained from answering. Therefore, based on the results of the analysis the randomization check was successful.

Table 3. Sex randomization check scores

Participant Sex Randomization Check Chi-Square Analysis

		Stimulus Material			
What is your gender?		**Multimedia**	**Visual**	**Auditory**	**Total**
Male	Count	7	5	8	20
	%	20,6%	16,1%	23,5%	20,2%
Female	Count	26	25	25	76
	%	76,5%	80,6%	73,5%	76,8%
Non-binary / third gender	Count	1	0	1	2
	%	2,9%	0,0%	2,9%	2,0%
Prefer not to say	Count	0	1	0	1
	%	0,0%	3,2%	0,0%	1,0%
Total	Count	34	31	34	99
	%	100,0%	100,0%	100,0%	100,0%

Control Variables

Furthermore, for each of the control variables (caption viewing, prior knowledge of the TikToker, prior knowledge of the brand, and prior experience with the product) a correlation analysis was conducted with each of the four variables from the model as shown in Figure 1. As depicted in Table 4, the results of the correlation analysis revealed a significant weak relationship between influencer trustworthiness and caption viewing, (r = .21, p =.042). None of the results of the correlation analysis between prior knowledge of the TikToker and any of the model variables were significant, therefore the control variable prior knowledge of the TikToker was excluded from further analysis.The results of the correlation analysis revealed a significant weak relationship between influencer trustworthi-

ness and prior knowledge of the brand, (r = .21, p = .043), and there was a significant moderate relationship between purchase intention and prior knowledge of the brand, (r = .48, p < .001). Lastly, the results of the correlation analysis revealed a significant moderate relationship between purchase intention and prior experience with the product, (r = .39, p < .001). Therefore, the control variables caption viewing, knowledge of the brand, and prior experience with the product were included in further process analysis as covariates.

Table 4. Results of the correlation analyses between control variables and model variables

Correlations for Control Variables

Variable	n	M	SD	1	2	3	4
1. Type of brand partnership disclosure	99	–	–	–			
2. Influencer trustworthiness	98	4.46	1.20	–	–		
3. Purchase intention	98	3.74	1.47	–	–	–	
4. Ad recognition	94	3.71	1.43	–	–	–	–
5. Caption viewing	98	3.87	1.67	.01	.21*	.02	.18
6. Prior knowledge of the TikToker	98	1.93	1.38	.11	.17	.12	-.01
7. Prior knowledge of the brand	98	3.13	1.55	.05	.21*	.48**	.09
8. Prior experience with the product	98	1.88	1.15	-.05	.05	.39**	.03

*p < .05. **p < .01

Hypotheses Testing

In order to test H1 and H2 a MANOVA analysis was conducted. The first part of the analysis had BPD as the independent variable and ad recognition as the dependent variable. The analysis of variance showed a non-significant weak effect of ad recognition on BPD $F(2,91) = 1.19$, p = .310, $\eta 2 = 0.03$. Post hoc comparisons (Bonferroni corrected) indicated a non-significant difference between the multimedia BPD condition (M = 3.66, SD = 1.62) and visual BPD condition (M = 3.45, SD = 1.45) with a mean difference of .21 (SE = .37, p = 1.000). The case was similar between the multimedia BPD condition (M = 3.66, SD = 1.62) and auditory BPD condition (M = 4.00, SD = 1.20) with a mean difference of -.34 (SE = .35, p = 1.000). Lastly, there was a non-significant difference between the

visual BPD condition (M = 3.45, SD = 1.45) and auditory BPD condition (M = 3.90, SD = 1.35) with a mean difference of -.55 (SE = .36 p = .400). In conclusion, since none of the post hoc comparison results were significant the results indicate no significant differences in ad recognition between the three conditions. Therefore, H1 indicating that ad recognition would be significantly higher for multimedia disclosure compared to sole visual and sole auditory BPD is to be rejected.

The second part of the analysis had BPD as the independent variable and purchase intention as the dependent variable. The analysis of variance showed a non-significant weak effect of ad recognition on BPD $F(2,91) = .44$, $p = .643$, $\eta 2 < 0.01$. Post hoc comparisons (Bonferroni corrected) indicated a non-significant difference between the multimedia BPD condition (M = 3.63, SD = 1.46) and visual BPD condition (M = 3.59, SD = 1.60) with a mean difference of .03 (SE = .37, p = 1.000). The case was similar between the multimedia BPD condition (M = 3.63, SD = 1.46) and auditory BPD condition (M = 3.90, SD = 1.35) with a mean difference of -.28 (SE = .36, p = 1.000). Lastly, there was a non-significant difference between the visual BPD condition (M = 3.59, SD = 1.60) and auditory BPD condition (M = 3.90, SD = 1.35) with a mean difference of -.31 (SE = .37, p = 1.000). In conclusion, since none of the post hoc comparison results were significant the results indicate no significant differences in purchase intention between the three conditions. Therefore, H2 indicating that purchase intention would be significantly higher for multimedia disclosure compared to sole visual and sole auditory BPD is to be rejected.

In order to test H3 and H4 two analyses using process model 4 were conducted. The first analysis was conducted with ad recognition as the outcome variable, influencer trustworthiness as the mediator, and type of BPD as the predictor. The analysis consisted of four steps. In Step one of the mediation model, the regression of type of BPD on ad recognition, ignoring influencer trustworthiness as the mediator, was non-significant, b = .158, $t(89)$ = .887, p = .377. Step two showed that the regression of the type of BPD on the mediator influencer trustworthiness was also non-significant b = .072, $t(89)$ = .487, p = .627. Step three of the mediation showed that the mediator influencer trustworthiness, controlling type of BPD, was also non-significant, b = -.061, $t(88)$ = -.475, p = .636. Step four of the analyses revealed that, controlling for the mediator influencer trustworthiness, type of BPD was not a significant predictor of ad recognition, b = .163, $t(88)$ = .907, p = .367, neither was caption viewing b = .156, $t(88)$ = 1.72, p = .090, nor prior experience with the product b = -.091, $t(88)$ = -.501, p = .618 or previous knowledge of the brand, b = .109, $t(88)$ = .813, p =.419. These results indicated

the indirect coefficient was non-significant, $b < 0.01$, $SE = .02$, 95% CI [-.06, .04], partially standardized $\beta < 0.01$. Therefore, H3 stating that presence of multimedia BPD will increase ad recognition and the indirect effect of influencer trustworthiness will mediate this relationship is to be rejected as the confidence interval includes zero and thus the indirect effect is non-significant.

A secondary process analysis was conducted with purchase intention as the outcome variable, influencer trustworthiness as the mediator, and type of BPD as the predictor. The analysis consisted of four steps. In Step one of the mediation model, the regression of type of BPD on purchase intention, ignoring influencer trustworthiness as the mediator, was non-significant, $b = .149$, $t(93) = .930$, $p = .355$. Step two showed that the regression of the type of BPD on the mediator influencer trustworthiness was also non-significant $b = .082$, $t(93) = .569$, $p = .570$. Step three of the mediation showed that the mediator influencer trustworthiness, controlling type of BPD, was significant, $b = .531$, $t(92) = 5.18$, $p < .001$. Step four of the analyses revealed that, controlling for the mediator influencer trustworthiness, type of BPD was not a significant predictor of purchase intention, $b = .105$, $t(92) = .744$, $p = .459$, neither was caption viewing $b = -.113$, $t(92) = -1.57$, $p = .119$, nor prior experience with the product $b = .269$, $t(92) = 1.90$, $p = .061$. However, previous knowledge of the brand was a significant predictor of purchase intention $b = .244$, $t(92) = 2.28$, $p = .025$. These results indicated the indirect coefficient was non-significant, $b = .43$, $SE = .07$, 95% CI [-.11, .19], partially standardized $\beta = .03$. Therefore, H4 stating that the presence of multimedia BPD will increase purchase intention and the indirect effect of influencer trustworthiness will mediate this relationship is rejected as the confidence interval includes zero and thus the indirect effect is non-significant.

Results Interpretation

The study was conducted in order to determine the effect of multimedia BPD on purchase intention and ad recognition on TikTok. Additionally, the study aimed to find whether these relationships were mediated by influencer trustworthiness. Based on the results of the analysis both H1 and H2 stated that ad recognition and purchase intention would be significantly higher for multimedia disclosure compared to sole visual and sole auditory BPD. Based on the results of the MANOVA and the post hoc comparisons there was no significant difference in either purchase intention nor ad recognition between the three BPD conditions. Therefore, both H1 and H2 were rejected. Secondly, two process analyses were conducted to test both H3 and H4 which stated that presence of multimedia

brand partnership disclosure will increase ad recognition and purchase intention and that the indirect effect of influencer trustworthiness will mediate these relationships. Based on the output of the indirect effect it was concluded that the hypothesis is to be rejected as the confidence interval includes zero and thus the indirect effect is non-significant. Similarly, based on the output of the second process analysis H4 was rejected as the confidence interval includes zero and thus the indirect effect is non-significant.

However, based on the manipulation check and Table 2 it appears that both multimedia and visual BPD were more often correctly identified compared to auditory BPD, which supports past research[28]. However, since none of the post hoc comparison results were significant in either process analyses the results of the study did not find support for the visual-superiority effect, though, it may be argued that since the multimedia and visual BPD were more often recognized it may imply some support for the theory[29]. Finally, based on the results in Table 2, 51,5% of participants correctly identified their condition as multimedia, which is higher than the remaining two conditions, thus partially supporting the claim that an overt disclosure increases one's advertising recognition[30]. Finally, as no support for the effect of influencer trustworthiness on purchase intention was found, this study contributes no support to past research into the topic.

Limitations and Future Research Recommendations

The main limitation of the study is the failed manipulation check. It may be explained by participants using their phones to answer the survey in which case they would not see the caption while watching the video compared to people answering the survey on their laptops (with a wider screen prompting eyes to wander around and read the caption while phone users would have the video fit to screen and thus obscuring the caption) or participants may have had their audio on low and thus not heard the auditory disclosure. Additionally, as there was no attention check participants may have grown bored during the course of the survey and stopped paying attention resulting in incorrect answers. Future research should include an attention check to ensure participants paid attention while answering the survey. Additionally, future studies should conduct a pretest

[28] P. De Pauw, L. Hudders, V. Cauberghe, op.cit., International Journal of Advertising 2008, 27(4), pp. 508–525.

[29] S. An, S. Stern, op.cit., Journal of Advertising 2011, 40(1), pp. 43–56.

[30] C.T. Carr, R.A. Hayes, op.cit., Journal of Interactive Advertising 2014, 14(1), pp. 38–50.

with their manipulation in order to ensure a successful manipulation check prior to the study itself.

Secondly, the aim of the design of the survey was to mimic a genuine interaction a viewer may have while scrolling through TikTok. While efforts were made to do so by including filler videos all on one page allowing the participant to scroll through them, one key factor was not included. Typically the viewer of any given TikTok may choose to disengage from the video they are watching, regardless of whether this is an advertisement or not. However, due to the survey being constructed in Qualtrics this option was not made available to the participants. Therefore, the desire to disengage from the video was not controlled for. Additionally, if the caption is longer than two lines, which all 5 of the captions used for this study were, the viewer would have had to click on the caption in the app to view the '#ad' at the end of the caption, which was the visual BPD condition, instead of it being visible at all times. This made the recognition of the visual disclosure overt while in TikToks real life setting it is covert. The experimental setting is thus not representative to the real life setting which hurts the external validity. Additionally, the instructions did not include that the viewers had to listen to the videos as only the word 'watch' was included. This may have led to participants watching the videos with the sound off and thus not hearing the auditory or multimedia BPD. To ensure the validity of the manipulation a more true to life setting would be optimal. For instance a lab setting where the participants can actually scroll through the app, can disengage at any moment, and have to click on the caption in order to view it. Therefore, this setting would also ensure participants would hear the audio disclosure as the device would be on high volume.

Finally, the scale for prior knowledge of the brand proved to be unreliable and it was the only covariate to be a significant predictor of purchase intention as per the first process analysis. As the scale was unreliable future research into the topic should employ a different scale in order to attempt to replicate the results form this study. At the moment there is an indication that prior knowledge of the brand is a predictor of purchase intention, but only future research can confirm this.

Conclusion

To answer the research question, based on all of the analyses there is no significant effect of multimedia BPD on purchase intention or ad recognition compared to sole audio or sole video BPD, and there is no indirect effect of influencer

trustworthiness on these relationships. Regardless of the limitations of this study it does offer interesting insight into a relatively new and emerging field of research. Studies few and far between have looked into the effect of auditory, visual, and multimedia BPDs, and even fewer have looked into its effects on TikTok. As the video sharing app grows in popularity and more brands and influencers promote products and services on the apps there ought to be clear and overt BPDs with fair communication toward the viewers.

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