

This Way Up: The Effectiveness of Mobile Vertical Video Marketing

Lana Mulier, Ghent University, Belgium

Hendrik Slabbinck, Ghent University, Belgium

Iris Vermeir, Ghent University, Belgium

ABSTRACT

In a large-scale field study and two experimental studies, we investigate mobile vertical video marketing effectiveness. We show that vertical (vs. horizontal) video advertisements increase consumer interest, engagement, and processing fluency, because watching mobile vertical video advertisements takes less effort. We further demonstrate a moderating effect of mobile users' age.

EXTENDED ABSTRACT

Today's mobile environment currently experiences a vertical video revolution. The new portrait or vertical screen format is replacing the traditional landscape or horizontal format to become the default for mobile video content (Williams 2019). A vertical video is intended for viewing in portrait mode on full-screen. Until recently, vertical videos were considered unusual, amateur, unpleasing, and wrong, because they violate technical video standards and the laws of nature on human sight, as we see the world in a horizontal panorama (Ryan 2018). Accordingly, horizontal displays should be easier to process than vertical displays (Deng et al. 2016).

However, smartphones were designed to be held vertically (Canella 2017). Mobile users hold their phones upright 94% of the time (ScientiaMobile 2017). This native upright mobile screen position stimulated vertical video content, which is attractive for mobile users because they can shoot and consume videos without rotating their phone 90 degrees (Jabbari 2017). Less than 30% of mobile users turn their smartphones to watch horizontal videos; and when they do, they view only 14% of the content (Martin 2017).

These changes in the mobile video environment align with mobile becoming the dominant way to consume content (Scott 2017). Smartphones now drive the overall increase in consumers' digital time (McLean et al. 2020), and mobile is the fastest growing venue within digital marketing (Smith 2017). More than 75% of all video viewing is now mobile (Doyle 2018), and mobile video spend is expected to reach \$16.2 billion by 2021 (MediaRadar 2017). Therefore, video marketers need to follow mobile trends (Sedej 2019). As business insights predict that mobile vertical videos could yield three times the return of horizontal videos (Martin 2017), companies have started to embrace the vertical video trend. Social media apps Facebook, Instagram, Twitter, and TikTok have vertical video-friendly interfaces, the movie industry explores the tall screen with vertical film festivals, and music artists release vertical videos on Spotify and YouTube. Recently, Samsung has launched the first vertical television (Dent 2019), and mobile streaming application Quibi automatically flips between vertical and horizontal viewing mode when rotating your smartphone (Welch 2020).

Considering this increasing use of vertical videos, an important yet unanswered question is how mobile users respond to this new screen format. Despite extensive research on video marketing and mobile marketing, there is a lack of empirical research on the effectiveness of mobile vertical video marketing. We fill this research gap by examining (1) the effectiveness

of mobile vertical video marketing in terms of consumer interest, engagement, and processing fluency, (2) the underlying mechanism of the effort of watching the video advertisement on the smartphone, and (3) the moderating effect of mobile users' age.

Mobile vertical videos are immersive (filling the entire mobile screen), intimate (showing people/places close up), and immediate (easy to record/post; Jabbari 2017; Coppola 2018). Therefore, we propose that mobile vertical (vs. horizontal) video advertisements increase mobile users' interest and engagement (H1). Building on the hedonic marking hypothesis, which argues that items that are processed effortlessly and fluently are judged as more positive and desirable (Winkielman et al., 2003), we further expect that mobile vertical (vs. horizontal) video advertisements take less effort to watch on the smartphone (H2), and increase processing fluency of the video advertisement (H3). We expect a mediation effect of effort for the effect of mobile vertical (vs. horizontal) video ads on processing fluency (H4). Finally, we propose a moderated mediation effect by mobile users' age (H5). Young smartphone owners are more familiar and experienced with watching mobile (vertical) videos than older generations (Canella 2017). Therefore, we expect the indirect effect of mobile vertical (vs. horizontal) video advertisements on processing fluency, through the effort of watching the video advertisement on the smartphone, to be positive for younger mobile users (Generation Z) and negative for older mobile users (Generations X and Y).

Study 1 ($N = 2,377$), testing H1, was a large-scale field study with real Facebook user data. Using an A/B split test, Facebook mobile users were randomly exposed to a fictive mobile vertical ($n = 1,266$) or horizontal ($n = 1,111$) promotional video ad, embedded in a sponsored Facebook newsfeed advertisement. We find that mobile vertical (vs. horizontal) video advertisements generate higher consumer interest (more (full) video plays) and post engagement (more likes, clicks, comments, and shares; $ps < .001$).

In Study 2 ($N = 110$, $M_{age} = 20.39$, ages 17–29), testing H2–H4, participants were recruited in a university campus hall for a short mobile test and were randomly assigned to watch an existing mobile vertical ($n = 57$) or horizontal ($n = 53$) video advertisement for Nike (2015). We assessed processing fluency on a two-item, 7-point bipolar scale (Lee & Aaker, 2004), and effort of watching the video on the smartphone on a two-item, 7-point Likert scale. To control for general smartphone usage, we assessed the Smartphone Usage scale (Rosen et al. 2013). A Tobit mediation model shows that the effect of mobile vertical (vs. horizontal) video ads on processing fluency of the video ad is mediated by the effort to watch the video ad on the smartphone ($ab = 0.20$, $SE = 0.06$, 95 % CI = [0.0069; 0.3603]).

Study 3 ($N = 109$, $M_{age} = 23.37$, ages 18–65), testing H2–H5, extended these findings in a lab setting. Participants were randomly assigned to watch a mobile vertical ($n = 60$) or horizontal ($n = 58$) video advertisement from Animaker (2017) on their mobile. We assessed processing fluency and effort similar to Study 2. A Tobit moderated mediation model shows that the indirect effect of mobile vertical (vs. horizontal) video ads on processing fluency through the effort of watching the video ad on the smartphone is moderated by mobile users' age ($ab = -0.17$, $SE = 0.01$, 95% CI = [-0.1798; -0.0150]).

Our findings contribute to research on mobile video marketing, consumer effort and processing fluency, and generational marketing. We further provide clear managerial implications in terms of the design and target audience of mobile vertical video advertising campaigns.

REFERENCES

- Animaker (2017, June 1), “Men Vs Women (Comparison Video),” Retrieved April 1, 2019 from <https://www.youtube.com/watch?v=mXnI2Ojpvyo&t>
- Canella, Gino (2017), “Video Goes Vertical: Local News Videographers Discuss the Problems and Potential of Vertical Video,” *Electronic News*, 1-19. [doi:10.1177/1931243117705417](https://doi.org/10.1177/1931243117705417)
- Coppola, Jenny (2018, July 11), “How to Tell an Effective Story With Vertical Video,” Retrieved December 8, 2019 from <https://wistia.com/learn/marketing/effective-storytelling-with-vertical-video>
- Deng, Xiaoyan, Barbara E. Kahn, H. Rao Unnava, and Hyojin Lee (2016), “A "Wide" Variety: Effects of Horizontal Versus Vertical Display on Assortment Processing, Perceived Variety, and Choice,” *Journal of Marketing Research*, 53 (5), 682-98. [doi:10.1509/jmr.13.0151](https://doi.org/10.1509/jmr.13.0151)
- Dent, Steve (2019, April 29), “Samsung's Vertical Sero TV Brings Insta Stories to a Big Screen,” Retrieved November 25, 2019 from <https://www.engadget.com/2019/04/29/samsung-the-sero-vertical-tv/?guccounter=1>
- Doyle, Sheelagh (2018, February 7), “More Than 75% of Worldwide Video Viewing is Mobile,” Retrieved May 4, 2020 from <https://www.emarketer.com/newsroom/index.php/threequarters-video-viewing-mobile/>
- Jabbari, Sara (2017, June 14), “Vertical or Horizontal video on Mobile?,” Retrieved November 26, 2019 from <https://www.pulpix.com/insights/blog/vertical-or-horizontal-video-mobile/>
- Lee, Angela Y., and Jennifer L. Aaker (2004), “Bringing the Frame Into Focus: The Influence of Regulatory Fit on Processing Fluency and Persuasion,” *Journal of Personality and Social Psychology*, 86 (2), 205-18. [doi:10.2139/ssrn.452084](https://doi.org/10.2139/ssrn.452084)
- Martin, Erik J. (2017), “Marketers Turn up the Volume on Vertical Video,” *EContent*, 40 (6), 6–8.
- McLean, Graeme, Kofi Osei-Frimpong, Khalid Al-Nabhani, and Hannah Marriott (2020), “Examining Consumer Attitudes Towards Retailers’ M-Commerce Mobile Applications – an Initial Adoption vs. Continuous Use Perspective,” *Journal of Business Research*, 106, 139-57. [doi:10.1016/j.jbusres.2019.08.032](https://doi.org/10.1016/j.jbusres.2019.08.032)
- MediaRadar (2017, July 17), “How Vertical Video Is Changing the Mobile Ad Landscape,” Retrieved November 22, 2019 from <https://mediaradar.com/trend-reports/how-vertical-video-is-changing-the-mobile-ad-landscape/>
- Nike (2015, November 4), “Nike: Last,” Retrieved October 25, 2019 from https://www.youtube.com/watch?v=m8WAYF5_NEM

- Rosen, Larry, Kelly Whaling, Mark Carrier, Nancy A. Cheever, and Jeffrey Rokkum (2013), "The Media and Technology Usage and Attitudes Scale: An Empirical Investigation," *Computers in Human Behavior*, 29 (6), 2501-11. [doi:10.1016/j.chb.2013.06.006](https://doi.org/10.1016/j.chb.2013.06.006)
- Ryan, Kathleen M. (2018), "Vertical Video: Rupturing the Aesthetic Paradigm," *Visual Communication*, 17 (2), 245-61. [doi:10.1177/1470357217736660](https://doi.org/10.1177/1470357217736660)
- ScientiaMobile (2017), "Smartphone and Tablet Portrait Orientation Usage 2017 Q3," Retrieved November 29, 2019 from <https://www.scientiamobile.com/smartphone-tablet-portrait-orientation-usage-2017-q3/>
- Scott, David Meerman (2017), *The New Rules of Marketing & PR: How to Use Social Media, Online Video, Mobile Applications, Blogs, Press Releases, and Viral Marketing to Reach Buyers Directly*, New Jersey: John Wiley & Sons, Inc.
- Sedaj, Tanja (2019), "The Role of Video Marketing in the Modern Business Environment: A View of Top Management of SMEs," *Journal for International Business and Entrepreneurship Development*, 12 (1), 37-48. [doi:10.1504/JIBED.2019.10024902](https://doi.org/10.1504/JIBED.2019.10024902)
- Smith, Katherine Taken (2017), "Mobile Advertising to Digital Natives: Preferences on Content, Style, Personalization, and Functionality," *Journal of Strategic Marketing*, 27 (1), 67-80. [doi:10.1080/0965254x.2017.1384043](https://doi.org/10.1080/0965254x.2017.1384043)
- Welch, Chris (2020, April 6), "Quibi App Review: Shifting Landscape," Retrieved May 4, 2020 from <https://www.theverge.com/2020/4/6/21208932/quibi-app-review-price-short-form-video-content-features-streaming-rotation>
- Williams, Owen (2019), "How to Master Vertical Video," Retrieved November 6, 2019 from <https://buffer.com/vertical-video>
- Winkielman, Piotr, Norbert Schwarz, Tedra A. Fazendeiro, and Rolf Reber (2003), "The Hedonic Marking of Processing Fluency: Implications for Evaluative Judgment," in *The Psychology of Evaluation: Affective Processes in Cognition and Emotion*, ed. Jochen Musch and Karl C. Klauer, Mahwah, NJ: Lawrence Erlbaum Associates Publishers, 189-217.

Table 1. Summary of main effects results of the three studies.

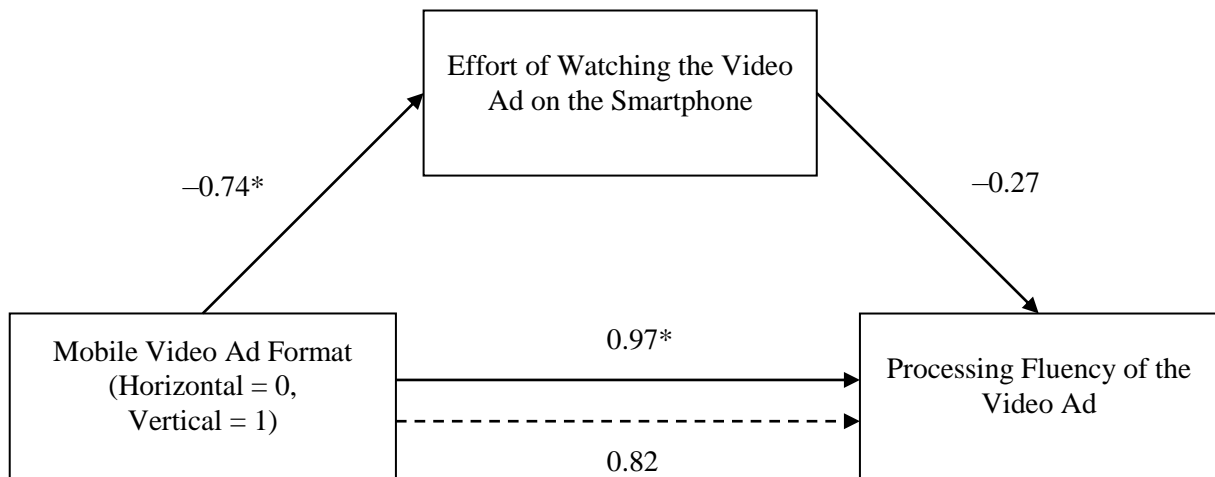
Study 1 ($N = 2,377$)								
Dependent Measure	Total	Vertical Video		Horizontal Video		Comparison		
		Total	Prop.	Total	Prop.	z	p	h
ThruPlays	1,599	905	61.90%	694	49.01%	6.92	< .001	0.26
Video Plays	2,363	1,269	86.80%	1,094	77.26%	6.63	< .001	0.25
3-second Video Plays	1,828	997	68.19%	831	58.69%	5.25	< .001	0.20
Video Plays at 25%	1,783	981	67.10%	802	56.64%	5.74	< .001	0.22
Video Plays at 50%	1,698	936	64.02%	762	53.81%	5.53	< .001	0.21
Video Plays at 75%	1,644	914	62.52%	730	51.55%	5.91	< .001	0.22
Video Plays at 100%	1,600	904	61.83%	696	49.15%	6.81	< .001	0.26
Post Engagement	1,837	1,002	68.54%	835	58.97%	5.30	< .001	0.20

Study 2 ($N = 110$)								
Dependent measure	Vertical Video		Horizontal video		Comparison			
	M	(SD)	M	(SD)	B	(SE)	z	p
Effort	1.75	(0.84)	2.47	(1.41)	-0.74	(0.37)	-1.99	.047
Processing fluency	5.66	(1.39)	4.99	(1.78)	0.97	(0.43)	2.27	.023

Study 3 ($N = 109$)								
Dependent measure	Vertical Video		Horizontal video		Comparison			
	M	(SD)	M	(SD)	B	(SE)	z	p
Effort	2.11	(1.48)	1.93	(1.48)	0.66	(0.54)	1.23	.219
Processing fluency	5.95	(1.04)	6.11	(1.08)	-0.22	(0.25)	-0.88	.377

Note. Study 1: ‘ThruPlays’ are videos played to completion. Study 2: Effect of the covariate smartphone usage on effort: $B = -0.08$ ($SE = 0.16$), $z = -0.49$, $p = .624$; and on processing fluency: $B = 0.19$ ($SE = 0.20$), $z = 0.97$, $p = .330$. Study 3: Results reported for participants with average age of 23.37 years (M).

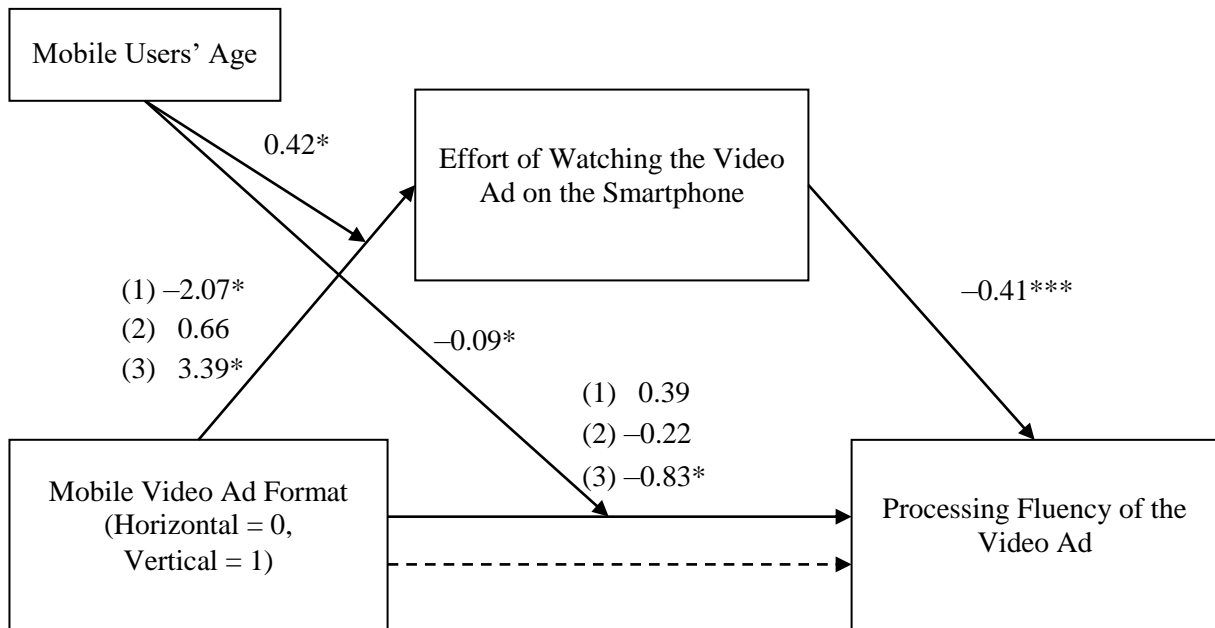
Figure 1. Results from Studies 2-3.



$ab = 0.20 (SE = 0.06), 95 \% CI = [0.0069; 0.3603]$

Panel A. Study 2 – Mediation. The effect of mobile vertical (vs. horizontal) video ads on processing fluency of the video ad is mediated by the effort to watch the video ad on the smartphone on full-screen.

Note. Smartphone usage: $B = 0.16 (SE = 0.19), z = 0.84, p = .404; *p < .05$.



$ab = -0.17 (SE = 0.01), 95\% CI = [-0.1798; -0.0150]$

Panel B. Study 2 – Moderated mediation. The indirect effect of mobile vertical (vs. horizontal) video ads on processing fluency, through the effort of watching the video ad on the smartphone on full-screen, is moderated by mobile users' age.

Note. Index of moderated mediation = ab ; (1) simple slope for younger participants with 16.87 years of age ($M - 1 SD$); (2) simple slope for participants with average age of 23.37 years (M); and (3) simple slope for older participants with 29.86 years of age ($M + 1 SD$); *** $p < .001$; * $p < .05$.