

Communication Effect of Podcast Experience: focusing on Skepticism and Demographic Factors

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Abstract

The objective of this study is to demonstrate through a survey how the digital media (podcast) experience, ad-skepticism, and gender can affect attitudes toward advertisement, brand, and purchase intentions. Two hundred and forty college students, with a reasonable understanding of the main factors of the study, participated in the survey. The study findings showed that all the dependent variables produced the same results. In other words, for the non-skeptics among podcast users, the attitude (brand attitude, purchase intention) of males toward advertisements is more favorable than that of females. For the skeptics in that group, it appears that the attitude of females toward advertisements is more favorable than that of males. Meanwhile, the female non-skeptics among non-podcast users had a more favorable attitude toward advertisements than the males. It appears that the attitude of females toward advertisements is more favorable than that of males among the skeptics in that group as well.

Keywords: Demographic Factor, Podcast, Skepticism

1. Introduction

Podcast is an effective new digital medium of persuasion that allows consumers to choose their own information directly and voluntarily¹. An outstanding advantage of maximizing choices of information is that it enables consumers to selectively accept or reject media messages. Skepticism is the main factor that affects the consumer's selection of information from the new media. It has a close relationship with a corporation's competitive environment. The more competitive the environment gets, the more competitive the marketing activity becomes². Gender, which is perhaps the most basic demographic factor, also affects persuasion. The fact that every consumer interprets the same messages in a different way is because each individual has his or her own unique world³.

2. Background Literature & Hypothesis

2.1 Persuasive Effect of Podcast, the New Digital Medium

Wikipedia defines podcast as “a series of digital media files (either audio or video) that are released episodically and downloaded through web syndication”⁴. A podcast is one of several Web 2.0 digital social-networking tools, including blogs, YouTube, and Facebook, that provide platforms for the creation and sharing of user-generated content, often by means of portable media players, such as iPods and MP3 players. Many school districts regard portable media players as distractions, and some districts have banned them from schools. However, others have recognized that students' out-of-school lives are infused with such technologies and incorporate these applications into students' classroom lives to engage them in learning new content⁵. Podcasting is a relatively new phenomenon, but one that is already driving change in how audiences consume and interact with media content⁶. City streets, offices, and college campuses are full of people plugged into their MP3 players listening to or watching portable, self-contained

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news, sports, or entertainment content. A quick visit to the Podcast Alley, iTunes, or PodcastPickle directory sites reveals an expanding selection of video and audio podcasts⁷. A podcast is a digital recording of a radio broadcast or similar program, made available on the Internet for downloading to a personal audio player. 1) In 2005, podcast users numbered 5 million, and the number is expected to grow to 45 million users by 2010. 2) Podcasting has excellent potential as a medium for advertisers⁸. They believe that advertisers, most of whom are currently waiting out the innovation period, will miss out on the early learning that could help form the experience base and learning from which to anchor future efforts⁹. Yet, despite early predictions about advertising not really having the traction to turn podcasting into a profitable industry, significant movement of advertising dollars has occurred¹⁰.

2.2 Consumer Skepticism and Scenarios

Skepticism about advertising has both social and individual antecedents. Earlier researchers developed the notion of information economics in advertising, arguing that consumers tend to value information that is perceived to be useful and valid^{11,12}. Because advertising is associated with selling and tends toward exaggerating, especially as claims are more difficult to substantiate, consumers are socialized to be skeptical. Finally, our hypotheses are based largely on the discussion in Obermiller and Spangenberg of the nomological relation between ad skepticism and these other factors. In the current research, moreover, the purpose of the present study is to examine a greater range of consequences than in previous studies^{13,14}. Skepticism toward advertising is an important component of consumer persuasion knowledge¹⁵ and a generalizable belief about the way the marketplace operates¹⁶. In two studies we further examined the construct by addressing questions of intergenerational influence on ad skepticism and the overlap between skepticism toward advertising and other sources of product information¹⁷. Two studies were conducted to investigate the origin and distinctness of consumer skepticism toward advertising, defined as a tendency to disbelieve advertising claims by Obermiller and Spangenberg¹³. The results indicated some overlap between skeptical beliefs about advertising and salespeople, but, otherwise, ad skepticism appeared to be a separate construct from skepticism toward other sources of product information. Moreover, advertising

was viewed as the least believable of the five sources of product information that were considered¹⁷.

2.3 Demographic Clues and Lopsided Influence

Neuroscience research on sex difference is currently a controversial field, frequently accused of purveying a 'neurosexism' that functions to naturalise gender inequalities. However, there has been little empirical investigation of how information about neurobiological sex difference is interpreted within wider society¹⁸. Bangerter presents evidence that the aforementioned saturation of biological accounts of fertilisation with everyday understandings of sex roles is a gradual process, which consolidates through repeated communicative exchanges¹⁹. Traditionally, the mass media are conceptualised as the key vessel by which scientific information moves from the laboratory into the public sphere²⁰. Debate about popular portrayals of sex difference would benefit from a more robust empirical foundation, which systematically documents the patterns visible in media responses to scientific claims of sex difference¹⁸. There are many gender stereotypes about emotion experience and emotion expression²¹⁻²³. Whereas university students believe that there are no gender differences in emotion experience, they think that adolescent boys and men are less likely than adolescent girls and women to express emotions²⁴. Moreover, pre-school-aged children judge women to feel sad more often than men²⁵. Some of these stereotypes have been borne out in research. For example, responding to written vignettes designed to elicit emotion, adolescent girls provided more references to sadness than did boys, whereas boys invoked anger more than did girls^{26,27}. While the results of the existing studies reveal how the new digital media experience affects consumer attitudes, this study assumed that the podcast experience leads to different results regarding the persuasive effect. Based on the findings of the earlier studies that the consumers' ad-skepticism and gender affect their responses to stimulation in different ways, the following hypotheses were proposed:

Hypothesis 1. The podcast experience will cause consumer skepticism and gender to have a different effect on attitudes toward advertisement.

Hypothesis 2. The podcast experience will cause consumer skepticism and gender to have a different effect on attitudes toward a brand.

Hypothesis 3. The podcast experience will cause consumer skepticism and gender to have a different effect on purchase intention.

3. Methods

3.1 Subjects and Experiment Design

The experiment design involves a three-way factorial design (between-subjects factorial design), that is, 2(podcast experience: Yes No) x 2(skepticism: Non-skepticism skepticism) x 2(gender: male female).

3.2 Variables

As a measure of ad-skepticism, participants are classified using a median value division process. Internal consistency between questions in this experiment is coefficient $\alpha = .93$. There are 11 skepticism-related questions measured on a 7-point Likert scale. A self-camera tripod (bar) is presented in a podcast as an independent variable. Self-camera tripods enable people to have their own pictures taken, and are often shown with college students, the subjects. There are 4 questions on advertisement attitude, the dependent variable, measured on a 7-level SD scale. Internal consistency between questions in this experiment is coefficient $\alpha = .90$. There are 4 questions on brand attitude measured on a 7-level SD scale. Internal consistency between questions in this experiment is coefficient $\alpha = .91$. There are 3 questions on purchase intention measured on a 7-level SD scale. Internal consistency between questions in this experiment is coefficient $\alpha = .93$. Variance analysis using SPSS WIN ver18.0 is conducted for data analysis.

4. Results

4.1 Analysis Results for Hypothesis 1

Variance analysis was used to verify if the podcast experience, ad-skepticism, or gender caused a difference in the advertisement attitude. There was a two-way interaction effect in podcast ($F = 13.17$, $p < .001$), skepticism ($F = 1225.38$, $p < .001$), and gender impact ($F = 12.62$, $p < .001$), and podcast and gender ($F = 174.85$, $p < .001$), and skepticism and gender ($F = 44.06$, $p < .001$). However, podcast, skepticism, and gender ($F = 109.75$, $p < .001$) were in a three-way interaction relationship. Therefore, it was appropriate that we interpreted this as a

three-way interaction rather than considering the two-way interaction effect and the main effect separately.

Table 1. Results of variance analysis for advertisement attitude by podcast experience, skepticism, and gender

Source	ss	df	ms	F
Podcast (A)	2.90	1	2.90	13.17***
Skepticism (B)	269.79	1	269.79	1225.38***
Gender (C)	2.78	1	2.78	12.62***
(A)×(B)	.17	1	.17	.80
(A)×(C)	38.49	1	38.49	174.85***
(B)×(C)	9.70	1	9.70	44.06***
(A)×(B)×(C)	24.17	1	24.17	109.75***
error				

*** $p < .001$, ** $p < .01$, * $p < .05$

To investigate the origin of the three-way interaction effect for podcast, skepticism, and gender, simple interaction and simple main effect were analyzed, and the results are presented in Table 2 and Table 3. As shown in Table 2, for podcast users, there is a similar interaction between skepticism and gender ($F = 108.83$, $p < .001$). As shown in Table 3, among podcast users in the non-skepticism group, the male group ($M = 5.10$) has a higher advertisement attitude than the female group ($M = 3.47$) ($F = 132.59$, $p < .001$). Among podcast users in the skepticism group, the female group ($M = 2.44$) has a higher advertisement attitude than the male group ($M = 1.99$) ($F = 31.82$, $p < .001$).

Table 2. Results of analysis of simple interaction effect on podcast, skepticism, and gender

Source	ss	df	ms	F
Gender x skepticism at podcast user	40.78	2	20.39	108.83***
Gender x skepticism at podcast non user	33.14	2	16.58	65.50***

*** $p < .001$, ** $p < .01$, * $p < .05$

Table 1. Results of analysis of simple main effect on simple interaction effect by podcast, skepticism, and gender

Source	ss	df	ms	F
Podcast user				
Gender at non skepticism	137.58	1	137.58	132.59***
Gender at skepticism	3.21	1	3.21	31.82***
Podcast non user				
Gender at non skepticism	24.22	1	24.22	64.61***
Gender at skepticism	8.92	1	8.92	72.91***

*** $p < .001$, ** $p < .01$, * $p < .05$

Meanwhile, among the non-podcast users, there seems to be a significant interaction between skepticism and gender ($F = 65.50$, $p < .001$). As shown in Table 3, among the non-podcast users in the non-skepticism group, the female group ($M = 5.19$) has a higher advertisement attitude than the male group ($M = 3.93$) ($F = 64.61$, $p < .001$). For the non-podcast users in the skepticism group as well, the female group ($M = 2.78$) has a higher advertisement attitude than the male group ($M = 1.99$) ($F = 72.91$, $p < .001$).

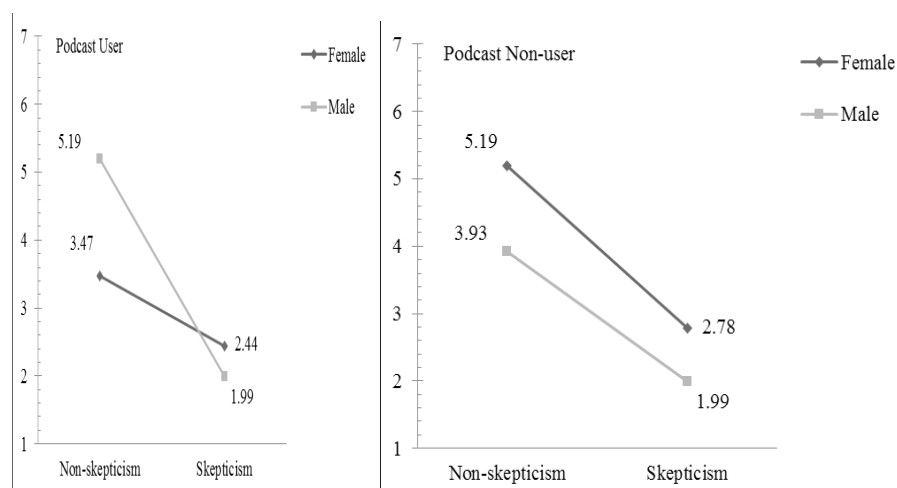
4.2 Analysis Results for Hypothesis 2

Variance analysis was used to verify if the podcast experience, message inference, and cognition need influenced brand attitude. As shown in the results in Table 4, there was a two-way interaction effect as follows: podcast ($F = 17.37$, $p < .001$), skepticism ($F = 1222.59$, $p < .001$), and gender impact ($F = 10.83$, $p < .001$), and podcast and gender ($F = 191.68$, $p < .001$) and skepticism and gender ($F = 38.06$, $p < .001$). However, podcast, skepticism, and gender ($F = 126.05$, $p < .001$) were in a three-way interaction relationship; therefore, it was appropriate that we interpreted this as a three-way interaction rather than considering the two-way interaction effect and the main effect separately.

Table 4. Results of variance analysis for brand attitude by podcast experience, skepticism, and gender

Source	ss	df	ms	F
Podcast (A)	3.74	1	3.74	17.37***
Skepticism (B)	263.18	1	263.18	1222.59***
Gender (C)	2.33	1	2.33	10.83***
(A)×(B)	.005	1	.005	.03
(A)×(C)	41.26	1	41.26	191.68***
(B)×(C)	8.19	1	8.19	38.06***
(A)×(B)×(C)	27.13	1	27.13	126.05***
error	.21	232		

*** $p < .001$, ** $p < .01$, * $p < .05$

**Figure 1.** Three-way interaction effect for podcast, skepticism, and gender in the advertisement attitude (podcast user/non-podcast user).

To investigate the origin of the three-way interaction effect of podcast, skepticism, and gender, simple interaction and simple main effect were analyzed, and the results are presented in Table 5 and Table 6. As shown in Table 6, for the podcast users, there is a similar interaction between skepticism and gender ($F = 104.69$, $p < .001$). As shown in Table 6, among the podcast users in the non-skepticism group, the male group ($M = 5.10$) has a higher brand attitude than the female group ($M = 3.42$) ($F = 140.32$, $p < .001$). Among the podcast users in the skepticism group, the female group ($M = 2.38$) has a higher brand attitude than the male group ($M = 1.97$) ($F = 20.33$, $p < .001$).

Table 5. Results of analysis of simple interaction effect on podcast, skepticism, and gender

Source	ss	df	ms	F
Gender x skepticism at podcast user	42.66	2	42.66	104.69***
Gender x skepticism at podcast non-user	35.05	2	35.05	77.27***

*** $p < .001$, ** $p < .01$,
* $p < .05$

Table 6. Results of analysis of simple main effect on simple interaction effect by podcast, skepticism, and gender

Source	ss	df	ms	F
Podcast user				
Gender at non skepticism	40.01	1	40.01	140.32***
Gender at skepticism	2.65	1	2.65	20.33***
Podcast non-user				
Gender at non skepticism	27.45	1	27.45	78.07***
Gender at skepticism	7.60	1	7.60	81.64***

*** $p < .001$, ** $p < .01$,
* $p < .05$

Meanwhile, among the non-podcast users, there seems to be a significant interaction between skepticism and gender ($F = 77.27$, $p < .001$). As shown in Table 6, among the non-podcast users in the non-skepticism group, the female group ($M = 5.19$) has a higher brand attitude than the male group ($M = 3.85$) ($F = 78.07$, $p < .001$). For the non-podcast users in the skepticism group as well, the female group ($M = 2.78$) has a higher brand attitude than the male group ($M = 2.05$) ($F = 81.64$, $p < .001$).

4.3 Analysis Results for Hypothesis 3

Variance analysis was used to verify if the podcast, message inference, and cognition need caused a difference in the purchase attitude. As shown in the results in Table 7, there was a two-way interaction effect as follows: podcast ($F = 20.67$, $p < .001$), skepticism ($F = 1199.75$, $p < .001$), and gender impact ($F = 12.07$, $p < .001$), and podcast and gender ($F = 167.89$, $p < .001$) and skepticism and gender ($F = 32.79$, $p < .001$). However, podcast, skepticism, and gender ($F = 135.84$, $p < .001$) were in a three-way interaction relationship; therefore, it was appropriate that we interpreted this as a three-way interaction rather than considering the two-way interaction effect and the main effect separately.

Table 7. Results of variance analysis for purchase attitude by podcast experience, skepticism, and gender

Source	ss	df	ms	F
Podcast (A)	4.99	1	4.99	20.67***
Skepticism (B)	289.48	1	289.48	1199.75***
Gender (C)	2.91	1	2.91	12.07***
(A)×(B)	.20	1	.20	.83
(A)×(C)	40.51	1	40.51	167.89***
(B)×(C)	7.91	1	7.91	32.79***
(A)×(B)×(C)	32.78	1	32.78	135.84***
error	55.98	232		

*** $p < .001$, ** $p < .01$, * $p < .05$

To investigate the origin of the three-way interaction effect for podcast, skepticism, and gender, simple interaction and simple main effect were analyzed, and the results are presented in Table 8 and Table 9. As shown in Table 8, for the podcast users, there is a similar interaction between skepticism and gender ($F = 109.31$, $p < .001$). As shown in Table 9, among the podcast users in the non-skepticism group, the male group ($M = 5.12$) has a higher purchase intention than the female group ($M = 3.41$) ($F = 151.06$, $p < .001$). Among the podcast users in the skepticism group, the female group ($M = 2.38$) has a higher purchase intention than the male group ($M = 1.87$) ($F = 26.33$, $p < .001$).

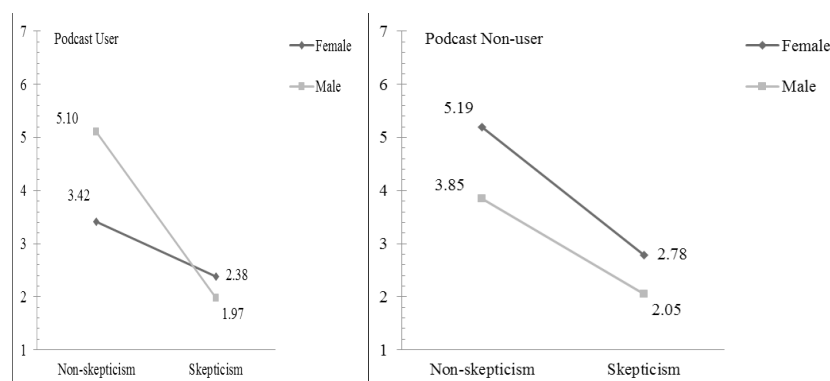


Figure 2. Three-way interaction effect for podcast, skepticism, and gender in the brand attitude (podcast user/non-podcast user).

Table 8. Results of analysis of simple interaction effect on podcast, skepticism, and gender

Source	ss	df	ms	F
Gender x skepticism at podcast user	45.38	2	22.69	109.31***
Gender x skepticism at podcast non-user	37.67	2	18.84	68.50***

*** $p < .001$, ** $p < .01$, * $p < .05$

Table 9. Results of analysis of simple main effect on simple interaction effect by podcast, skepticism, and gender

Source	ss	df	ms	F
Podcast user				
Gender at non skepticism	41.43	1	41.43	151.06***
Gender at skepticism	3.96	1	3.96	26.83***
Podcast non-user				
Gender at non skepticism	31.23	1	31.23	86.31***
Gender at skepticism	6.44	1	6.44	35.41***

*** $p < .001$, ** $p < .01$, * $p < .05$

Meanwhile, among the non-podcast users, there seems to be a significant interaction between skepticism and gender ($F = 68.50$, $p < .001$). As shown in <Table 9>, among the non-podcast users in the non-skepticism group, the female group ($M = 5.32$) has a higher purchase intention than the male group ($M = 3.90$) ($F = 86.31$, $p < .001$). For the non-podcast users as well in the skepticism group, the female group ($M = 2.69$) has a higher purchase intention than the male group ($M = 2.02$) ($F = 35.41$, $p < .001$).

5. Discussion and Conclusion

Consumers with ad-skepticism not only distrust advertisement stimulation, but also do not glance at it from the beginning. The reason that ad-skepticism did not get much attention despite its key role in accepting and rejecting in the advertisement process is because of the belief that creativity controls everything in advertisement. For the advertisement's quantitative and qualitative growth, research on ad-skepticism needs to be encouraged. Several preceding research related to ad-skepticism have expressed concerns about possible teeming distrust caused by it and have warned us of the severity of ad-skepticism. The reason we should focus on ad-skepticism now is that it could create a vicious cycle of consumer skepticism towards advertisement. This study analyzed how the digital media, podcast experience, consumer's ad-skepticism, and gender can affect consumer persuasion. The results of the research indicate that for the non-skeptics among podcast users, the advertisement attitude (brand attitude, purchase intention) of males is more favorable than that of females, and for the skeptics in that group, it appears that the advertisement attitude of females is

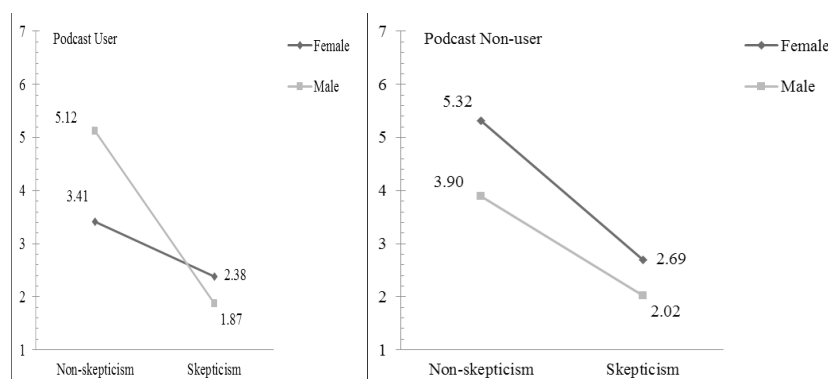


Figure 3. Three-way interaction effect for podcast, skepticism, and gender in the purchase attitude (podcast user/non-podcast user).

more favorable than that of males. Meanwhile, for the non-skeptics among non-podcast users, the advertisement attitude of females is more favorable than that of males, and it appears that for the skeptics in that group as well, the advertisement attitude of females is more favorable than that of males. To sum up, among podcast users, only for the non-skeptics, the male consumers' advertisement attitude, brand attitude, and purchase intention are more favorable than that of females. For the skeptics in that group, the female consumers' attitudes are more favorable than that of males. In addition, among non-podcast users, without consideration of skepticism, the female consumers' attitudes are more favorable than that of males for all dependent variables. Studies like this suggest that ad-skepticism has a big impact on advertisement results, and the effect of skepticism becomes even stronger with the gender factor. For the new media, such as podcast, it is apparent that the focus on offering trustworthy information will generate a favorable assessment from the consumers.

6. Acknowledgement

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