Effectiveness of Product Placement: An Experimental Study in Turkey

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Abstract
This experimental research conducted in Turkey aims to investigate the effects of product placement on consumer choice and memory by combining explicit and implicit measures. Results of the present study support the overall impact of placements on memory and choice. According to the results prominent product placements were recalled and recognized more than subtle product placements, whereas centrality had no reliable effect on brand choice. Effect of modality also differed for memory and choice results where audiovisual placements were the most recalled and recognized.

Key words: Product placement; Consumer memory; Brand placement; Implicit memory; Explicit memory

INTRODUCTION

The advertisement industry had been looking for a new media as a result of the media proliferation and fragmentation which caused a decrease in the effectiveness of the traditional media. The increased number of commercials reduces the recall of audience, and consequently decreases the impact and value of commercials for advertisers. Since it is known that nearly two-thirds of TV viewers cut the sound during commercials, channel surf or skip them (Kiley, 2006), product placement is considered as the future of television advertising. Therefore, scholars have specified the significance of product placement as an additional element of the promotional mix (Balasubramanian, 1994; Gould, Gupta, & Grabner-Krauter, 2000; Nebenzahl & Secunda, 1993; Friedman, 1986).

Although product placement is becoming very popular recently, a small number of researches have studied product placements in TV shows or in different other practices of entertainment media (Argan & Velioglu, 2007). It is difficult to ascertain the effectiveness of brand placements because much of the data on their effectiveness is proprietary (Karrh, 1998; Yang, Roskos-Ewoldsen, & Roskos-Ewoldsen, 2004).

The media law that allows usage of product placement in TV programs entered into force in 2011 in Turkey, encouraging use of the strategy. By the act of new law by RTÜK, 755 product placements appeared in Turkish TV series in 2, 5 months (Dünya, 2012). Since product placement is a relatively new tool for Turkish marketers compared to Western countries; there is a need to study the effects of product placement in television medium and its ability to achieve key communication objectives pertaining consumer memory and brand choice in Turkey. Thus, this study aims to review the product placement literature and examine the memory effect of exposure to products in Turkish TV shows.
Jules Verne published the adventure novel *Around the World in Eighty Days* (1873) mentioning shipping and transportation company names (Butcher, 1995).

Movies are popular but not the sole vehicles for product placements, brands are also embedded in T.V. shows, videogames, songs, and books. Freidman (1986) states that on average 2.5 brand names are mentioned per 10,000 words in lyrics of songs from 1946 to 1980.

Product placement enables the ad agency to reduce production costs through a trade of product, which can be used for the placement (Branswell, 2002). Product placement in a television program may cover up to 25% of the total production costs (D’Astous & Séguin, 1999). Another benefit for moviemakers is that product placement enhances movies’ realism as long as it is congruent with the story (Karrh, 1998; Law & Braun, 2000; Ebenkamp, 2001). On the other hand, too many bizarre or inappropriate product placements may annoy the audience since they pay for the entertainment, not for the commercials interrupting their entertainment; therefore, practitioners should be careful when placing products (Gould, Gupta, & Grabner-Krauter, 2000). Additionally, product placements are cost effective because they are long lasting and also far-reaching since films and television programs can keep long shelf lives and are mostly distributed across the world (Karrh, 1998).

Besides advantages over traditional advertising, product placement has also some disadvantages. First of all, it isn’t possible to give detailed information about the product (Russell, 1998). Until recently, there were no common effectiveness measures for product placement. Each product placement agency uses their own ways to measure the effectiveness of product placements (Friedman, 2003). There was a lack of a standard rating system for product placement, and a standard method to calculate return on investment or a technique to compare product placement with the other communication tools (Friedman, 2003).

Product placements are connected with increased purchase intent and sales, especially when used in sitcoms (Russell, & Stern, 2006; Balasubramanian, Karrh, & Patwardhan, 2006). There is not much evidence in the literature about purchase behaviors but there are some practical examples that present evidences for sales increase. Wenner (2004) states that after the E.T. movie Reese’s Pieces candy sales increased by 66% and after The Firm movie, which starred Tom Cruise, doubled the market share of a not known beer brand Red Stripe.

The effect of modality of placement showed different results depending on the testing measure used. Audiovisual (both heard and seen) placements were best remembered but least chosen hence the seen-only products were least recalled but most influential on choice (Law & Braun, 2000). D’Aoustous and Chartier (2000) found that the high integration with placement and scene yields to liking of placement, but reduces recall. Prominence has more influence on liking when integration is high and prominence increases unacceptability when integration is low (D’Astous & Séguin, 1999). On the other hand, audience is more likely to recognize products placed audio-visualy than only shown either audibly or visually (Waldt, Nunes, & Stroebel, 2008). Movie audiences’ ability to recall a product is more probable if the product is repeatedly presented during the movie than it is only displayed once (Waldt, Nunes, & Stroebel, 2008).

Law and Braun (2000) state that exposure to a product generates better recognition for that product. Placements prominently shown in a film have greater impact on memory levels than subtle placements, which is also supported by findings of Gupta and Gould (1998). Modality has an effect on explicit and implicit memory; “audiovisual placements are the best recalled where 49% of participants who saw an audio/visual placement later recalled it, 20% of participants recall seen-only products and 9% recall heard-only products” (Law & Braun, 2000).

**Types of Product Placement**

Product placements can be classified in three categories: visual, audio and both audio/visual (Law & Braun, 2000). Visual product placements contain brand identifiers associated to brand and/or brand identity that don’t have any verbal expressions. Audio placements do not display the product but verbally mention the brand to the audience (Emet & Adem, 2005). Most of the product placements are implemented visually which involves only display of a product, brand, or visual brand identifier with no verbal mentioning (Williams, Petrosky, Hernandez, & Page, 2011). However, seen only or heard only placements may not be noticed (Williams, Petrosky, Hernandez, & Page, 2011). In order to create a connection between the audience and product, placement should be displayed on screen relatively longer (Williams, Petrosky, Hernandez, & Page, 2011). Although it is known that recall can be enhanced from dual-modality by using audio and visual placements together, it is more costly due to the need for more creativity (La Ferle & Edwards, 2006; Argan, 2007).

Prominence is the capacity of the brand to attract the spectator’s attention (Lehu & Bressoud, 2007). This capacity can be explained with the size and duration of the placement (D’Astous & Séguin, 1999), as well as its location on the screen (Gupta & Lord, 1998). A subtle product placement is regarded as one that is not in the forefront, with a shorter exposure and is not highly visible (Waldt, Nunes, & Stroebel, 2008).

Implicit product placement is the passive appearance of the brand, logo, the firm, or the product within the program without being expressed formally. This product placement is more contextual or part of the background with no clear demonstration of product benefits (D’Astous & Séguin, 1999). In integrated explicit product placement the brand is formally expressed during the program, enabling the company to mention the attributes and benefits of the product clearly (D’Astous & Séguin, 1999).
In literature, two different measures were used to investigate the impact of product placement on consumer memory; implicit and explicit memory measures. Many studies include the explicit memory measures; recall and recognition but a few take implicit components into account. In this study brand choice is used to measure implicit memory.

It was supposed that people are aware of all the events they previously encountered. According to Jacoby and Witherspoon (1982) memory may work implicitly; without awareness. Implicit memory may be able to impact the interpretation of later events. Some psychologists state that implicit memory lasts longer than explicit memory (Jacoby & Witherspoon, 1982; Tulving et al., 1982). Tulving et al. (1982) mention that implicit memory survived 7 days after the exposure; however recognition decreased over the time period.

Advertising practitioners prefer to use audiovisual placement driven from Paivio’s dual-coding theory, which proposes, “information may be coded in mental pictures and/or verbal codes” (Law & Braun, 2000). Several studies focused on the subject and resulted in controversial findings. D’Astous and Chartier (1999) compared audio placements with audiovisual placements and results show that mention of a brand by the principal actor had no significant effect on recognition memory; in fact, it was found to have a significant negative effect on brand recall.

Law and Braun (2000) tested the effectiveness in television shows by using a brand choice questionnaire. They mentioned that implicit memory measurement results deliver more sensitive tests for product placement effectiveness than explicit measures. According to Van Reijmersdal et al. (2010) traditional memory measures; recall and recognition do not show the complete effects of product placement. It is known that even when there was no explicit memory of the placement, audience reactions still may be affected by product placement (Van Reijmersdal, Neijens, & Smit, 2010).

Scholars in the field of marketing determine the effectiveness of placements by measuring only the cognitive outcomes (brand recall/recognition) (Brennan, Dubas, & Babin, 1999; D’Astous & Séguin, 1999; Gupta & Lord, 1998; Yang & Ewoldsen, 2007). Similarly, advertising managers value brand recall as the one of the most important indicators of placement effectiveness since it is assumed that by influencing brand recall, placements are intended to activate already existing images or schemata of a brand (Matthes, Wirth, Schemer, & Kissling, 2011). Most studies examined recall and recognition together as memory measures (D’Astous & Séguin, 1999; Gupta & Lord, 1998).

The following research model (Figure 1) is driven from the literature.

![Figure 1 Research Model](image-url)

Bressoud, Lehu and Russell’s (2010) research investigated the impact of placement and audience characteristics and they contacted 3,532 individuals who viewed a DVD movie the day before the recall survey was given. Watching the film on a large screen occurred as the most significant effect on recall. Therefore, it is hypothesized:

H_{3a}: Exposure to product placement affects the recall of the audiences.

H_{3b}: Exposure to product placement affects the recognition of the audiences.

H_{3c}: Prominent product placements will lead higher recall than subtle product placements.

H_{3d}: Prominent product placements will lead higher recognition than subtle product placements.

H_{3e}: Prominent product placements will lead higher brand choice.

Modality of placement is also expected to affect the memory and the choice of the audience. Among the product placement practices, visual placements are the most common and audio-visual applications are the most expensive and need more effort to implement (Gupta & Lord, 1998). Law and Braun’s (2000) study examines participants’ memory and choice levels after watching Seinfeld television shows containing several placements.
In contrast to less-prominent visual-only or audio-only placements; audiovisual placements were best recalled, however, were least likely to be chosen in an implicit brand choice task.

Dodd and Johnstone (2000) define product recognition as “a person’s ability to identify a product name in a film”. They also mention that “in order for a product to be effectively recognized in a film, it should have considerable length of exposure time, as well as having a well-integrated placement such as audio, visual or audio-visual”.

Matthes, Wirth, Schemer and Kissling (2011) found that as the placement frequency increases, free recall and recognition also increase. Yang, Ewoldsen, Dinu and Arpan’s (2006) research results indicated that college students had low levels of explicit memory (recognition test) for the brands, but they showed implicit memory (word-fragment test) for the brand names placed in video games. According to Waldt et al., (2008) a subtle visual placement of a product has a limited time exposure and it is often used as a background prop without audio reinforcement. To illustrate, a car passing a billboard on a highway where one could only subtly see the advertisement flashing in the background (Waldt, Nunes, & Stroebel, 2008). In order to explore the relation between the type of the placement and memory, it is hypothesized that; H4a: Audiovisual placements will generate higher recall than audio-only and visual-only placements.

H4b: Audiovisual placements will lead to higher brand choice than audio-only, and visual-only.

2. METHODOLOGY

The effectiveness of product placement is measured by a controlled experimental study since the purpose of an experimental research is to “study casual links; whether a change in one independent variable produces a change in another dependent variable” (Saunders, Lewis, & Thornhill, 2009). An experimental study gives the opportunity to have a greater control over aspects of the research process such as sample selection and context. This quantitative study seeks to find cause and affect relationships between external factors’ (modality, centrality) of product placement and memory. The nature of the design is correlational, and it is a cross-sectional investigation.

2.1 Sample Design

Since this experimental study targeted young adults, 149 students aged between 18 and 24 have been chosen randomly from undergraduate courses of Yeditepe University. Although convenience sampling may limit the external validity, Yeditepe University is one of Turkey’s largest foundation universities with a diverse community of around 20,000 students.

2.2 Research Instrument

Two Yalan Dünya (a popular T.V sit com) video clips have been chosen as the experimental stimuli. Clips included at least five distinctive products within a 15 minutes segment, which fit the definition of product placement offered by Gupta and Lord (1998). Both audio only and audio visual usage of product placement were chosen in video clips. Participants were informed that the experimentation involved rating a popular TV show, Yalan Dünya. Fifteen minutes lasting Yalan Dünya clips (Video A and Video B) were shown to small groups of participants. The survey used was adopted from Law and Braun’s (2000) study, where also a popular TV show (Seinfield TV series) was used. All participants were asked to rate their familiarity with Yalan Dünya on a 1–7-point scale where 1 = “very infrequently” and 7 = “very frequently.” The participants’ feelings were investigated toward the show on a 1–7-point scale, where 1 = “worst program” and 7 = “best program.”

2.3 Study

Participants were informed that the aim of the experiment is to measure their assessment of a popular TV series, Yalan Dünya. Then, they watched either Video A or B. After having viewed the video, participants were assigned to evaluate their rating for general impressions of the show, and the frequency of viewing Yalan Dünya. Later participants were directed to fill out an implicit memory questionnaire which asked to “shop for a friend who has just moved to a new apartment”. They were given a shopping list that includes brands and products preferred by the friend, and assigned to mark the brands they would choose, without mentioning the Yalan Dünya episode. This shopping list contained products with the brand names drawn from Videos A and B. After completing the brand choice part, participants were requested to recall brand names. At last, participants were given a recognition test with a list of brands. Besides the brands mentioned in the video clips, filler items were also included in the list and respondents were asked to check off the ones they had seen in the clip.

3. RESULTS

There were five different products in each video shown to participants. Products on Video A were used as the control products for Video B and vice versa. Table 2 shows the proportions of each measure (recognition, recall, and choice) according to the products. Audiences’ frequency of viewing didn’t show significant differences between the two groups (Video A 4.74, Video B 5.22). Participants have favorable feelings toward the Yalan Dünya show (Video A 4.7, Video B 4.8).

A paired-samples t-test was used to compare the frequency of recalling the placed products in the exposure group and control group. Exposure of a product placement
yielded significant main effects, which were; for test group (M=48.09, SD=21.96) and for control groups (M=2.25, SD=2.75); t(9)=6.28, p = 0.000. Results show that exposure to product placement does affect brand recall. Specifically, exposure to product placement increases the recall of the placed brands.

Table 2
Mean Proportions of Choice, Recall, and Recognition for Each Product Placement

<table>
<thead>
<tr>
<th>Modality</th>
<th>Centrality</th>
<th>Brand</th>
<th>Choice</th>
<th>Recall</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ariel</td>
<td>21.13</td>
<td>4.61</td>
<td>14.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bellona</td>
<td>40.85</td>
<td>24.36</td>
<td>16.49</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KFC</td>
<td>25.35</td>
<td>7.69</td>
<td>17.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Signal</td>
<td>23.94</td>
<td>10.26</td>
<td>13.69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Turkcell</td>
<td>19.72</td>
<td>3.85</td>
<td>15.87</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Algida</td>
<td>34.62</td>
<td>18.31</td>
<td>16.31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cartador</td>
<td>25.64</td>
<td>16.90</td>
<td>8.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coca Cola</td>
<td>32.05</td>
<td>29.58</td>
<td>7.49</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lipton</td>
<td>35.90</td>
<td>23.94</td>
<td>11.95</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Saray Halı</td>
<td>30.77</td>
<td>14.08</td>
<td>16.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Means</td>
<td>29.00</td>
<td>15.54</td>
<td>13.46</td>
</tr>
</tbody>
</table>

A paired-samples t-test was used to compare the frequency of recognition of the placed products in exposure group and control group. There was a significant difference in the scores for exposure (M=60.45, SD=23.07) and control groups (M=2.10, SD=2.46); t(9)=7.73, p = 0.000. Results are similar to recall results where exposure to product placement does affect recognition. Thus, it is found that exposure to product placement increases the recognition of the placed brands.

A paired-samples t-test was used to compare the frequency of the placed brands’ choice in exposure group and control group. Analysis showed a significant difference for exposure (M=28.99, SD=6.91) and control groups (M=15.53, SD=8.60); t(9)=9.07, p = 0.000. Results show that exposure to product placement does affect brand choice.

To identify if there is a relationship among the recall, recognition and the choice, Pearson correlation coefficients were run on the facilitation scores of recognition, recall, and choice, where facilitation is measured as the difference in explicit, and implicit measures rates between the experimental and control group scores. Recognition and recall of audiences are highly correlated. Hence, results show that there is no correlation between the explicit and implicit measures. Instead recognition is significantly correlated with recall (Pearson correlation coefficient of 0.949, p < .001). Finally, the scores show that recognition facilitation scores (58.36%) were greater than the recall scores (45.84%). This difference is significant ( t(9) = 5.244, p < .001 ) and findings agree with previous studies where “recognition is found to be a more sensitive measure of learning about products than recall” (Law & Braun, 2000; Singh & Rothschild, 1983). Moreover, choice facilitation is not significantly correlated with either explicit measure (with recall: 0.159, p > .1; with recognition: 0.303, p > .1).

Table 3
Mean Facilitation Scores for Choice, Recall, and Recognition

<table>
<thead>
<tr>
<th>Facilitation Scores</th>
<th>Central</th>
<th>Not Central</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Choice</td>
<td>13.08</td>
<td>2.90</td>
</tr>
<tr>
<td>Recall</td>
<td>63.04</td>
<td>15.32</td>
</tr>
<tr>
<td>Recognition</td>
<td>76.96</td>
<td>7.11</td>
</tr>
</tbody>
</table>

Results mentioning prominently placed products have positive effects on each measure. These results are also parallel with the earlier studies. It is supported that prominent product placements will lead to higher recall than subtle product placements and prominent product placements will lead to higher recognition than subtle product placements. Table 4 summarizes the mean facilitation scores for each three dependent measures. However, centrality did not yield a reliable effect on brand choice facilitation.

In this study the effect of placement type on memory and choice is also investigated. It was expected that audiovisual products would have the most impact on
both explicit and implicit measures. Recall scores show a significant effect of modality, $F(2,9)=18.97, p<.001$, the result is consistent with Paivio’s dual coding theory, and Law and Braun (2000) findings. Audiovisual placements were best recalled; 69% of the participants recalled audio-visual placements, and 34% recalled seen-only products, and only 9% recalled heard-only products. In other words, audiovisual placements will generate higher recall than audio-only and visual-only placements.

Recognition results are similar with the recall results where audiovisual placements sustained to be the best results; 80% of the participants recognized audio-visual products, 51% recognized seen only and 10% recognized heard only. Again seen-only products results are higher than heard-only products. Thus, modality is found to have a significant effect on recognition at $F(2,9)=21.47, p<.001$; and audiovisual placements are found to result in higher recognition than audio-only and visual-only placements.

Importantly, the implicit brand choice test yielded different results; seen-only placements were the most effective, where 17% of the participants chose seen-only products, and 12% of the participants chose audio-visual products, heard-only continued to be the least effective type of modality with 2% choice. Therefore, the hypothesis “audio-visual placements will lead higher brand choice than audio-only and visual-only” is rejected. Consequently, it is found that modality has a significant impact on choice at $F(2,9)=27.55, p<.001$.

4. DISCUSSION

One of the major contributions of the current research is to provide an explanation for the influence of centrality and modality of product placements on brand memory, and brand choice. As expected, product placement affects the consumers’ memory and brand choice. Prominent placements had more impact on consumer memory than the subtle placements; however, centrality had no influence on brand choice. Modality also influences consumer memory and choice. Audio-visual placements were the most recalled ones where heard-only products were the least recalled. Same results occurred for the recognition measures. The effect of modality on choice showed different results; seen-only placed products occurred to be the most chosen and, heard-only placements were the least chosen.

Considering the correlation between choice and memory results, it is found that there is no significant correlation between implicit and explicit memory. Findings support the idea that brands can be chosen subconsciously.

In parallel with the findings of Law and Braun (2000) modality is found to be affecting both explicit and implicit memory where centrality is only affecting explicit memory. Conversely to Law and Braun (2000), in this experiment seen-only placements were more recognized than heard only placements.

Waldt, Nunes, & Stroebel’s (2008) research suggests that impact of centrality to recognition of products in a movie is significant in line with the previous study, however current study findings show that prominently placed products create higher recognition ($M=76.96$) than the subtle placements ($M=39.75$). Similar results were found for the recall rates where prominent placements lead to higher recall rates ($M=63.04$) than the subtly placed products ($M=28.64$).

According to Godberg and Gorn (1987) happy programs create a happier mood which viewers don’t skip or ignore and that leads to greater perceived commercial effectiveness. Similarly, recall and recognition results might have been affected since Yalan Dünya is a comedy show.

From the practitioners view, effectiveness of product placement becomes questionable due to the dissimilar results of memory and choice. Brands desire to be in the list of consumers’ top remembered brands and called top of the mind brands. Although current study results indicate that product placement may benefit marketers to locate the brand among the top of the mind brands, it was also found that the most chosen brands are not the most remembered brands. However, there is no doubt that recall is an important indicator for sales success.

Consequently, there is an overall impact of exposure to a product placement on consumer memory, the application strategy and type of the placements influence the level of the results. Considering the brand choice results, this study had similar findings with previous researches, modality affects the choice results however there is no significant affect of centrality.

CONCLUSION

Consistent with previous studies, this paper supports that exposure of product placement affects consumer behavior; the level of influence depends on the application type of the placement, such as modality and centrality. It appears the placement may affect the brand choice when the consumers are not specifically aware of the influence. This finding leads us to consider the ethical consequences of product placement; it may be perceived being subliminal by some groups because of generating unconscious change in consumer behaviors.

The main contribution of this study is the usage of two different memory measures (implicit and explicit) independently for comparing the relationship between explicit and implicit memory effects. Mostly, measuring the effects of product placements is limited to explicit tests (D’Astous & Chartier, 2000; Gupta & Lord, 1994; Morton & Friedman, 2002). Regarding to the findings of the current study, Turkish audiences have similar responses for the product placement with audiences from
both Europe and the USA. However, in contrast to Law and Braun’s (2000) finding that the second most effective placements were the heard-only placements, in this study audio-visual placements are found as the second most effective placement type.

The study has shown that product placements have an impact yet; placements are more effective when the audience is not aware of the impact. The effectiveness may change due to the measure used, since choice and memory results are not significantly correlated.

Therefore, practitioners’ implementation strategy must be based on the goal of the brand manager. If the firm is targeting increase in sales, product placement is not applicable; however for increasing brand awareness or creating a brand image, product placement is an appropriate tool (D’Astous & Chartier, 2000). This difference arises from the fact that product placement is more subtle than advertising but has relatively stronger communicative abilities (D’Astous & Chartier, 2000). When the intention is to increase the brand choice, practitioners should use seen-only placements and measure the effectiveness with the use of implicit measures. On the other hand, when the aim is to increase consumer memory, they should choose audiovisual placements and measure the effectiveness with the use of explicit memory measures. Additionally, results show that centrality has no effect on brand choice; therefore practitioners may use central placements when the goal is to increase memory.

Limitations and Future Suggestions

One of the limitations of the study is the choice of using convenience sampling. In addition to conducting this study to only Yeditepe University students, the choice of the program can also constitute a limitation since Yalan Dünya is known for being one of the first shows that implemented product placements in Turkey and there have been many news in the media about Yalan Dünya and product placements used in the show. Because of the popularity of the show, a number of the participants may have watched the episodes shown in the study and previous exposure might have affected their responses. Although Karrh (1994) found that prior viewing made no difference, there are studies discussing that there is a positive connection between brand familiarity and choice (Coates, Butler, & Berry, 2006). Future research should use a less popular TV series or movie to investigate the product placement subject.

REFERENCES


