

**ISTANBUL TECHNICAL UNIVERSITY ★ GRADUATE SCHOOL OF ARTS AND
SOCIAL SCIENCES**

**AN ANALYSIS OF VOTERS' PERCEPTION OF VISUAL ADVERTISEMENTS
WITH RESPECT TO NEUROMARKETING APPROACH: EYE-TRACKING
STUDY**

Ph.D. THESIS

Ahmed AL-BURAI

Department of Management

Management Programme

MAY 2018

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İSTANBUL TEKNİK ÜNİVERSİTESİ ★ SOSYAL BİLİMLER ENSTİTÜSÜ

**NÖROPAZARLAMA YAKLAŞIMIYLA SEÇMENLERİN GÖRSEL REKLAM
ALGILARININ ANALİZİ: GÖZ İZLEME ÇALIŞMASI**

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MAY 2018

*To my parents, wife, children, and all brothers, sisters and friends in Gaza,
Palestine*

FOREWORD

“Permanence, perseverance and persistence in spite of all obstacles, discouragements, and impossibilities: It is this, that in all things distinguishes the strong soul from the weak.”

Thomas Carlyle

I admit that the journey of pursuing one’s dream is long and exhausting. In this journey I was in search of my aspirations as a Palestinian young man, who lived under sever conditions of occupation followed by inhumane and unjust blockade on the Gaza Strip. As an academic, attending conferences, participating to academic seminars and travelling to study days and workshops were out-of-the-way daydreams. In 2011, a glimpse of hope was in the horison when I was able for the first time to travel to one of the most desired destination, Istanbul, the city of beauty and tranquility.

My academic journey started to take its shape and the phases became clearer when I first visited Istanbul Technical University and met with the wonderful academic staff of the facultuy. I decided to join the Ph.D. program of management. Thanks to the academic staff for their kind support and guidance. Without their help and patience, my academic progress would have been more difficult. Special thanks to the ones from whom I have learned much: Assoc. Prof. Dr. Elif KARAOSMANOGLU, Prof. Dr. Umit SENESEN, Prof. Dr. Ayse Banu ELMADAG, Prof. Dr. Selime Sezgin. Assoc. Prof. Tolga KAYA.

However, my special thanks to Prof. Dr. Sebnem BURNAZ my academic advisor particularly for her patience and support. I would like to extend my heartfelt gratitude for her understanding of the critical and difficult circumstances that I endured with my family in Istanbul and at home. She has been inspring with her great insight, crtifical feedback that help me go ahead with the thesis smoothly. Her critiques, comments, suggestions and editing remarkds made this study valuable and relevant. I take all the responsibility for the boring portions, irrelevancies and redundancy.

Still I do not know how to thank members of the committee especially Dr. Yener GIRISKEN for the unprecedented support especially in the practical part of the study. He offered all facilities and capabilities to help me finish the study in a proper manner. Without the help and support he offered, it would have been difficult to finish the thesis in the way it was produced. I cannot forget to thank Dr. Gokhan INCE for accepting to give insight from his technical expertise that constituted an additional value to the thesis experimental part. I also have to thank Dr. Serap ATAKAN and Dr. Tolga KAYA, the thesis committee members, who have added more depth to the final shape of the thesis with their critical feedback and critiques.

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Finally, above all, I would like to thank my parents, Latifa and Ali Al-BURAI and my wife, Hanaa Al-BURAI and my four children, Saba, Amro, Jana, Saji AL-BURAI for their support and encouragement. Their love and faith in me kept me going.

In the end, after a lot of prayer, hard-work, unequivocal faith, this thesis has been written. I hope it will add some value to those who are interested. I pledge to work harder so that I become a better academician who is able to serve my students, colleagues, and humanity. There is still a lot to write but less is more.

May 2018

Ahmed AL-BURAI

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ABBREVIATIONS

AKP	: Justice and Development Party
AOI	: Areas of Interest
CHP	: Republican People's Party
FC	: Fixation Count
HDP	: Peoples' Democratic Party
MHP	: Nationalist Movement Party
TFF	: Time to First Fixation
TVD	: Total Visit Duration

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AN ANALYSIS OF VOTERS' PERCEPTION OF VISUAL ADVERTISEMENTS WITH RESPECT TO NEUROMARKETING APPROACH: EYE-TRACKING STUDY

SUMMARY

Researchers have progressively used a multidimensional approach in their methodical development, which has led to new understandings and discoveries. The usage of neuroscientific approaches has gained more prominence in several marketing functions and has contributed to greater understanding of human behavior. Neuromarketing is one of these disciplines that integrate multidimensional fields of scientific research; neurology: a science that concentrates on the study of the human brain; cognitive psychology: focuses on exploring the relationship between mind and human behavior; marketing: the field of research that focuses on developing new, lucrative products and services to meet the needs of consumers.

Thus, Neuromarketing focuses on researching and understanding consumer behavior and measuring people's brain responses to marketing stimuli. The development of this field basically is reliant on the progress of several principles of study: neuroscience, applied physics, and computer science. Moreover, Neuromarketing is being used to study consumer behavior and purchase decision processes. Neuromarketing save an opportunity basically to researchers to have a deeper insight of the degree of abstraction present in the minds of customers and the role of feelings in decision-making and intentional behavior. Thus, it allows the development of more operative mechanisms for activating and stimulating these feelings. Conventional methods, such as interviews, surveys, or focus groups assume that customers are able to describe their own mental processes.

There are numerous brain regions related to vision. The processing of visual attention begins with eyes gazes. Eye movements can be considered good behavioral signals for evaluating visual attention and information acquisition because they are thoroughly related to cognitive processes. Consequently, accepting and observing eye gazes and other patterns in eye movement is a vital part of neuroscience for Neuromarketing.

The ability to track eye activities has existed for over a long period of time though it was limited to academic field because the technology was not validly manageable or flexible. Lately, nevertheless, eye tracking technology has stretched to be feasible in marketable developments. Eye tracking is now flexibly and straightforwardly applied and used in marketing settings, that many unique applications are obtainable, principally those that can study phenomena in ordinary setting rather than a laboratory.

In the domain of marketing, eye tracking technology is a novel but recognized field of study identified as visual marketing. Eye tracking measures where the person is gazing, the time that this person gazed at this certain region, the movement of his eyes in relation to his head, and even the number of blinks. In addition to the eye gazes and fixations, the sequence in which his or her eyes shift from one location to

another that is known as known as the (saccade) can also be measured. There are different eye tracking technologies to measure eye movement and gaze fixations. The most common are those that inspect the monitoring of controlled stimuli at fixed points in videos, photos, and viewer's interaction with a displayed screen. There are more sophisticated tools that also mechanically track the head position in three-dimensional space in relation to the camera.

Advertisements are not only limited for business field. In modern representative democracies, political parties employ their optimum capabilities through a variety of tools i.e. public relations, social media activation and various advertising campaigns. All these tools are used to achieve political success by attempting to affect the voters' attention especially during an election campaign. They tend to maintain their success by choosing and producing the best influential advertisements.

Therefore, the primary objective of the study is to analyze the effect of advertisement schematic design on viewers' attention. In other words, it measures how the arrangements and positions of the advertisements' elements such as their claim, photo and logo may alter voter's gaze plots and fixations. The study aims at measuring these differences based on eye-tracking technology not self-reporting or traditional research tools such as questionnaires and focus groups. The eye-tracking technique is unique because it gives precise and abstract findings that are not affected by personal judgement of the subjects of the study. Eventually the results will help campaigners and political parties in Turkey get deeper insight of their voters' preferences and gaze attention so that they can design their advertisements accordingly.

The dissertation starts with reviewing the literature of political marketing and advertising. Then previous studies utilizing eye tracking approach were thoroughly reviewed. Based on the literature review, conceptual model and hypotheses are formulated and the rationale is discussed. Then, a brief review of the literature of eye tracking approach and its relations to customers' mental attitude based on their age, gender is presented. Then the rationale for the experimental study of eye tracking is conducted then hypotheses and variables are tested. Finally, discussion, findings and conclusions are presented.

It aims to offer gaze plots' measurement and eye-tracking techniques as novel methods in political marketing. The contribution is expected to generate a change tendencies in the advertising field mainly when designing the logo, text and pictures of printed advertisements. It aims at investigating both 'focus selection', what the voter chooses to gaze at- and 'focus engagement', the time a voter spends gazing at the components of the advertisement. Both focus selection and focus engagement are offered as indicators of voters' tendencies. A sample of 80 participants were recruited to measure their eye gazes on 32 visual political advertising materials. The findings highlight that voters have variances with various proportions in their visual attention on areas of interests (AOI) as claim, logo, and photo of the printed political advertisements based on their gender, age, partisan affiliation and their level of likeability to the advertisements.

NÖROPAZARLAMA YAKLAŞIMIYLA SEÇMENLERİN GÖRSEL REKLAM ALGILARININ ANALİZİ: GÖZ İZLEME ÇALIŞMASI

ÖZET

Araştırmacılar kademeli olarak, sistematik gelişimlerinde, yeni anlayışlara ve keşiflere olanak tanıyan çok boyutlu bir yaklaşım kullanmışlardır. Nöro-bilimsel yaklaşımın kullanımı birçok pazarlama işlevinde belirginlik kazanmış ve insan davranışının daha iyi anlaşılmasına katkıda bulunmuştur. Bilimsel araştırmanın çok boyutlu alanlarını biraraya getiren disiplinlerden olan Nöropazarlama , insan beyni ile ilgili çalışmalara yoğunlaşan bir bilim dalı olan nöroloji, zihin ve insan davranışı arasındaki ilişkinin araştırılmasına odaklanan bilişsel psikoloji ve tüketicilerin ihtiyaçlarına yanıt verebilecek yeni ve karlı ürün ve hizmetler geliştirmeye odaklanan bir alan olan pazarlamayı bir araya getiren bir disiplindir.

Başka bir deyişle, Nöropazarlama tüketici davranışlarının araştırılması ve anlaşılması ve insan beyninin pazarlama uyaranlarına verdiği yanıtların ölçülmesine odaklanır. Bu alanın gelişimi temel olarak nörobilim, uygulamalı fizik ve bilgisayar biliminin gelişmesine dayalıdır. Bunun yanı sıra, Nöropazarlama tüketicilerin davranışlarının ve satın almaya karar verme süreçlerinin araştırılmasında da kullanılmaktadır. Nöropazarlama, araştırmacılara esasen, tüketicilerin zihininde mevcut olan soyutlama seviyesi ile duyguların karar almada ve kasıtlı davranışlardaki rolü hakkında daha derinlemesine bir anlayışa sahip olma fırsatı sunmaktadır. Böylelikle, bu duyguların harekete geçirilmesi ve uyarılması amacıyla daha etkin mekanizmaların geliştirilmesine olanak tanır. Mülakat, anket ve odak grupları gibi geleneksel yöntemler tüketicilerin kendi zihinsel süreçlerini tanımlayabilme becerisine sahip olduğunu varsaymaktadır.

Beynin görme ile ilgili çok sayıda bölgesi vardır. Görsel dikkatin işlenmesi gözlerin bakması ile başlar. Gözlerin hareketi, tamamen bilişsel süreçle ilgili olduğundan, görsel dikkatin değerlendirilmesi ve bilgi edinimi açısından olumlu davranışsal işaretler olarak ele alınabilir. Sonuç olarak, bakışların ve gözlerin hareketine ilişkin diğer örüntülerin kabul edilmesi ve gözlemlenmesi Nöropazarlama için nörobilimin en hayati kısımlarından biridir. Gözlerin hareketinin izleyebilen çalışmalar uzunca bir süreden beridir var olmakla birlikte, bu konuyla ilgili teknolojinin makul bir yönetilebilirliğinin ya da esnekliğinin olmaması nedeniyle akademik alandakilerle sınırlı kalmıştır. Ancak son zamanlarda, göz izleme teknolojisi pazarlanabilir yenilikler için uygulanabilir hale gelmiştir.

The ability to track eye activities has existed for over a long period of time though it was limited to academic field because the technology was not validly manageable or flexible. Lately, nevertheless, eye tracking technology has stretched to be feasible in marketable developments. Günümüzde göz izleme, esasen sorunun laboratuvar ortamından ziyade olağan şartlar altında incelenebildiği, pek çok emsalsiz uygulamanın yer aldığı pazarlama ortamında esnek bir biçimde ve doğrudan uygulanıp kullanılabilir.

Göz izleme teknolojisi, pazarlama alanında yeni ancak kabul görmüş bir araştırma alanı olup görsel pazarlama adıyla bilinmektedir. Göz izleme teknolojisi kişinin nereye baktığını, belli bir bölgeye ne kadar süre baktığını, gözlerinin kafası ile ilişkili hareketlerini ve hatta göz kırpması sıklığını ölçmektedir. Bakış ve bakışın sabitlenmesine ek olarak, (seğirme) olarak da bilinen, gözlerin bir noktadan başka bir noktaya doğru hareket etme sıralaması da ölçülebilmektedir. Gözlerin hareketini ve bakışın sabitlenmesini ölçmek için çeşitli teknolojiler mevcuttur. Bunlardan en yaygın olanı video ve fotoğraflarda yer alan sabit noktalardaki kontrollü uyaranların takip edilmesinin ve kullanıcının ekranla olan etkileşiminin incelenmesidir. Kafanın kameraya oranla konumunu üç boyutlu ortamda mekanik olarak izleyebilen çok daha gelişmiş araçlar da mevcuttur. Reklamlar sadece iş dünyasını ilgilendirmemektedir. Çağdaş temsili demokrasilerde, siyasi partiler, halkla ilişkiler, sosyal medya hesapları ve çeşitli reklam kampanyaları gibi araçlarla en iyi yeteneklerini sergilemektedir. Tüm bu araçlar, özellikle de seçim kampanyaları boyunca, seçmenlerin dikkatlerini etkileme girişimi ile siyasi başarı elde etmek amacıyla kullanılmaktadır. Siyasi partiler, en etkileyici reklamların seçilmesi ve hazırlanması yoluyla bu başarılarını sürdürme eğilimindedir.

Bu nedenlerle, bu çalışmanın temel amacı reklam tasarımının izleyicinin dikkati üzerindeki etkilerini incelemektir. Diğer bir deyişle, reklamlarda yer alan vaat, fotoğraf ve logo gibi reklam unsurlarının düzenlenmesi ve konumlarının seçiminin bakış alanı ve bakışın sabitlenmesini nasıl değiştirebileceğini ölçmektedir. Bu çalışma, söz konusu farklılıkları, kendini ifade etme becerisi ile anket ve odak grupları gibi geleneksel yöntemleri kullanmaksızın, göz izleme teknolojisini temel alarak ölçmeyi amaçlamaktadır. Göz izleme tekniği, incelemeye konu öznelerin kişisel yargılarına dayanmayan kesin ve soyut bulgular sunması açısından emsalsizdir. Sonuç olarak, bu çalışmadan elde edilen sonuçlar, Türkiye'deki kampanya uzmanlarının ve siyasi partilerin, seçmenlerin tercihlerini ve bakışlarının odağını daha iyi anlamasına ve reklamlarını da buna uygun olarak tasarlamasına yardımcı olacaktır.

Çalışma, alanyazında siyasi pazarlama ve reklamcılık konularının taranması ile başlamaktadır. Sonrasında, göz izleme teknolojisinden faydalanan önceki çalışmalar ayrıntılı olarak incelenmiştir. Alanyazın taramasına dayalı olarak kavramsal model ve hipotezler oluşturulmuş ve gerekçeler tartışılmıştır. Devamında, göz izleme yaklaşımı ve bu yaklaşımın tüketicinin, yaşına ve cinsiyetine dayalı zihinsel

tutumları ile bağlantısı üzerine kısa bir alanyazın incelemesi sunulmuştur. Bu sürecinde sonrasında deneysel göz izleme çalışmasının gerekçeleri oluşturulmuş ve ardından hipotez ve değişkenler sınanmıştır. Son olarak tartışmalar, bulgular ve sonuçlar sunulmuştur.

Çalışma, bakış alanının ölçümünün ve göz izleme tekniklerinin siyasi pazarlama alanına yeni bir yöntem olarak sunulmasını amaçlamaktadır. Araştırma sonuçlarının, özellikle reklam materyalleri üzerindeki logoların, metinlerin ve resimlerin tasarımı konularında olmak üzere reklamcılık alanında değişim eğilimleri yaratması beklenmektedir. Çalışma, hem seçmenin neye bakmayı seçtiğini, yani “odak seçimini” hem de seçmenin, reklam bileşenlerine bakmaya harcadığı zamanı, yani “odağa katılımını” incelemeyi amaçlamaktadır. Hem odak seçimi hem de odağa katılım seçmenin eğilimlerinin göstergesi olarak sunulmaktadır. 80 katılımcıdan oluşan bir örneklemin, 32 adet siyasi görsel reklam materyaline bakışları ölçülmüştür. Bulgular, seçmenlerin, cinsiyet, yaş, siyasi partiye bağlılığı ve reklamı beğenebilirlik seviyelerine dayalı olarak, basılı siyasi reklamlarda yer alan vaat, logo ve fotoğraf gibi ilgi alanları üzerindeki görsel dikkatlerinin çeşitli bölümlerinde farklılıklar olduğunu ortaya koymaktadır.

1. INTRODUCTION

First Once John Wanamaker, a merchant and founder of one of the first American department stores, known for his successful use of advertising; he was one of the first major merchandisers to employ advertising agencies in 1889. He said “Half the money I spend on advertising is wasted; the trouble is I do not know which half.” Wanamaker’s saying constituted an urging motivation to both academics and practitioners to devote more effort to analyze and understand how to select the most appropriate design and channel of advertising that matches their target groups and help them manipulate their strategies so that they can achieve their objectives and meet their goals without missing the budget limitations of their businesses. It is evident that advertisements have a substantial and undeniable impact on various customers so that their medium, design and delivery should have been effectively and professionally conducted to attract customers’ attention emotionally and behaviorally (Breuer and Brettel, 2012).

Choosing the incorrect design of the advertisement or selecting the inadequate channel or medium to deliver the message may cause a serious failure of a company to realize its objectives. Wrong choices with poor results may even lead to an entire failure to convince top management to save the appropriate marketing budgets (Breuer and Brettel, 2012). Therefore, it has been an unpretentious challenge for advertisers to practically try to measure the influence of different designs of advertisements’ displays on several media channels such as TV, radio, magazines newspapers and even websites (Hyun and Sunkyu, 2006; Tellis and Thaivanich, 2005). All these trials and maneuvers intend to achieve the effectiveness of the medium to promote business products or services. The aim is to reach the right target groups through the most effective medium of communication and with the most appropriate message and image.

Advertisements are not only limited for business field. In modern representative democracies, political parties employ their optimum capabilities through a variety of tools i.e. public relations, social media activation and various advertising campaigns. All these tools are used to achieve political success by attempting to affect the voters' attention especially during an election campaign. They do tend to maintain their success by choosing and producing the best influential advertisements (Berger, Wagner, and Schwand, 2012).

Advertising as a direct communication tool, is one of the most prominent interest for campaigners; it is undoubtedly tempting for researchers and marketing analysts to devote their effort to understand the mechanisms and determinants that could be utilized so that electoral campaign can effectively influence the mass of voters and their behavior. There is a great number of studies focusing on the search of the best methods and approaches to draw the attention of voters in a race of election (Russell and Barrett, 2013 and Taylor, 2013) Some further studies have focused on exploring the hindrances and opportunities in multichannel customer advertisements (Neslin, Grewal and others, 2006)

It is well accepted that the first and most commonly used source of information in recognizing any identity of any visual materials is the eye of the viewer. According to Bayliss et al. (2013) there is a wide range of studies validating that eye gaze route and fixations may lead to a better adjustment to the investigated materials (Wilkinson and Mitchell, 2018) Attention is differently and inevitably concerned with the sensation and the pursuit of eye gaze path. Furthermore, gaze track appears to instantaneously control viewers' mental perception. For instance, a straight look influences face memorization equally at the encoding and at the retrieval levels (Hood et al., 2003; Vuilleumier et al., 2005) whereas a straight gaze may result in a deferred alignment of the attention toward marginal objects (Senju and Hasegawa, 2005). Moreover, it is proven that our eyes have dynamic role in social recognition and they are the main face feature of interaction between the brain and the external investigated factors. Recently, Pfeiffer et al's (2013) concluded that in cognitive neurosciences there are neural regions inside the human brain that is activated in response to the processing of a human eye gaze.

In the field of marketing, gaze direction draws viewer's attention, which is of great importance to affect the frequency of recalling the perceived product and keeping it in memory. Both the studies of Hutton and Nolte (2011) and Sajjacholapunt and Ball (2014) concluded that customers spend more time gazing at a printed advertisement of a product more than any advertisement in another channel. Moreover, they proved that gaze privileged a direct influence over memorization of the content of the advertisement.

Tracking eye gazes and determining their fixations have become a progressively prevalent tool for observing customer's attention and measuring his concentration. It has also become an urgent effective method that political campaigners and marketing practitioners are highly interested in its implications and recommendations (Atalay, Bodur, and Rasolofoarison, 2012; Chandon, Hutchinson, Young, and radlow, 2009; Janiszewski, 1998; Lohse and Wu, 2001; Maughan, Gutnikov, and Stevens, 2007). Eye tracking technique has been efficiently applied for promoting planning and developing novel advertising designs and formats in numerous fields (Krugman, Fox, Fletcher, Fischer, and Rojas, 1994; Pieters and Wedel, 2007; Rayner, Miller, and Rotello, 2008; Wedel and Pieters, 2004).

Although eye tracking has been applied in previous studies to measure and reflect consumers' focus to different types of advertising stimuli to the knowledge of the researcher, few studies have applied this technique on scrutinizing the role of attention in the efficiency and appropriateness of political campaigns' printed advertising materials (Fox, 1998).

Political advertisements' designs and productions are, indisputably, key dynamics leading to an election victory, so it is crucial that they have to be designed to reach their communication objectives professionally and effectively. Therefore, this study aims to analyze how printed electoral advertisements' designs may succeed to affect voters' gaze and attract their attention based on a number of variables such as their gender, affiliation to a particular political party, their age and their level of likeability of the presented visual materials. The study also aims at measuring how their gaze fixations might affect their memory-based task of recalling those printed political advertisements after viewing them.

1.1 Significance of the Study

The study herein basically aims to investigate the impact of advertisement schematic design and the arrangement of the position and placement of the three main features or elements of a political advertisement, i.e. AOI (Area of Interest) (logo, photo, claim/text) and how juggling these three elements with different designs may alter voters' gaze plots and divert their gaze fixation. The unique feature of the study is that the measurement of these effects is performed by applying eye-tracking method not through conventional marketing research tools (i.e. questionnaires or focus groups), therefore it is expected to reach precisely real findings to be able to assist political parties and advertising agencies choose their right adjustments and layouts of their visual materials.

Earlier studies on the effectiveness of advertising materials and their effect on viewers' perceptions have largely relied on self-reported indicators of the customer's memory to determine participants' attention to the brand locations and designs (e.g., Boerman, Van Reijmersdal, and Neijens 2012a, 2012b; Campbell, Mohr, and Verlegh 2013; Tessitore and Geuens 2013; Van Reijmersdal, Tutaj, and Boerman 2013). Self-reported methods have some considerable drawbacks as subjects who receive the messages or attend to the printed advertisements with comparatively slight focus are hesitant to recall their content in the context of a memory task (Slater 2004). Viewers' concentration is not always vigorous or active and that is why their physical indicators of attention have been argued to be more reliable (Rosbergen, Pieters, and Wedel 1997).

Predominantly, integrated influential messages, such as brand or logo positioning, can be processed indirectly or obliquely and thus such messages call for implied measures of processing (Smit and Neijens 2013). Consequently, this research tended to utilize eye tracking to guesstimate voters' visual gaze while staring at printed political party advertisement. Eye tracking method is mainly valuable because it qualifies to inconspicuously and unswervingly measure voter's attention to specific visual elements of an advertisement, i.e. claim, logo, and image. Interestingly, it is well-known that babies, teenagers and adults prefer to gaze at open-eyed-faces rather than close-eyed-faces (Batki, 2000). Also, it is evident that from early childhood,

babies innately gaze at the eyes of the subject of a photo or a printed material. There are a host of studies that have concluded that eyes are the most influential facial feature (Vinette et al., 2004; Itier et al., 2007; Sather et al., 2009). Thus, studies have considered exploring eye movements and different levels of eye gazes to find a relation between those elements of eye fixations and other mental activities.

Marotta, Casagrande, and Lupianez (2013) found that eye tracking results are essential bases that could lead to the expansion of social communication, as it extends to prove that eye gazes can additionally reveal not only customers' interests but also their mental states. To illustrate, when the customer's attention is fixed as a direct gaze, it simply indicates that the peripheral detection is completely neutralized; which means that a direct gaze dominates the customer's cognitive processing. For example, Senju and Hasegawa (2005) asserted that the recognition of marginal objects, such as any other images rather than faces, is apparently hindered when customers observe faces with direct gaze not averted gaze. In other words, the quick orienting to faces when compared with other objects depends on the perception of direct gaze.

Contrariwise, it is well recognized that when averted gaze is perceived, customers' focus hastily and mechanically become preoccupied with the same position in the advertisement's space. Tracking gaze plots can definitely display viewers' reactions to an imminent object based on its location which is systematically well-matched with the path of the gaze plot (Marotta, Casagrande, and Lupianez, 2013).

Therefore, the major significance of the study is to use different eye gazes as a measurement tool in political advertising field to give more explanation to meanings of these gazes and how advertising materials can be adjusted to match the viewers' various gazes.

1.2 Purpose and Contribution of the Thesis

The ultimate goal of this thesis is to offer better understanding of individuals' perceptions in term of their eye gazes and fixations toward printed advertisements' design. In the field of political marketing, it aims to offer gaze plots' measurement and voters' eye-tracking techniques as novel methods that may radically change

tendencies in the advertising field mainly when designing the logo, text and pictures of printed advertisements.

In the past few years, Turkey has gone through a range of parliament, presidential and municipal elections. Recently, the political parties severely competed to gain the votes of the citizens especially in the second snap election in November 2015 where the electoral campaigns, along with other influential moderating and intervening variables, have been vital factors to affect people's opinions. Therefore, every party has tried to do its best to make use of the advertising campaign tools efficiently to win the political battle.

This study aims at investigating both 'focus selection' which means what the voter chooses to gaze at, and 'focus engagement' which means the time a voter spends gazing at the components of the advertisement (Vertegaal and Roel. (2008). Therefore, the study will eventually reflect the choice of which areas of a political advertisement the voter opts to gaze at. Both focus selection and focus engagement are offered as indicators of voters' tendencies. This suggests that eye-tracking data will help predict whether different printed advertisement will arouse higher levels of voters' engagement and stimulate participants' memories to remember the content of the advertisement.

Considering eye tracking techniques to measure the objective consequences of advertising impact offers instantaneous indication of the voter's focus on an advertisement. Eye-tracking device along with other established valuation appliances will unquestionably produce more vigorous conclusions for prospect voter-related perception and understandings. A voter's focus involvement may offer an understanding to the analytical nature of the printed advertising materials as they appeal to voter's attention. The research intends to examine whether political campaigners should use certain positions and outlines for images, claims and logos when advertising and whether such positioning ultimately lead to faster fixation time on the faces of the image, the claim or the logo and which element needs more focus to delicate enough to arouse instant fixation on areas of interest.

Briefly, this study aims at filling the void of eye-tracking mechanisms in the field of social marketing and mainly in political advertising campaign by investigating the

effect of various variables such as age, gender, political affiliation and likeability on the voter's gaze plot and recall of the printed political advertisements. More specifically, it aims to

- identify voters' different gaze areas that selectively respond to the exposure to different political parties' advertisements by using eye-tracking method.
- test whether the aforementioned factors (i.e. gender, age, political affiliation and likability) are relevant to eye tracking approach and whether they are supported within political advertising context.
- suggest alternative designs for advertisers that could be more effective for political campaigns. Moreover, the recommendations could be utilized not only in the field of social marketing but also in the field of commercial advertising.

1.3 Overview of the Thesis Process

The overall objective of this thesis is to determine whether the design, layout and positioning of the advertisements in terms of three main components or areas of interests (AOIs), i.e. photo, claim, and logo have an effect on a voter's gaze plot and gaze fixation times particularly in electoral campaign context.

The study is mainly interested in the three AOI when monitoring eye movements; these regions are prominent factors to assess the advertisements impact on voters' gaze plots. According to Aribarg, Pieters, and Wedel (2010), these areas save the researcher the opportunity to examine the voter's focus and level of involvement. Besides, AOI save the opportunity to scrutinize the voters' memory recall of the printed advertisements.

There are three elements to measure the viewers' eye gazes. The first that comprise the length of the time of the voter first fixation on the AOI (Time to First Fixation, TFF). The second is how many times viewers return to gaze on that AOI (Fixation Count, FC). The third is measures the total time spent gazing at that AOI (Total Visit Duration, TVD). The study examines whether these visual metrics help in identifying which rudiments of the advertisements' segments were most probably to influence the choice of the voters to change their gaze plots. Although the prior advertising

studies that utilized eye-tracking techniques have investigated these three AOI related metrics in commercial advertisements, this study uniquely applies this technology to a political electoral campaign setting.

1. Time to First Fixation (TFF): The duration, in seconds, from the outset of the advertisement “stimulus” recognition until the voter fixated on the AOI for the first time.
2. Fixation Count (FC): The number of times the voter fixated on an AOI.
3. Total Visit Duration (TVD): The overall duration of all fixations within an AOI.

The thesis is organized into seven main phases as it is shown in the chart below (Figure 1.1)

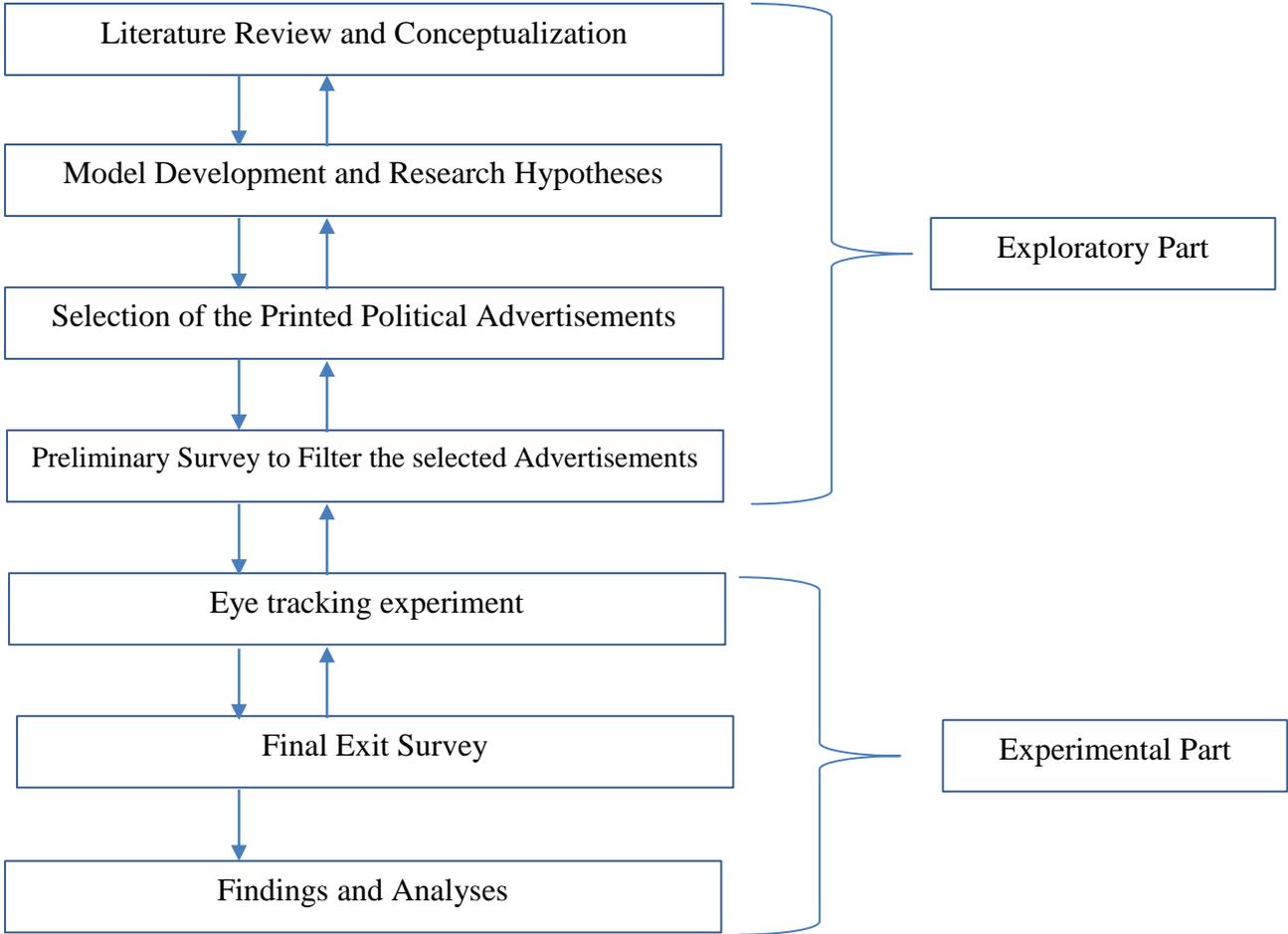


Figure 1.1 : Research process chart.

The first phase of the study focuses on reviewing the literature of political marketing and advertising in addition to eye tracking literature. Then the determination of the variables that will be used in the study. Based on the literature review, gender, age, affiliation and likeability were the variables that have chosen to measure how relevant they are to eye tracking of advertising materials and how connected they are to recalling a visual advertising material and that was followed by the development of hypotheses and model of the thesis. After that, the process of selecting the main printed political advertisements. To do so, the four main Turkish political parties' websites were examined and 8 advertisements were selected for each party – totally 32 printed advertisements. The number of the advertisements was mainly 8 simply because it was rather difficult for the researcher to find more appropriate printed advertisements in equal numbers among the four selected parties. All the chosen advertisements were supposedly chosen to contain the advertisements' three main components or Areas of Interest AOIs i.e. image, text, and logo. (Appendix A).

The final phase of the exploratory part is the preliminary survey that was developed and distributed among university students as representative population. The questionnaire aims at solidifying the authenticity of the examined advertisements by letting the voters themselves selected the advertisements to be examined and the researcher tended to relatively balance a number of variables such as the ratios of the respondents' political backgrounds and affiliations, their gender, and voting preferences. To illustrate, initially the sample consisted of a sample of 370 students, whom the researcher visited on campus and personally attended their classes displaying the filtering questionnaire (Appendix A) that was translated into Turkish language to facilitate understanding and communication.

The second part of the study is the eye tracking experiment section where the participants have been received in the place of the study. The entrance survey was given to each participant and later he or she were invited to get to the room of the experimental study. The study has been conducted in a dedicated room accommodating the Tobii eye tracker. The respondents have been seated approximately 60 cm away from the screen. The eye tracker was calibrated using five points on the screen and takes approximately one minute. The 16 selected

printed advertisements will be sequentially displayed. After that, an exit survey was conducted. After conducting the experiment of the eye tracking session, respondents were introduced to the exit survey. The exit survey is divided into four sections: The first section aims to examine the respondents' ability to recall the slogans and messages of each party's displayed advertisements.

Unaided recall or free recall: subjects were asked to write down all the claims they could remember in the advertisements they watched. The second section aimed to measure the subjects' abilities in aided recall or cued recall experiments: (the claims given to the participants and they attributed them to the corresponding parties. In other words, they match the slogan with the party that used it. The third section was to measure the respondents' abilities in unaided recall test of the printed advertisement. The test was conducting by asking the subject to recall the advertisements that they have seen in the advertising from a randomized list of 32 advertisements, including the 16 that were displayed and the subjects will be asked to try to pick out the 16 advertisements they have just watched. The fourth section was to measure the likeability of the advertisements. To do that, participants recorded their responses on 5-point Likert scales.

These procedures, which were modified from earlier studies of memory for advertisements (Colman and Grimes 1989; Heflin and Haygood 1985; Thorson, Friestad, and Zhao 1987), have been managed in order to help the researcher test hypotheses related to recall and likeability variables and its probability of any correlation with the gaze fixations of the respondents on the three Areas of Interests (AOI). The short post-study (Exit) questionnaire was administered in an interview session by the moderator to make sure that the activities and measures of recall and likeability are not intermingled or confused. In other words, the facilitator was asked to present each section of the questionnaire separately and in a particular order so that respondents cannot check their responses.

1.4 Organization of the Thesis

The thesis is organized as follows: In Chapter II, the literature of political marketing and advertising is reviewed, previous studies utilizing eye tracking approach were thoroughly reviewed. Based on the literature review, conceptual model is developed.

In Chapter III, a brief review of the literature of eye tracking approach and its relations to customers' mental attitude based on their age, gender, affiliation and likeability is presented. Then the rationale for the experimental study of eye tracking is proposed, variables are presented and hypotheses are formulated. Finally, the eye tracking experiment is performed, hypotheses are tested and discussion, findings and conclusions are presented.

2. THEORETICAL BACKGROUND

2.1 Advertising in the Realm of Political Marketing

According to Harrop (1990) political marketing is not merely about political advertising or partisan announcements or even the speeches of election campaigns; it is rather comprehensively covering the entire domain of the positioning of the political positioning in the arena of an electoral market. Kavanagh (1996), however, argues that political marketing as electioneering, i.e. a set of policies and tactics to follow when studying communities' public opinions before and during an election campaign. On the other hand, political marketing is the field that aims to develop election campaign communications and to evaluate their influence (Scammell, 1995). For Maarek (1995) political marketing is rather "a multifaceted process in which the product of a more worldwide work involves all the variables of the politician's partisan communiqué" and accentuates that "political marketing' is the wide-ranging method of 'political communication'.

It has often been maintained that 'marketing' tools and approaches in the field of politics is nothing new (Perloff, 1999; Baines and Egan, 2001). The new transformation in the past two centuries is the sophistication of political marketing management that includes not only political parties and official candidates but also governments, political groups and lobbying establishments (Harris et al., 1999; Nimmo, 1999; Harris, 2001). They all try to integrate their use of marketing and advertising tools in a comprehensible marketing scheme to achieve their partisan goals (Newman, 1994; Dermody and Scullion, 2001). Political marketing activities have moved from exclusively being a communication tool to an incorporated instrument of handling general politics, policy expansion, political activism (Nimmo, 1999), or even governing (O'Shaughnessy, 2003).

Since the time Dwight Eisenhower decided to run for the American presidency in 1952, advertisements have proved their effective and imperative role among all other means of political marketing (Diamond and Bates 1992). Before 1960, the 'hard-sell'

publicity was the dominant strategy. The strategy principally depends on reiterating the broadcasted speeches for numerous times in order to influence electors' attitude. A significant transformation that later dominated the method of persuading the constituents and was the 'soft-sell' promotion. Its chief purpose is to influence the electors by means of emotional appeals and sentimental messages. However, Schwartz (1973) contended that people have firm inclinations toward political matters and the role of advertising is to arouse the voters' emotions and provide them with a mentor or guidance that maintain connecting them with principles and values that subconsciously formulate positive images (Kern 1989). Thus, forming these images for specific participants in the electoral race definitely affects electors' emotional relation with the political candidates and their parties (Abelson et al. 1982; Cwalina and Falkowski 2000). The formulated image is a specific type of depiction formed for a precise purpose by arousing identified associations that maintain further social, psychological, moral or personal values. Those values eventually enrich voter's emotional insight.

The prominence of this image is that it ensures further emotional response of the promoted object without damaging its essence. In addition, it assures a stronger emotional reaction for the publicized goal while maintaining its principle. As confirmed by a plethora of studies conducted in several American states, political publicity unequivocally impacts elector's perception of the candidate. The constituents' perception of their candidate results in reorganizing priorities of characteristics that eventually form the candidate's perceived image (Kaid and Holtz-Bacha 1995).

Some studies focus on discussing advertisement's impacts on candidate's image. However, there is less effort to explore the relationship between the factors of political marketing; the produced image, the elector emotional feelings toward the candidate, and their influence on the voting decision. Discussing these factors separately does not offer an adequate explanation of voters' behavior. Hence, observing advertisements might result in diminishing or rather improving candidate's estimation and valuation, yet this valuation does not necessarily address the outcomes of the voter's choice (Kaid and Chanslor 1995; Kaid and Holtz-Bacha 1995). Therefore, there has been a need to discover the direction in which

advertisements affect the electors' perceived image of the candidates. Causal relationships between cognitive–affective elements (candidate image); feelings toward the candidate; intention to vote; and decision to give vote have been explored (Cwalina and Falkowski, 2000) Thus, the literature of political advertisement offered a host of studies and models which measures and explores different kinds of correlations between these constructs and their impact on the effectiveness of the advertising campaigns.

2.2 Advertising Effectiveness

Principally, advertisers consider a number of variables when evaluating the effectiveness of their advertising materials. Customer's attention is a primary dominant variable that has been discussed in various studies (Wedel and Pieters, 2007). However, attention alone is not adequate hence people are different in their levels of interest, attention and perception. It is not necessarily true that people remember everything they notice (Lang, 2000). In order to maintain an effective advertising message, advertisers should focus more on both customers' attention and their cognitive processing mechanism (Molosavljevic and Cerf, 2008). Some studies, however, concluded that an outstanding stimulus matched with frequent exposure will most probably lead to high levels of customers' attention (Wedel and Pieters, 2010). Yet, recent studies claimed it is rather difficult to draw the attention of customers in highly competitive advertising milieu such as the virtual world of the internet (Fredricksen, 2011).

Fredricksen (2011) stated that businesses spend billions of dollars on internet advertisements to regain their segments through online advertisement. However, advertisers realized that the numbers of visits to a particular advertising banner is not satisfactory when compared with the total number of the users who visited the website, that hosts the advertisement. Click-Through Rate (CTR), which is the ratio of internet surfers who click on a particular advertising banner compared with the total number of the users who visited the website. CTR is commonly applied to measure how successful online banner or advertising campaigns are. It is also used to measure the usefulness of email campaigns.

Advertisers realized the disappointing results simply because less than one out of 1000 visitors tend to click on the advertising banner Fredricksen (2011). Thus, the effectiveness of the whole online advertising campaigns has to be reexamined. There seems to be a huge difference between customers' understanding of advertisements and advertising agencies' understanding. Interestingly, advertisers insist to spend more on these advertisements despite their realization that there is a very low visiting rate. This can only be clarified by knowing that lots of advertisers believe that exposing customers more to advertisements might eventually affect their preferences or even behavioral choices (Yoo, 2004). Unconscious processing of advertising materials and its impact on implicit memory and attitude toward the brand have been discussed by Dreze and Hussher (2003), who conclude that advertisers' understanding of 'exposure' should be distinguished from customers' viewpoints. They found that due to the huge competition and the enormous number of advertisements, customers tend to habitually avoid paying attention to the advertisements.

2.2.1 Components of advertisements' effectiveness

Throughout the past three decades, numerous facets on the effectiveness of advertisements have been examined and deeply scrutinized. Some of those elements is the advertisement genre (Barclay, Doub, and McMurtrey, 1965; Schwerin, 1958; Schwerin and Newell, 1981); the participants' mood (Axelrod, 1963; Goldberg and Gorn, 1987; Kamins, Marks, and Skinner, 1991, Schumann, 1986); the advertisement congruity (Bello, Pitts, and Etzel 1983; Hansen, Barry, Reed, and McGill, 1976; Horn and McEwan, 1987; Johnson, 1981; Kamins, Marks, and Skinner, 1991; Lambert, 1980; Murphy, Cunningham, and Wilcox, 1979); the participants' excitement (Singh, Churchill, and Hitchon, 1987); the respondents' attitude or liking for the advertisement (Clancy and Kweskin, 1971; Leach, 1981; Priemer, 1983; Schumann, 1986; Thorson and Reeves, 1986; Twyman, 1974); participants' drive for termination (Kennedy, 1971); the emotional arousal of the participant (Pavelchak, Antil, and Munch, 1988); the impact or appeal of the advertisement (Television Audience Assessment, 1984); and above all the respondents' involvement (Bryant and Comisky, 1978; Colman, Grimes, and Wober, 1989; Lloyd and Clancy, 1991; Park and McClung, 1986; RBL, cited in Johnson,

1992; Siebert, 1978; Soldow and Principe, 1981; Thorson and Reeves, 1986; Thorson, Reeves and Schleuder, 1985).

However, this body of literature is riddled with seemingly inconsistent conclusions mainly related to the respondent's involvement, which was the major concern for researchers. Some studies have concluded a constructive, simplifying effect of advertisement context on recall or perception of associated advertisements (e.g., Lloyd and Clancy, 1991; RBL, cited in Johnson, 1992), while other works have concluded undesirable upshot (e.g. Bryant and Comisky, 1978; Colman, Grimes, and Wober, 1989; Norris and Colman, 1992; Park and McClung, 1986; Soldow and Principe, 1981; Thorson and Reeves, 1986; Thorson, Reeves, and Schleuder, 1985).

The inconsistency may be partly explained by the process of selective exposure in the studies reporting a positive relationship (Schumann and Thorson, 1987; Thorson, Friestad, and Zhao, 1987). The contradictory results could also be relatively clarified by the diverse means in which involvement has been operationalized in the various studies (Schumann and Thorson, 1987; Thorson, Friestad, and Zhao, 1987).

There is clear discrepancy related to the operational definitions of independent variables, particularly of the variable of involvement. Involvement has been measured using a range of rating scales attached to adjectives as 'absorbing'. A question such as "How absorbing was the segment?" answers or choices given are interesting and involving (Bryant and Comisky, 1978), suspenseful (Soldow and Principe, 1981), irrelevant, very meaningful to me, it matters a lot to me, it is interesting, important, vital, and essential (Park and McClung, 1986).

Operationalizing the construct of involvement differed in various studies. For instance, Colman, Grimes, and Wober (1989) operationalized it with reference to enjoyment value, informativeness, perceived quality, and emotional arousal potential. However, other studies operationalized depended on the standard UK audience appreciation (AI) index to operationalize the construct of involvement and they adopted the Broadcasters' Audience Research Board ("It touched my feelings"). Whereas, Lloyd and Clancy (1991) operationalized it by setting a set of scales jointly categorized as "entertainment value" that were thought to measure different characteristics of respondents' emotional states.

It is well established that those scales were utilized to operationalize or measure the variable of involvement. Nonetheless, it is a valid point to claim that various studies tend to measure different context effects other than the variable of involvement, and this may clarify the unreliable reversing confusing tendencies in the conclusions. The study of Bryant and Comisky (1978) might be considered the only exception to this. They claimed that their evaluation to measure involvement was highly valid and reliable (Bryant, 1974), and the scales of Park and McClung (1986) measurements were adapted from Zaichkowsky (1984).

2.2.2 Measures of Advertising Effectiveness

Humans have a restricted cognitive power to use for converting perception and then re-claiming the perceived knowledge from surrounding environment (Lang 2000). In this sense, encoding signifies the assortment of stimuli that will later be kept as conceptual depictions of the surrounding milieu, while retrieval concerns mental activation of this information. When cognitive properties are put under stress, for instance, because of inadequate enthusiasm, prospects, or aptitude to handle information, then encoding and retrieval suffers (Lang 2006). There is a plethora of measures of advertising effectiveness in the literature of marketing, though they tend to be commonly recall- or persuasion- focused, including measures such as likability (Leather, McKechnie, and Amirkhanian 1994), attractiveness (Wells 2000), attitude toward the brand and recall (Higie and Sewall 1991).

Therefore, it is still challenging to determine the precise factor that determine the effectiveness of an advertisement hence advertising is a unique field in the business process that is utterly designated as ‘creative’. It is well established that creativity is a substantial element of effective advertisements and that demonstrates the emphasis placed on innovation in the advertising process. However, though innovation has unquestionable significance in advertising, there have not been efficient or ample studies on the relation between creativity and advertising effectiveness.

Advertising agencies feel proud when receiving prizes on the originality of their advertisements rather than their brands performance (Mokwa 1986). Previous studies focused on discussing the subject of creativity differently; some concentrated on the systematic measures of creativity (Barron 1988; Kneller 1965; White and Smith

2001), while others comprehensively explored the strategies and tactics of creative advertising (Blasko and Mokwa 1986). Nonetheless, there is still a minority of experimental studies on innovative marketing and advertising that have been accomplished (Kover, Goldberg, and James 1995; Pieters, Warlop, and Wedel 2002; Stone, Besser, and Lewis 2000; White and Smith 2001). Therefore, all previous studies did not provide a thorough interrelated understanding or view of creative advertising.

Most importantly, few research works addressed the relationship between creative advertising and its effectiveness. Consequently, while the previous studies have made a vital contribution in various domains, the effectiveness of innovative advertisements is not much better understood now than it was 40 years ago. This study aims to utilize the eye-tracking technique that would help researchers address this gap by focusing on the voters' gaze plots and how voters' eyes are moving when seeing a printed advertisement. The effectiveness of the creative design of the advertisement would be measured by the percentages of the gaze plots on the three different Areas of Interest and how that will affect their recall and attitude toward the visual material of different parties.

Studies in the late 1980s through the 1990s turned to generate more developed explanations of creativity (Barron 1988; MacKinnon 1987) and by that time, studies started to conduct empirical examinations on the influence of creative broadcasting. In those studies, some the operationalization of creativity started to be formulated as advertising award winners were represented as a proxy of creativity (Kover, Goldberg, and James 1995). This method of operationalization was dependent on the idea that creativity is actually an individual viewpoint best estimated by specialists (Amabile 1982).

Accordingly, when the assessors or juries of prizes decide that the commercial is adequately original to be granted this medal, their decision is considered as an accurate criterion of creativity (White and Smith 2001). Researches have employed assessors to categorize publications as creative or original (Ang and Low 2000; Pieters, Warlop, and Wedel 2002), however, such evaluators are not usually experienced, some of them were typically students and thus they might not be the

best evaluator of original advertising as they might lack the enough expertise enough to evaluate.

In fact, this comparatively few number of studies on the purpose and effect of creativity and advertising provides chances to go on studying this topic. Since the industry rewards creativity, the appealing question is doing creative commercials or visual advertisements result in any actual or remarkable profit to the promoted trademark? Do they lead to particular outcomes for the marketing logos such as higher recall rates, better persuasion that may lead to attitude change or improved purchase decisions?

There have been criticisms that advertising awards are like “beauty contests” (Moriarty 1996), concentrated on business-related norms (Kover, James, and Sonner 1997; White and Smith 2001), more than on the real influences (concrete consequences) of the advertisements. This general feeling is replicated in the formation of the effective awards. These awards concentrate solely on the impact of the commercial advertisements, without any valuation of creativity. Due to the great attention to original publicizing, in addition to the censure on the creative advertisements competitions, it is relatively unexpected that very few studies focused its attention on the influence or efficiency of award-winning advertising. Kover, Goldberg, and James (1995) explored the relationship between creative advertisements and customers’ reaction and attitude toward the advertisement. The study considered variables such as liking the advertisement, consistency, originality, and purchase decision as their main standards of effectiveness and they concluded a positive relation between these variables and the final decision.

Similarly, the second study of Ang and Low (2000) aimed to examine the link between creative commercials and the norms of effectiveness such as customers’ attitude toward the advertisement, attitude toward the brand, and purchase intent. To classify advertisements as ingenious, the researchers defined them in terms of novelty, meaningfulness, and emotional content. The researchers concluded that creative advertisements, as they described them, were compatibly realized as more convenient, and, minimally, produced further affirmative sight of the brand then improved purchase decision.

Finally, the study of Stone, Besser, and Lewis (2000) aimed at navigating any correlation between creative advertisements and the likability of that advertisement. For judging creativity, respondents (undergraduate seniors studying advertising) estimated the novelty of commercials that were formerly classified by common people as announcements they mostly liked or disliked. To be arbitrated as a creative commercial, 80% of the students had to approve that the advertisement was really innovative. All in all, the study concluded that 70% of the liked advertisements were refereed as innovative, while only 46% of the disliked advertisements were arbitrated to be creative. Thus, this study links likability to advertisement creativity. Generally, studies suggest an interest in the importance of creative advertising but with some quantifiable effects. While some studies have methodological criticisms (i.e. use of students as judges of creativity, small sample sizes), there are some solid signs that innovative advertising provide effectiveness to the brand image.

It is undoubtedly a problematic arena to measure the responses of people to advertisements. There are various attempts that aimed at measuring people's reactions to advertisements. A considerable host of studies aimed to measure solely the variable of memory (e.g., Bryant and Comisky, 1978; Clancy and Kweskin, 1971; Johnson, 1992; Murphy, Cunningham, and Wilcox, 1978; Pavelchak, Antil, and Munch, 1988), other studies tended to measure the people's attitude towards the advertisement (e.g., Axelrod, 1963; Krugman, 2000), whereas studies such as Park and McClung (1986) focused on the measurement of the viewer's involvement. Some studies moved deeper to measure two or more of these variables (Colman, Grimes, and Wober, 1989; Goldberg and Gorn, 1987; Kamins, Marks, and Skinner, 1991; Kennedy, 1971; Lloyd and Clancy, 1991; Schumann, 1986; Soldow and Principe, 1981; Thorson, Friestad, and Zhao, 1987).

Definitely the sophistication of those studies varied. Some studies such as Pavelchak, Antil, and Munch (1988) that considered the test of memory ranged from crude records for the number of recalled advertisements. Whereas studies of Colman, Grimes, and Wober (1989) were more refined and multidimensional. They utilized various tools to measure the memory by aided recall and unaided recall along with tests of recognition.

However, there are still several criticisms of the context literature that mandates caution in reading the conclusions. Many researchers tend to recruit undergraduate students as subjects (Axelrod, 1963; Bryant and Chomsky, 1978; Goldberg and Gorn, 1987; Horn and McEwan, 1977; Kamins, Marks, and Skinner, 1991; Murphy, Cunningham, and Wilcox, 1979; Pavelchak, Antil, and Munch, 1988; Schumann, 1986), and it is known that the responses of the students to advertisements will improbably be the representative of the population as a whole. In many studies, no effort has been made to control for previous experience with the advertisements (Crane, 1964; Goldberg and Gorn, 1987; Horn and McEwan, 1977; Kamins, Marks, and Skinner, 1991; Kennedy, 1971; Lloyd and Clancy, 1991; Schumann, 1986; Soldow and Principe, 1981; Thorson, Friestad, and Zhao, 1987; Thorson and Reeves, 1985; Webb, 1979). Therefore, it is unfortunately concluded that its impact on the processing of advertisements cannot be accredited indisputably to the influence of the advertising context at the time of the experiment. That is why this study paid serious attention to this point when choosing the sample of the study. The researcher made sure that all the respondents are chosen from the different age groups, both genders and based on their different political backgrounds.

Another main criticism that the researcher made sure to avoid is the piloting and testing of the advertisements that are intended to be examined in the experiment. All the scrutinized printed advertisements were selected based on the likeability of a segment of the population of the study. Many studies do not appear to have pretested or examined the advertisements (Crane, 1964; Kennedy, 1971; Murphy, Cunningham, and Wilcox, 1979; Park and McClung, 1986; Soldow and Principe, 1981; Schumann, 1986; Thorson, Friestad, and Zhao, 1987; Thorson and Reeves, 1986; Webb, 1979). Advertisements should be examined in order to enable the assortment of the advertisements that offer acceptable range of scores on the targeted dependent variable that is intended to be measured. One protuberant research considered the sample of the examined advertisements based on the construct of suspense. However, the variable of suspense was not essentially scrutinized or measured when the study was conducted (Soldow and Principe, 1981).

Some studies were not committed to the commonly acknowledged 5% probability level for statistical significance (Horn and McEwan, 1977; Kennedy, 1971; Murphy,

Cunningham, and Wilcox, 1979; Schumann, 1986), while other studies were unable to report any quantitative tests of variances or correlations to support their analyses and conclusions of their studies (Barclay, Doub, and McMurtrey, 1965; Steiner, 1966). Lastly, researchers such as Barclay, Doub, and McMurtrey, 1965; Clancy and Kweskin, 1971; Krugman, 1983; Pavelchak, Antil, and Munch, 1988; Rogus and Griswold, 1989; Steiner, 1966) have adopted the survey procedure. Although their methodology is naturalistic, one of its main deficiencies is the lack of validity. The timing of the experiments and their relations to the respondents' prior familiarity with the advertisements has not commonly been cautiously organized and rather in some cases they were not even reported.

Advertising agencies are generally keen on their advertisements' perception among their audience. Various studies examined advertisements' effect on memory and participants' awareness among contesting or associated advertisements (Colman and Grimes 1989; Horn and McEwan 1977; Kennedy 1971; Schumann 1986; Soldow and Principe 1981; Thorson, Friestad and Zhao 1987). Customers' perceptions of the advertisements were measured by the set of five seven-point rating scales: (I do not remember this advertisement at all / I remember this advertisement very well), (I liked this advertisement / I did not like this advertisement), (I think the advertisement was poorly made / I think the advertisement was well made), (I attended closely to the advertisement / I did not attend closely to the advertisement), (The advertisement did not make me want to buy the product / the advertisement made me want to buy the product).

It has been claimed that memory-based activities such as design recall do not essentially offer an unpretentious indication of the mental or cognitive processing that experts employ when it is juxtaposed with activities of behavioral prediction and decision making that necessitate a more accurate reaction (Ward et al., 2006; Williams and Ericsson, 2005; see also North, Ward, Ericsson, and Williams, 2011; North, Williams, Hodges, Ward, and Ericsson, 2009). Therefore, an inspection into the degree to which recall activities can offer interpretation to the fundamental strategies of advertisers bridge the gap of implications theoretically and practically.

To sum up, this study intends to avoid the shortcomings of the previous research and aims at providing a clearer picture of the evaluation of advertisements' effect and design. The participants' political affiliation was considered as a variable that is predicted to affect the respondents' attention, memory activity and attendance to the examined advertisements. The laboratory study of the eye tracking method will be used in preference to a survey methodology simply due to the fact that it saves a genuine chance to manage the context variables and other moderating or intervening factors that could affect advertisement effectiveness. The advertisements examined in this study were chosen, following a large-scale pretest investigation, in order to genuinely involve the respondents in ranking the advertisements so that it is much more authentic. The pretest indicated that the advertisements did not differ sharply.

Another extra methodological enhancement was the participation of the respondents who were carefully and deliberately chosen from the overall population of Istanbul from different age groups, with different political backgrounds and from both genders. This by return is likely to enhance and robust the external validity of the study in contrast to those that have been limited to only university students. Eye tracking as a unique technique used to measure the movements of respondents' eye gazes on the elements of the advertisements had never been seen before by any of the participants. This tool facilitates the objectivity of the test and the analysis as it minimizes the interference of the personal judgement of the subjects. In other words, it mechanically measures the attention of the subjects regardless their own feelings or verbal declarations that might night reveal their real feelings or judgments. It also solved the ubiquitous problem of infection from previous experiences.

Moreover, the sophisticated measures of memory test by recalling the advertisements content and figure it from others and connecting the results with the results of the eye tracking results is a genuine addition to the literature.

2.3 Effectiveness of Political Advertising

Researchers have genuine challenges to determine the effectiveness of political advertisements due to the intermingled factors that may affect the factor of effectiveness. The task can be more complicated in political marketing. Media

markets is utterly different when the advertising campaign is political (Huber and Arceneaux 2006). Reckoning the impact of political advertising or electoral campaigns' appeals is one of the permanent topics in the study of political marketing. Prior studies proposed that political advertising in particular used to have less impact on the attitude of constituents in any voting process (Lazarsfeld, Berelson, and Gaudet 1944). However, other researchers suggest that political advertising and political campaigns do have major impact on the attitude and rather the behavior of voters (Ansolabehere and Iyengar 1995; Bartels 1993, 1996; Freedman and Goldstein 1999; Goldstein 1997; Popkin 1991; West 1993; Zaller 1992, 1996).

Despite all the controversy over the importance of advertising and its relevance to effective political marketing, there is still a question regarding the context and circumstances where political advertising makes a difference by its effectiveness (Achen 1992, 2002). This question includes the impact of political advertising on decisions or at least attitude of voters in an election process. To build an effective political advertising campaign, researchers suggest that voters' expectations about a specific candidate have functional implications (Shepsle 1972; Brady 1993). In other words, voters' hopes play an essential role that should be taken into account of the advertising strategists and experts.

One common topic in the field of measuring political marketing advertisements is the candidate spending and its relation to the outcome of the electoral campaign. Researchers have developed descriptive inferences about the influence of the expenditure of the candidate and the result of the elections (Green and Krasno, 1990; Jacobson, 1992; Gerber, 1999); other studies have focused on the influence of money spending on the constituents' knowledge and affect (Coleman and Manna, 2000; Coleman 2001). Others found that estimating voters' expectations is key to render political advertising effectively. Right understanding of the voters' expectation would definitely lead to better treatment of the message that the advertisers tend to send (Brady and Johnston 1987). A more interesting topic is how effective advertising campaign influence the learning process of the voters (Bianco 1998; Fiske 1993). Initially, people classify their nominees according to various factors. Voters' irrational first impressions are key to their attitude though these impressions can later be updated by more understandings and discussions matched with effective

advertising campaign, which eventually may lead to a negation or sometimes a confirmation of voters' initial impressions (Fiske and Neuberg 1990). Fiske and Neuberg (1990) conclude that voters learn more about a certain political advertising appeal quickly, they are more apt to disregard future advertising that may affect their favorability of a particular candidate.

Falkowski and Cwalina (2005) introduced a causal pattern of the effects of persuasion appeals as well as allusions utilized in political publicity. Their study was carried out to validate their paradigms and was applied on the presidential elections in Poland. They operationalized the image of the presidential candidate by using semantic differential scales. They found that it is possible to detect the candidate's characteristics which emotionally arouse the voters. The findings indicate that there is a causal connection between the political nominee's image and the tendencies formed toward them. Largely, it could be claimed that the approach of the suggested study was based on a certain scheme to direct or influence elector's reaction depending on advertisements' manipulations in an effective way. By means of commercial marketing, the political advisor can weaken or reinforce the candidate's influence through operating the preferred and the previously mentioned features of the candidates' image. As a result, defining a causal link between the image of the candidates and the attitude towards them advertisements to develop promotional means that can eventually affect voters' behavior.

2.3.1 Political Advertisements and Voters' Behavior

The relationship between advertisements and the voters' behavior represented in the outcomes of any electoral battle is a major concern for advertising experts in political marketing. According to Gaddie and Bullock (2000), the relation between political advertisements and election outcomes is the chief principle that researchers focus on. Huber and Arceneaux and others (2006), conducted a study on the effects of publicity campaigns in presidential elections. In their study, they concluded that there is a direct correlation between collective vote share and the airing ratios of radio and television advertising appeals. Specifically, they found that the rate of advertisements' disclosure positively affected the vote share in favor of the candidate of the broadcasted advertisement.

On the other hand, West (1992) found that the more a presidential nominee maintains a disclosure of more electoral advertisements, the better his vote share would be. His study found that individual-level survey studies support the same hypothesis. In other words, in his study on Senate election of 1994, he found that political advertisements positively influenced a number of factors such as candidate recognition, favorability, electability and the vote's ballot. Likewise, in their study on the 1996 national election, Goldstein and Freedman (2002), they pooled the data of the voters' responses and the advertisement content along with the rates of exposures to advertisements of the incumbent and the challenger. They concluded that exposing the voters to the advertising appeals of the competitor would definitely affect the vote intention negatively, while exposing the same voters to the candidate's advertisement will undoubtedly lead to an augmented probability of voting for the candidate.

Other studies' main trend is to concentrate on voters' knowledge (Brians and Wattenberg, 1996), campaign interest (Freedman, Franz, and Goldstein 2004), and the inclination to vote (Brooks 2006; Clinton and Lapinski, 2004). Even though there are continual calls to explore the connection between political advertising and vote share there are hardly few surveys focusing on presidential and parliamentary elections advertisement gaps (Huber and Arceneaux 2007; Goldstein and Freedman 2002; Shaw 1999; West 1994).

There is an ongoing debate between scholars of political marketing over two main points; mobilization (Ashworth and Clinton 2006; Freedman et al. 2004; Goldstein and Freedman 2002; Huber and Arceneaux 2007) and persuasion of an advertisement campaign (Brader 2005; Franz and Ridout 2007; Huber and Arceneaux 2007; Iyengar and Simon 2000; Johnston et al. 2004; Shaw 1999). It is argued that the impact of these two elements; mobilization and persuasion, could summon influential effects on the election results in case they originally had effects on the individual level. Political advertising campaigners are convinced that effective advertising is a crucial factor that boosts candidates' chances to win the election and that is manifested by the generous spending of millions on advertising campaigns (West 2005) and the consulting industry pushes candidates to spend extravagantly on televised and radio broadcasted advertisements.

2.3.2 Likeability of Advertisements

This study focused on the participants' likeability of the presented visual stimuli which were thoroughly demonstrated in the literature review as a tool to measure the effectiveness of the advertisements. It is well-established that it is increasingly hard for advertisements to grab the attention of their viewers, and successively affect their intentional behaviors (Robinson, 1997). Generally, audience are not willing to waste time and effort gazing at visual stimuli (Collett, 1994; Hollis, 1995). Undoubtedly, it has become conventional for people to dislike the manipulative tools or what they call deceiving convincing mechanisms (Agee, 1997). Audience reckon advertising materials as an undesirable interruption and a source of annoyance. This often results in deliberate effort to avoid them (Byrant and Zillman, 1994; Bishop, 1997) and rejection to react to advertising appeals (Cummins, 1996). An advertising approach, which is often recommended as a tool of managing this is known as 'likeability' (Sacharin, 2001). Advertising materials, which are liked, are believed to be high-class advertisements at intersecting what is known as the scanning phase of the advertising stimuli. Increasing processing and generating positive decisions of the advertising appeals and the authentic brand.

For decades, it was argued that the attitudes and standpoints the audience have towards advertising visual materials were irrelevant. All that was pondered to be significant was how consumers perceive a product or brand (Fam, 2006). The likeability of the advertising material was inferior to the recall and brand attitude (Franzen, 1994). It is now steadily acknowledged that likeability of an advertisement has a genuine significant role in the impact of the advertisement on consumer behavior (Biel and Bridgewater, 1990; DuPlessis, 1994a). Liking an advertisement has even been presented to be the solidest factor connected to persuasion and buying behaviors (Haley and Baldinger, 1991), and is therefore perceived as a very essential tool of advertising effectiveness, which has been researched by several methods. For decades, it was measured by focusing mainly on recognition, recall, opinion, brand-awareness, associations and ratings (e.g. Lucas and Britt, 1963).

Nonetheless, for many researchers the impact of effective advertisements has to ultimately be a measure of sales, and whether the budget allocated for advertising

campaigns is matched by the consumer response and sales figures (Wells, 1997). All other elements of the effective sales are considered either channels or barriers between the advertisement and purchase (Colley, 1961; Schultz, 1990), but sales figures are the primary criterion.

The literature on advertising likeability can be categorized into two parts. Firstly, what is known as profile studies that intends to determine how customers think or feel after viewing an advertising material. These studies have followed the methods of asking target audiences to describe advertising materials by selecting adjectives that describe the viewed materials (Aaker and Bruzzone, 1981; Biel and Bridgewater, 1990; Stayman, 1990; Greene, 1992) or statements (DuPlessis, 1994). The second approach involves studies which intend to assess the attitude of the customers towards the advertisement. The studies focus on determining attitude construct; in terms of affective and cognitive responses, and links with attitude towards the brand (Batra and Ray, 198; Lutz, 1985; MacKenzie, Lutz and Belch, 1986; MacKenzie and Lutz, 1989).

Cognitive theories (eGreenwald and Levitt, 1984; Tsal, 1985) state that emotional processing is always mediated by reasoning. Fishbein and Middlestadt (1995) propose that attitude towards an advertisement is a result of cognitive paradigms and views, which in turn envisage consumer intents and behavior. Conversely, emotion is rather taken as a pivotal element in formulating attitudes (Morris, Woo, Geason and Kim, 2002). Emotions are thought to have a direct impact on intentional behavior (Allen, Machleit and Kleine, 1992). The attitude toward the advertising materials has been perceived as an affectionate response (Zhang, 1996), which signifies the positive sentiments towards the advertisement; where affect is independent of cognitive variables (Machleit and Wilson, 1983). It has therefore been acknowledged that attitude toward an advertisement is formed out of a mixture of both cognitive and affective elements (Morris et al., 2002). Therefore, it has been argued that advertising likeability and the attitude towards the advertisement represent the same construct (DuPlessis and Foster, 2000), although their scrutinizing may vary.

Pre-testing, is the tool that advertising specialists can foresee how operative an advertising campaign can be (Jones, 1995). It is based on the investigation of

feedback from target addressees, before the advertisement is published, as a way of reckoning how successful it can be and to find potential enhancements. Pre-tests have conventionally investigated elements such as persuasion, salience, awareness and recall, (Wells, 1997). In scientifically controlled studies, likeable advertisements have been recognized to be up to two times more effective than the average advertisement (Biel and Bridgewater, 1990). Studies have even looked back at previous examples of successful advertisements to establish the inescapable impact of likeability (Thornsen, 1991; Jones, 1995). Nonetheless, some question persists; whether likeability is the best factor to determine advertising effectiveness (Hollis, 1995; Jones, 1996; Rossiter and Eagleson, 1994), it is unquestionable that advertisement likeability is significantly useful; not just because of its robust relation with advertising effectiveness and sales, but also because of the simplicity of the measure (Spaeth Hess and Tang, 1990).

Concisely pinpointing the different characteristics which make an advertisement likeable is currently an unreciprocated question, of course despite its unequivocal significance. Instinctively, it is thought that likeability of an advertisement is aroused purely through entertainment; yet, some studies revealed that likeable advertisements are as likely to be informatively revealing as they are to be entertaining (Haley and Baldinger, 1991). Therefore, it is argued that the fundamentals of likeability are in fact a multifaceted concept: likeability of an advertisement is presented as a multidimensional construct, with both affective and cognitive components (Alwitt, 1987). Recognizing and appreciating these numerous elements, and their associations, are a very appealing prospect for an advertising specialist, as a way of envisaging the extent to which an advertisement can be liked. That could ultimately have a direct impact on its success.

Various studies have attempted to determine what elements and features inspire the likeability of an advertisement. Biel and Bridgewater (1990) were the pioneers to manifest likeability's relation to perceptual attributes of the advertisement. Factor analysis, on responses to 80 advertisements that were rated on 26 characteristics, revealed five factors that were linked with likeability: 'ingenuity'; 'meaningfulness'; 'energy'; 'rubs the wrong way'; and 'warmth'.

The variables of ‘meaningfulness’ and ‘energy’ were the two sturdiest predictors of likeability. Aaker and Stayman (1990) followed a similar approach and reported the same five factors as Biel and Bridgewater, although phrased somewhat differently. Franzen, (1994) added four additional attributes: ‘believable’; ‘confusing’; ‘familiar’ and ‘dull’. There is also reliable evidence of a significant relationship between likeability and involvement or viewer participation and engagement. Biel and Bridgewater (1990) suggested that ‘involvement’, along with ‘perceived relevance’, links likeability to persuasion in the first place. There has been, nonetheless; confusion in opinions; where Hollis (1995) proposed that likeability is a side of the multifaceted and sophisticated construct of involvement; while DuPlessis (1994b) presented involvement as a dimension of likeability. Involvement has also been misrepresented for ‘entertainment’ (Hollis, 1995) and a universal measure of attitude (Thorson, 1991).

These different constructs in various studies therefore manifest the fact that there are various magnitudes that are dependably linked with advertising likeability, and can help to understand how positive sentiments towards an advertisement are reached. However, it is still controversial how to measure the likeability of an advertisement. Advertising literature contains extensive studies but they have not robustly concluded specific factors that contribute towards likeability of advertising materials. It seems improbable to ever envisage an exact recipe or formulation can ever be offered. In fact, there are signs that likeability is dependent on a host of other factors, such as product category (Biel and Bridgewater, 1990) and culture (Fam, 2006) and other variables.

2.4 Neuromarketing Approach to Advertising Effectiveness

Since the advent of the neuromarketing approach in 2002, its prominence is continuously increasing and its distinction is extending over businesses particularly among advertisers (Morin, 2011). There is definite indication suggesting that people are generally unable to reasonably reveal their genuine intentions or express their opinions for behavior consciously or unconsciously (Vecchiato, Astolfi, De Vico Fallani, Toppi, Aloise, Bez, and Babiloni, 2011). Although neuromarketing may not completely supersede conventional research approaches, there is high evidence that

emerging tools such as eye tracking can give more insight and indepth to understanding people's preferences and regions of interest (Keller, 2008; Venkatraman, Clithero, Fitzsimons, & Huettel, 2012; Adolphs, Tranel, Koenigs, and Damasio, 2005).

Currently, physical and virtual markets are overloaded with countless similar and yet slightly different products or services. Therefore, it became a key challenge to continuously innovate and distinguish products and services (Leonard, and Rayport, 1997; Dapkevičius, and Melnikas, 2011). To meet custoemrs' authentic need, researcher need to thourolouly understand their minds and metnal proceedings and reasoning by analyzing the understanding mental processes taking place when attitudes are formulated and intentions are set up. Here comes the role of neuromarketing research and its tools that are very promising (Kenning and Plassmann, 2008; Huettel et al., 2009). The conventional marketing approaches can be defined as an tool which tries to integrate products and people by traditionally comprehending and analyzing human behavior via traditional ways and tools such as focus groups, questionnaires and surveys (Ariely, and Berns, 2010). However, when taking into account the development from marketing to neuromarketing, fundamentally, the key quesiton which completely has become different is the methods or the activities in which information about consumers' desires, needs and preferences is attained (Ariely, and Berns, 2010).

In recent years, various studies have progressively used a multidimensional principle in their methodical development, which has steered new understandings and findings (Javor, Koller, and Lee, 2013). The usage of approaches of neuroscience has multiplied importance in several marketing functions and has led to greater insights of human behavior. According to Martinez and others (2011), neuromarketing is the output of the assimilation of three various fields of scientific research: neurology: a science that concentrates on analyzing and understanding the mind and brain of humans; cognitive psychology: focuses on exploring the relationship between human brain and their attitude and behavior; marketing: the field of research that focuses on developing new, lucrative output including products and services that satisfy consumers' various desires and needs.

Thus, neuromarketing focuses on researching and analyzing consumers' attitudes and behavior. It also aims at measuring people's brain various reactions to marketing stimuli. The progress made in this field basically is reliant on the development of several branches of science: neuroscience, applied physics, and computer science (Bercea, 2013). Moreover, Neuromarketing employed to study consumer behavior and investigate purchase decision processes (Glimcher, Camerer, Fehr, and Poldrack, 2009). It also aims to better understand the impact of psychological facts and sentiments and what effect they have on consumers' purchasing behavior. It also tends to offer a more inclusive service in measuring the effectiveness of marketing measures and tools, such as advertising, the rivalry over drawing the attention of various types of consumers, and the enclosure of products (Reimann et al., 2011).

Neuroscience, when applied to marketing, save an opportunity basically to researchers to have a deeper insight in the minds of customers and the role of feelings in decision-making and intentional behavior. Thus, it allows the development of more operative mechanisms for activating and stimulating these feelings (Vashishta and Balaji, 2012). Conventional methods, such as interviews, surveys, or focus groups assume that customers are able to describe their own mental processes. However, according to some researchers, the purchase decision-making process happens subconsciously (Butler, 2008; Fugate, 2008; Hubert and Kenning, 2008; Morin, 2011; Page, 2012). In addition, there are abundant variables that stimulate participants to filter the revelation of their feelings about motivation, time cost, or peer pressure (Morin, 2011). Therefore, the observation of customers' visual attention plays a significant role to substitute the conventional methods to understand the dynamics of customers mental activities.

There are numerous brain regions related to vision. The processing of visual attention begins with eyes gazes. According to Russo (1978), eye movements can be considered good behavioral signals for evaluating visual attention and information acquisition because they are thoroughly related to cognitive processes. Consequently, accepting and observing eye gazes and other patterns in eye movement is a vital part of neuroscience for Neuromarketing.

2.4.1 Eye Tracking as a Neuromarketing Research Tool

The ability to track eye activities has existed for over a long period of time though it was limited to academic field because the technology was not validly manageable or flexible. Lately, nevertheless, eye tracking technology has stretched to be feasible in marketable developments. Eye tracking is now flexibly and straightforwardly applied and used in marketing settings, that many unique applications are obtainable, principally those that can study phenomena in ordinary setting rather than a laboratory.

In the domain of marketing, eye tracking technology is a novel but recognized field of study identified as visual marketing. Rik Pieters and Michel Wedel (2004, 2008, and 2013) carried out quite a few number of research works on magazine advertisements investigating the effect of each advertising component: brand name, the image and the text. Similarly, Lohse and Rosen (2001) commenced a substantial research study ascertaining which yellow page advertisements were most effective, and finally Lundquist and Holmqvist and others (2011) examined newspaper advertisements.

Eye tracking measures where the person is gazing, the time that this person gazed at this certain region, the movement of his eyes in relation to his head, and even the number of blinks (Zurawicki, 2010). In addition to the eye gazes and fixations, the sequence in which his or her eyes shift from one location to another that is known as saccade can also be measured (Seo, Chae and Lee, 2012). There are different eye tracking technologies to measure eye movement and gaze fixations. The most common are those that inspect the monitoring of controlled stimuli at fixed points in videos, photos, and viewer's interaction with a displayed screen. There are more sophisticated tools that also mechanically track the head position in three-dimensional space in relation to the camera (Zurawicki, 2010).

Eye tracking technology has offered novel perspective within Neuromarketing. Understanding the mechanisms that guide consumers to select certain Areas of Interests (AOI) in a displayed visual material have many applications for the business world (Zhao and Koch, 2013). Therefore, eye tracking can provide information on what is more appropriate to customers' engagement and level of

attention and involvement (Fiszman, Velasco, Salgado-Montejo, and Spence, 2013). Also, eye tracking can be used with other equipment to understand and estimate rational responses, particularly in relation to consumer behavior and advertising communications. Facial coding can offer deeper insights to the precise effort of visual activity and that explains exactly where people are gazing when looking at visual stimuli. Other studies argue that eye tracking can also give understanding to specific emotional responses to different elements of a stimulus and the harmonization between emotional response and visual focus offers a dependable method for understanding what stimulates the responses to a given stimulus (Hill, 2011).

The typical eye tracking technology consists of two concepts: fixations and saccades (Velásquez, 2013). Nielsen and Pernice (2009) define fixation as the moment when the eyes are fixed on an area of interest, while saccades correspond to the sequencing of eye movements between two points of gazing. According to Tobii Technology (2013). There are various variables that can be measured by utilizing eye tracking technology; gaze direction and gaze point: gaze interaction with screens and other interfaces. Gaze direction gives more understanding to the human's eye responses and that gives more insight to what attracts people's attention. Eye position: the ability to locate and measure the eye's position in real time and that is part of what makes the eye tracking technology accurate and precise with regard to visual attention. Eye position determination helps in studies of advertising campaigns on television, internet, and cinemas. Eye identification: this variable helps researchers identify individuals' visual characteristics with the help of geometric calibration. The characteristics of the eye and can also be employed to better identify the visual characteristics. Eyelid closure: eyelid closure is used to measure and investigate the level of gaze attention and degree of sleepiness of consumers. Pupil dilation and size: these are reliable measures of consumers feelings and are basically utilized in market research.

2.4.2 Indicators of Eye Tracking Measurement

In the research of both Pieters and Wedel (2004) and Poole and Ball (2005) Time of First Fixations (TFF) was the indicators of impact of any visual stimulation.

Furthermore, it is resolved that there is a confident direct relational association between TFF and the AOI; to put it differently, the faster the participants' first fixation on a visual stimulus, the more likable that stimulus or AOI grabbed their attention. Additionally, the research of Calvo and Lang, (2004) and Rayner et al. (2001) validated that the indicators of Total Visit Duration (TVD) fundamentally exemplifies the respondents' connection, attention, or commitment with the visual image. Nonetheless, the Fixation count (FC), is the indicator of the influence of the stimuli on the encouraging or minimally drawing the attention of the participant as in the study of both Janiszewski, (1998) and Maughan et al. (2007). This last finding was strengthened by the findings of Maughan et al. (2007) who examined and documented the fixation beatings while watching an open-air commercial.

According to Wedel and Pieters (2008) eye-tracking saves real time observation and analysis to not only the sensitive replications but also to the mental and emotional processes, containing memory, latitude of focus, and even intended actions. There are both light and dark spot eye trackers. Both securely sparkle low altitudes of infrared light on to the participant's face to identify his pupil gaze plot. With bright spot trackers, the camera is situated close to the infrared light to enable the light to rebound the participant's retina creating the light area identifying the pupil. With dark spot trackers, the infrared lights are located far away from the camera as the light gets into the eye at an angle in comparative to the camera and as a result it does not spring back to the retina. As a consequence, it creates a dark spot to identify the pupil. By the means of either of these methods, in addition to detecting the pupil various locations at the cornea participant's eye locations can be calculated.

A typical eye tracking experiment provides raw figures postulating where (in x, y pixel coordinates for each eye, or an average of both), when (in milliseconds) and the duration of time (in milliseconds) a viewer's gaze at each element of the advertisement's AOI, besides, the viewer's pupil enlargement at each assumed time. These data can be exemplified graphically in different methods, and the data of the various subjects can be straight forwardly observed and grouped. The produced circles indicate the position of fixations of the plot gaze (where the participant gazed), and the size of a circle denotes the duration of the fixation; a larger circle indicates a longer fixation. The lines are saccades, which are the tracking the

movement of the gaze between fixations. Each of the fixations will be numbered in the order in which they occurred, demonstrating the participant's path through the advertisement.

Eye fixation usually takes from roughly 200 milliseconds to the reading of an advertisement's claim or message to 350 Ms to view a scene. The saccades movement to another object takes nearly 200 Ms. The stemming sequence of fixations and saccades is called 'scan path'. Scan paths are the tools that analyze optical perception, intentions, levels of interest, and possible application. One example of a possible implication for advertising is how humans interact with displayed screens, particularly the assessment of online banners and behavioral patterns of internet surfing (Zurawicki, 2010). So, eye tracking technology helps to identify more effective methods to create online advertising campaigns and identify challenges during the customer decision-making process.

The saccades, which are the hasty movement of the eye amid fixation points during a visual exploration of a stimulus, can be observed through the eye tracker techniques. Scan tracks are the outcome of tracking these saccades and eye activities. Straightforwardly, saccades are real scan tracks that results from tracking the eye glares and activities during a disclosure to an advertising stimulus. Eye fixations spot the eye gazes on definite AOI. In this study, the scan paths are to be scrutinized after the voter's exposure to advertisements of the four political parties, with their different layouts and designs. The outcomes of questioning the scan tracks will produce a huge number of gaze plots with indefinite examined figures.

Orquín and Loose (2013) conclude that the eyes' movement during the decision-making process is moderately determined by the necessities of a particular activity and comparatively by the qualities and merits of stimuli. The variables that contribute to attention, and impact the meaning of stimuli to an individual are the characteristics of the stimulus itself, and they are a rapid form of attentional capture. (Behe, Zhao, Sage, Huddleston, and Minahan, 2013). Contemporary research has revealed noteworthy evidences for the instinctive premises that 'Customers' gaze at what they like', and 'They like what they stare at'. The fundamental path of this association is still unidentified, if this connection is causative or not, nevertheless the

very being of the bond between the variables has vital consequences for marketing. In a study of Boerman, Reijmersdal, and Neijens (2015) eye tracking experiment attempted to investigate the impact of different ways of releasing brand location on spectators' visual consideration by considering brand awareness, and brand responses. The outcomes showed that the amalgamation of text or the advertisement's message and the brand image was most effective in promoting the product and that logo alone was the least effective. Also, it was asserted that the perception of the advertising brand subsequently increased levels of customers' memory and led to more desirable brand attitudes.

On the other hand, the study of Purucker, Landwehr, Sprött and Herrmann (2013) tried to analyze eye-tracking data in marketing research and relied upon Regions of Interests (ROIs) methodology and the use of heat-maps. Unfortunately, both these two methods have some unblemished drawbacks. Tackling this gap, the aforementioned researchers tried to apply spatiotemporal scan statistics to the investigation and picturing of the eye tracking records and the outcomes of their experimentations that utilized anthropomorphic car faces validated numerous benefits provided by the new technique. On the contrary to the old-fashioned methods, scan statistics offered a measurement to scan eye tracking records mechanically both in space and time with divergent gaze collections, with outcomes able to be expansively envisaged and statistically evaluated.

In another remarkable study of Chang and Chen (2014), the researchers contributed to this progressing field of exploration by associating brand-oriented advertisements and two types of cause-focused advertisement in promoting customer relationships based on eye movement information. Their study tackled how fixation duration and observing times differ according to the product type. They provided insight into the formerly unrequited question of "What structures of advertisements ease enhanced communication when various products are promoted and when different medium or advertising style is employed? The study suggested that the decision of whether to use a cause-focused or product-oriented visual can affect participants to perceive advertisements in different ways.

Lee and Ahn (2012), used eye tracking technology to assess the effectiveness of online posters. While Atalay et al (2012) used eye tracking technology to measure the influence of brand positioning and customers' ultimate choices on products. And Teixeira, Wedel, and Pieters (2012), relied on eye tracking techniques to assess the effectiveness of advertisements including emotion-inducing factors. They all concluded that advertisements containing constructive and negative sensitive stimuli ominously influence the gaze plots and eye fixations of viewers.

Finally, Bebko, Charlene, Sciulli, Bhagat, Parimal (2014), scrutinized print advertisements of Non-Profit Organizations (NPOs) by means of eye-tracking tools and emotive measure to evaluate donor's behavior. Attention to three areas of interest, including the text, face, and the organization's logo, were tracked. Afterward, the three eye-tracking metrics (Time to First Fixation, Fixation Count, and Total Visit Duration) and matching benefactor performance were assessed. The eye-tracking metrics were influential signs of an advertisement's ability to affect the benefactor behavior. The outcomes revealed that the advertisements used by the organization motivated donors to look at the face of the figure used in the design. The more times the donors went back and gazed at the advertising character's eyes, and the more entire time spent observing the character's face, the more probable donors would indorse the organization.

2.4.3 Personal Differences and their Effects on Eye Movements

Still, personal differences and their impact on people's level of attention is a controversial issue. A number of studies have investigated differences between females and males in visual selective attention, working memory, anticipation time, and auditory reaction time (Allen et al., 2003; Gur et al., 2002). Some researchers have repeatedly reported gender differences in cognitive abilities and brain organization. Some reported men's higher scores on spatial task (Shikhman, 2007). It has been reported that males tend to have larger brain volume and others found males and females do not differ in spatial or identity negative priming (Koshino et al., 2000).

2.4.3.1 Gender Differences

Gender differences in cognitive functions have been demonstrated in several studies (Dane and Erzurumluoglu, 2003; Der and Deary, 2006; Riccio et al., 2001). Males have faster reaction times (i.e. recalling objects organization in a displayed material or the order of the objects) than females and female disadvantage is not reduced by practice (Noble et al., 1964; Welford, 1980; Adam et al., 1999; Dane and Erzurumluoglu, 2003; Blough and Slavin, 1987). Women had slower simple reaction times than men (Der and Deary, 2006), whereas other research suggests that while male participants were faster than female in gazing at a target object, the female participants were more accurate in recalling the order of the objects (Barral and Debu, 2004). Silverman et al. (2007) indicates that such cognitive differences are relatively small. Lambourne (2006) indicated that no statistically significant differences are found in working memory capacity as a function of gender. Jausovec and Jausovec (2009) indicted that Gender differences were observed on the behavioral level only for the visual tasks; females display shorter reaction times than males.

Previous studies concluded that women's ability to decode a nonverbal emotional message outweighs men's capability (Hall, 1978, 1984). Yet, the studies have not introduced a sharp mechanism that clarify this advantage. Recent studies of Hall, Hutton, and Morgan, (2010) used eye tracking techniques to measure the male and female's attention to a visual material. They examined eye gazes of 19 males and 20 females during a facial expression recognition activity. The study concluded that female participants were faster and more precise than men in the recognition task (i.e. the recognition of advertisement's elements to particular brand). It also concluded that female subjects looked more at the eyes than male subjects. The researchers also realized that there is a positive relationship between total time and number of fixations to the eyes. Those conclusions and findings strengthen the hypothesis that the women advantage in facial expression recognition is related to greater women attention to eyes.

The findings of other studies supported the hypothesis of women advantage in decoding nonverbal messages. Female subjects show better judgement of facial

expressions and quicker reaction times to appropriately distinguish different sentiments (Hall and Matsumoto, 2004; Kirouac and Dore, 1985; Rahman, Wilson, and Abrahams, 2004; Rotter and Rotter, 1988). On the other hand, Wicker and others (2003) argued that male and female participants differed in their 'empathizing' capability. They claimed that women are more likely to be high empathizers compared with males and that in the case of autism the male bias towards low empathizing is exaggerated. One aspect of empathizing is the ability to decode the internal states of others from facial expression.

The study of Hall, Hutton, and Morgan (2010) has established a further evidence that women have an advantage in facial expression recognition. It also approved the output of the study of (Rahman et al, 2004) that claimed that gender difference in facial expression recognition was not influenced by emotional expression. Interestingly, the study concluded that there were no sex differences in overall number of fixations to the face, number of fixations to the mouth, or number of fixations to other areas of the face besides the eyes and mouth. However, there was a substantial variance that showed female subjects' advantage in the number of fixations made to the eyes. Female participants demonstrated longer total fixation times to the eyes when compared with male participants. Moreover, unlike male participants, the study found that female subjects tend to gaze more at the eyes before the mouth. An additional interesting observation was that male subjects made longer first fixation to both the eyes and mouth in the advertising material. These findings provide further support for the hypothesis that women's advantage in facial expression recognition is linked to a female inclination to gaze primarily and initially at the eyes.

Hall (2004) fundamentally concluded that female customers have by far the advantage of interpreting non-verbal emotional appeals. However, the mechanism of this advantage is not fully understood. A study of Rahman, Wilson, and Abrahams, (2004) examined whether women have greater attention to eyes and to explore that an eye tracking technique was used to measure the measure consideration of eye movements in 19 women and 20 men. Females were quicker and more correct in their acknowledgement of the offered advert when compared with men, additionally, female subjects believed to look more at the eyes than men. Constructive correlations

were observed between total fixation time and number of fixations to the eyes and both precision of facial gesture and the subjects pace of recognizing and recalling the expressions. These results principally enhance the propositions that the women advantage in facial expression recognition is related to greater feminine care and consideration of the eyes.

Female customers display better judgement of facial expressions of emotion and earlier response to correctly distinguish different feelings (e.g., Hall and Matsumoto, 2004; Kirouac and Dore, 1985; Rahman, Wilson, and Abrahams, 2004; Rotter and Rotter, 1988) and women have lower inceptions than men to identify sentiments at increasingly growing concentrations (Montagne, Kessels, Frigerio, de Haan, and Perrett, 2005). Interestingly, Cohen (2002) argued, in his work on autism and the extreme hypothesis of man brain, that there is a significant difference based on gender in the sympathizing capacity of man and women. He found that female subjects are high sympathizers when equated with men particularly in the case of autism. He also found that the male bias towards low sympathizing is overstated. One feature of sympathizing is the aptitude to interpret the interior situations of others from facial gestures.

So, women are believed to care more about eyes' gazes of advertisements' figures. Moreover, there is clear indication that attention to the eye region is vital for precise identification of others' demonstrative situations. A study with two-sided amygdala patient just recognized that her fear identification deficit was exclusively related to her inability to gaze customarily to the eyes in faces of the figures in the advertisements (Adolphs et al. and others, 2005). That is why Pelphrey et al. (2002) conducted his study to investigate, by using eye-tracking methods, gender differences in gaze allocations to dissimilar regions in the advertisements, and to examine the association between gaze patterns and facial gesture recognition based on gender.

2.4.3.2 Age Differences

When voters, due to the progress in age, develop familiarity with the different parties' advertisements, they become more aware of how the advertisement is

designed and where each component is located and become better able to avoid attending to advertisement's location where that advertising is positioned (Assael, 1992). Teenagers become increasingly contingent on advertising as an information source and there is a noticeable interest in the advertising messages, predominantly those involving cigarettes and alcohol goods. Adulthood is a period of physical and intellectual development, a time of changeover from being a teenager to playing the role of independence manhood (Evans et al, 1995)

The exclusive nature of teenage years makes teens more sensitive than other age groups to advertising imagery and advertising messages. Young people are predominantly vulnerable to image-based publicity, which is used expansively in the advertising of alcohol and tobacco products (Strasburger 1995). Pollay et al. (1996) established that adolescents were much more exposed to advertising than grownups; Hastings and Aitken (1995) concluded that marketing and advertising campaigns of tobacco companies were very effective in motivating teenagers and young people to embark on new experiences of smoking.

Each generation has unique expectations, experiences, generational history, lifestyles, values, and demographics that influence their buying behaviors. Accordingly, many companies are reaching out to multi-generational consumers and trying to understand and gain the attention of these diverse customers. Multi-generational marketing is the practice of appealing to the unique needs and behaviors of individuals within more than one specific generational group, with a generation being a group of individuals born and living about the same time.

2.4.3.3 Affiliation and Engagemnt

The study of Wedel and Pieters (2000) is a unique work that tried to explore individuals' eye gazes and eye fixations on printed visual materials and their ability to recall the brands presented in the printed advertisements. At the beginning, they stated that by examining eye fixation, percentage of gazes, saccades and durations the effectiveness of a printed promotional material could be measured. The researchers observed the rate of occurrence of the subject's eye fixations on printed

visual materials by observing their ability to recall the gotten information after a certain period of time and what affects that level of recall.

Different eye tracking studies have reinforced the use of the technology for promotion development and research based customers level of involvement and engagement with the presented brands (Rayner, Miller, and Rotello, 2008; Lohse, 1997; Krugman, Fox, Fletcher, Fischer, and Rojas, 1994). The authors' suggestions that customers' capability to recall and recognize certain features of a product will differ based on various factors such as their perception of the brand, the level of engagement and the effect of visual advertisement features on respondents' attention. Segmentation of the subjects was based on their level of involvement, their attitude from the brand itself and how that affected their level of recalling the examined advertisements. Three advertisement components of the brand, pictorial, and text were differently arranged when carrying out the experiment of eye movements tracking and eye fixation tasks. Precision and failure of memory tasks were then scrutinized. The study concluded that that two components of the promotional visual materials i.e. pictures and brand's logo remarkably affected eye fixations on precision of information while the claim or the message included the visual advertisements did not have the same effect. Furthermore, brand's logo conspicuously produced the most momentous impact.

In a different study, Rosbergen, Pieters, and Wedel (1997) examined respondent's eye fixations during a process of exposing them to printed visual materials. The study concluded that the impact of categorizing respondents based upon their attitudes and emotional attachment to the products affected their gaze concentrations and total fixations during testing. Moreover, exclusive patterns of gaze fixations were remarkably noted for physical commercial's features particularly when subjects were grouped according to the different gaze durations.

Once again Pieters and Wedel (2004) verified the influence of the three Areas of Interest (AOI) i.e. brand's logo, image, and the claim/text have on respondents' attention to printed visual materials. The study successfully concluded the abovementioned associations between recall and subject's attitude and involvement based on a great deal of visual commercials on different brands utilizing eye tracking

mechanisms. More freshly, Pieters, Wedel and Batra (2010) explored the impact of two sorts of pictorial complexity on gaze intervals to develop the pausing power of visual materials used in printed advertisements.

That latest study concluded that visual intricacy of a picture used in an advertisement was unfavorable and rather damaging to subjects' concentration to the product and negatively affected their attitude toward the commercial. On the contrary, design intricacy stirred more attention to the commercial visual material, its unambiguousness, and attitude toward the commercial itself. On the other hand, Logo, Jozsa, and Hamornik (2010) implemented eye tracking techniques to observe the subjects' attitude toward store shelf arrangements. Interestingly the study concluded substantial associations between customers' eye fixations and products preferences and level of attachments.

Wedel and Pieters (2000) examined an individual's eye fixations on printed advertisements and their ability to remember brands. The authors observed eye movement as a signal of visual attention. Their study then investigated the participants' eye fixations on visual materials by observing their ability to keep the attained information in their long-term memory. Three elements of the advertisements (i.e. picture, logo and text) were controlled during eye fixation tasks. Accuracy and inactivity of memory were then inspected during the memory tasks. The study concluded that the picture and the logo directly affected eye fixation while the text did not.

The above brief literature review highlights that observing eye gazes and fixation durations may divulge an exceptional perspective for advertising materials' design based on respondent's attitudes, preferences, attachment, level of involvement with the product and that would offer assistance for future planning. Probably this could be a potential sign of the power of clear advertiser's identification for a promotional visual advertisements' design and that what this study will try to manipulate in political marketing domain and how the affiliation or real attachment of a respondent with his party would affect his eye fixations on his party's advertisements as well as the printed visual materials of other parties. Thus, attitudes toward the social cause

and the sponsoring organization will also impact responses generated from the advertisements.

Finally, even though there has been no significant research on the influence of creativity on recall, some previous studies indicate that there are a few potential associations between the two variables. Firstly, innovative advertisements have been frequently determined, as novel or creative (Ang and Low 2000; Haberland and Dacin 1992). The presence of this advantage in any description or evaluation of the originality of the advertisement is a main potent inclination in literature. Consecutively, creativity and visual prominence have been powerfully proved to develop concentration in a range of contexts, an advertisement recall is one of them (Mitchell and Olson, 1981).

2.5 Advertising Recall

Some studies' chief objective was to scrutinize the nature of the connection between pattern recall and advertising effectiveness and its relations to intentional behavior. Starkes and Deakin, 1984; Williams, Hodges, North, and Barton, (2006) anchored their study on basketball team players. The active, multifaceted, and domain-specific collaborations that take place among players in the basketball game provide an idyllic setting to examine and explore the pattern recall of skilled performers. The purpose of their study was to set a comparison between skilled and amateur basketball players utilizing tests of recall and decision-making to define whether those two constructs share any common search features.

Similarities in eye gaze activities, such as the total fixations and the percentage of fixations consumed to watch a visual material, would offer some indications that might imply that a recall activity mandates processing necessities visually and perceptually. Those processing requirements are very close to the requirements used in any representative activity such as decision-making (North et al., 2009). Therefore, a group of researchers such as Farrow, McCrae, Gross, and Abernethy (2010); North et al. (2009); Williams and Davids (1999) concluded that pattern recall is probably a sustaining process that enhances the customer's perceptual capability. Further investigational studies focused on the dissimilarities of the displayed visual

materials. Some studies adopted a sample of static images whereas other studies considered the moving or animation images as.

Ericsson et. al (2007) and others claim that despite the instinctive charm of those ideas, studies exploring the degree of the association between pattern recall and expectation of a behavioral intention indicates that the relationship between the two variables incline to be quite limited (Ericsson and Smith, 1991; Williams and Ericsson, 2005; see also Farrow et al., 2010; Williams and Davids, 1995). For instance, the study of Ward and Williams (2003) is a unique research that tackled the customer's attainment of conceptual-reasoning ability across the evolving variety of experienced professional soccer players and amateur incompetent players exposed that illustrative activities such as expectation and the competence to precisely recognize main players in a game were solidier forecasters of skill level than performance on a recall activity. Likewise, Williams and Ericsson (2005) maintained that though Williams and Davids (1997) concluded that performance in an anticipation test was thoroughly related to performance on a pattern recall activity, only a very limited extent of the whole discrepancy in anticipatory skill was clarified by recall.

One tool to investigate the nature of examining the processing strategy of any visual perception is to investigate the variances in that visual features (Williams and Ericsson, 2005). In other words, North et al. (2009) documented the eye gazes of experienced and less experienced footballers while they accomplished a recall activity and an expectation activity. The expectation activity required contributors to foresee the last position of the footballer' kick performed by him in a temporally blocked video action order, while in the recall activity, contributors were asked to recognize formerly displayed action arrangements which were displayed in the previous anticipation test along with the new action arrangements. The findings of the studies exposed that an expert dominance in both activities, which is in harmony with prior research works. (Farrow et al., 2010; Williams and Davids, 1995). However, the findings of the visual search data demonstrated that both relationships and variances in the processing strategies were implemented by the subjects of the studies. For the unexperienced participants, there were no noteworthy variances in the number of positions fixated and the number of fixation transition in both

activities, whereas skilled participants exhibited more fixations in the expectation test and meaningfully longer fixations in the recall test.

In the aforementioned studies, it has been established that not only constructive images but also undesirable ones have led to faster first fixations but longer amounts of viewing time on the first fixation. Even the research of Lang and Calvo (2004) has confirmed that both positive and nasty advertising stimulus, unlike impartial pictures, have resulted in longer stares in the Areas of Interest (AOI). Therefore, it can be determined that commercials including demonstrative images would arouse faster and longer stares in those AOI and this fundamentally demonstrates that commercials with emotional designs would be much motivating and inspiring to viewers than those impassive or impartial commercials.

Many of the original recall research works associated professional and minor experienced chess players in an effort to recognize the primary tools donating the skillful player's advantage (Chase and Simon, 1973; de Groot, 1965; see also Gobet, 1998). The outcomes quite extraordinarily indicated that after watching an emblematic chess outline for only a few seconds, the more exceedingly graded guys were successfully able to recall the positions of the pieces of the chess game on the board with astonishing precision. Accordingly, it could be concluded that a professional experienced player would recall much better than an inexperienced or less skilled player (Chase and Simon, 1973; de Groot, 1965).

Comparisons in gaze performances, such as the number of first visit fixation time and the total percentage of fixation time spent watching definite presentation topographies, would deliver indication to propose that a recall task includes pictorial and perceptual dispensation necessities alike those used during a more illustrative mission such as decision-making (North et al., 2009). Such outcomes would propose that shape recall may be one of the possible sustaining procedures donating perceptual proficiency (Farrow, McCrae, Gross, and Abernethy, 2010; North et al., 2009; Williams and Davids, 1995). Superfluous investigational operations encompassed disparities in the sort of demonstration, in other way the way it is displayed as static images or moving images and tries to scrutinize the ostensible

position of the numerous rudiments within the arrangements such as attackers and defenders in a game.

It has been well established that the fundamental well-designed role overdue the precise recall of organized playing arrangements most likely associated with the expectation and decision-making (Farrow et al., 2010; Gorman, Abernethy, and Farrow, 2013a; Gorman and Farrow, 2009; Williams and Davids, 1995). Proficient players may use the positions of players in a representative playing arrangement to forestall the probable succeeding positions of the outline, thus supporting in the speedy preparation of a suitable decision in answering the growing pattern edifices (Didierjean and Marmèche, 2005; Gorman, Abernethy, and Farrow, 2011, 2012, 2013a; Starkes et al., 1994). According this study proposes that there is high expectation to have correlations between the recall ability of the voter and the total time he fixated on the printed advertisements.

2.5.1 Recall and Attention

Recall of an advertisement has been broadly and thoroughly investigated in advertising literature (Donthu, Cherian, and Bhargava 1999; Stewart and Koslwo 1989). Recall is connected with placing the brand into a consumer's stimulated set and is recurrently used by advertising specialists (Jones 1986; Walker and Gonten 1989). It is approved that recall is a variable of evident memory (Isingrini, Vazou, and Leroy 1995; Rajaram, Srinivas, and Travers 2001). In their study, they focused on recall more than recognition.

Attention is an important component of advertising effectiveness and is linked directly to recall (Mulligan 1998; Walker and von Gonten 1989). Several studies have explored the link between improved attention and memory or recall, and have concluded that this relation has led to greater levels of both aided (Isingrini, Vazou, and Leroy 1995; Rajaram, Srinivas, and Travers 2001) and unaided recall (Craig et al. 1996; Olsen 1995; Rosbergen, Pieters, and Wedel 1997). Accordingly, there is a possibility that this process could result in improving results on recall and memory activities when it comes to creative or more original commercials.

There are two main types of recall; aided and unaided recall. While both types of recall have been widely used as measures of advertising effectiveness, they have infrequently been used in the same research (Donthu, Cherian, and Bhargava 1993). Aided and unaided recalls, while linked, symbolize different tasks; each one embodies separate or distinct activities. Based on past studies, it is assured that creative advertisements gain more attention and thus enjoy a deeper and more profound recall rates. For unaided recall, the mission will be challenging enough to obviously offer a benefit to the creative advertisement. However, for aided recall, the mission is probably not as challenging as an activity that mandates an individual full concentration to solidify a measureable feature of innovation.

First, a great range of the attention-associated aided recall research works employed diverting activities leading to an energetic recall procedure (Insingrini, Vazou, and Leroy 1995; Mulligan 1998; Rajaram, Srinivas, and Travers 2001). Second, aided recall is, as stated in the name, a supported recall that is conducted by the assistance of the researcher to facilitate the process of recalling by giving hints or even parts of the activities to make it easier for the respondent to recall the intended items. This help results in stress-free memory access for the respondents. Besides the facilitative role of publicity, there could be an impending obtrusive impact whereby publicity might inhibit recall of non-publicized products that in other way would have been recalled. (Bettman 1979; Lutz 1996; Singh, Rothschild, and Churchill 1988).

Enhanced performance in a recall activity with replication is an unshakable and a reasonable phenomenon. Repetition is a well-confirmed factor in enhancing realization in a memory activity of any natural incident in the past. In comparison to unpublicized products, the recall of marketed goods with promotional campaigns should be superior due to frequent coverage. Together with a modest replication effect, there are a host of theoretical contexts for the simplifying impacts of publicity. To illustrate, the awareness process that publicity would generate saves supplementary elucidations for the superior memory of publicized products.

This particular topic was tackled in the study of (Jin 2003). Jin projected two factors for his model; motivation and repetition. He aimed at representing theoretical explanations for the simplifying impacts in the context of the Super Bowl, the

National Football League championship game, played annually between the champions of the National and the American Football Conferences. His motivation variable denotes the awareness processes in which exposure of publicity arouses respondents' vigorous involvement with succeeding advertisements, in turn enlightening memory of those advertisements. As Jin and others (2003) propose the awareness factor influences the encoding processes when respondents watch the advertisements.

Friedman (1970) envisages the supported influence of publicity. An incentive endures changes in encoding of the advertisements' appeals from performance to performance. These variations in encoding increase information to the occasional illustration of the incentive's performances and underscore the enhancement in presentation. Accordingly, encoding variability permits the formation of more prompt relations. When a respondent is exposed to anything related to a particular advertisement and later watches that advertisement, the encoding variability impact will occur, resulting in superior recall performance the that specific advertisement.

At the time Jin and others (2003) experimentally proved that promoted trademarks are well remembered, other studies' main concern was the negative or damaging influence of well-recalled marketed trademarks on non-marketed brands. Based on the literature, it is concluded that publicized products will constrain the recall of non-publicized goods because advertised or promotionally enhanced products will hinder recalling other non-publicized brands. For such an inhibitive upshot to happen, publicity followed by exposure to advertising should upsurge the reminiscence of publicized brands; therefore, those advertised products should be recalled in earlier structures of a recall activity (Rundus 1973).

3. RESEARCH DESIGN AND METHODOLOGY

The research model developed based on extensive literature review is visualized in (Figure 1). The overall objective of this research is to determine if the design, layout and positioning of the advertisements' elements in terms of three main components or Areas of Interest (AOIs), i.e. photo, claim, and logo particularly in electoral campaign context have an effect on a voter's gaze plot. The focused output is in three parts Time to First Fixation (TFF), Fixation Count (FC) and the total time spent gazing at those AOIs, called total visit duration (TVD). The study will examine whether these visual metrics help in identifying which rudiments of the advertisements' segments are most probably to influence the choice of the voters to change their gaze plots. Although the prior advertising studies that utilized eye tracking techniques have investigated these three AOI related metrics in commercial advertisements, this study uniquely applies this technology to a political electoral campaign setting.

To develop the model and uncover the relationships between the variables (Figure 3.1), a thorough research was conducted to choose the political advertisements of the four main Turkish political parties, namely CHP: Republican People's Party, AKP: Justice and Development Party, MHP: Nationalist Movement Party and HDP People's Democratic Party. Then, a questionnaire was developed to filter the selected advertisements. Later a convenient sample of 80 participants was invited to conduct the eye tracking study in a well-equipped laboratory. Then results were taken and analyzed.

In the context of political marketing, particularly in electoral advertising context and based on the introduced literature, gender is considered as one of the main variables to be influential in voters' eye gazes. It is expected that voters of both genders will presuppose that advertising design does not make any difference. This will lead them to avoid attending to display locations that have a high probability of containing advertisements. In the Turkish context, it is common that advertising agency

organize the partisan printed advertisements in a specific order where the right side of printed advertisement is the most common location for the party's logo. The center locations rarely contain the logo but rather contain the motto or message, while the left side generally contains the photo of the party's leader. In free-viewing tasks, some voters may still consider advertising irrelevant to their objective but less so. Other voters may be fully open to advertising when in a free-viewing task.

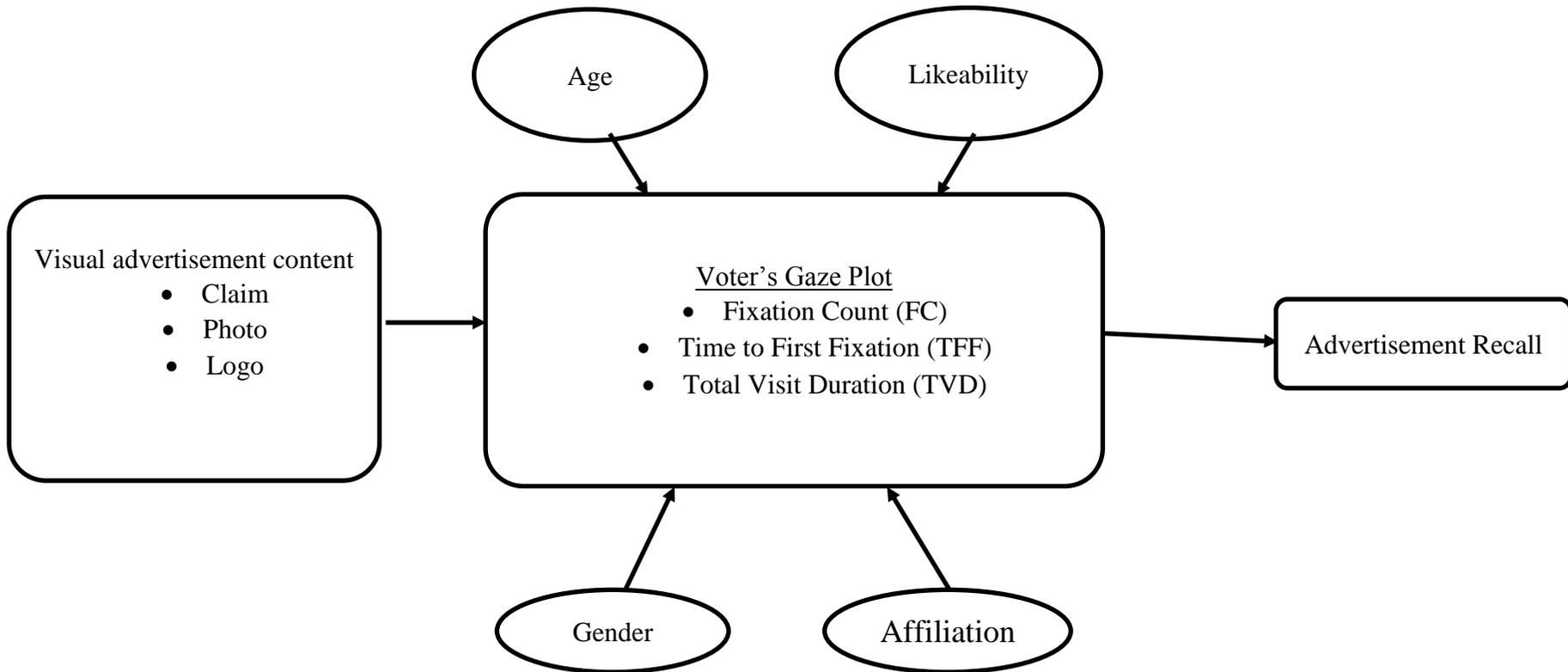


Figure 3. 1: Research Model.

3.1 Research Model and Hypotheses

Based on the above model, the following hypotheses are offered.

H1: Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their gender.

Sub-hypotheses:

H1a: Voters' Time to First Fixation (TFF) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.

H1b: Voters' Fixation Count (FC) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.

H1c: Voters' Total Visit Duration (TVD) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.

H2: Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their age group.

Sub-hypotheses:

H2a: Voters' Time to First Fixation (TFF) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their age.

H2b: Voters' Fixation Count (FC) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their age.

H2c: Voters' Total Visit Duration (TVD) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their age.

H3: Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their political affiliations.

Sub-hypotheses:

H3a: Time to First Fixation (TFF) of one political party's affiliates to AOI of the printed political advertisements will be different from other parties' advertisements.

H3b: Fixation Count (FC) of one political party's affiliates to AOI of the printed political advertisements will be different from other parties' advertisements.

H3c: Total Visit Duration (TVD) of one political party's affiliates to AOI of the printed political advertisements will be different from other parties' advertisements.

H4: Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their level of likeability.

Sub-hypotheses:

H4a: There is a correlation between voters' Fixation Count (FC) to AOIs and likeability rate of the political advertisements.

H4b: There is a correlation between voters' Time to First Fixation (TFF) to AOIs and likeability rate of the political advertisements.

H4c: There is a correlation between voters' Total Visit Duration (TVD) to AOIs and likeability rate of the political advertisements.

H5: There might be correlation between voters' visual attention on AOI and the recall of the printed political advertisements.

3.2 Research Types and Surveys

Eye tracking experiment is conducted to reach the objectives of the study. But before political advertisements were subject to eye tracking experiment, they have gone through a process of selection and filtering. To select the main printed political advertisements, four main parties' websites were examined and 8 advertisements were selected for each party – totally 32 printed advertisements (Appendix1). The number of the advertisements was mainly 8 per each party simply because it was

rather difficult to find more appropriate printed advertisements in equal numbers among the four selected parties. All the above-mentioned 32 chosen advertisements were supposedly chosen to contain the advertisements' three main components or Areas of Interest (i.e. image, text, and logo).

3.2.1 Selection of Printed Advertisements and Filtering Survey

An initial questionnaire was developed and distributed among university students as an accessible population. The questionnaire aims at solidifying the authenticity of the examined advertisements by letting parts the potential voters (students) themselves select the advertisements to be examined and the researcher tended to relatively balance a number of variables such as the ratios of the respondents' gender and age and political affiliation. To illustrate, initially the sample consisted of a sample of 370 students, whom the researcher visited on campus and personally attended their classes displaying the questionnaire that was translated into Turkish language to facilitate understanding and communication. All the measures were explained in details and respondents were repeatedly informed to scientifically and objectively deal with the research task. However, almost 120 questionnaires were excluded due to respondents' failure to meet the standards of the selection procedure. For example, the questionnaire of any respondent that ranked all advertisements in one scale or chose to rank a particular party's advertisement in a clear biased way was rejected.

The questionnaire was developed and distributed among university students as representative population of the Y generation. The researcher tended to purposefully choose the Y generation, who are known as Echo Boomers or Millennials and who were born in the period of 1977-1994, for a couple of reasons: Generation Y is an exceptional and prominent consumer group whose performance, attitude and behaviors are often discoursed but not completely comprehended (Drake-Bridges and Burgess, 2010; Luca, 2010; Noble et al., 2009; Smith, 2012). Profoundly prejudiced by technology and internet era, this segment of customers has progressed in a different style from preceding cohorts of customers. Therefore, it a stimulating segment of consumers to target (Lester et al., 2005). Earlier studies have inspected Generation Y in countless settings and milieus, nevertheless, hypothetical and experiential studies about its psychographic contour is inadequate (Yu, 2011). Greater interest than before is developed to identify features of Generation Y that

distinguish them from earlier customer’s cohorts and studies started exploring this field to fill that void (Hauw and Vos, 2010). All in all, they are known as incredibly sophisticated, technology oriented, resistant to most conventional marketing campaigns.

They are characterized by ethical and racial diversity as their personalities are formulated with the direct intervention of TV channels, Internet and smart apparatuses (Luca, 2010). Interestingly, according to the study of Smith, (2012), this generation is known to be less brand loyal and that would appeal with the eye-tracking technique that this part of the study aims to measure; in other words, when selecting the political advertisements of the different parties this cohort of respondents of Y generation would supposedly be more objective to rank the displayed advertisements.

The questionnaire aims at solidifying the authenticity of the examined advertisements by letting the voters themselves selected the advertisements to be examined and the researcher tended to relatively balance a number of variables such as the ratios of the respondents’ political backgrounds and affiliations, their gender, and voting preferences.

Thus, only 250 students (Figure 3.2) 97% of them are currently enrolled in a university program and almost halved between both genders while 90% of them are aged 18-25.

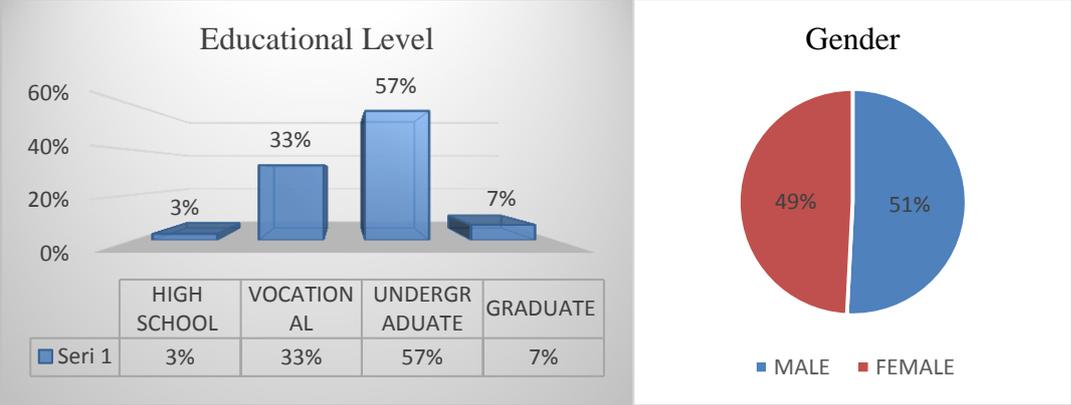


Figure 3.2 : Gender and educational level distributions of the sample.

77% of the respondents are apolitical i.e. they are not affiliated to any political party while just 23% of the sample stated that they are affiliated to a political party (Figure 3.3).

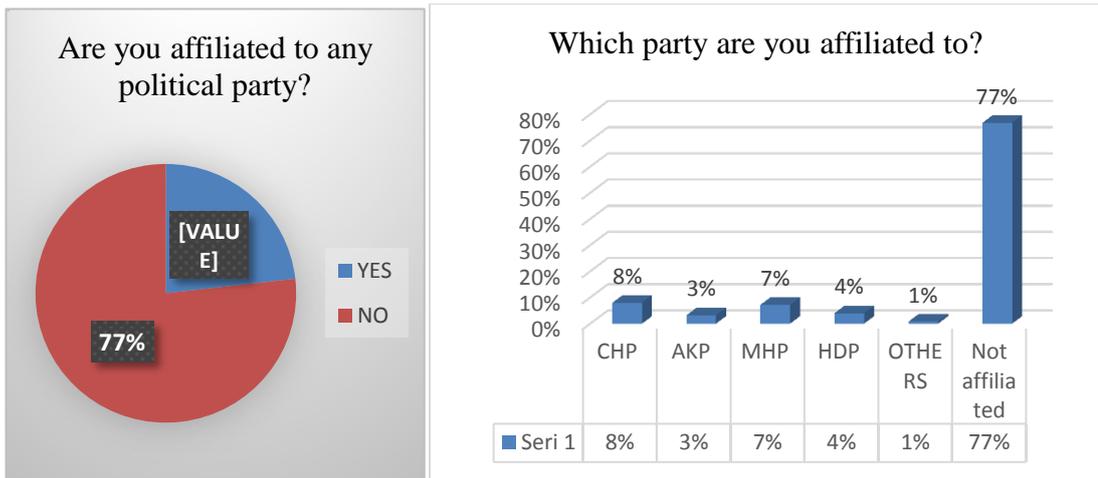


Figure 3.3 : Political affiliation of the participants in pre-test survey.

For their participation in the election of 7th June 2015, 81% of the respondents stated that they voted in the election, whereas just 19% of them did not. The percentage of the voting distributed equally between CHP and AKP with a percentage of 20 and 19 respectively. However, MHP recorded the highest number of voters with a percentage of 24% while HDP voters were just 16% of the voting sample. (Figure 3.4)

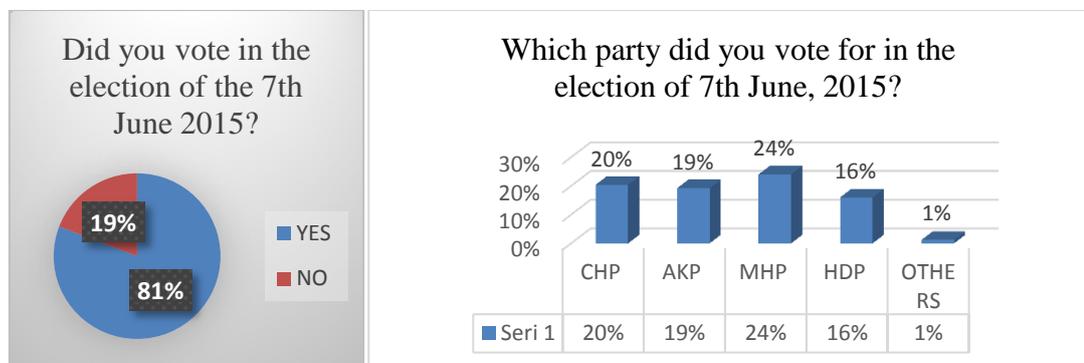


Figure 3.4 : Voting tendencies and decisions in the first election.

Similarly, the figures in the in the latest election on 1st Nov. 2015 slightly changed, where 89% of the examined sample went to the election constituencies and casted their ballots whereas 11% did not vote. 25% of the subjects voted to MHP while both AKP and CHP voters recorded a percentage of 20% while HDP 16% and just 4 voters casted their ballot to other parties (Figure 3.5).

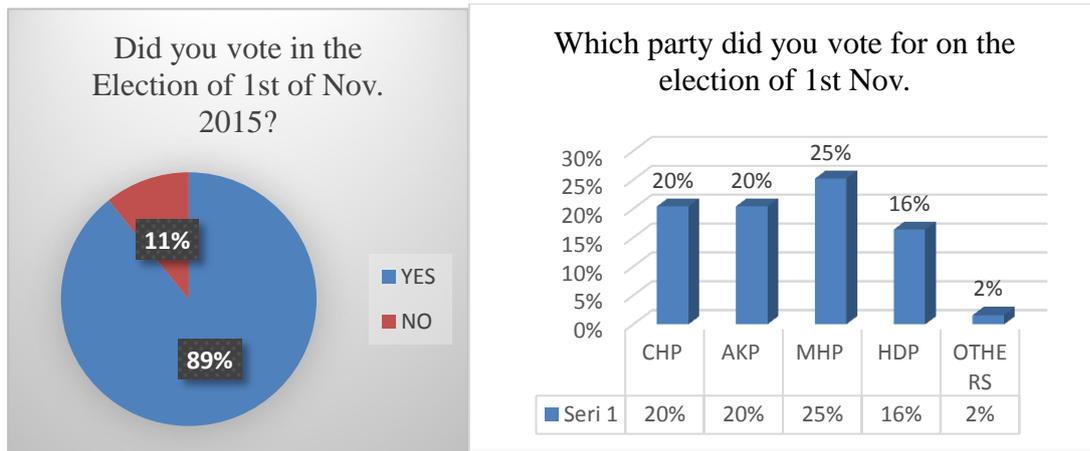


Figure 3.5 : Voting tendencies and decisions in the second election.

For the approval of the printed advertisements participants recorded their responses on 5-point Likert scales (Appendix B). This was repeated for each of the 4 parties' advertisements. As the bar graph of (Figure 3.6) clearly demonstrates that CHP advertisements (A and E) scored the highest mean of (2.79 and 2.78) respectively whereas advertisements (B and C) recorded the lowest mean of (2.10 and 2.54).

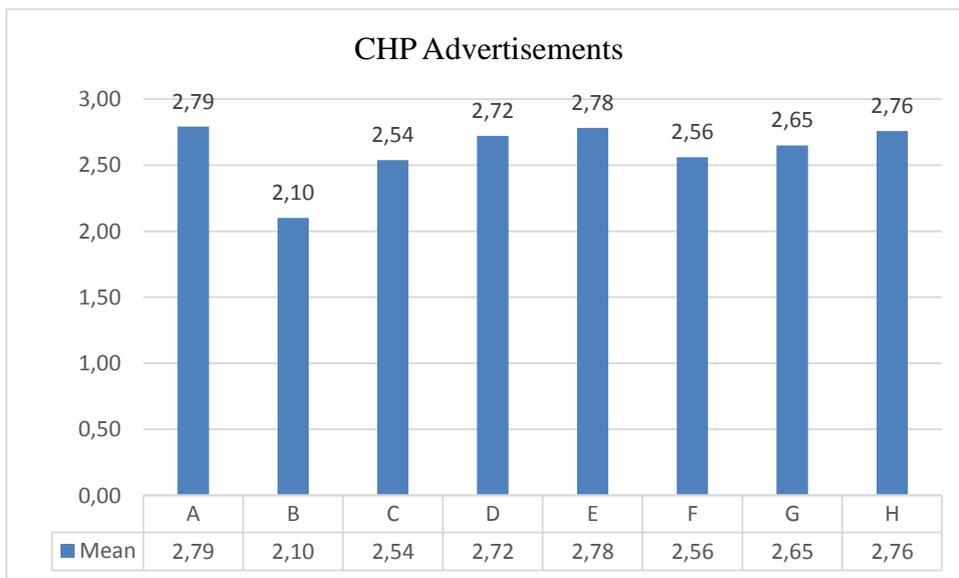


Figure 3.6 : Level of likeability for CHP printed advertisements.

Similarly, AKP advertisements (H and A) recorded the highest means of (3.13 and 2.98) respectively. Whereas, (E and D) advertisements scored the lowest mean of (2.42 and 2.59) respectively as in Figure 3.7.

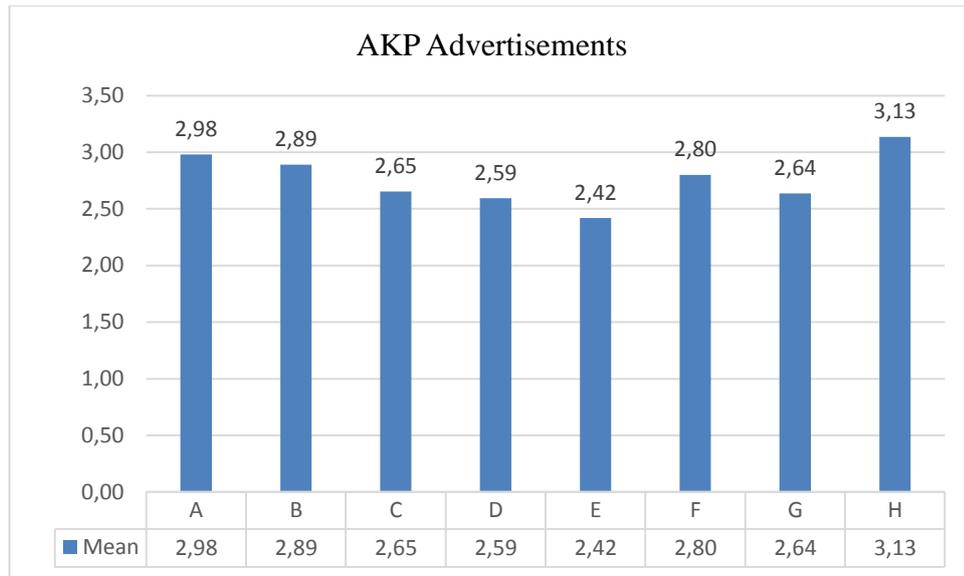


Figure 3.7 : Level of likeability for AKP printed advertisements.

On the other hand, MHP advertisements (D and H) recorded the highest means of (2.90 and 2.89) respectively, while advertisements (E and G) scored the lowest means of (2.66 and 2.68) respectively as in Figure 3.8.

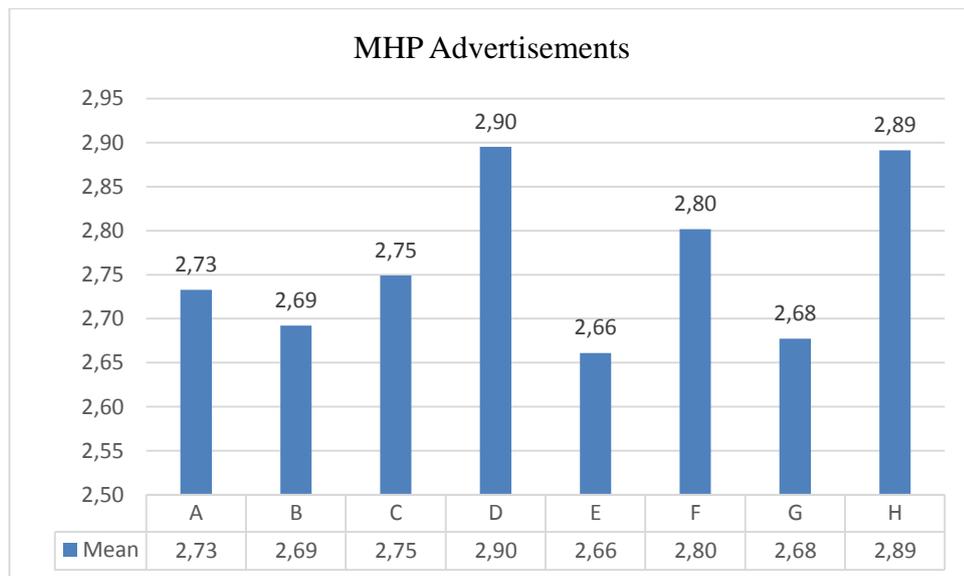


Figure 3.8 : Level of likeability for MHP printed advertisements.

Finally, HDP advertisements (D and E) recorded the highest means of (2.32 and 2.21) respectively, while (B and C) scored the lowest means of (2.06 and 2.07) as in Figure 3.9.

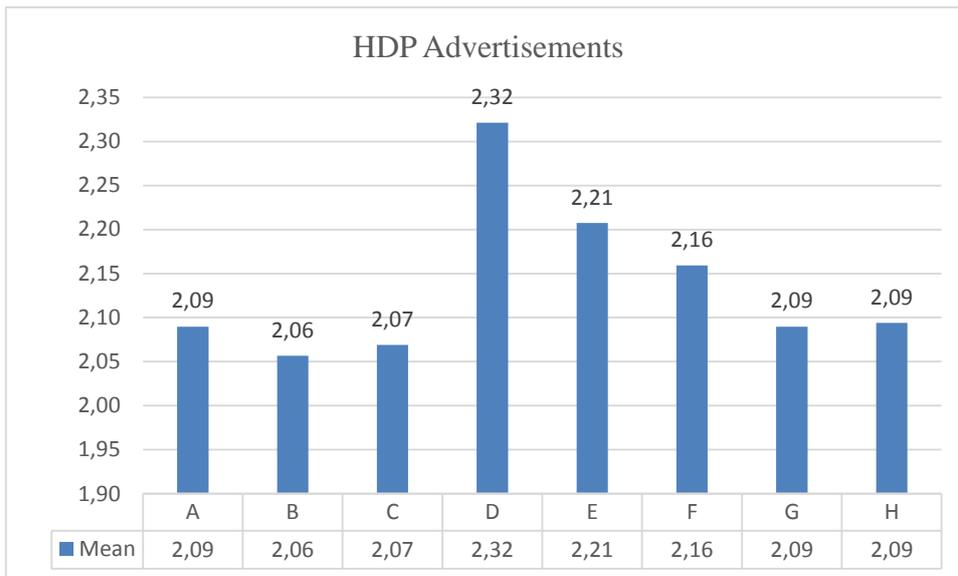


Figure 3.9 : Level of likeability for CHP printed advertisements.

3.2.2 Exit Survey

After conducting the experiment of the eye tracking session, respondents were introduced to the exit survey. The exit survey is divided into four sections (Appendix C):

The first section aims to examine the respondents' ability to recall the slogans and messages of each party's displayed advertisements.

Unaided recall or free recall: subjects were asked to write down all the claims they could remember in the advertisements they watched. The second section aimed to measure the subjects' abilities in aided recall or cued recall experiments: (the claims given to the participants and they attributed them to the corresponding parties. In other words, they match the slogan with the party that used it.

The third section was to measure the respondents' abilities in unaided recall test of the printed advertisement. The test was conducting by asking the subject to recall the advertisements that they have seen in the advertising from a randomized list of 32 advertisements, including the 16 that were displayed and the subjects will be asked to try to pick out the 16 advertisements they have just watched.

The fourth section was to measure the likeability of the advertisements. To do that, participants recorded their responses on 5-point Likert scales.

These measures, which were adapted from those used in previous investigations of memory for commercials (Colman and Grimes 1989; Heflin and Haygood 1985; Thorson, Friestad, and Zhao 1987), have been administered in order to help the researcher test hypotheses related to recall and likeability variables and its probability of any correlation with the gaze fixations of the respondents on the three Areas of Interests (AOI). The short post-study (Exit questionnaire) was administered in an interview session by the moderator to make sure that the activities and measures of recall and likeability are not intermingled or confused. In other words, the facilitator was asked to present each section of the questionnaire separately and in a particular order so that respondents cannot check their responses.

3.3 Sampling Procedure and Main Data Collection Method

Eye movement data is used to describe how the typical person or group of people in the population behaves while performing a task. Eye movement data is usually the main source of information but also other data is included. The results are generalized to be valid for a specified population, and sub-groups within that population.

There is a wide spread perception among the researchers of the eye tracking field that a valid and solid study should have at least thirty participants to be conducted reliably. However, the literature of eye tracking simply states that this would be designated as an oversimplification. In different studies, the sample size considerably differs (Ooms et al, 2015) and few number of participants would be appropriate for some eye tracking studies. As in any other type of study, the sample size depends on multiple factors including research objectives and study design. Thirty participants are more than sufficient for a qualitative study in which the eye movement data are used to demonstrate certain usability findings.

Therefore, sample size is determined based on the following elements:

- The subgroups that will be analyzed autonomously like gender and age
- The degree of risk involved in the decisions being made based on the results
- The amount of available resources (time and money)

- The statistical tests that will be used to analyze the data
- Margin of standard error of the mean and significance levels accepted in the results

Adding more participants will improve the quality of the data; the standard error for 20 participants is much higher than for 50 people that is why the sample of our study would consist of 80 participants divided in accordance with the four main variables of gender, age and affiliation and likeability.

3.4 Participants and Sample Characteristics

The sample composition has been 50% female and 50% male, distributed among age groups of (25-35), (36-45) and (46-70). The sample is also scattered based on their affiliation to the four Turkish political parties. There are 20 participants for each party. Their affiliation has been determined on the entrance questionnaire. Only those who decided that they will support their political party for more than 80% were chosen as highly affiliated to that party. The questionnaire also explored general information about the participants.

All subjects are supposed to have normal vision because one of the main limitations of an eye-tracking study is that not all eyes can be tracked. Contact lenses, glasses, and pupil color can all impact the eye-tracking camera's ability to record eye movements (Tobii 2013). The subjects were not aware of the study's hypotheses.

3.5 Limitations of the Thesis

This thesis has a couple of limitations. First, the eye tracking experiment is nearly close to real-life bill board or static printed advertisement display, but it is still conducted in a forced-exposure situation and that should be considered into account. The eye tracking study is conducted in a laboratory setting, and consequently the findings may have limited potential for generalization to other populations. In other words, the expected conclusions are only valid for the Turkish context. Second, the limitation of the sample size. The sample size of this study was disseminated among three factors; age, gender and affiliation and that would diminish the number of participants in each variable. That is why additional research with a larger sample size could generate more robust results.

Third, the examined advertisements were mainly collected from official websites of the political parties and they were used in the last two elections. However, an unexpected change in the Turkish cabinet has happened within the study period. Mr. Davudoglu, the leader of AKP at the time of the two elections, has resigned and was replaced by another prime minister Mr. Binali Yildirim, who was not involved in any of the elections and that might affect the perception of the respondents or divert their gazes or at least distract their attention when looking at the printed advertisements of the AKP. Nonetheless, as previously asserted, Yildirim was not involved in the elections and it is therefore believed that his photo would not genuinely affect the voters' perception.

4. FINDINGS AND ANALYSES

When starting the process of recruitment of the desired subjects, a host of an expected challenges surfaced. Most of the subjects were initially interviewed through a telephone call and when introducing the nature of the research, they tend to refrain from participation and politely decline the invitation. With further clarifications and asserting the academic and scientific nature of the study, a number of participants have decided to take part. However, their number was not adequate mainly with HDP and MHP parties and that is why a field visit to their headquarters was inevitable. The field visit made things easier as the deputy chairman of parties showed great level of understanding and helped in the recruitment process.

The participants have been received in the place where the facilities are installed and the entrance survey has been distributed in Turkish language. A facilitator gave an introductory clarification of the whole process and made sure that every step was clear. The respondents have initially signed an informed consent form clarifying the objectives of the study and the steps and procedures used to collect the printed advertisements. An entrance survey was given to each participant and later he or she were invited to get to the room of the experimental study. The entrance questionnaire (Appendix C) has also explored general information about the participants. All subjects are supposed to have normal vision because one of the main limitations of an eye-tracking study is that not all eyes can be tracked. Contact lenses, glasses, and pupil color can all impact the eye-tracking camera's ability to record eye movements (Tobii 2014).

The study has been conducted in a dedicated room accommodating the Tobii eye tracker. The respondents have been seated approximately 60 cm away from the screen. The eye tracker was calibrated using five points on the screen and takes approximately one minute. The 16 selected printed advertisements has been sequentially displayed. Each one of the advertisement was reflected on the screen for 5 seconds and other 5 seconds break between the different samples so that the eye is

relaxed. Using the 16 advertisement consecutively without a proper break can lead to exhausting and confusing the participants and even distracting his attention that can negatively affect the results of the study.

Definitely adding more participants will improve the quality of the data; the standard error for a sample of 20 participants is much higher than the standard error of a sample that is comprised of more than 50 participants and that is why the sample of this study consists of 80 participants. The sample is distributed in accordance with the three main variables of gender, age and political affiliation.

As presented in Table 4.1, the sample composition has been 50% female and 50% male.

Table 4.1 : Demographic profile of the sample gender (N=80).

		GENDER			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	40	50	50	50
	Female	40	50	50	100
	Total	80	100	100	
Total		80	100		

As presented in (Table 4.2), the sample was distributed among three age groups based on the gender. So, the first age group (25-35) contains 32 participants and that is 40% of the total sample size (80), and 24 participants aged 36 to 45 and that is 30% of the total sample size. Finally, 24 other participants in the oldest age group (46–above) and that is also 30% of the total sample.

Table 4.2 : Demographic profile of the sample age group (N=80).

		AGE and GENDER		
		GENDER		Total
		MALE	FEMALE	
AGE	25-35	16	16	32
	36-45	12	12	24
	46-ABOVE	12	12	24
Total		40	40	80

As presented in Table 4.3, the sample was equally distributed among the four main political parties in Turkey. 20 participants (10 male and 10 female) and that is 25% of the total sample was assigned to each party.

The sample is also scattered based on their affiliation to the four Turkish political parties. Their affiliation has been determined in the entrance questionnaire. Only those who decided that they will support their political party for more than 80% (Appendix B) were chosen as highly affiliated to that party.

Table 4.3 : Demographic profile of the sample political affiliation (N=80).

PARTY		PARTY and GENDER		Total
		GENDER		
		MALE	FEMALE	
PARTY	AKP	10	10	20
	CHP	10	10	20
	MHP	10	10	20
	HDP	10	10	20
Total		40	40	80

When starting the process of recruitment of the desired subjects, a host of unexpected challenges surfaced; most of the subjects were initially interviewed through a telephone call and when introducing the nature of the research, they tend to refrain from participating to the study and politely decline the invitation. With further clarifications and asserting the academic and scientific nature of the study, a number of participants have decided to take part. However, their number was not adequate mainly with HDP and MHP parties and that is why a field visit to their headquarters was inevitable. The field visit made things easier as the deputy chairmen of parties showed great level of understanding and helped in the recruitment process.

The participants have been received in the place where the facilities are installed and the entrance survey has been distributed in Turkish language. A facilitator gave an introductory clarification of the whole process and made sure that every step was clear. A very crucial point was made to the facilitator who conducted the study and that was to keep the subjects unaware of the study's hypotheses.

The respondents have initially signed an informed consent form clarifying the objectives of the study and the steps and procedures used to collect the printed advertisements. An entrance survey was given to each participant and later he or she

was invited to get to the room of the experimental study. The study has been conducted in a dedicated room accommodating the Tobii eye tracker. The respondents have been seated approximately 60 cm away from the screen. The 16 selected printed advertisements have sequentially displayed. Each advertisement was displayed for 5 seconds. Then a short gap of 5 seconds between each advertisement. The aim of this short break is to diminish the likelihood of confusion and give the eye a short break before handling another visual material. The 16 advertisements were originally selected out of 32 advertisements of the political parties in a filtering questionnaire that was conducted earlier of the study.

4.1 Hypotheses Testing

This section presents the results of data analysis and hypotheses testing. In the first section, the results of eye tracking experiments are presented. Independent t-tests were conducted to measure whether there are any significant differences between male and female voters' Time to First Fixation (TFF) on the different advertisements.

4.1.1 First Hypothesis

H1: Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their gender.

H1a: Voter's Time to First Fixation (TFF) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender

4.1.1.1 (TFF) and First Area of Interest: Claim

Generally, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a clear tendency to quickly gaze at the claim of the visual stimuli as shown in the heat map of figure 4.1. Then they tend to fixate their gaze on the photo of the leader and lastly to the logo of the party. There are some exceptions in the advertising posters of MHP (Appendix A)

Heat maps show how looking is distributed over the stimulus. In contrast to the gaze plot, there is no information about the order of looking in a static heat map. Neither is the focus on individual fixations. Rather, heat maps are a visualization that can

effectively reveal the focus of visual attention for dozens or even hundreds of participants at a time. Heat maps have long been the poster child of eye tracking. Broadly used and equally as misused, this visualization is seldom the most meaningful output from an eye tracking study. And if improperly constructed and interpreted, heat maps can do more to distract and mislead than inform decision making. Choosing the right basis for constructing a heat map is the critical first step. Thus determining the AOI depends on the heatmaps reflection.

Based on the results of the independent t-test, female subjects tend to look faster than male subjects to the claim of only one advertisement (AKP: D) (Figure 4.1) out of the total 16 advertisements.

AKP: D



Figure 4.1 : Result of Respondents' TFF to the claim of the visual materials according to their gender.

An independent-samples t-test was conducted to measure the differences between male and female voters' Time to First Fixation on the claim of the advertisements.

As shown in the group statistics (Table 4.2) and the results of t-test table, there was a significant difference in the scores for of male (M=0.5, SD=1.003) and female (M=0.17, SD=0.24) variables; $t(78)=2.039$, $p = 0.045$ as in Table 4.3. The result suggests that gender does not have a significant effect on time to first fixation of the participants.

Table 4.4 : Group Statistics of respondents' Time to First Fixation (TFF) to the claim according to their gender.

GENDER		Group Statistics			
		N	Mean	Std. Deviation	Std. Error Mean
*AKP-TFF-CLAIM-D	Male	40	.509	1.003	.159
	Female	40	.176	.245	.039

*AKP: the name of the party TFF: Time to First Fixation. Claim. D: the number of the Advertisement

Table 4.5 : Results of independent sample t-test for (TFF) to the claim of the advertisement according to their gender.

		Independent samples t-test							
		t-test for Equality of Means 95% Confidence							
*AKPTFFCLAIMD	Equality of Means Variances								
	F	Sig-	T	df	Sig. (2-tailed)	Mean Difference	Std. Error of difference	Interval of the	
								Lower	Upper
	4.060	.047	2.039	78.000	.045	.333	.163	.008	.658

*AKP: the name of the party TFF: Time to First Fixation. Claim. D: the number of the Advertisement

Female participants looked faster than male participants (Figure 4.2) illustrates Women gazed at the logo in 0.18 seconds while men waited for almost 0.5 seconds to fix their gaze on the claim of the advertisement. The result only showed difference in one advertisement and that could be attributed to the location of the position and simplicity of the claim.

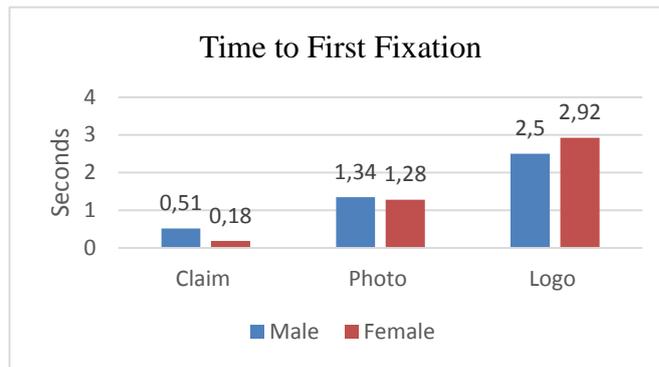


Figure 4.2 : Respondents' Time to First Fixation (TFF) to the AOI of the advertisements according to their gender

4.1.1.2 (TFF) and Second Area of Interest: Photo

Based on the results of the independent t-test, female subjects tend to look faster than male subjects to the claim of only one advertisement (HDP: D) (Figure 4.3) out of the total 16 advertisements and that represents a percentage of 6.25%.

HDP: D



Figure 4. 3 : Results of Respondents' TFF to the photo of the visual materials

An independent-samples t-test was conducted to measure the differences between male and female voters' Time to First Fixation on the (Photo) of the advertisements.

As shown in the group statistics (Table 4.6) and the results of t-test table, there was a significant difference in the scores for of male (M=1.44, SD=1.233) and female (M=1.49, SD=1.48) variables; $t(78)=-0.177$, $p = 0.050$ as in table 4.7, the result suggests that gender does not have a significant effect on first time fixations of the participants.

Table 4. 4 : Group Statistics of respondents' Time to First Fixation (TFF) to the photo according to their gender.

GENDER		Group Statistics			
		N	Mean	Std. Deviation	Std. Error Mean
*HDP-TFF-PHOTO-D	Male	40	1.445	1.233	.195
	Female	40	1.499	1.485	.235

Note: abbreviations explained in Table 4.5

Table 4. 5 : Results of independent sample t-test for (TFF) to the photo of the advertisements to the photo according to their gender

*HDP-TFF-PHOTO-D	Independent samples t-test								
	t-test for Equality of Means 95% Confidence								
	Equality of Means Variances		T	Df	Sig. (2-tailed)	Mean Difference	Std. Error of difference	Interval of the	
F	Sig-	Lower						Upper	
	3.956	.050	.177	78.000	.860	-.054	.305	-.662	.554

Note: abbreviations explained in Table 4.5

The result showed difference in only one advertisement and that could be attributed to the fact that it was the only advertisement that contains the images of two leaders of the party.

4.1.1.3 (TFF) and Third Areas of Interests: Logo

Based on the results of the independent t-test, female subjects tend to look faster than male subjects to the (Logo) of only two advertisements (AKP: A and MHP: D) as in Figure 4.4, out of the total 16 advertisements.



Figure 4. 4 : Results of Respondents' TFF to the logo of the visual materials according to their gender.

An independent-samples t-test was conducted to measure the differences between male and female voters' Time to First Fixation on the (Logo) of the advertisements. As shown in the group statistics (Table 4.8) and the results of t-test table of the two advertisements, there was a significant difference in the scores for of (AKP: A) male (M=3.5, SD=1.00) and female (M=3.30, SD=1.44) variables; $t(14)=0.393$, $p = 0.059$. Also there was a significant difference in the scores for of (MHP: D) male (M=0.8, SD=1.067) and female (M=1.22, SD=1.836) variables; $t(78)=-1.51$, $p = 0.038$. as in (Table 4.9).

The results suggest that gender does not have a significant effect on first time fixations of the participants. The result only showed difference in one advertisement and that could be attributed to the location of the position and simplicity of the claim.

Table 4.6 : Group Statistics of respondents' Time to First Fixation (TFF) to the logo according to their gender.

Group Statistics					
GENDER		N	Mean	Std. Deviation	Std. Error Mean
*AKPTFFLOGOA	MALE	7	3.557	1.000	.378
	FEMALE	9	3.304	1.447	.482
MHPTFFLOGOD	MALE	40	.807	1.067	.169
	FEMALE	40	1.224	1.386	.219

*Note: abbreviations explained in Table 4.5

Table 4.7 : Results of Independent Samples Test of respondents' Time to First Fixation (TFF) to the logo of the advertisements according to their gender.

	Independent samples t-test										
	Equality of Means Variances		t-test for Equality of Means							95% Confidence Interval of the Difference	
	F	Sig-	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error of difference	Lower	Upper		
AKPTFFLOGOA	3.330	.059	.393	14	.700	.253	.643	-1.125	1.631		
MHPTFFLOGOD	4.446	.038	1.510	78	.135	-.41750	.27654	-.96804	.13304		

*Note: abbreviations explained in Table 4.5

Female participants looked at the (Logo) of the parties faster than male participants (Figure 4.5). Women gazed at the logo after 3.3 seconds while men waited for almost 3.56 seconds to fix their gaze on the logo of the parties at the displayed advertisement.

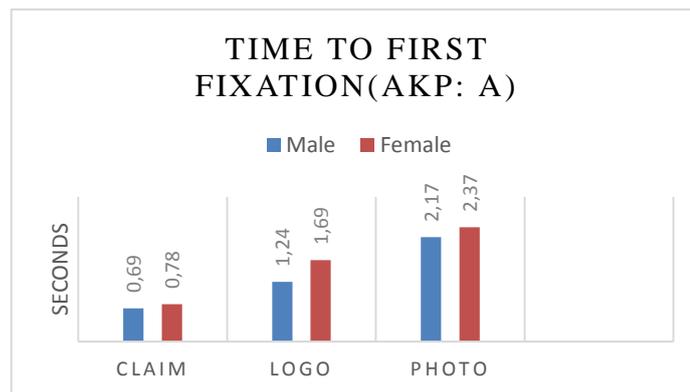


Figure 4. 5 : Respondents' Time to First Fixation (TFF) to the AOI of the advertisements according to their gender

The only difference where men looked faster than women was in the (MHP: D) advertisement. As the results demonstrated at the bar graph (Figure 4.6) illustrates male participants looked at the (Logo) of the party faster than female participants.

Men gazed at the logo after 1,2 seconds while women waited for almost 1,7 seconds to fix their gaze on the logo of the party at the displayed advertisement.

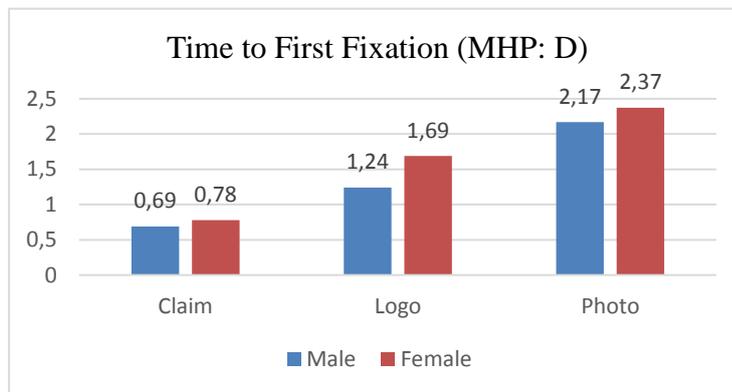


Figure 4.6 : Respondents’ Time to First Fixation (TFF) to the AOI of the advertisements according to their gender.

In a nutshell, it can be; therefore, concluded that the first hypothesis (H1a: Voter’s Time to First Fixation (TFF) to AOI (Logo) of the printed political advertisements will be different based on their gender) has not been supported by the results of the eye-tracking study.

H1b: Voter’s Fixation Count (FC) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.

4.1.1.4 (FC) and First Area of Interest: Claim

Fixation time refers to how long a user’s point of gaze must stay within a certain area to be measured as an eye fixation. The default fixation duration in Analyze is 200 milliseconds (0.200 seconds). This means that any time a participant’s gaze remains within the fixation radius for 0.2 seconds or longer then the eye tracking tool will measure it as a fixation.

Generally, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a tendency to focus their gazes at the claim of the visual stimuli more than the photo and logo. Then they tend to fixate their gaze on the photo of the leader and lastly to the logo of the party. There are some exceptions in two advertising posters of MHP and HDP (Appendix A)

Based on the results of the independent t-test, male subjects tend to focus more than female subjects in their fixation counts to the claim of only two advertisements (HDP: C and E) (Figure 4.7) out of the total 16 advertisements.

The only difference where men looked faster than women was in the (MHP: D) advertisement. As the results indicate that male participants looked at the (Logo) of the party faster than female participants. Men gazed at the logo after 1.2 seconds while women waited for almost 1.7 seconds to fix their gaze on the logo of the party at the displayed.

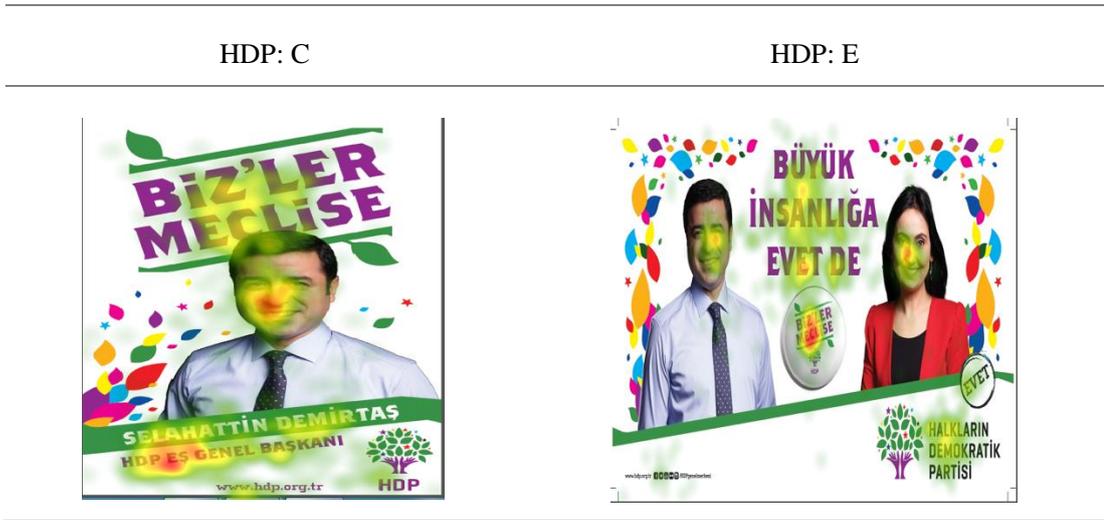


Figure 4.7 : Results of Respondents' FC to the claim of the visual materials according to their gender.

An independent-samples t-test was conducted to measure the differences between male and female voters' Fixation Count on the claim of the advertisements. As shown in the group statistics (Table 4.10) and the results of t-test table (HDPFCCLAIMC), there was a significant difference in the scores for of male (M=4.4, SD=2.341) and female (M=4.7, SD=3.02) variables; $t(78)=-0.496$, $p = 0.048$. Similarly, the results of (*HDPFCCLAIME) demonstrates that there was a significant difference in the scores for of male (M=7.4, SD=4.67) and female (M=4.7, SD=3.02) variables; $t(78)=-1.208$, $p = 0.014$ (Table 4.11)

Table 4.8 : Group Statistics of respondents' Fixation Count) to the claim of the advertisements according to their gender.

Group Statistics					
GENDER		N	Mean	Std. Deviation	Std. Error Mean
*HDP-FC-CLAIM-C	MALE	40	4.4250	2.34124	.37018
	FEMALE	40	4.7250	3.02119	.47769
**HDP-FC CLAIM-E	MALE	40	6.3000	3.36040	.53133
	FEMALE	40	7.4000	4.67837	.73972

* HDP: the name of the political party- FC (Fixation Count) – Claim – C: The Number of the advertisement

** HDP: the name of the political party- FC (Fixation Count) – Claim – E: The Number of the advertisement

The result suggests that gender does not have a significant effect on Fixation Count (FC) of the participants on the claim of the advertisements.

Table 4.9 : Results of Independent Samples Test of respondents' Fixation Count (FC) to the claim of the advertisements according to their gender.

Independent samples Test									
*HDP-FC-CLAIM-C	Equality of Means Variances		t-test for Equality of Means 95% Confidence						
	F	Sig-	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error of difference	Interval of the	
								Lower	Upper
	4.029	.048	.496	78	.621	.30000	.60434	1.50314	.90314
**HDP-FC-CLAIM-E	6.382	.014	1.208	78	.231	-1.10000	.91076	2.91319	.71319

* HDP: the name of the political party- FC (Fixation Count) – Claim – C: The Number of the advertisement

** HDP: the name of the political party- FC (Fixation Count) – Claim – E: The Number of the advertisement

As the bar graph (Figure 4.8) clearly shows that female participants focused more than male participants on the claim of HDP: C advertisement. Women gazed at the claim for almost 5.5 counts, whereas men fixated their gaze for almost 4.5 counts.

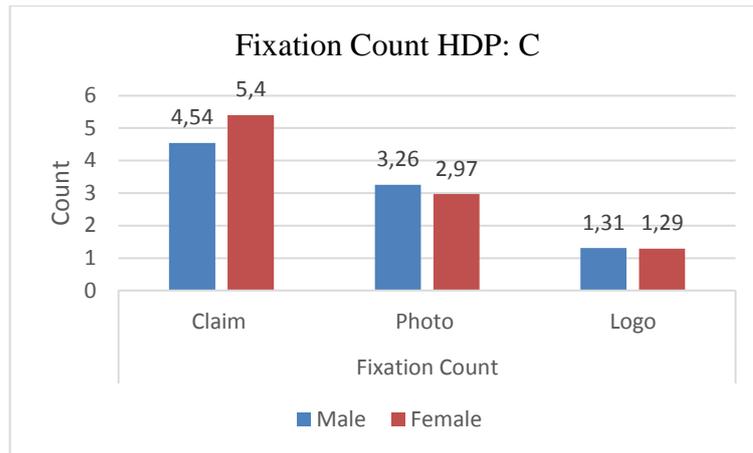


Figure 4.8 : Respondents’ Time to First Fixation (FC) to AOI of the advertisements according to their gender.

Likewise, female individuals focused more than male participants on the claim of HDP: E advertisement (Figure 4.9). Women gazed at the claim for almost 7.92 counts, whereas men fixated their gaze for 6.7 counts.

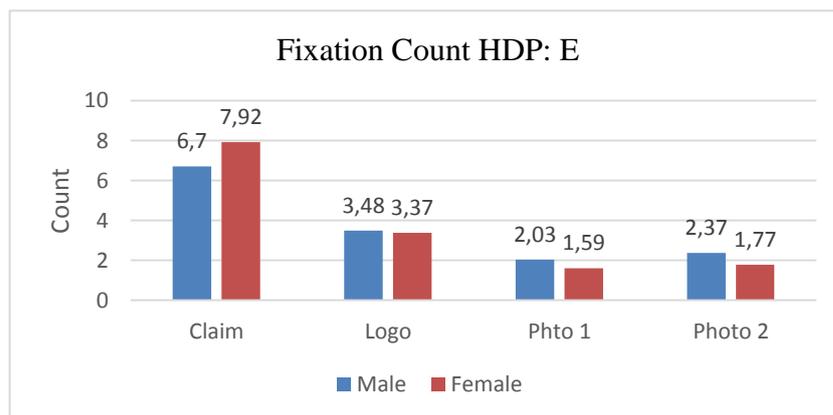


Figure 4.9 : Respondents’ Time to First Fixation (FC) to the AOI of the advertisements according to their gender.

The result concludes that there was a significant difference between male and female participants’ Fixation Count to the claim of the advertisement in only these two advertisements and that could be attributed to the location of the position and simplicity of the claim; the claim is written in the middle of the posts.

4.1.1.5 (FC) and Second Area of Interest: Photo

H1b: Voter’s Fixation Count (FC) to AOI (claim, logo, photo) of the printed political advertisements will be different based on their gender. Based on the results of the

independent t-test, female subjects tend to focus more than male subjects in their fixation counts to the photo of only 3 advertisements (CHP: B), (MHP: E), (HDP: E) (Figure 4.10) out of the total 16 advertisements.

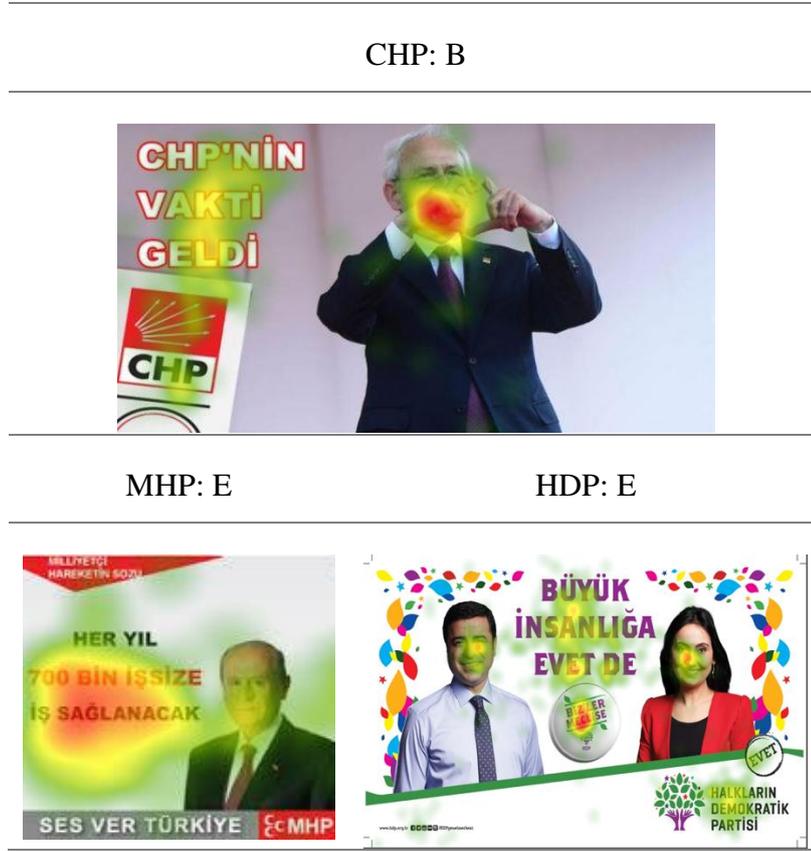


Figure 4.10 : Results of Respondents' Fixation Count (FC) to the photo of the visual materials according to their gender

An independent-samples t-test was conducted to measure the differences between male and female voters' Fixation Count on the (Photo) of the advertisements.

Table 4.10 : Group Statistics of respondents' Fixation Count (FC) to the photo of the advertisements according to their gender.

		Group Statistics			
GENDER		N	Mean	Std. Deviation	Std. Error Mean
*CHP-FC-PHOTO-B	MALE	40	2.9500	2.63069	.41595
	FEMALE	40	2.0500	1.28002	.20239
**MHP-FC-PHOTO-E	MALE	14	1.07	.267	.071
	FEMALE	17	1.24	.437	.106
***HDP-FC-PHOTO-E	MALE	40	1.6250	1.37165	.21688
	FEMALE	40	1.0750	1.07148	.16942

* CHP: the name of the political party- FC (Fixation Count) – Photo – B: The Number of the advertisement

** MHP: the name of the political party- FC (Fixation Count) – Photo – E: The Number of the advertisement

** HDP: the name of the political party- FC (Fixation Count) – Photo – E: The Number of the advertisement

As shown in the results of t-test (Table 4.13), there was a significant difference in the scores for of male and female participants' Fixation Counts on the photos of the leaders in 3 different advertisements.

Table 4.11 : Results of Independent Samples Test of respondents' Fixation Count (FC) to the photo of the advertisements according to their gender.

	Independent samples Test								
	Equality of Means Variances		t-test for Equality of Means 95% Confidence						
	F	Sig-	T	df	Sig. (2-tailed)	Mean Difference	Std. Error of difference	Interval of the Lower	Upper
*CHP-FC-PHOTO-B	16.679	.000	1.946	78	.055	.90000	.46257	-.02091	1.82091
**MHP-FC-PHOTO-E	7.466	.011	1.224	29	.231	-.164	.134	-.438	.110
***HDP-FC-PHOTO-E	4.487	.037	1.999	78	.049	.55000	.27520	.00211	1.09789

* CHP: the name of the political party- FC (Fixation Count) – Photo – B: The Number of the advertisement

** MHP: the name of the political party- FC (Fixation Count) – Photo – E: The Number of the advertisement

** HDP: the name of the political party- FC (Fixation Count) – Photo – E: The Number of the advertisement

The overall result suggests that gender does not relatively have an effect on Fixation Count (FC) of the participants on the photo of the leaders of the political parties in printed advertisements.

As the bar graph (Figure 4.11) clearly shows that male participants focused more than female participants on the (photo) of the leaders of two political parties in the

printed advertisements of (CHP) and (HDP). While, women focused more than men with a very slight difference on the photo of MHP leader.

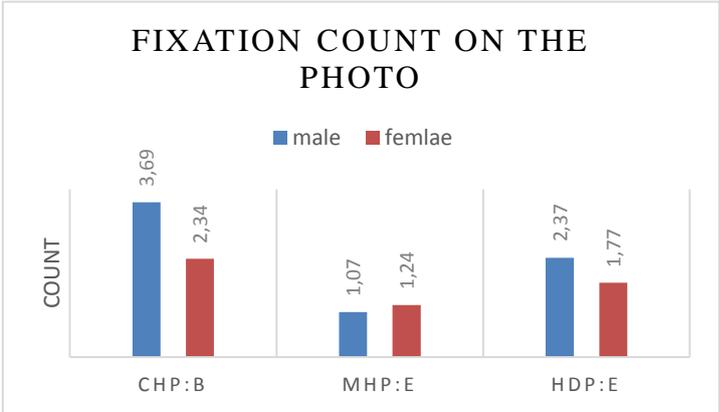


Figure 4.11 : Respondents’ Time to First Fixation (FC) to the photo of the advertisements according to their gender.

The only explanation that could explain the results is that men tend to focus more on the photos of smiling faces and unusual postures like the shape of the heart of the leader of (CHP).

4.1.1.6 (FC) and Third Area of Interest: Logo

H1b: Voter’s Fixation Count (FC) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.

Based on the results of the independent t-test, male subjects tend to focus more than female subjects in their fixation counts to the logo of only 6 advertisements (AKP: Dand E), (MHP: Dand H), (HDP: Dand E) (Figure 4.17) out of the total 16 advertisements.

AKP: D

AKP: E



MHP: D

MHP: H



HDP: D

HDP: E



Figure 4.12 : Results of Respondents' FC to the logo of the visual materials according to their gender.

An independent-samples t-test was conducted to measure the differences between male and female voters' Fixation Count on the (Logo) of the advertisements. As shown in (Table 4.15), there was a significant difference in the scores for of male and female participants' Fixation Counts in 6 different advertisements. Four of them with positive t-value which means that women fixated their counts on the party's logo more than men. While the other two negative t-value indicate that men fixated their count more than women. The overall result suggests that gender does relatively have an effect on Fixation Count (FC) of the participants on the logo of the political parties in printed advertisements.

Table 4.12 : Group Statistics of respondents' Fixation Count (FC) to the logo of the advertisements according to their gender.

Group Statistics					
GENDER		N	Mean	Std. Deviation	Std. Error Mean
*AKP-FC-LOGO-A	MALE	7	1.00	0.000	0.000
	FEMALE	9	1.33	.707	.236
**AKP-FC-LOGO-E	MALE	19	1.26	.452	.104
	FEMALE	17	1.53	.514	.125
***MHP-FC-LOGO-D	MALE	40	1.5000	1.53590	.24285
	FEMALE	40	1.3000	1.22370	.19348
****MHP-FC-LOGO-H	MALE	10	1.80	1.135	.359
	FEMALE	11	1.27	.467	.141
*****HDP-FC-LOGO-D	MALE	18	1.22	.428	.101
	FEMALE	10	1.60	.699	.221
*****HDP-FC-LOGO-E	MALE	40	6.3000	3.36040	.53133
	FEMALE	40	7.4000	4.67837	.73972

* AKP: the name of the political party- FC (Fixation Count) – Logo – A: The Number of the advertisement
 ** AKP: the name of the political party- FC (Fixation Count) – Logo – E: The Number of the advertisement
 *** MHP: the name of the political party- FC (Fixation Count) – Logo – D: The Number of the advertisement
 **** MHP: the name of the political party- FC (Fixation Count) – Logo – H: The Number of the advertisement
 ***** HDP: the name of the political party- FC (Fixation Count) – Logo – D: The Number of the advertisement
 ***** HDP: the name of the political party- FC (Fixation Count) – Logo – E: The Number of the advertisement

Table 4.13 : Results of Independent Samples Test of respondents' Fixation Count (FC) to the logo of the advertisements according to their gender.

	Independent samples Test								
	Equality of Means Variances		t-test for Equality of Means 95% Confidence						
	F	Sig-	T	df	Sig. (2-tailed)	Mean Difference	Std. Error of difference	Interval of the	
								Lower	Upper
*CHP-FC-PHOTO-B	16.679	.000	1.946	78	.055	.90000	.46257	-.02091	1.82091
**MHP-FC-PHOTO-E	7.466	.011	-1.224	29	.231	-.164	.134	-.438	.110
***HDP-FC-PHOTO-E	4.487	.037	1.999	78	.049	.55000	.27520	.00211	1.09789
****MHP-FC-LOGO-H	16.679	.000	1.946	78	.055	.90000	.46257	-.02091	1.82091
*****HDP-FC-LOGO-D	7.466	.011	-1.224	29	.231	-.164	.134	-.438	.110
*****HDP-FC-LOGO-E	4.487	.037	1.999	78	.049	.55000	.27520	.00211	1.09789

* CHP: the name of the political party- FC (Fixation Count) – Photo – B: The Number of the advertisement
 ** MHP: the name of the political party- FC (Fixation Count) – Photo – E: The Number of the advertisement
 *** HDP: the name of the political party- FC (Fixation Count) – Photo – E: The Number of the advertisement
 **** MHP: the name of the political party- FC (Fixation Count) – Logo – H: The Number of the advertisement
 ***** HDP: the name of the political party- FC (Fixation Count) – Logo – D: The Number of the advertisement
 ***** HDP: the name of the political party- FC (Fixation Count) – Logo – E: The Number of the advertisement

As the bar graph (Figure 4.13) clearly shows that female participants focused more than male participants on the (Logo) of the political parties in the printed advertisements of AKP and HDP. While, men focused on the logo of MHP more than women.

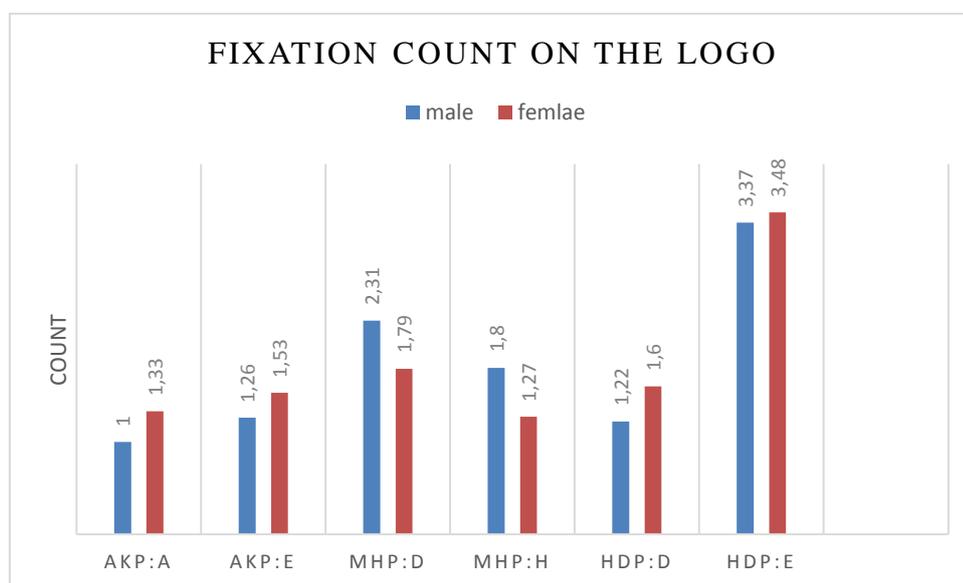


Figure 4.13 : Respondents' Time to First Fixation (FC) to the logo of the advertisements according to their gender.

The only explanation that could explain the results is that women tend to focus more on the logos when they are in the margins of the printed advertisements. Whereas men tend to focus their fixations more on the logo when it tends to be centralized in the middle of the printed advertisements.

H1c: Voter's Total Visit Duration (TVD) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.

4.1.1.7 (TVD) and First Area of Interest: Claim

Generally, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a tendency to spend more time gazing at the claim of the visual stimuli more than the photo and logo. Then they tend to spend more time gazing on the photo of the leader and lastly to the logo of the party. There are some exceptions in two advertising posters of MHP and CHP (Appendix A)

Based on the results of the independent t-test, male and female individuals tend to spend dissimilar time durations or total visit duration on the claim of two advertisements of (HDP: E and C) (Figure 4.14)



Figure 4.14 : Results of Respondents' Total Visit Duration (TVD) to the claim of the visual materials according to their gender.

An independent-samples t-test was conducted to measure the differences between male and female voters' Total Visit Duration of the (Claim) of the advertisements. As shown in the group statistics (table 4.16) and the results of t-test (Table 4.17),

there was a significant difference in the scores for of male and female participants' Total Visit Duration of two different advertisements.

Table 4.14 : Group Statistics of respondents' Total Visit Duration (TVD) to the claim of the advertisements according to their gender.

Group Statistics					
GENDER		N	Mean	Std. Deviation	Std. Error Mean
*HDPTVDCLAIMC	MALE	40	.9813	.60006	.09488
	FEMALE	40	1.0828	.75998	.12016
**HDPTVDCLAIME	MALE	40	1.4203	.81163	.12833
	FEMALE	40	1.6470	1.14397	.18088

* HDP: the name of the political party- TVD (Total Visit Duration) – Claim – C: The Number of the advertisement

** HDP: the name of the political party- TVD (Total Visit Duration) – Claim – E: The Number of the advertisement

Table 4.15 : Results of Independent Samples Test of respondents' Total Visit Duration (TVD) to the claim of the advertisements according to their gender.

Independent samples Test									
	Equality of Means Variances		t-test for Equality of Means 95% Confidence						
	F	Sig-	T	df	Sig. (2-tailed)	Mean Difference	Std. Error of difference	Interval of the	
								Lower	Upper
*HDP-TVD-CLAIM-C	2.925	.051	- .663	78	.509	-.10150	.15311	-.40631	.20331
			- .663	74.018	.509	-.10150	.15311	-.40657	.20357
**HDP-TVD-CLAIM-E	4.019	.048	- 1.022	78	.310	-.22675	.22178	-.66827	.21477
			- 1.022	70.326	.310	-.22675	.22178	-.66904	.21554

* HDP: the name of the political party- TVD (Total Visit Duration) – Claim – C: The Number of the advertisement

** HDP: the name of the political party- TVD (Total Visit Duration) – Claim – E: The Number of the advertisement

The overall result suggests that gender does not relatively have an effect on the Total Visit Duration of the participants to the claim of the political parties in printed advertisement. As the bar graph (Figure 4.15) clearly shows that both genders tend to have different times of eye fixations on the (Claim) of the advertisements of one political party HDP.

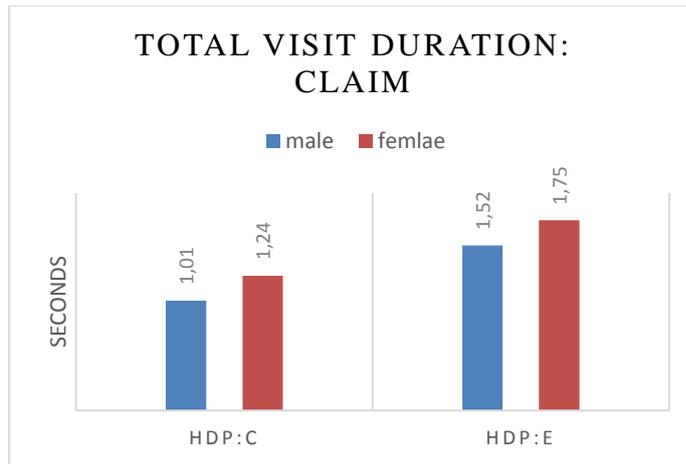


Figure 4.15 : Respondents’ Time to First Fixation (TVD) to the claim of the advertisements according to their gender.

It can be explained that men tend to visit the short claims less than women do. One of the claims include only 2 words while the other include only 3 words.

4.1.1.8 (TVD) and Second Area of Interest: Photo

H1c: Voter’s Total Visit Duration (TVD) to AOI (Photo) of the printed political advertisements will be different based on their gender. Based on the results of the independent t-test, male and female individuals tend to spend different times or total visit on the photo of three advertisements of (MHP: E and G) and (HDP: E) (Figure 4.16).

HDP: E

MHP: E



MHP: G



Figure 4.16 : Results of Respondents' Total Visit Duration (TVD) to the photo of the visual materials according to their gender

The results of the independent-samples t-test that was conducted to measure the differences between male and female voters' Total Visit Duration of the (Photo) of the advertisements show that there was a significant difference in the scores for of male and female participants' Total Visit Durations in three different advertisements (Table 4.19).

Table 4.16 : Results of Independent Samples Test of respondents' Total Visit Duration (TVD) to the photo of the advertisements according to their gender.

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
*HDP-TVD-PHOTO-E	Equal variances assumed	4.283	.042	1.602	78	.113	.09750	.06088	.02369	.21869
	Equal variances not assumed			1.602	74.927	.113	.09750	.06088	.02377	.21877
**MHP-TVD-PHOTO-G	Equal variances assumed	7.856	.006	1.664	78	.100	-.25900	.15564	.56885	.05085
	Equal variances not assumed			1.664	66.526	.101	-.25900	.15564	.56970	.05170
***MHP-TVD-PHOTO-E	Equal variances assumed	5.162	.031	2.302	29	.029	-.111	.048	-.209	-.012
	Equal variances not assumed			2.430	25.593	.022	-.111	.046	-.204	-.017

* HDP: the name of the political party- TVD (Total Visit Duration) – Photo – E: The Number of the advertisement
 ** MHP: the name of the political party- TVD (Total Visit Duration) – Photo – G: The Number of the advertisement
 *** MHP: the name of the political party- TVD (Total Visit Duration) – Photo – E: The Number of the advertisement

The overall result suggests that gender does not relatively have an effect on the Total Visit Duration of the participants to the photo of the political parties in printed advertisements. As the bar graph (Figure 4.17) obviously shows that both genders tend to have different times of eye fixations on the (Photo) of the advertisements of one political parties HDP and MHP. Male individuals spend less time gazing on the photos of the leaders in the examined advertisements. However, it cannot be generalized as it was only different in 3 out of 16 advertisements.

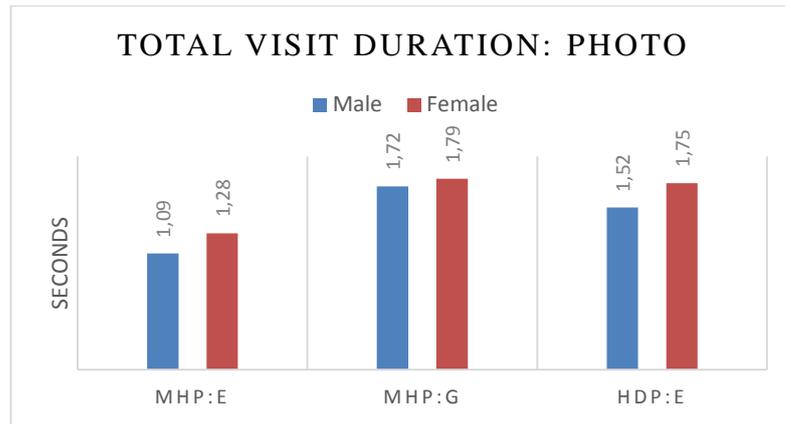


Figure 4.17 : Respondents’ Time to First Fixation (TVD) to the photo of the advertisements according to their gender.

It can be explained that men tend to visit the short claims less than women do. One of the claims include only 2 words while the other include only 3 words.

4.1.1.9 (TVD) and Third Area of Interest: Logo

H1c: Voter’s Total Visit Duration (TVD) to AOI (Logo) of the printed political advertisements will be different based on their gender. Based on the results of the independent t-test, male and female individuals tend to gaze more on the logo of 6 different advertisements of (AKP: E and H) and (MHP: D and H) and (HDP: C and E) (Figure 4.18).

AKP: E

AKP: H



MHP: D

MHP: H



HDP: E

HDP: C



Figure 4.18 : Results of Respondents' Total Visit Duration (TVD) to the photo of the visual materials according to their gender.

The results of the independent-samples t-test (Table 4.19), that was conducted to measure the differences between male and female voters' Total Visit Duration of the (Photo) of the advertisements show that there was a significant difference in the scores of male and female participants Total Visit Durations in six different advertisements.

Table 4.17 : Results of Independent Samples Test of respondents' Total Visit Duration (TVD) to the logo of the advertisements according to their gender

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
AKPTVDLOGOE	Equal variances assumed	9.674	.003	-1.381	78	.171	-.152	.110	-.370	.067	
	Equal variances not assumed			-1.381	64.198	.172	-.152	.110	-.371	.068	
AKPTVDLOGOH	Equal variances assumed	6.784	.031	-1.498	8	.172	-.237	.158	-.601	.128	
	Equal variances not assumed			-1.862	5.198	.119	-.237	.127	-.560	.086	
MHPTVDLOGOD	Equal variances assumed	3.583	.042	1.241	78	.218	.12400	.09992	-.07492	.32292	
	Equal variances not assumed			1.241	75.406	.218	.12400	.09992	-.07503	.32303	
MHPTVDLOGOH	Equal variances assumed	3.363	.052	1.118	19	.277	.194	.173	-.169	.557	
	Equal variances not assumed			1.071	10.287	.309	.194	.181	-.208	.595	
HDPTVDCLAIMC	Equal variances assumed	2.925	.051	-.663	78	.509	-.10150	.15311	-.40631	.20331	
	Equal variances not assumed			-.663	74.018	.509	-.10150	.15311	-.40657	.20357	
HDPTVDCLAIME	Equal variances assumed	4.019	.048	-1.022	78	.310	-.22675	.22178	-.66827	.21477	
	Equal variances not assumed			-1.022	70.326	.310	-.22675	.22178	-.66904	.21554	

The overall result suggests that gender has an effect on the Total Visit Duration of the participants to the logo of the political parties in printed advertisements. As the bar graph (Figure 4.19) remarkably displays that both genders tend to have different times of eye fixations on the (logo) of the advertisements of political parties AKP, HDP and MHP. Female individuals fixated their gazes on the logo of three advertisements for times more than men (AKP – E and H) and (HDP - C) Whereas men spent more time gazing on the logos of the other three advertisements (MHP-D, H) and (HDP-E) However, it cannot be generalized as it was only different in 6 out of 16 advertisements.

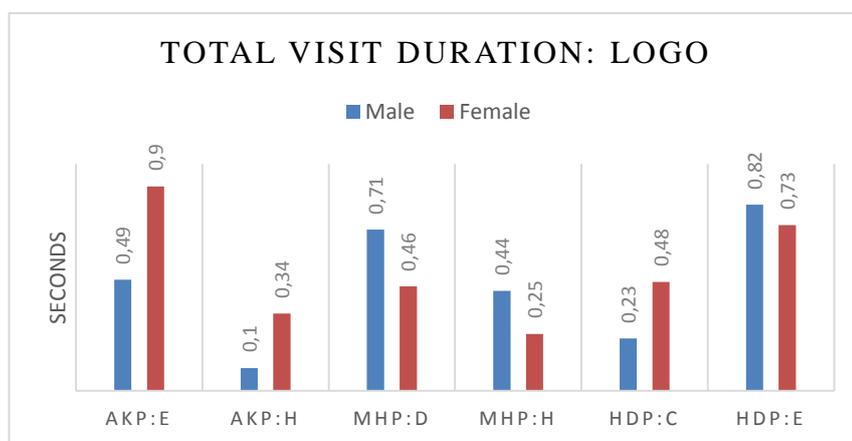


Figure 4. 19 : Respondents’ Time to First Fixation (TVD) to the logo of the advertisements according to their gender

It can be explained that men interestingly tend to visit the logos in the center of the printed advertisements more than women do. While women tend to look more on the logo if it was located on the corners or the margins of the printed advertisement.

4.1.2 Second hypothesis:

H2a: Voter's Time to First Fixation (TFF) to AOI (claim) of the printed political advertisements will be different based on their age.

4.1.2.1 (TFF) and First Area of Interest: Claim

Generally, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a clear tendency to quickly gaze at the claim of the visual stimuli. Then they tend to gaze at the photo of the leader and lastly to the logo of the party. There are some exceptions in the advertising posters of MHP (Appendix A)

Based on the results of one-way between subjects- ANOVA test, young generations tend to look faster than older generations to the claim of only two advertisements (MHP: G) and (HDP: C) (Figure 4.20)



Figure 4. 20 : Results of Respondents' Time to First Fixation (TFF) to the claim of the visual materials according to their age

A one-way between subjects – ANOVA (Table 4.22) was conducted to compare the effect of age group on the participants' Time to First Fixation to the displayed advertisements. Age groups were classified into three main groups (25-35), (36-45) and (46-above). According to the results, there was a significant effect of age on (TFF) at the $p < 0.05$ level for the three age groups [$F(2, 77) = 4.64, p = 0.012$]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the age

groups (M = 0.67, SD = 0.58) was significantly different with reference to the to (TTF) to the claim of the advertisement of (MHP: G).

Similarly, there was another significant effect of the age groups on (TFF) at the $p < 0.05$ level for the age groups [F (2, 77) = 2.67, $p = 0.056$]. and the Post hoc comparisons using the Tukey HSD test indicated that the mean score for the age groups (M = 0.88, SD = 0.09) (Table 4.20) was significantly different with reference to the (TTF) to the claim of the advertisement of (MHP: G). Taken together, these results suggest that individuals from different age groups do not significantly differ in their Time to First Fixation. In other words, there is no significant difference in their pace of gazing to the Areas of Interests.

Table 4. 18 : Group Statistics of ANOVA respondents' Time to First Fixation (TFF) to the claim of the visual materials according to their age

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
MHPTFFCLAIM G	Between Groups	2.863	2	1.432	4.641	.012
	Within Groups	23.751	77	.308		
	Total	26.614	79			
HDPTFFCLAIM C	Between Groups	4.044	2	2.022	2.671	.056
	Within Groups	58.288	77	.757		
	Total	62.332	79			

*Note: abbreviations explained in Table 4.5

Table 4. 19 : Results of ANOVA Test of respondents' Time to First Fixation (TFF) to the claim of the advertisements according to their age.

		ANOVA							
		N	Mean	Std. Deviation	Std. Error	Interval for Mean 95% Confidence		Minimum	Maximum
						Lower Bound	Upper Bound		
MHPTFFCLAIM G	25-35	32	.5647	.57579	.10179	.3571	.7723	0.00	2.73
	36-45	24	.5263	.21994	.04489	.4334	.6191	0.00	1.14
	46-ABOVE	24	.9596	.73311	.14965	.6500	1.2691	.26	3.80
	Total	80	.6716	.58042	.06489	.5425	.8008	0.00	3.80
HDPTFFCLAIM C	25-35	32	.4278	.54874	.09700	.2300	.6257	0.00	3.14
	36-45	24	.7517	.99229	.20255	.3327	1.1707	0.00	3.61
	46-ABOVE	24	.9604	1.06948	.21831	.5088	1.4120	0.00	4.69
	Total	80	.6848	.88827	.09931	.4871	.8824	0.00	4.69

*Note: abbreviations explained in Table 4.5

Specifically, the results suggest that young participants tend to look at the claim of the advertisements faster than the middle aged, adults and elderly people. According to the bar graph, (Figure 4.21) the more the individuals grow up the slower they consider looking at the claim of the political advertisements. Nonetheless, the results cannot be generalized as this conclusion was just observed in 2 displayed advertisements of the total 16 advertisements. A possible interpretation could be that the claims of the two advertisements are composed of only two words and that make young people look faster than older.

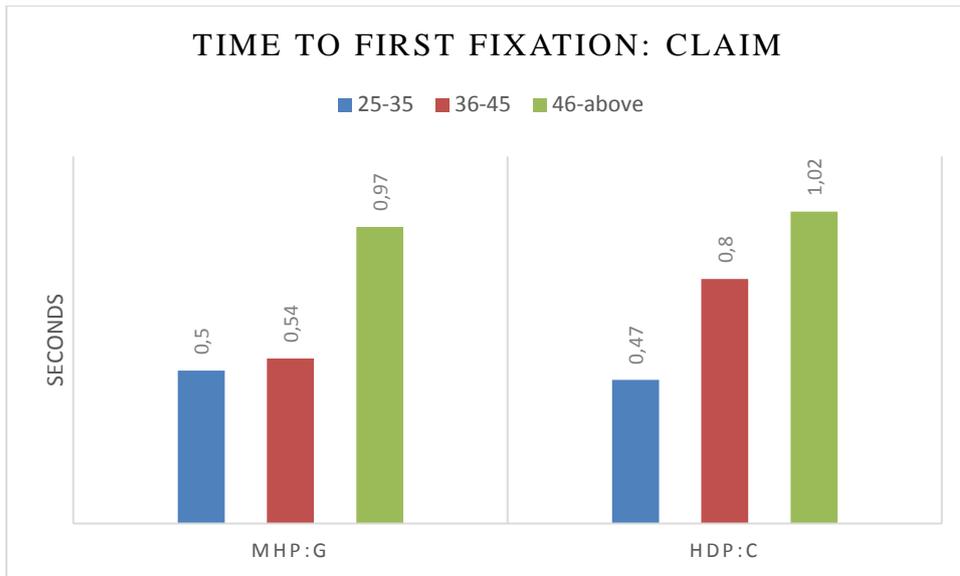


Figure 4. 21 : Respondents’ Time to First Fixation (TFF) to the claim of the advertisements according to their age.

4.1.2.2 (TFF) and Second Area of Interest: Photo

H2a: Voter’s Time to First Fixation (TFF) to AOI (Photo) of the printed political advertisements will be different based on their age. Based on the results of one-way between subjects- ANOVA test, old generations tend to look faster than young participants to the photos of political leaders of 5 political advertisements (AKP: A and D) (CHP: B), (HDP: C) and (MHP: H) (Figure 4.22).

AKP: A

AKP: D



CHP: B

MHP: H



HDP: C



Figure 4. 22 : Results of Respondents' (TFF) to the photo of the visual materials according to their age

The overall results suggest that old participants tend to look at the photo of the advertisements faster than the middle aged, young individuals. According to the bar graph, (Figure 4.23) the more the individuals grow up the faster they consider looking at the photo of the political advertisements. Nonetheless, the results cannot be totally generalized as this conclusion was observed in 5 displayed advertisements.

In almost all the observations, the participants who are aged more than 45 tend to gaze at the photo in less than a second. While some of the individuals aged 25 to 35 may wait for 3.18 seconds to consider looking at the photo of the (MHP: H) and 2.37 seconds to look at (AKP: A) and the explanation could be than young generation consider looking faster at the image of the leader if it was relatively in the middle of the printed advertisement and relatively big.

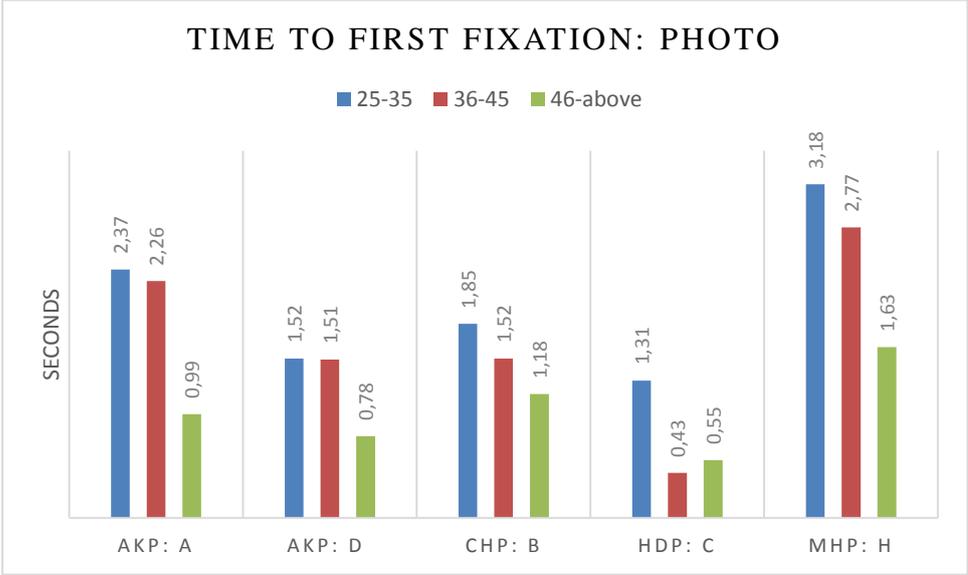


Figure 4. 23 : Respondents’ Time to First Fixation (TFF) to the photo of the advertisements according to their age

A one-way between subjects - ANOVA (Table 4.22) was conducted to compare the effect of age group on the participants’ Time to First Fixation to the photos used in the displayed advertisements. Age groups were classified into three main groups (25-35), (36-45) and (46-above). According to the results, there was a significant effect of age on (TFF) at the $p < 0.05$ level for the three age groups to five advertisements as shown in the tables below.

Taken together, these results suggest that individuals from different age groups relatively have significant difference in their Time to First Fixation towards the photos of the leaders in the displayed materials. Nonetheless, it cannot be overgeneralized to the rest of the sample simply because the results do not overwhelmingly include all the advertisements. Still, the results show that old generation appeal to the images of the leaders faster than young generation.

Table 4. 20 : Group Statistics of ANOVA respondents' Time to First Fixation (TFF) to the photo of the advertisements according to their age

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AKPTFFPHO TOA	Between Groups	18.149	2	9.075	4.024	.024
	Within Groups	105.991	47	2.255		
	Total	124.140	49			
AKPTFFPHO TOD	Between Groups	6.701	2	3.351	3.302	.042
	Within Groups	78.126	77	1.015		
	Total	84.827	79			
CHPTFFPHO TOB	Between Groups	8.272	2	4.136	2.769	.059
	Within Groups	115.003	77	1.494		
	Total	123.275	79			
MHPTFFPHO TOH	Between Groups	25.587	2	12.794	5.122	.008
	Within Groups	192.344	77	2.498		
	Total	217.931	79			
HDPTFFPHO TOC	Between Groups	12.020	2	6.010	5.508	.006
	Within Groups	84.011	77	1.091		
	Total	96.031	79			

*Note: abbreviations explained in Table 4.5

4.1.2.3 (TFF) and Third Area of Interest: Logo

H2a: Voter's Time to First Fixation (TFF) to AOI (Logo) of the printed political advertisements will be different based on their age. Based on the results of one-way between subjects- ANOVA test, middle aged participants tend to look faster than young participants and much faster than the old generations to the logo of only one political advertisement (MHP: D) (Figure 4.24) and that represents 6.5% of the total advertisements.



Figure 4. 24 : Results of Respondents' Time to First Fixation (TFF) to the logo of the advertisements according to their age.

The overall result suggests that participants aged 36 to 45 spend almost 0.8 seconds till they consider looking at the logo of the (MHP: D) advertisement, as shown in the bar graph (Figure 4.25). Undoubtedly, the result cannot be generalized as this conclusion was observed only in one displayed advertisement and that represents only 6.5 of the total 16 advertisements. The outstanding feature of the logo of this particular advertisement is that it comes typically in the center of the post and that may indicate that middle aged individuals often consider the middle of the displayed advertisements rather than the corner and the margins.

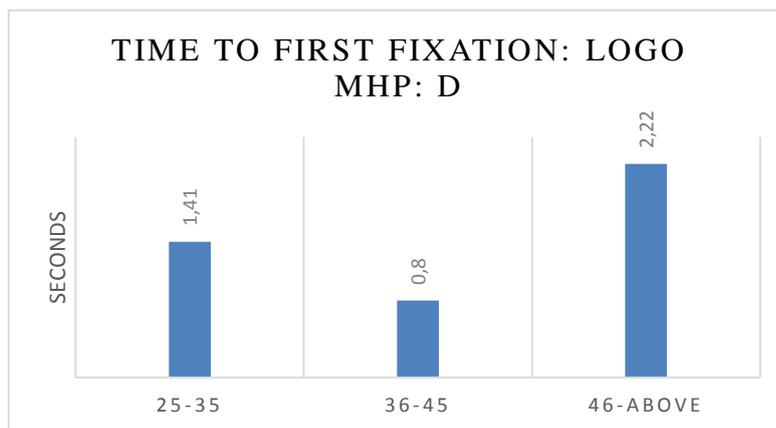


Figure 4. 25 : Respondents' Time to First Fixation (TFF) to the logo of the advertisements according to their age.

A one-way between subjects - ANOVA (Table 4.23) was conducted to compare the effect of age group on the participants' Time to First Fixation to the logo of the displayed advertisements. Age groups were classified into three main groups (25-35),

(36-45) and (46-above). According to the results, there was a significant effect of age on (TFF) at the $p < 0.05$ level for the three age groups [$F(2,77) = 4.38, p = 0.016$]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the age groups ($M = 1.05, SD = 1.28$) was significantly different with reference to the (TFF) to the logo of the advertisement of (MHP: D) as in Table 4.28.

Table 4. 21 : Results of ANOVA Test of respondents' Time to First Fixation (TFF) to the logo of the advertisements according to their age.

Descriptives								
MHP-TFF-LOGO-D								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
25-35	32	1.0538	1.28192	.22661	.5916	1.5159	0.00	4.92
36-45	24	.4804	.62676	.12794	.2158	.7451	0.00	1.66
46-ABOVE	24	1.4996	1.47828	.30175	.8754	2.1238	0.00	4.13
Total	80	1.0155	1.24668	.13938	.7381	1.2929	0.00	4.92

*Note: abbreviations explained in Table 4.5

Table 4. 22 : Group Statistics of ANOVA respondents' Time to First Fixation (TFF) to the logo of the advertisements according to their age

ANOVA					
MHPTFFLOGOD	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.542	2	6.271	4.380	.016
Within Groups	110.241	77	1.432		
Total	122.783	79			

*Note: abbreviations explained in Table 4.5

H2b: Voter's Fixation Count (FC) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their age.

4.1.2.4 (FC) and Areas of Interest: Photo

All the results showed that there has not been any difference between the various participants Fixation Counts to the claim or the photo of the displayed advertisements based on their age differences. The only significant difference was observed in one advertisement (AKP: A) (Figure 4.26) and that was related to the photo of the advertisement.

AKP: A



Figure 4. 26 : Results of Respondents' Fixation Count (FC) to the photo of the visual materials according to their age

As shown in Figure 4.27, old participants tend to fixate their gaze on the photo of one advertisement (AKP: A) They gazed for 2 counts where middle aged gazed for only 1.2 counts. Still, it is only one advertisement of the total 16 advertisements and thus it is hard to overgeneralize the findings.

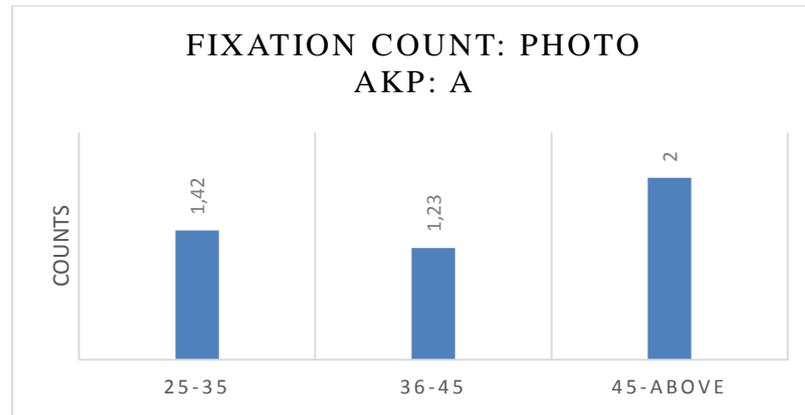


Figure 4. 27 : Respondents’ Fixation Count (FC) to the photo of the visual materials according to their affiliation

A one-way between subjects – ANOVA (Table 4.25) was conducted to compare the effect of age group on the participants’ Time to First Fixation to the photo of the displayed advertisements. Age groups were classified into three main groups (25-35), (36-45) and (46-above). According to the results, there was a significant effect of age on (TFF) at the $p < 0.05$ level for the three age groups [$F(2,47) = 5.65, p = 0.006$]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the age groups ($M = 1.42, SD = 0.507$) was significantly different with reference to the to (TTF) to the photo of the advertisement of (AKP: A) (Table 4.26)

Table 4. 23 : Results of ANOVA Test of respondents’ Fixation Count (FC) to the photo of the visual materials according to their age

Descriptives								
AKFCPHOTOA								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
25-35	19	1.42	.507	.116	1.18	1.67	1	2
36-45	14	1.29	.469	.125	1.02	1.56	1	2
46-ABOVE	17	2.00	.866	.210	1.55	2.45	1	3
Total	50	1.58	.702	.099	1.38	1.78	1	3

*Note: abbreviations explained in Table 4.5

Table 4. 24 : Group Statistics of ANOVA to respondents' Fixation Count (FC) to the photo of the visual materials according to their age

ANOVA					
AKFCPHOTOA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.691	2	2.346	5.657	.006
Within Groups	19.489	47	.415		
Total	24.180	49			

*Note: abbreviations explained in Table 4.5

H2C: Voter's Total Visit Duration (TVD) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their age. The results did not support the hypothesis in any area of interest

4.1.3 Third hypothesis

H3a: One party affiliates' Time to First Fixation (TFF) to AOI (claim) of the printed political advertisements will be different from other parties' advertisements.

(TFF) and First Area of Interest: Claim

The hypothesis was not supported. There were no significant differences in TFF between various party affiliates and the claims of various advertisements.

4.1.3.1 (TFF) and Second Area of Interest: Photo

H3a: One party affiliates' Time to First Fixation (TFF) to AOI (photo) of the printed political advertisements will be different from other parties' advertisements.

The overall results showed that there is a significant difference among the participants' political affiliation and the pace of their eye fixation on the photo of the leader in 3 advertisements (Figure 4.28).

AKP: D

AKP affiliate

Others



CHP: E

CHP affiliates

Others



HDP: E

HDP affiliates

Others



Figure 4. 28 : Results of Respondents' (TFF) to the photo of the visual materials according to their affiliation

Results show that the affiliates of the party tend to look faster than the other party's affiliates to the photo of their leader. As it is clear in the bar graph (Figure 4.29) the affiliates of CHP spend almost one second before they quickly look at the photo of their leader while the affiliates of other parties waited for longer time to look at the same photo. For instance, the affiliates of AKP waited for 1.75 seconds before fixing their gaze on the photo of the leader of CHP.

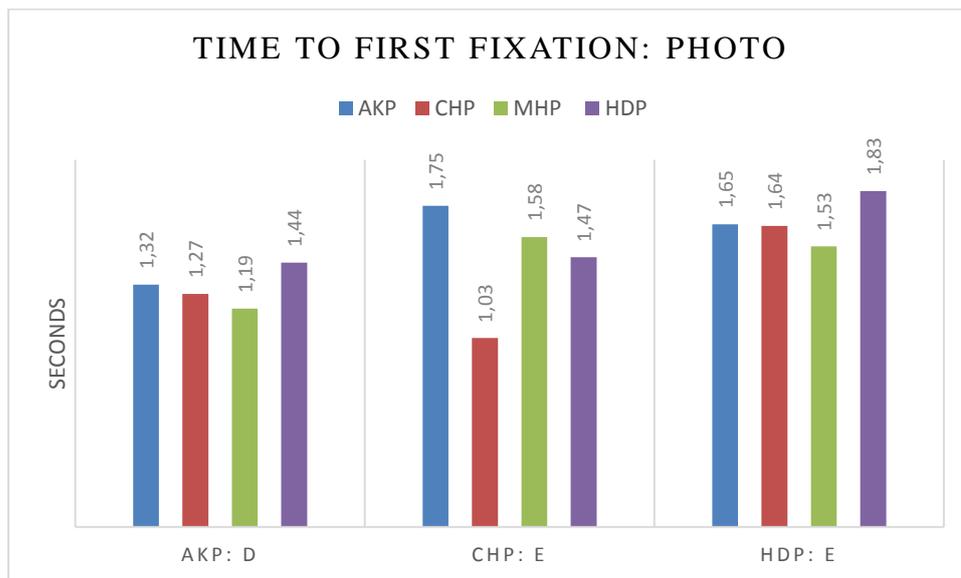


Figure 4. 29 : Respondents' Time to First Fixation (TFF) to the photo of the visual materials according to their affiliation

A one-way between subjects – ANOVA (Table 4.27) was conducted to compare the effect of political affiliation on the participants' Time to First Fixation to the displayed advertisements. Political affiliation was early determined by either asking the participant to show his membership card or scoring more than 80% of his previous vote records for his party. According to the results, there was a significant effect of political affiliation on (TFF) at the $p < 0.05$ level for the four political parties with reference to the photo of the leaders in three main advertisements. The first one was (AKP: D) where participants' results recorded a significant difference [$F(3, 76) = 2.307, p = 0.008$]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the political affiliation ($M = 1.25, SD = 1.03$) was significantly different with reference to the to (TFF) to the photo of the advertisement of (AKP: D).

Similarly, there was another significant effect of the political affiliation on (TFF) at the $p < 0.05$ level for the party's affiliation [$F(3, 44) = 2.94, p = 0.043$]. and the Post hoc comparisons using the Tukey HSD test indicated that the mean score for the age groups ($M = 1.47, SD = 1.702$) was significantly different with reference to the (TTF) to the photo of the political leader in the advertisement of (CHP: E).

Likewise, there was another significant effect of the political affiliation on (TFF) at the $p < 0.05$ level for the party's affiliation [$F(3.76) = 2.611, p = 0.057$]. and the Post hoc comparisons using the Tukey HSD test indicated that the mean score for the age groups ($M = 1.22, SD = 1.49$) was significantly different with reference to the (TTF) to the photo of the political leader in the advertisement of (HDP: E). (Table 4.28)

Taken together, these results suggest that individuals from different political affiliations have relatively significant difference in their Time to First Fixation to the photo of their political leaders

Table 4. 25 : Results of ANOVA Test of respondents' (TFF) to the photo of the visual materials according to their affiliation

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
AKPTFFPHOTOD	AKP	20	1.2720	1.18188	.26428	.7189	1.8251	0.00	4.72
	CHP	20	1.4145	.67942	.15192	1.0965	1.7325	0.00	2.19
	MHP	20	.7745	.83458	.18662	.3839	1.1651	0.00	2.44
	HDP	20	1.5670	1.23978	.27722	.9868	2.1472	0.00	4.96
	Total	80	1.2570	1.03623	.11585	1.0264	1.4876	0.00	4.96
CHPTFFPHOTOE	AKP	12	.64	1.215	.351	-.13	1.41	0	4
	CHP	16	2.36	1.901	.475	1.34	3.37	0	5
	MHP	11	1.46	1.787	.539	.26	2.66		5
	HDP	9	1.01	1.175	.392	.11	1.92	0	3
	Total	48	1.47	1.702	.246	.98	1.96	0	5
HDTFFPHOTOE	AKP	20	1.5195	1.72367	.38542	.7128	2.3262	0.00	4.77
	CHP	20	.8110	1.42663	.31900	.1433	1.4787	0.00	4.91
	MHP	20	.7635	.86595	.19363	.3582	1.1688	0.00	2.32
	HDP	20	1.8210	1.63798	.36626	1.0544	2.5876	0.00	4.50
	Total	80	1.2288	1.49628	.16729	.8958	1.5617	0.00	4.91

*Note: abbreviations explained in Table 4.5

Table 4. 26 : Group Statistics of ANOVA respondents’ (TFF) to the photo of the visual materials according to their affiliation

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
AKPTFFPHOTOD	Between Groups	7.079	3	2.360	2.307	.083
	Within Groups	77.749	76	1.023		
	Total	84.827	79			
CHPTFFPHOTOE	Between Groups	22.745	3	7.582	2.941	.043
	Within Groups	113.412	44	2.578		
	Total	136.156	47			
HDPTFFPHOTOE	Between Groups	16.525	3	5.508	2.611	.057
	Within Groups	160.344	76	2.110		
	Total	176.869	79			

*Note: abbreviations explained in Table 4.5

Specifically, the results suggest that party affiliates have a tendency toward looking at the photo of their leader faster than the fans of the other parties. Nonetheless, the results cannot be generalized as this conclusion was just observed in 3 displayed advertisements.

4.1.3.2 (FC) and First Area of Interest: Claim

H3b: One party affiliates’ Fixation Count (FC) to AOI (claim) of the printed political advertisements will be different from other parties’ advertisements. The overall results showed that there is a significant difference among the participants’ political affiliation and the Fixation Count of their eye gazes on the claim of two advertisements (Figure 4.30)



Figure 4. 30 : Results of Respondents' (FC) to the claim of the visual materials according to their affiliation

The results demonstrate that the affiliates of the party tend to fix their gazes on the claim of their party less than the other party's affiliates and that was obvious in two advertisements of (MHP: E and D). As it is clear in the bar graph (Figure 4.31) the affiliates of MHP spend less time gazing on their party's claim, while the affiliates of other parties gazed more as HDP affiliates gazed for 5.2 counts/times on the (MHP: D) advertisement.

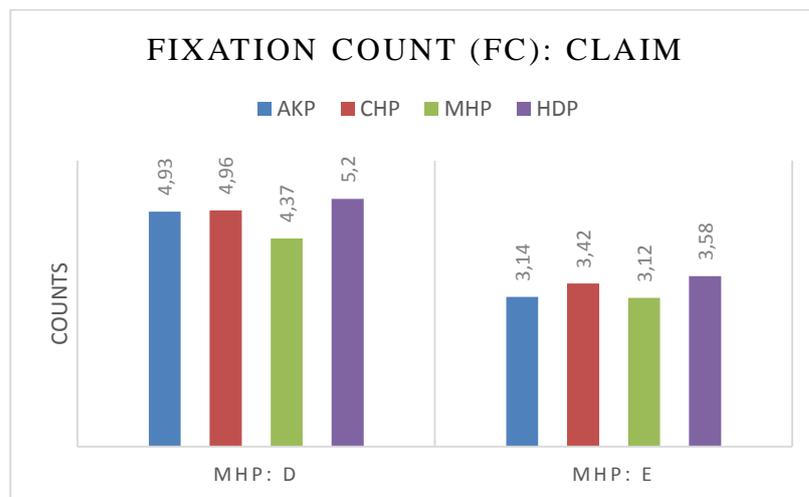


Figure 4. 31 : Respondents' (FC) to the claim of the visual materials according to their affiliation

A one-way between subjects - ANOVA (Table 4.29) was conducted to compare the effect of political affiliation on the participants' Fixation Count to the claim of the displayed advertisements. According to the results, there was a significant effect of political affiliation on (FC) at the $p < 0.05$ level for the two political parties with reference to the claim of their parties in two main advertisements. The first one was

(MHP: D) where participants' results recorded a significant difference [$F(3,76) = 2.205, p = 0.054$]. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the political affiliation ($M = 3.77, SD = 3.55$) was significantly different with reference to the (TTF) to the photo of the advertisement of (MHP: D).

Similarly, there was another significant effect of the political affiliation on (FC) at the $p < 0.05$ level for the party's affiliation [$F(3,76) = 2.323, p = 0.052$]. and the Post hoc comparisons using the Tukey HSD test indicated that the mean score for the age groups ($M = 2.86, SD = 2.45$) was significantly different with reference to the (TTF) to the claim of the party's advertisement (MHP: E). (Table 4.30)

Taken together, these results suggest that individuals from different political affiliations have relatively significant difference in their Fixation Count to the claims when displayed in printed advertisements.

Table 4. 27 : Results of ANOVA Test of respondents' FC to the claim of the visual materials according to their affiliation.

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
MHPFCCLAIMD	Between Groups	79.750	3	26.583	2.205	.094
	Within Groups	916.200	76	12.055		
	Total	995.950	79			
MHPFCCLAIME	Between Groups	39.938	3	13.313	2.323	.082
	Within Groups	435.550	76	5.731		
	Total	475.488	79			

*Note: abbreviations explained in Table 4.5

4.1.3.3 (FC) and Second Area of Interest: Photo

H3b: One party affiliates' Fixation Count (FC) to AOI (photo) of the printed political advertisements will be different from other parties' advertisements. The overall results showed that there is a significant difference among the participants' political affiliation and the Fixation Count of their eye gazes on the photo of the leaders of only two advertisements (Figure 4.32).

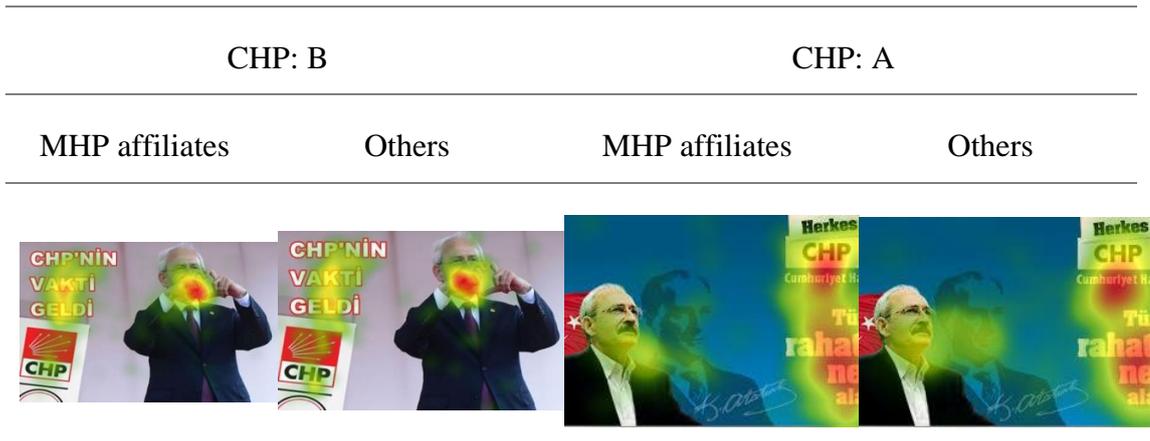


Figure 4. 32 : Results of Respondents' Fixation Count (FC) to the photo of the visual materials according to their affiliation

The results clearly show that the affiliates of the party tend to fix their gaze on the photo their leader less than the other party's affiliates and that was obvious in two advertisements of (CHP: A and B). As it is clear in the bar graph (Figure 4.33) the affiliates of CHP focused less on the image of the leader when compared with the other affiliates of other parties focus on the same photo.

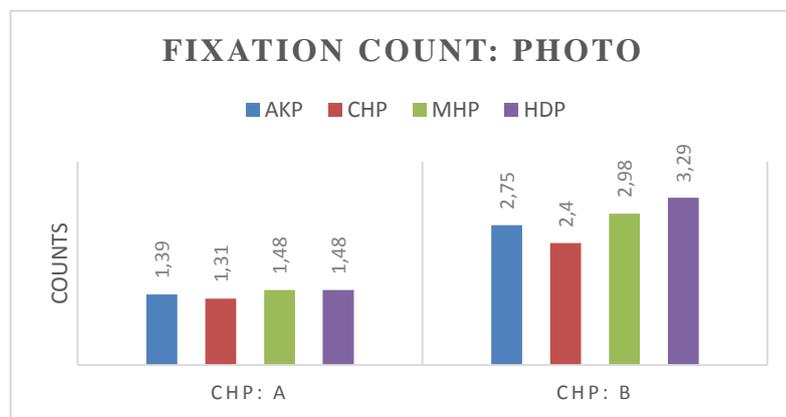


Figure 4. 33 : Respondents' Fixation Count (FC) to the photo of the visual materials according to their affiliation

A one-way between subjects – ANOVA (Table 4.30) was conducted to compare the effect of political affiliation on the participants' Fixation Count to the photo of the leader in the displayed advertisements. According to the results, there was a significant effect of political affiliation on (FC) at the $p < 0.05$ level for the two political parties with reference to the photo of their parties' leaders in two main advertisements (CHP: A and B) (Table 4.31).

Table 4. 28 : Group Statistics of ANOVA to respondents' Fixation Count (FC) to the photo of the visual materials according to their affiliation

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
CHPFCPHOTOA	Between Groups	9.350	3	3.117	2.291	.085
	Within Groups	103.400	76	1.361		
	Total	112.750	79			
CHPFCPHOTOB	Between Groups	39.700	3	13.233	3.241	.027
	Within Groups	310.300	76	4.083		
	Total	350.000	79			

*Note: abbreviations explained in Table 4.5

Table 4. 29 : Results of ANOVA Test of respondents' Fixation Count (FC) to the claim of the visual materials according to their affiliation

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
CHPFCPHOTOA	AKP	20	1.2500	1.06992	.23924	.7493	1.7507	0.00	4.00
	CHP	20	1.4500	1.46808	.32827	.7629	2.1371	0.00	5.00
	MHP	20	.5500	.75915	.16975	.1947	.9053	0.00	2.00
	HDP	20	1.2500	1.25132	.27980	.6644	1.8356	0.00	5.00
	Total	80	1.1250	1.19466	.13357	.8591	1.3909	0.00	5.00
CHPFCPHOTOB	AKP	20	3.4000	2.25715	.50471	2.3436	4.4564	0.00	10.00
	CHP	20	2.7500	2.35919	.52753	1.6459	3.8541	0.00	10.00
	MHP	20	1.4500	1.39454	.31183	.7973	2.1027	0.00	6.00
	HDP	20	2.4000	1.93037	.43164	1.4966	3.3034	0.00	6.00
	Total	80	2.5000	2.10485	.23533	2.0316	2.9684	0.00	10.00

4.1.3.4 (FC) and Third Area of Interest: Logo

H3b: One party affiliates' Fixation Count (FC) to AOI (logo) of the printed political advertisements will be different from other parties' advertisements.

The overall results showed that there is a significant difference among the participants' political affiliation and the Fixation Count of their eye gazes on the logo of the parties in only two advertisements (Figure 4.34)

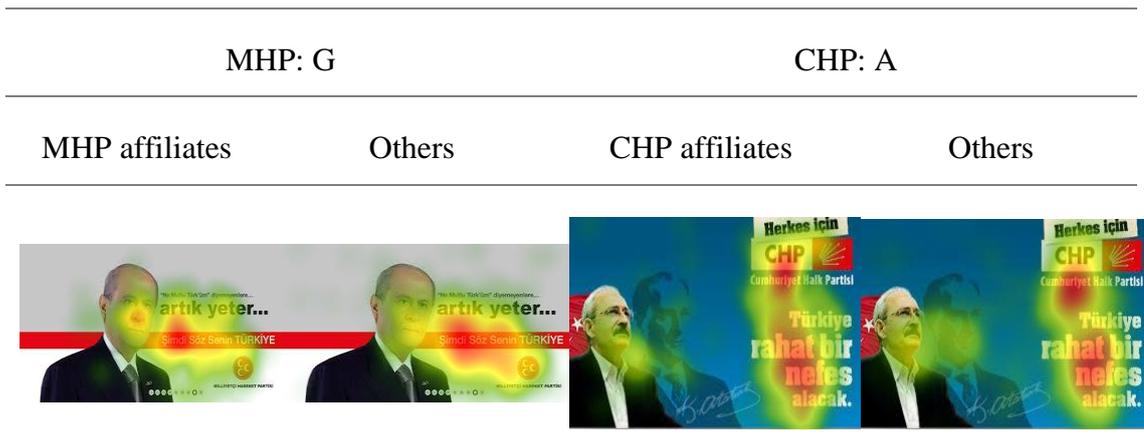


Figure 4. 34 : Results of Respondents' (FC) to the logo of the visual materials according to their affiliation

The results indicate that the affiliates of the party tend to focus their gazes on the logo of their party less than the other party's affiliates and that was obvious in two advertisements of (CHP: A) and (MHP: G). As it is clear in the bar graph (Figure 4.35) the affiliates of CHP focused less on the logo of their party with a count number 1.35, the same as the affiliates of MHP focused less on their party's logo with a count number 2.13.

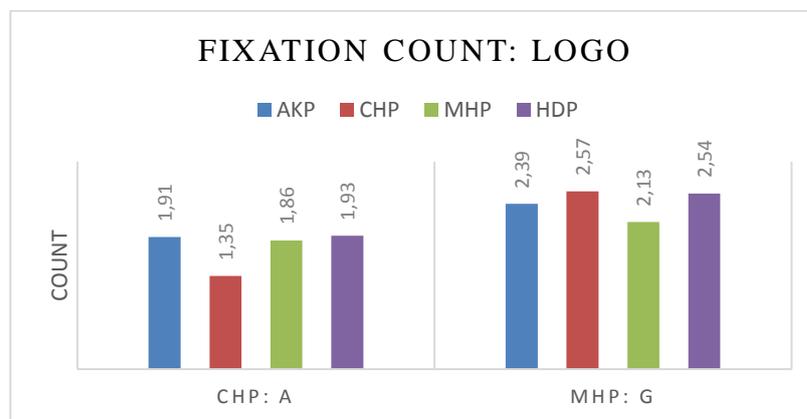


Figure 4. 35 : Respondents' Fixation Count (FC) to the logo of the advertisements according to their affiliation.

A one-way between subjects - ANOVA (Table 4.32) was conducted to compare the effect of political affiliation on the participants' Fixation Count to the photo of the leader in the displayed advertisements. According to the results, there was a significant effect of political affiliation on (FC) at the $p < 0.05$ level for the two political parties with reference to the photo of their parties' leaders in two main advertisements (CHP: A and B) as in table 4.33.

Table 4. 30 : Group Statistics of ANOVA to respondents' Fixation Count (FC) to the logo of the visual materials according to their affiliation

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
CHPFCLOGOA	Between Groups	9.350	3	3.117	2.291	.055
	Within Groups	103.400	76	1.361		
	Total	112.750	79			
MPHFCLOGOG	Between Groups	13.484	3	4.495	2.270	.052
	Within Groups	95.035	48	1.980		
	Total	108.519	51			

*Note: abbreviations explained in Table 4.5

Table 4. 31 : Results of ANOVA Test of respondents' Fixation Count (FC) to the logo of the visual materials according to their affiliation

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
CHPFCLOGOA	AKP	20	1.2500	1.06992	.23924	.7493	1.7507	0.00	4.00
	CHP	20	1.4500	1.46808	.32827	.7629	2.1371	0.00	5.00
	MHP	20	.5500	.75915	.16975	.1947	.9053	0.00	2.00
	HDP	20	1.2500	1.25132	.27980	.6644	1.8356	0.00	5.00
	Total	80	1.1250	1.19466	.13357	.8591	1.3909	0.00	5.00
MPHFCLOGOG	AKP	11	2.45	1.214	.366	1.64	3.27	1	4
	CHP	15	2.00	.845	.218	1.53	2.47	1	3
	MHP	13	3.23	2.242	.622	1.88	4.59	1	8
	HDP	13	2.00	.913	.253	1.45	2.55	1	4
	Total	52	2.40	1.459	.202	2.00	2.81	1	8

*Note: abbreviations explained in Table 4.5

4.1.3.5 (TVD) and First Area of Interest: Claim

H3c: One party affiliates' Total Visit Duration (TVD) to AOI (claim) of the printed political advertisements will be different from other parties' advertisements.

The overall results showed that there is a significant difference among the participants' political affiliation and the Total Visit Duration of their eye gazes on the claim of the parties in only two advertisements (Figure 4.36)



Figure 4. 36 : Results of Respondents' (TVD) to the claim of the visual materials according to their affiliation.

The results conclude that the affiliates of the party tend to look at the claim of their parties less than the affiliates of the other parties and that was obvious in two advertisements of (MHP: D) and (MHP: E). As it is clear in the bar graph (Figure 4.37) the affiliates of MHP visited their party's claim fewer seconds than the affiliates of the other parties.

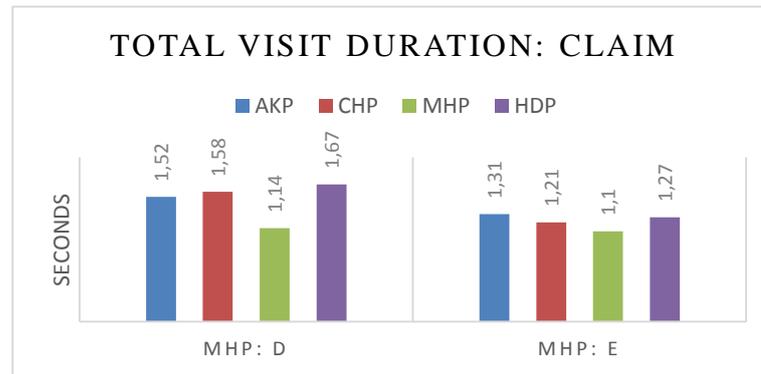


Figure 4. 37 : Respondents' Total Visit Duration (TVD) to the claim of the advertisements according to their affiliation

A one-way between subjects – ANOVA (Table 4.34) was conducted to compare the effect of political affiliation on the participants' Total Visit Duration to the claim of their parties compared other parties' affiliates duration. According to the results, (Table 4.35) there was a significant effect of political affiliation on (TVD) at the $p < 0.05$ level for the two political parties with reference to the claim of their parties in two main advertisements (MHP: D and E).

Table 4. 32 : ANOVA results to Respondents' (TVD) to the claim of the visual materials according to their affiliation

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
MHPTVDCLAIMD	Between Groups	8.976	3	2.992	2.267	.058
	Within Groups	100.322	76	1.320		
	Total	109.298	79			
MHPTVDCLAIME	Between Groups	4.664	3	1.555	2.385	.046
	Within Groups	49.544	76	.652		
	Total	54.208	79			

*Note: abbreviations explained in Table 4.5

Table 4. 33 : Results of ANOVA Test of respondents' (TVD) to the claim of the visual materials according to their affiliation

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
MHPTVDCLAIMD	AKP	20	1.4575	1.12860	.25236	.9293	1.9857	0.00	3.76
	CHP	20	1.0730	1.09929	.24581	.5585	1.5875	0.00	3.83
	MHP	20	.7090	1.04778	.23429	.2186	1.1994	0.00	4.50
	HDP	20	1.5540	1.30387	.29156	.9438	2.1642	0.00	3.71
	Total	80	1.1984	1.17623	.13151	.9366	1.4601	0.00	4.50
MHPTVDCLAIME	AKP	20	1.2445	.80585	.18019	.8674	1.6216	0.00	3.33
	CHP	20	.8785	.89585	.20032	.4592	1.2978	0.00	2.90
	MHP	20	.6935	.67461	.15085	.3778	1.0092	0.00	1.97
	HDP	20	1.2570	.83699	.18716	.8653	1.6487	0.00	2.90
	Total	80	1.0184	.82836	.09261	.8340	1.2027	0.00	3.33

4.1.3.6 (TVD) and Second Area of Interest: Photo

H3a: One party affiliates' Time to Total Visit Duration (TVD) to AOI (photo) of the printed political advertisements will be different from other parties' advertisements. The overall results showed that there is a significant difference among the participants' political affiliation and the pace of their total visit duration to the photo of the leader in 3 advertisements (Figure 4.38)

AKP: D

AKP affiliate

Others



CHP: B

CHP affiliates

Others



HDP: E

HDP affiliates

Others



Figure 4.38 : Results of Respondents' (TVD) to the photo of the visual materials according to their affiliation

The results apparently manifest that the affiliates of the party tend to visit the photo of their party's leader less than other parties except for (HDP: E) where the participants who are affiliated to the party tend to visit the photo of their leader more than the other participants who are affiliated to other parties (Figure 4.39)

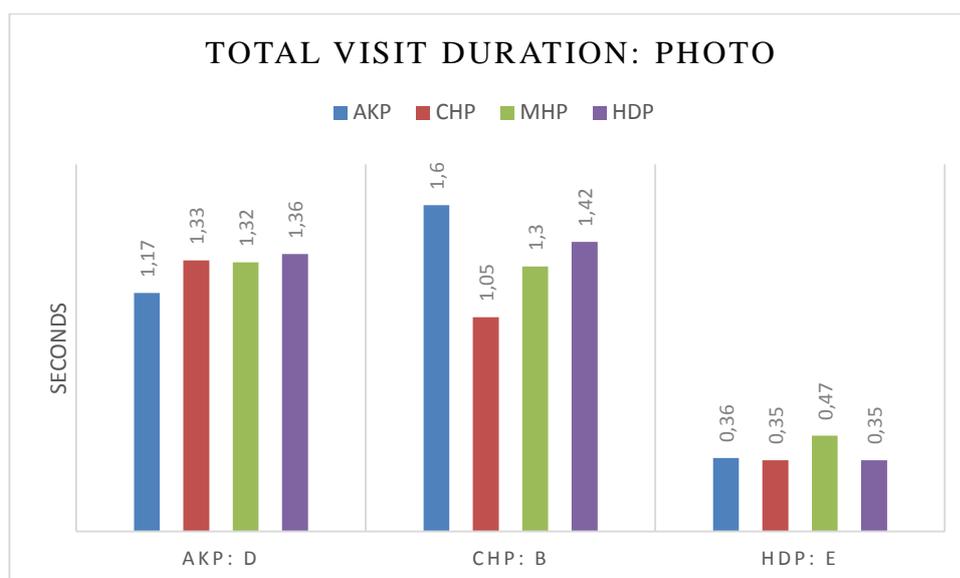


Figure 4. 39 : Respondents' Total Visit Duration (TVD) to the photo of the advertisements according to their affiliation

A one-way between subjects – ANOVA (Table 4.36, 37) was conducted to compare the effect of political affiliation on the participants' Total Visit Duration to the displayed advertisements.

Table 4. 34 : ANOVA results to respondents' (TVD) to the photo of the visual materials according to their affiliation

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
AKPTVDPHOTO D	Between Groups	6.140	3	2.047	3.086	.032
	Within Groups	50.396	76	.663		
	Total	56.536	79			
CHPTVDPHOTO B	Between Groups	18.658	3	6.219	8.589	.000
	Within Groups	55.036	76	.724		
	Total	73.694	79			
HDPTVDPHOTO E	Between Groups	.572	3	.191	2.683	.053
	Within Groups	5.399	76	.071		
	Total	5.971	79			

*Note: abbreviations explained in Table 4.5

Table 4. 35 : Results of ANOVA Test of respondents' (TVD) to the photo of the visual materials according to their affiliation

		Descriptives							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
AKPTVDPHOTOA	AKP	20	1.5470	.82125	.18364	1.1626	1.9314	.18	3.03
	CHP	20	1.4225	.73113	.16348	1.0803	1.7647	.10	2.98
	MHP	20	.8685	.84596	.18916	.4726	1.2644	0.00	3.18
	HDP	20	1.0315	.85308	.19076	.6322	1.4308	0.00	2.91
	Total	80	1.2174	.84595	.09458	1.0291	1.4056	0.00	3.18
CHPTVDPHOTOB	AKP	20	1.5230	1.02989	.23029	1.0410	2.0050	0.00	3.18
	CHP	20	1.4375	1.15297	.25781	.8979	1.9771	0.00	3.27
	MHP	20	.3670	.35176	.07866	.2024	.5316	0.00	1.38
	HDP	20	.7385	.61877	.13836	.4489	1.0281	0.00	1.90
	Total	80	1.0165	.96584	.10798	.8016	1.2314	0.00	3.27
HDPTVDPHOTOE	AKP	20	.3640	.28933	.06470	.2286	.4994	0.00	.90
	CHP	20	.1460	.19938	.04458	.0527	.2393	0.00	.63
	MHP	20	.2175	.28777	.06435	.0828	.3522	0.00	1.05
	HDP	20	.3145	.27912	.06241	.1839	.4451	0.00	1.18
	Total	80	.2605	.27493	.03074	.1993	.3217	0.00	1.18

*Note: abbreviations explained in Table 4.5

Taken together, these results suggest that individuals from different political affiliations have relatively significant difference in their Total Visit Duration to the photo of their political leaders when displayed in printed advertisements.

4.1.3.7 (TVD) and Third Area of Interest: Logo

H3c: One party affiliates' Total Visit Duration (TVD) to AOI (logo) of the printed political advertisements will be different from other parties' advertisements.

The overall results showed that there is a significant difference among the participants' political affiliation and the duration of their total visits to the logo of their party in only one advertisement (AKP: E) (Figure 4.40)

AKP affiliates

Others



Figure 4. 40 : Results of Respondents' (TVD) to the logo of the visual materials according to their affiliation

Based on the results, it can be said that the affiliates of the party tend to visit the logo of their party less than other parties' affiliates. The graph (Figure 4.46) shows that AKP affiliates looked for their party's logo for 0.6 seconds while CHP affiliates looked for 0.9 seconds.

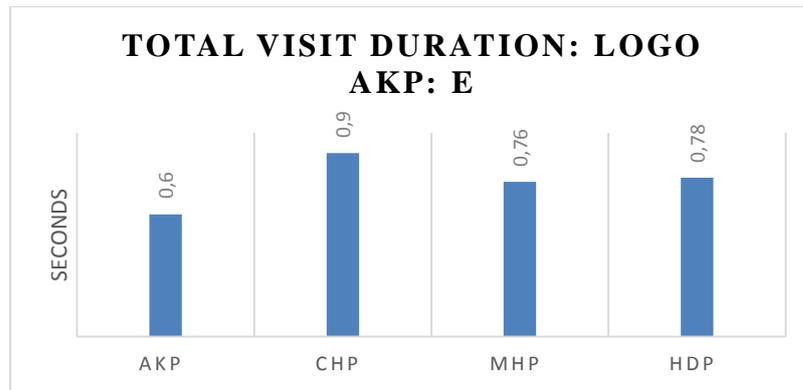


Figure 4. 41 : Respondents' Total Visit Duration (TVD) to the logo of the visual materials according to their affiliation

Finally, a one-way between subjects - ANOVA was conducted to compare the effect of political affiliation on the participants' Total Visit Duration to the displayed advertisements (Table 4.38, 39). And the results show that there is a significant difference between the affiliation and the (TVD) only in one advertisement.

Table 4. 36 : ANOVA results to respondents' (TVD) to the logo of the visual materials according to their affiliation

ANOVA					
AKPTVDLOGOE					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.624	3	.541	2.336	.050
Within Groups	17.619	76	.232		
Total	19.243	79			

Table 4. 37 : Results of Independent Samples Test of respondents' (TVD) to the logo of the visual materials according to their affiliation

Descriptives								
AKPTVDLOGOE								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
AKP	20	.54	.696	.156	.21	.86	0	2
CHP	20	.15	.266	.059	.02	.27	0	1
MHP	20	.25	.480	.107	.03	.48	0	2
HDP	20	.29	.375	.084	.12	.47	0	1
Total	80	.31	.494	.055	.20	.42	0	2

4.1.4 Fourth Hypothesis

H4a: There is a correlation between voter's Fixation Count (FC) to AOIs and likeability rate of the political advertisements.

4.1.4.1 Likeability and Fixation Count (FC)

A Pearson likeability- Fixation Count (FC) correlation coefficient was computed to assess the relationship between the rate of likeability and rating visits or durations of eye fixations.

According to the correlation table, (Table 4.40) there was a positive correlation between the two variables, $r = 0.346$, $n = 56$, $p = 0.009$. In other words, there was a strong positive correlation between participants' (FC) on the photo of (AKP: E) and the level of its likeability.

Table 4. 38 : Pearson Correlation results of 'Likeability' and Fixation Count (FC) on the photo

		Correlations									
		AKPLIKEE	AKFCCLAI ME	AKFCPHOTOE	AKFCLOGOE	AKPTFFCLAI ME	AKPTFFPHOTOE	AKPTFFLOGOE	AKPTVDCLAI ME	AKPTVDPHOTOE	AKPTVDLOGOE
AKPLIKEE	Pearson Correlation	1	.032	.346**	.096	.053	.092	.312	.038	.266*	.141
	Sig. (2-tailed)		.781	.009	.584	.642	.422	.068	.739	.018	.216
	N	79	76	56	35	79	79	35	79	79	79

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

According to the correlation table, (Table 4.41) there was a positive correlation between the two variables, $r = 0.227$, $n = 80$, $p = 0.043$. In other words, there was a strong positive correlation between participants' (FC) on the claim and logo of (HDP: E) and the level of its likeability.

Table 4. 39 : Pearson Correlation results of 'Likeability' and Fixation Count (FC) on the claim and logo

		Correlations									
		AKPLIKEE	HDPFCCLAME	HDPFCPHOTOE	AHDPFCLOGOE	HDPTFFCLAME	HDPTFFPHOTOE	HDPTFFLOGOE	HDPTVDCLAME	HDPTVDPHOTOE	HDPTVDLOGOE
HDPLIKEE	Pearson Correlation	1	.227*	-.121	.227*	-.070	-.090	-.153	.241*	-.106	.241*
	Sig. (2-tailed)		.043	.284	.043	.535	.426	.176	.032	.347	.032
	N	8	80	80	80	80	80	80	80	80	80
		0									
		*. Correlation is significant at the 0.05 level (2-tailed).									
		**. Correlation is significant at the 0.01 level (2-tailed).									

4.1.4.2 Likeability and Time to First Fixation (TFF)

H4b: There is a correlation between voter's Time to First Fixation (TFF) to AOIs and likeability rate of the political advertisements.

A Pearson likeability- Time to First Fixation (TFF) correlation coefficient was computed to assess the relationship between the rate of likeability and rating visits or durations of eye fixations.

According to the correlation table, (Table 4.42) there was a positive correlation between the two variables, $r = 0.287$, $n = 80$, $p = 0.010$. In other words, there was a strong positive correlation between participants' (TFF) on the logo of (CHP: C) advertisement and the level of its likeability.

Table 4. 41 : Pearson Correlation results of 'Likeability' and Time to First Fixation (TFF) on the photo

		Correlations									
		AKPLIKEE	MHPFCCLAIMG	MHPFCPHOTOG	MHPFCLOGOG	MHPTFFCLAIMG	MHPTFFPHOTOG	MHPTFFLOGOG	MHPTVDCLAIMG	MHPTVDPHOTOG	MHPTVDLOGOG
MHPLIKEE	Pearson Correlation	1	.011	-.080	-.103	-.041	.228*	.090	.052	-.205	.013
	Sig. (2-tailed)		.921	.482	.469	.721	.042	.528	.647	.068	.925
N		80	80	80	52	80	80	52	80	80	52
*. Correlation is significant at the 0.05 level (2-tailed).											
**. Correlation is significant at the 0.01 level (2-tailed).											

4.1.4.3 Likeability and Total Visit Duration (TVD)

H4c: There is a correlation between voter's Total Visit Duration (TVD) to AOIs and likeability rate of the political advertisements.

A Pearson likeability- Total Visit Duration (TVD) correlation coefficient was computed to assess the relationship between the rate of likeability and rating visits or durations of eye fixations.

According to the correlation table (Table 4.44), there was a positive correlation between the two variables, $r = 0.266$, $n = 79$, $p = 0.018$. In other words, there was a strong positive correlation between participants' (TVD) on the photo of (AKP: E) advertisement and the level of its likeability.

Table 4. 42 : Pearson Correlation results of 'Likeability' and Time to Total Visit Duration (TVD) on the photo

		Correlations									
		AKPLIKEE	AKFCLLAIME	AKFCPHOTOE	AKFCLOGOE	AKPTFFCLAIME	AKPTFFPHOTOE	AKPTFFLOGOE	AKPTVDCLAIME	AKPTVDPHOTOE	AKPTVDLOGOE
AKPLIKEE	Pearson Correlatio	1	-.032	.346**	-.096	-.053	-.092	-.312	.038	.266*	.141
	Sig. (2-tailed)		.781	.009	.584	.642	.422	.068	.739	.018	.216
	N	79	76	56	35	79	79	35	79	79	79
		*. Correlation is significant at the 0.05 level (2-tailed).									
		**. Correlation is significant at the 0.01 level (2-tailed).									

Likewise, there was a positive correlation between the two variables (Table 4.45), $r = 0.699$, $n = 10$, $p = 0.024$. In other words, there was a positive correlation between participants' (TVD) on the logo of (AKP: H)

Table 4. 43 : Pearson Correlation results of 'Likeability' and Time to Total Visit Duration (TVD) on the logo

		Correlations									
		AKPLIKEE	AKFCCLAIMH	AKFCPHOTOH	AKFCLOGO	AKPTFFCLAIMH	AKPTFFPHOTOH	AKPTFFLOGOH	AKPTVDCLAIMH	AKPTVDPHOTOH	AKPTVDLOGOH
AKPLIKEH	Pearson Correlatio	1	-.023	-.108	. ^a	-.067	.007	-.387	-.011	-.056	.699 [*]
	Sig. (2-tailed)		.841	.392		.558	.950	.270	.926	.622	.024
	N	80	80	65	10	80	80	10	80	80	10
*. Correlation is significant at the 0.05 level (2-tailed).											
**. Correlation is significant at the 0.01 level (2-tailed).											

Also, there was a positive correlation between the two variables (Table 4.46), $r = 0.413$, $n = 31$, $p = 0.021$. In other words, there was a positive correlation between participants' (TVD) on the photo of (MHP: E) and on the same table $r = 0.970$, $n = 6$, $p = 0.001$. In other words, there was a positive correlation between participants' (TVD) on the logo of (MHP: E).

Table 4. 44 : Pearson Correlation results of ‘Likeability’ and Time to Total Visit Duration (TVD) on the photo and logo

		Correlations									
		AKPLIKEE	MHPFCCLAI ME	MHPFCPHOTOE	MHPFCLOGOE	MHPTFFCLAI ME	MHPTFFPHOTOE	MHPTFFLOGOE	MHPTVDCLAI ME	MHPTVDPHOTOE	MHPTVDLOGOE
MHPLIKEE	Pearson Correlatio	1	-.043	.321	. ^a	-.029	.071	.283	-.043	.413 [*]	.970 ^{**}
	Sig. (2-tailed)		.702	.078		.800	.704	.586	.706	.021	.001
	N	80	80	31	6	80	31	6	80	31	6
*. Correlation is significant at the 0.05 level (2-tailed).											
**. Correlation is significant at the 0.01 level (2-tailed).											

Finally, there was a positive correlation between the two variables (Table 4.47), $r = 0.241$, $n = 32$, $p = 0.032$. In other words, there was a positive correlation between participants’ (TVD) on the claim and the logo of (AKP: E).

Table 4. 45 : Pearson Correlation results of 'Likeability' and Time to Total Visit Duration (TVD) on the claim and logo

		Correlations									
		AKPLIKEE	HDPFCCLAIME	HDPFCPHOTOE	AHDPFCLOGOE	HDPTFFCLAIME	HDPTFFPHOTOE	HDPTFFLOGOE	HDPTVDCLAIME	HDPTVDPHOTOE	HDPTVDLOGOE
HDPLIKEE	Pearson Correlatio	1	.227*	-.121	.227*	-.070	-.090	-.153	.241*	-.106	.241*
	Sig. (2-tailed)		.043	.284	.043	.535	.426	.176	.032	.347	.032
	N	80	80	80	80	80	80	80	80	80	80
*. Correlation is significant at the 0.05 level (2-tailed).											
**. Correlation is significant at the 0.01 level (2-tailed).											

4.1.5 Fifth Hypothesis

There will be correlation between voters' visual attention on AOI and the recall of the printed political advertisements.

4.1.5.1 TVD and Recall.

A Pearson likeability- Total Visit Duration (TVD) correlation coefficient was computed to assess the relationship between the rate of recall and the rating of eye fixations.

According to the correlation table, there was a positive correlation between the two variables (Table 4.48), $r = 0.369$, $n = 42$, $p = 0.016$. In other words, there was a strong positive correlation between participants' (TVD) on the photo of (CHP: A) advertisement and the level of its recall.

Table 4. 46 : Pearson Correlation results of 'Recall' and TVD on the photo

		Correlations									
		CHPRECALLA	CHPFCCLAIMA	CHPFCPHOTOA	CHPFCLOGOA	CHPTFFCLAIMA	CHPTFFPHOTOA	CHPTFFLOGOA	CHPTVDCLAIMA	CHPTVDPHOTOA	CHPTVDLOGOA
CHPRECALLA	Pearson Correlation	1	.035	.090	.090	.142	.091	.142	.091	.369*	.045
	Sig. (2-tailed)		.760	.430	.430	.209	.567	.209	.567	.016	.695
	N	80	80	80	80	80	42	80	42	42	80

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Likewise, there was a positive correlation between the two variables (Table 4.49), $r = 0.253$, $n = 80$, $p = 0.024$. In other words, there was a positive correlation between participants' (TFF) on the logo of (CHP: C).

Table 4. 47 : Pearson Correlation results of 'Recall' and TFF on the photo

		Correlations									
		CHPRECALLC	CHPFCCLAIMC	CHPFCPHOTOC	CHPFCLOGOC	CHPTFFCLAIMC	CHPTFFPHOTOC	CHPTFFLOGOC	CHPTVDCLAIMC	CHPTVDPHOTOC	CHPTVDLOGOC
CHPRECALLC	Pearson Correlation	1	.163	.183	.183	-.077	.048	.253*	.061	-.029	.100
	Sig. (2-tailed)		.149	.189	.189	.499	.735	.024	.591	.800	.474
	N	80	80	53	53	80	53	80	80	80	53
*. Correlation is significant at the 0.05 level (2-tailed).											
**. Correlation is significant at the 0.01 level (2-tailed).											

4.1.5.2 Recall and TFF

Finally, there was a positive correlation between the two variables (Table 4.50), $r = 0.233$, $n = 80$, $p = 0.038$. In other words, there was a positive correlation between participants' (TFF) on the photo of (MHP: H).

Table 4. 48 : Pearson Correlation results of 'Recall' and TFF on the photo

		Correlations									
		MHPRECALLH	MHPFCCLAIMH	MHPFCPHOTOH	MHPFCLOGOH	MHPFFFCLAIMH	MHPFFFPHOTOH	MHPFFFLOGOH	MHPTVDCCLAIMH	MHPTVDPHOTOH	MHPTVDLOGOH
MHPRECALLH	Pearson Correlation	1	.052	.036	.227	.071	.233*	.014	-.004	.039	.107
	Sig. (2-tailed)		.645	.749	.322	.533	.038	.953	.973	.732	.643
N		80	80	80	21	80	80	21	80	80	21
		*. Correlation is significant at the 0.05 level (2-tailed).									
		**. Correlation is significant at the 0.01 level (2-tailed).									

4.2 Summary of Research Findings

Generally, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a clear tendency to quickly gaze (TFF) at the claim of the visual stimuli. Then they tend to gaze at the photo of the leader and lastly to the logo of the party. There are some exceptions in the advertising posters of (CHP-A, E), (MHP-D, E, G) (Appendix A)

Predominantly, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a tendency to focus their gazes (FC) at the claim of the visual stimuli more than the photo and logo. Then they tend to fixate their gaze on the photo of the leader and lastly to the logo of the party. There are some exceptions in two advertising posters of MHP-E and HDP-D (Appendix A)

Largely, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a tendency to spend more time gazing (TDV) at the claim of the visual stimuli more than the photo and logo. Then they tend to spend more time gazing on the photo of the leader and lastly to the logo of the party. There are some exceptions in two advertising posters of MHP/D, E and CHP1B (Appendix A)

4.2.1 The effect of participants' gender on their eye movement

The results only show that female subjects tend to look faster (TFF) than male subjects to one of the AOI (i.e. the claim) of only one advertisement (AKP: D) out of the total 16 other visual materials. Results also indicate that female subjects tend to look faster than male subjects to the claim of only one advertisement (HDP: D) (Table 4.53). Thus, the results indicated difference in only one advertisement and that could be attributed to the fact that it was the only visual material that contains the images of two leaders of the political party. On the other hand, the results of the study show that female subjects tend to look faster than male subjects to the (Logo) of only two advertisements (AKP: A and MHP: D). This result suggests that gender does not have a significant effect on Time to First Fixations (TFF) of the participants.

On the other hand, the only difference where men looked faster than women was in the (MHP: D) (Table 4.54) advertisement. The results of the eye tracking experiment illustrate that male participants looked at the (Logo) of the party faster than female participants. Interestingly, the results of the eye tracking experiment suggest that gender does not have a significant effect on Fixation Count (FC) of the participants on the claim of the advertisements. The result concludes that there has been a significant difference between male and female participants' Fixation Count to the claim of the advertisement in only these two advertisements and that could be attributed to the location of the position and simplicity of the claim; the claim is written in the middle of the posts.

Based on the results of the study, female subjects tend to focus more than female subjects in their fixation counts to the photo of only 3 advertisements (CHP: B), (MHP: E), (HDP: E) (Table 4.52,54,53). Overall result suggests that gender does not relatively have an effect on Fixation Count (FC) of the participants on the photo of

the leaders of the political parties in printed advertisements. Based on the results, male subjects tend to focus more than female subjects in their fixation counts to the logo of only six advertisements (AKP: D and E), (MHP: D and H), (HDP: D and E). The overall result suggests that gender does relatively have an effect on Fixation Count (FC) of the participants on the logo of the political parties in printed advertisements.

On the other hand, the study found that male and female individuals tend to spend dissimilar time durations or total visit duration on the claim of two advertisements of (HDP: E and C) (Table 4.53). The overall result suggests that gender does not relatively have an effect on the Total Visit Duration of the participants to the claim of the political parties in printed advertisement. It can be explained that men tend to visit the short claims less than women do. One of the claims include only two words while the other include only three words.

Based on the results, male and female individuals tend to spend different times or total visit on the photo of three advertisements of (MHP: E and G) and (HDP: E). The overall result suggests that gender does not relatively have an effect on the Total Visit Duration of the participants to the photo of the political parties in printed advertisements

In a nutshell, as shown in hypothesis summary table (Table 4.55) it can be concluded that the first hypothesis, voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their gender is supported. There were differences in 12 out of 16 images based on gender.

4.2.2 The effect of participants' age on their eye movement

Based on the results of the study, young generations tend to look faster than older generations to the claim of only two advertisements (MHP: G) (Table 4.54) and (HDP: C) (Table 4.53). Specifically, the results suggest that young participants tend to look at the claim of the advertisements faster than the middle aged, adults and elderly people.

The study found that old generations tend to look faster than young participants to the photos of political leaders of 5 political advertisements (AKP: A and D) (CHP: B), (HDP: C) and (MHP: H). The overall results suggest that old participants tend to look at the photo of the advertisements faster than the middle aged, young individuals. It was found that the more the individuals grow up the faster they consider looking at the photo of the political advertisements.

Taken together, the study found that individuals from different age groups have significant difference in their Time to First Fixation towards the photos of the leaders in the displayed materials. Nonetheless, it cannot be overgeneralized to the rest of the sample simply because the results do not overwhelmingly include all the advertisements. Still, the results show that old generation appeal to the images of the leaders faster than young generation. All the results showed that there is not any difference between the various participants Fixation Counts to the claim or the photo of the displayed advertisements based on their age differences. The only significant difference was observed in one advertisement (AKP: A) and that was related to the photo of the advertisement. Also, it was found that old participants tend to fixate their gaze on the photo of one advertisement (AKP: A).

In a nutshell, as the table of the hypotheses summary shows (Table 4.55), it can be concluded that the second hypotheses, voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their age group was not strongly supported because only age factor has shown that it affects participants gazing only on 7 out of 16 images and that is not a substantial difference.

4.2.3 The effect of partisan affiliation on participants' eye movement

The overall results of this study have showed that there is a significant difference among the participants' political affiliation and the pace of their eye fixation on the photo of the leader in 3 advertisements. Taken together, these results suggest that individuals from different political affiliations have relatively significant difference in their Time to First Fixation to the photo of their political leaders

Specifically, the results suggest that party affiliates have a tendency toward looking at the photo of their leader faster than the fans of the other parties. Nonetheless, the results cannot be generalized as this conclusion was just observed in 3 displayed advertisements. The overall results showed that there is a significant difference among the participants' political affiliation and the Fixation Count of their eye gazes on the claim of two advertisements. Results also suggest that individuals from different political affiliations have relatively significant difference in their Fixation Count to the claims when displayed in printed advertisements. The overall results showed that there is a significant difference among the participants' political affiliation and the Fixation Count of their eye gazes on the photo of the leaders of only two advertisements.

The result of the study shows that affiliates of the party tend to look at the claim of their parties less than the affiliates of the other parties and that was obvious in two advertisements of (MHP: D) and (MHP: E). Taken together, these results suggest that individuals from different political affiliations have significant difference in their Total Visit Duration to the photo of their political leaders when displayed in printed advertisements.

Therefore, it can be concluded as demonstrated in the table of the hypotheses summary (Table 4.60) that the third hypothesis, voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their political affiliation, is partially supported because there have been differences among participants' eye fixation on only 9 advertisements out of 16 visual stimuli and that was due to the different political affiliation of the participants.

4.2.4 The effect of likeability on participants' eye movement

According to this study results, there was a strong positive correlation between participants' (FC) on the photo of (AKP: E) and the level of its likeability. Also, there was a strong positive correlation between participants' (FC) on the claim and logo of (HDP: E) and the level of its likeability. On the other hand, there was a

negative correlation between participants' (TFF) on the photo of (MHP: G) advertisement and the level of its likeability.

Finally, there was a positive correlation between participants' (TVD) on the claim and the logo of (AKP: E). Therefore, it can be concluded that the third hypothesis, voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their level of likeability, is partially supported because participants have differences in their eye fixations due to their likeability on 10 advertisements out of 16 advertising materials.

4.2.5 Recall and its relation with eye movement

In this study, the results show that, there was a positive correlation between two variables (i.e. recall and TVD). However, this strong positive correlation between participants' (TVD) and recall was observed only in the photo of (CHP: A) advertisement and the level of its recall. Likewise, there was a positive correlation between the two variables, there was a positive correlation between participants' (TFF) on the logo of (CHP: C). Finally, there was a positive correlation between the two variables. In other words, there was a positive correlation between participants' (TFF) on the photo of (MHP: H).

Thus, it can be concluded that the fifth hypothesis, there might be correlation between voters' visual attention on AOI and the recall of the printed political advertisements, was not supported because there has been correlation between voters' attention and their recall ability in only 3 advertisements out of the 16 advertising materials and that is not statistically significant percentage.

Table 4.51 : The Overall Results of the Study for AKP

NO	Image	gender			Age			Affiliation		
		TFF	FC	TVD	TFF	FC	TVD	TFF	FC	TVD
E			logo	logo						logo
D		Claim	Logo		Photo			Photo		photo
A		Logo			Photo	photo				
C				logo						

Table 4.52 : The Overall Results of the Study for CHP

No	Image	gender			Age			Affiliation		
		TFF	FC	TVD	TFF	FC	TVD	TFF	FC	TVD
A									Photo Logo	
B			photo		photo				Photo	photo
C										
E								Photo		

Table 4.53 : The Overall Results of the Study for HDP

NO	Image Image	gender			Age			Affiliation		
		TFF	FC	TVD	TFF	FC	TVD	TFF	FC	TVD
B										
C			Claim	Claim logo	Claim photo					
D		Photo	Logo							
E			Claim photo logo	Claim photo logo				Photo		Photo

Table 4.54 : The Overall Results of the Study for MHP

NO		TFF	FC	TVD	TFF	FC	TVD	TFF	FC	TVD
G				photo	Claim				Logo	
D		Logo	Logo	Logo	Logo				Claim	Claim
E			Photo	Photo					Claim	Claim
H			Logo	Logo	photo					

Table 4.55 : Summary of Hypotheses Testing (N=80)

Hypotheses		Results
H1:	Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their gender.	Supported There are differences in 12 out of 16 images based on gender
H1a:	Voters' Time to First Fixation (TFF) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.	4 out of 16 advertisements
H1b:	Voters' Fixation Count (FC) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.	11 out of 16 advertisements
	H1c: Voters' Total Visit Duration (TVD) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their gender.	11 out of 16 advertisements
H2:	Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their age group.	Not strongly supported 7 out of 16 images have differences based on their age.
H2a:	Voters' Time to First Fixation (TFF) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their age.	8 out of 16 advertisements
H2b:	Voters' Fixation Count (FC) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their age.	1 out of 16 advertisements
H2c:	Voters' Total Visit Duration (TVD) to AOI (claim, logo, and photo) of the printed political advertisements will be different based on their age.	0 out of 16 advertisements

Table 4.55 (continued) : Summary of Hypotheses Testing (N=80)

H:	Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their political affiliation.	Partially supported 9 out of 16 advertisements have differences based on political affiliation.
H3a:	One political party affiliates' Time to First Fixation (TFF) to AOI (claim, logo, and photo) of his party's printed political advertisements will be different from other parties' advertisements.	3 out of 16
H3b:	One political party affiliates' Fixation Count (FC) to AOI (claim, logo, and photo) of his party's printed political advertisements will be different from other parties' advertisements.	6 out of 16
H3c:	One political party affiliates' Total Visit Duration (TVD) to AOI (claim, logo, and photo) of his party's printed political advertisements will be different from other parties' advertisements.	6 out of 16
H4:	Voters will have significant difference in their visual attention on AOI (claim, logo, and photo) of the printed political advertisements based on their level of likeability.	10 out of 16 partially supported.
H4a:	There is a correlation between voter's Fixation Count (FC) to AOIs and likeability rate of the political advertisements.	3 out of 16
H4b:	There is a correlation between voter's Time to First Fixation (TFF) to AOIs and likeability rate of the political advertisements.	2 out of 16
H4c:	There is a correlation between voter's Total Visit Duration (TVD) to AOIs and likeability rate of the political advertisements.	5 out of 16
H5:	There might be correlation between voters' visual attention on AOI and the recall of the printed political advertisements.	3 out of 16. Not supported

5. DISCUSSIONS AND CONCLUSIONS

The primary objective of the study is to analyze the effect of advertisement schematic design on viewers' eye gaze attention. In other words, it measures how the arrangements and positions of the advertisements' claim, photo and logo may alter voter's gazes and eye fixations. The study aims at measuring these differences based on eye-tracking technology not self-reporting or traditional research tools such as questionnaires and focus groups. The eye-tracking technique is unique because it gives precise and abstract findings that are not affected by personal judgement of the subjects of the study. Eventually the results will help campaigners and political parties in Turkey get deeper insight of their voters' preferences and gaze attention so that they can design their advertisements accordingly.

Previous studies (Boerman, Van Reijmersdal, and Neijens 2012a, 2012b; Campbell, Mohr, and Verlegh 2013; Tessitore and Geuens 2013; Reijmersdal, Tutaj, and Boerman, 2013) depended on traditional self-reporting techniques to understand how the attention of the viewers is fixated on a brand, message or photo's location and design. There are some genuine criticisms of the reliability of self-reporting methods as the participants principally tend to hesitate when asked to recall the content of the advertisement (Slater 2004). Viewers' attentiveness is not always vital or effective and that is why their physical indicators i.e. eye gazes and plot fixations that represent their core of attention have been believed to be more consistent to give more authentic and robust responses with any subjective intervention of individuals (Rosbergen, Pieters, and Wedel 1997).

Predominantly, cohesive effective appeals, such as brand or logo setting, can be managed indirectly or circuitously and thus such messages call for implicit measures of processing (Smit and Neijens 2013). Thus, this study tended to use eye tracking to project voters' eye gazes while viewing a printed advertisement of a political party. Eye tracking is chiefly valuable because it empowers advertisers and political marketing practitioners to trustily measure voter's attention to specific visual elements of an advertisement, i.e. claim, logo, and image. Therefore, researchers

have considered exploring eye movements and different level of eye gazes to find a relationship between those elements of eye gazes and other mental activities.

This study, however, aims to offer better understanding of voters' perception in term of their eye gazes and fixations toward printed political advertisements' design. It offers gaze plots and voters' eye-tracking techniques as novel methods used in political marketing context that may basically change advertising tendencies when designing the logo, text and pictures of their printed advertisement based on a number of factors like the gender, age, affiliation of their target groups.

In the past few years, Turkey has gone through a range of parliamentary, presidential and municipal elections. In which, parties competed to gain the votes of the citizens. Every party tried its best to make use of the advertising campaign tools professionally to win the political battle. This study aims at investigating both focus selection which means what the voter chooses to gaze at, and focus engagement which means the time a voter spends gazing at the components of the advertisement. The study eventually reflected the choice of which areas of a political advertisement the voter opts to gaze at based on their gender, age, affiliation and likeability. Both focus selection and focus engagement are offered as indicators of voters' tendencies. This suggests that eye-tracking data will assist researchers and advertising practitioners to predict whether different printed advertisement will arouse higher levels of voters' engagement and stimulate their memories to remember the content of the advertisement.

Bearing in mind that eye tracking techniques along with other established valuation appliances unquestionably produce more vigorous conclusions for prospect voter-related perception and understanding. A voter's focus involvement may offer an understanding to the nature of the printed advertising materials as they appeal to voter's attention. The research eventually offers recommendation of whether political campaigners should use certain positions and outlines for images, claims and logos when advertising and will such positioning ultimately lead to faster fixation time on the faces of the image, the claim or the logo and which element needs more focus to delicate enough to arouse instant fixation on areas of interest.

Thus, the study tends to fill the void of eye-tracking techniques in the field of political marketing and mainly in political campaign advertisements by investigating the effect of various variables such as age, gender, and political affiliation on the voter's gaze plot and recall of the printed political advertisements.

More specifically, it aims to identify voters' different gaze areas that selectively respond to the exposure to different political parties' advertisements by using eye-tracking methods. Also, it aims to test, with the help of eye tracking techniques, whether the relevance of the aforementioned factors is supported within political advertising context. Moreover, it suggests alternative designs for advertisers that are specifically valid for political campaigns. Moreover, the recommendations could be utilized not only in the field of social marketing but also in the field of commercial advertisements of various products and brand names. The overall objective of the study is to determine if the design, layout and positioning of the advertisements in terms of three main components or Areas of Interest (AOIs), i.e. photo, claim, and logo particularly in electoral campaign context have an effect on a voter's gaze plot and gaze fixation times.

The three elements comprise the length of time of the voters first fixate their gazes on the AOI, how many times they return to gaze on that AOI, and the total time spent gazing at that AOI. The study examines whether these visual metrics help in identifying which factors of the advertisements' segments were most probably affecting the choice of the voters to change their gaze plots. Although the prior advertising studies that utilized eye-tracking techniques have investigated these three AOI related metrics in commercial advertisements, this study uniquely applies this technology to a political electoral campaign setting.

The study is largely interested in the three AOI when monitoring eye movements; these regions are projecting elements to evaluate the advertisements influence on voters' gaze plots. According to Aribarg, Pieters, and Wedel (2010), these regions save the researcher the chance to measure and evaluate the voter's concentration and level of engagement. Furthermore, according to Pieters, Wedel, and Batra, (2010) AOI save the researcher the opportunity to assess the participants' memory of recall or recognition.

The time, in seconds, from the outset of the advertisement “stimulus” recognition until the voter fixated on the AOI for the first time is called Time to First Fixation or TFF. And the number of times the voter fixated on an AOI is called Fixation Count or FC and the overall duration of all fixations within an AOI is called the Total Visit Duration or TVD.

Within eye-tracking literature, it has been established that not only positive visual materials but also negative images can lead to faster first fixations and longer durations of gazing time and eye fixations. Therefore, it can be argued that advertising materials that contain demonstrative visuals may arouse faster and longer eye fixations on various AOI and this essentially demonstrates that commercials with emotional designs would be much motivating and stimulating to viewers than those impassive or impartial commercials.

Generally, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a clear tendency to quickly gaze at the claim (TFF) of the visual stimuli. Then they tend to gaze at the photo of the leader and lastly to the logo of the party. There are some exceptions in the advertising posters of (CHP-A, E), (MHP-D, E, G) (Appendix A)

Predominantly, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a tendency to focus their gazes at the claim of the visual stimuli more than the photo and logo. Then they tend to fixate their gaze on the photo of the leader and lastly to the logo of the party. There are some exceptions in two advertising posters of MHP-E and HDP-D (Appendix A)

Largely, it is clearly shown, according to the results of the eye-tracking experiment, that the participants have a tendency to spend more time gazing at the claim of the visual stimuli more than the photo and logo. Then they tend to spend more time gazing on the photo of the leader and lastly to the logo of the party. There are some exceptions in two advertising posters of MHP/D, E and CHP1B (Appendix A)

As it was thoroughly presented and discussed in literature review, some studies have attempted to scrutinize the nuance differences between females and males in a number of specific areas such as their visual selective attention, working memory, anticipation time, and auditory reaction time. Some other studies have focused on

specific gender differences in cognitive abilities and brain organization. As discussed in the literature review, men scored higher than women on spatial task, which could be attributed to the fact that males have larger brain volume (Allen et al., 2003; Gur et al., 2002; Shikhman, 2007). Others found males and females do not differ in spatial tasks (Koshino et al., 2000).

Also, gender differences in reaction time to a stimulus have been the subject matter of many other studies (Dane and Erzurumluoglu, 2003; Der and Deary, 2006; Riccio et al., 2001). It was interestingly concluded that men have faster reaction times than women and this female disadvantage is not reduced by practice (Noble et al., 1964; Welford, 1980; Adam et al., 1999; Dane and Erzurumluoglu, 2003; Blough and Slavin, 1987). Also, other researcher found out that women have slower simple reaction times than men (Der and Deary, 2006), whereas other research suggests that while male were faster than female at aiming at a target, the female were more accurate (Barral and Debu, 2004).

Spierer et al. (2010) indicated that male athletes react much faster than female athletes to both visual and auditory stimuli, whereas Silverman et al. (2007) concluded that such differences were relatively small. Lambourne (2006) indicated that no statistically significant differences were found in working memory capacity as a function of gender. Jausovec and Jausovec (2009) indicted that Gender differences were observed on the behavioral level only for the visual tasks; females display shorter reaction times than males.

However, the findings of this study show that female subjects tend to look faster than male subjects to one of the AOI (i.e. the claim) of only one advertisement (AKP: D) (Appendix A) out of the total 16 other visual materials. The findings also indicate that female subjects tend to look faster than male subjects to the claim of only one advertisement (HDP: D). Thus, the results indicated difference in only one advertisement and that could be attributed to the fact that it was the only visual material that contains the images of two leaders of the political party.

On the other hand, the results of the study show that female subjects tend to look faster than male subjects to the (Logo) of only two advertisements (AKP: A and MHP: D) out of the total 16 advertisements. This result suggests that gender does not

have a significant effect on Time to First Fixations of the participants. The result only showed difference in one advertisement and that could be attributed to the location of the position and simplicity of the claim.

The only difference where men looked faster than women was in the (MHP: D) advertisement. The results of the eye tracking experiment illustrate that male participants looked at the (Logo) of the party faster than female participants. The only difference where men looked faster than women was in the MHP: D) advertisement. On the other hand, the results of the eye tracking experiment suggest that gender does not have a significant effect on Fixation Count (FC) of the participants on the claim of the advertisements. The result concludes that there has been a significant difference between male and female participants' Fixation Count to the claim of the advertisement in only these two advertisements and that could be attributed to the location of the position and simplicity of the claim; the claim is written in the middle of the posts.

Based on the results of the study, female subjects tend to focus more than female subjects in their fixation counts to the photo of only 3 advertisements (CHP: B), (MHP: E), (HDP: E). Overall result suggests that gender does not relatively have an effect on Fixation Count (FC) of the participants on the photo of the leaders of the political parties in printed advertisements. Therefore, the only interpretation that might explain the results is that men tend to focus more on the photos of smiling faces and unusual postures like the shape of the heart of the leader of CHP.

Based on the results, male subjects tend to focus more than female subjects in their fixation counts to the logo of only 6 advertisements (AKP: Dand E), (MHP: Dand H), (HDP: Dand E). The overall result suggests that gender does relatively have an effect on Fixation Count (FC) of the participants on the logo of the political parties in printed advertisements. Therefore, the only interpretation that might explain the results is that women tend to focus more on the logos when they are in the margins of the printed advertisements. Whereas men tend to focus their fixations more on the logo when it tends to be centralized in the middle of the printed advertisements.

Also, the study found that male and female individuals tend to spend dissimilar time durations or total visit duration on the claim of two advertisements of (HDP: E and

C). The overall result suggests that gender does not relatively have an effect on the Total Visit Duration of the participants to the claim of the political parties in printed advertisement. It can be explained that men tend to visit the short claims less than women do. One of the claims include only 2 words while the other include only 3 words.

Based on the results, male and female individuals tend to spend different times or total visit on the photo of three advertisements of (MHP: E and G) and (HDP: E). The independent-samples t-test that was conducted to measure the differences between male and female voters' Total Visit Duration of the (Photo) of the advertisements shows that there was a significant difference in the scores for of male and female participants' Total Visit Durations in three different advertisements. The overall result suggests that gender does not relatively have an effect on the Total Visit Duration of the participants to the photo of the political parties in printed advertisements. It can be explained that men tend to visit the short claims less than women do. One of the claims include only 2 words while the other include only 3 words.

Based on the results of the independent t-test, male and female individuals tend to gaze more on the logo of 6 different advertisements of (AKP: E and H) and (MHP: D and H) and (HDP: C and E). The overall result suggests that gender has relatively an effect on the Total Visit Duration of the participants to the logo of the political parties in printed advertisements. It can be explained that men interestingly tend to visit the logos in the center of the printed advertisements more than women do. While women tend to look more on the logo if it was located on the corners or the margins of the printed advertisements.

The second factor that the study aimed to scrutinize its effect on the participants gaze fixations was their age. It was presented in the literature review that each generation has unique expectations, experiences, generational history, lifestyles, values, and demographics that influence their buying behaviors. Accordingly, many companies are reaching out to multi-generational consumers and trying to understand and gain the attention of these diverse customers. Multi-generational marketing is the practice of appealing to the unique needs and behaviors of individuals within more than one

specific generational group, with a generation being a group of individuals born and living about the same time.

Cautioning adolescents about product dangers is a unique challenge for advertisers and policy makers. Given the current controversy surrounding the advertising and sales of tobacco and alcohol products to adolescents, it is important to understand how that audience attends to advertising for such products and associated cautionary statements.

The research of Hastings and Aitken (1995) involved the use of eye tracking to monitor adolescents' viewing behavior for five selected print advertisements, including two advertisements for cigarettes and one ad for beer. After discussing the importance of warnings and the difficulty of warning adolescents, we describe the use of eye tracking to investigate warning effectiveness. We then report results on adolescents' viewing of advertisements for tobacco, beer, sunscreen, and a soft drink, and on attention to mandated warnings and voluntary disclosures within the context of print advertising.

It was thoroughly discussed in the literature review that due to the progress in age, people develop familiarity with the different parties' advertisements, they become more aware of how the advertisement is designed and where each component is located and become better able to avoid attending to advert locations where that advertising is situated. This relationship will be strongest for goal-directed tasks where avoiding advertising is most important.

Teenagers are increasingly reliant on advertising as an information source (Assael, 1992) and there is impregnable concern about the advertising messages, principally those involving cigarettes and alcohol goods. Adulthood is a period of physical and intellectual development, a time of changeover from being a teenager to playing the role of independence manhood (Institute of Medicine 1994).

The unique nature of teenage years makes teens more sensitive than other age groups to advertising imagery and advertising messages. Young people are primarily exposed to image-based publicity, which is used widely in the advertising of alcohol and tobacco products (Strasburger 1995). Pollay et al. (1996) found that teenagers were much more vulnerable to advertising than grownups; Evans et al. (1995) and

Hastings and Aitken (1995) concluded that marketing and advertising campaigns of tobacco companies were very effective in motivating teenagers and young people to embark on new experiences of smoking.

Based on the results of the study young generations tend to look faster than older generations to the claim of only two advertisements (MHP: G) and (HDP: C). Specifically, the results suggest that young participants tend to look at the claim of the advertisements faster than the middle aged, adults and elderly people. The more the individuals grow up the slower they consider looking at the claim of the political advertisements. Nonetheless, the results cannot be generalized as this conclusion was just observed in 2 displayed advertisements. A possible interpretation could be that the claims of the two advertisements is composed of only two words and that make young people look faster than older.

The study found that old generations tend to look faster than young participants to the photos of political leaders of 5 political advertisements (AKP: A and D) (CHP: B), (HDP: C) and (MHP: H). The overall results suggest that old participants tend to look at the photo of the advertisements faster than the middle aged, young individuals. It was found that the more the individuals grow up the faster they consider looking at the photo of the political advertisements. Nonetheless, the results cannot be totally generalized as this conclusion was observed in 5 displayed advertisements. The explanation could be that young generation consider looking faster at the image of the leader if it was relatively in the middle of the printed advertisement and relatively big.

Taken together, these results suggest that individuals from different age groups relatively have significant difference in their Time to First Fixation towards the photos of the leaders in the displayed materials. Nonetheless, it cannot be overgeneralized to the rest of the sample simply because the results do not overwhelmingly include all the advertisements. Still, the results show that old generation appeal to the images of the leaders faster than young generation.

The study also concluded that middle aged participants tend to look faster than young participants and much faster than the old generations to the logo of only one political advertisement (MHP: D). Undoubtedly, the result cannot be generalized as this

conclusion was observed only in one displayed advertisement. The outstanding feature of the logo of this particular advertisement is that it comes typically in the center of the post and that may indicate that middle aged individuals often consider the middle of the displayed advertisements rather than the corner and the margins.

All the results showed that there is not any difference between the various participants Fixation Counts to the claim or the photo of the displayed advertisements based on their age differences. The only significant difference was observed in one advertisement (AKP: A) and that was related to the photo of the advertisement. Also, it was found that old participants tend to fixate their gaze on the photo of one advertisement (AKP: A).

The third variable that the study examined was the affiliation of the participants. It was thoroughly demonstrated in the literature review, Pieters and Wedel (2004) verified the influence of the three Areas of Interest (AOI) i.e. brand's logo, image, and the claim/text have on respondents' attention to printed visual materials. Their research positively concluded the associations between recall and subject's attitude and involvement based on a great deal of visual materials on different brands utilizing eye tracking mechanisms. More freshly, Pieters, Wedel and Batra (2010) explored the impact of two sorts of pictorial complexity on gaze intervals to develop the pausing power of visual materials used in printed advertisements.

Pieters and Wedel's study concluded that visual complexity of a picture used in an advertisement was unfavorable and rather damaging to subjects' concentration to the product and negatively affected their attitude toward the visual stimuli. On the contrary, the simplicity and unambiguousness of a design proves to stir more attention to the commercial visual material, its unambiguousness, and attitude toward the commercial itself. On the other hand, Logo, Jozsa, and Hamornik (2010) implemented eye tracking techniques to observe the subjects' attitude toward store shelf arrangements. Interestingly the study has found substantial associations between customers' eye fixations and products preferences and level of attachments.

The study of Wedel and Pieters (2000) is a unique work that tried to explore individuals' eye gazes and eye fixations on printed visual materials and their ability to recall those brands presented in the printed advertisements. At the beginning, he

stated that by examining eye fixation, percentage of gazes, saccades and durations the effectiveness of a printed promotional material could be measured. Past eye tracking studies have reinforced the use of the technology for promotion development and research (Rayner, Miller, and Rotello, 2008; Lohse, 1997; Krugman, Fox, Fletcher, Fischer, and Rojas, 1994). Wedel and Pieters (2000) observed the rate of occurrence of the subject's eye fixations on printed visual materials by observing their ability to recall the gotten information after a certain period of time and what affects that level of recall. The authors' suggestions that recall capability will differ based on various factors were reinforced as the effect of visual advertisement features on respondents' attention differed among various consumer divisions. Segmentation of the subjects was based on their level of involvement, their attitude from the brand itself and how that affected their level of recalling the examined advertisements.

Three advertisement components of the brand, pictorial, and text were differently arranged when carrying out the experiment of eye movements tracking and eye fixation tasks. Precision and failure of memory tasks were then scrutinized. The study concluded that that two components of the promotional visual materials i.e. pictures and brand's logo remarkably affected eye fixations on precision of information while the claim or the message included in the visual advertisements did not have the same effect. Furthermore, brand's logo conspicuously produced the most momentous impact.

In summary, the above brief literature review highlights the relevance of the proposed research structure that observing eye gazes and fixation durations may divulge an exceptional perspective for commercial materials' design based on respondent's attitudes, preferences, attachment, level of involvement with the product and that would offer assistance for future planning. Probably this could be a potential sign of the power of clear advertiser's identification for a promotional visual advertisements' design and that what this study will try to manipulate in political marketing domain and how the affiliation or real attachment of a respondent with his party would affect his eye fixations on his party's advertisements as well as the printed visual materials of other parties.

The overall results of this study have showed that there is a significant difference among the participants' political affiliation and the pace of their eye fixation on the photo of the leader in 3 advertisements. Taken together, these results suggest that individuals from different political affiliations have relatively significant difference in their Time to First Fixation to the photo of their political leaders

Specifically, the results suggest that party affiliates have a tendency toward looking at the photo of their leader faster than the fans of the other parties. Nonetheless, the results cannot be generalized as this conclusion was just observed in 3 displayed advertisements. The overall results showed that there is a significant difference among the participants' political affiliation and the Fixation Count of their eye gazes on the claim of two advertisements. Taken together, these results suggest that individuals from different political affiliations have relatively significant difference in their Fixation Count to the claims when displayed in printed advertisements

The overall results showed that there is a significant difference among the participants' political affiliation and the Fixation Count of their eye gazes on the photo of the leaders of only two advertisements. On the other hand, based on the results of one-way between subjects- ANOVA test, the affiliates of the party tend to focus their gaze on the logo of their party less than the other party's affiliates and that was obvious in two advertisements of (CHP: A) and (MHP: G). The overall results showed that there is a significant difference among the participants' political affiliation and the Total Visit Duration of their eye gazes on the claim of the parties in only two advertisements.

Also, the total results showed that there is a significant difference among the participants' political affiliation and the duration of their total visits to the logo of their party in only one advertisement (AKP: E).

The fourth variable of the study was participants likeability of the presented visual stimuli which was thoroughly demonstrated in the literature review. It is well-established that nowadays it is increasingly hard for advertisements to grab the attention of their viewers, and successively affect their intentional behaviors (Robinson, 1997). Generally, audience are not willing to waste time and effort gazing at visual stimuli (Collett, 1994; Hollis, 1995). Undoubtedly, it has become

conventional for people to dislike the manipulative tools or what they call deceiving convincing mechanisms (Agee, 1997). Audience reckon advertising materials as an undesirable interruption and a source of annoyance. This often results in deliberate effort to avoid them (Byrant and Zillman, 1994; Bishop, 1997) and rejection to react to advertising appeals (Cummins, 1996). An advertising approach, which is often recommended as a tool of managing this is known as 'likeability' (Sacharin, 2001). Advertising materials, which are liked, are believed to be high-class advertisements at intersecting what is known as the scanning phase of the advertising stimuli. Increasing processing and generating positive decisions of the advertising appeals and the authentic brand.

For decades, it was argued that the attitudes and standpoints the audience have towards advertising visual materials were irrelevant. All that was pondered to be significant was how consumers perceive a product or brand (Fam, 2006). The likeability of the advertising material was inferior to the recall and brand attitude (Franzen, 1994). It is now steadily acknowledged that likeability of an advertisement has a genuine significant role in the impact of the advertisement on consumer behavior (Biel and Bridgewater, 1990; DuPlessis, 1994a). Liking an advertisement has even been presented to be the solidest factor connected to persuasion and buying behaviors (Haley and Baldinger, 1991), and is therefore perceived as a very essential tool of advertising effectiveness, which has been researched by several methods. For decades, it was measured by focusing mainly on recognition, recall, opinion, brand-awareness, associations and ratings (e.g. Lucas and Britt, 1963).

According to this study results, there has been a positive correlation between the two variables, $r = 0.346$, $n = 56$, $p = 0.009$. In other words, there was a strong positive correlation between participants' (FC) on the photo of (AKP: E) and the level of its likeability. According to the correlation table, there was a positive correlation between the two variables, $r = 0.227$, $n = 80$, $p = 0.043$. In other words, there was a strong positive correlation between participants' (FC) on the claim and logo of (HDP: E) and the level of its likeability.

Also, according to the correlation table, there was a positive correlation between the two variables, $r = 0.287$, $n = 80$, $p = 0.010$. In other words, there was a strong positive correlation between participants' (TFF) on the logo of (CHP: C)

advertisement and the level of its likeability. Similarly, there was a positive correlation between the two variables, $r = 0.228$, $n = 80$, $p = 0.042$. In other words, there was a negative correlation between participants' (TFF) on the photo of (MHP: G) advertisement and the level of its likeability.

On the other hand, according to the correlation table, there was a positive correlation between the two variables, $r = 0.266$, $n = 79$, $p = 0.018$. In other words, there was a strong positive correlation between participants' (TVD) on the photo of (AKP: E) advertisement and the level of its likeability. Likewise, there was a positive correlation between the two variables, $r = 0.699$, $n = 10$, $p = 0.024$. In other words, there was a positive correlation between participants' (TVD) on the logo of (AKP: H)

Moreover, there was a positive correlation between the two variables, $r = 0.413$, $n = 31$, $p = 0.021$. In other words, there was a positive correlation between participants' (TVD) on the photo of (MHP: E) and on the same table $r = 0.970$, $n = 6$, $p = 0.001$. In other words, there was a positive correlation between participants' (TVD) on the logo of (MHP: E) Finally, there was a positive correlation between the two variables, $r = 0.241$, $n = 80$, $p = 0.032$. In other words, there was a positive correlation between participants' (TVD) on the claim and the logo of (AKP: E).

The dependent variable of the study is recall of the advertisements. The study aims at measuring participants ability to recall the advertisements based on the other four variables of gender, age, affiliation and likeability and as it was thoroughly presented in the literature review, some studies' chief objective was to scrutinize the nature of the connection between pattern recall and decision-making. Starkes and Deakin, 1984; Williams, Hodges, North, and Barton, (2006) based their study on basketball team players. The purpose of their study was to set a comparison between skilled and amateur basketball players utilizing tests of recall and decision-making to define whether those two constructs share any common search features.

Similarities in eye gaze activities, such as the total fixations and the percentage of fixations consumed to watch a visual material, offers some indications which implies that a recall activity mandates visual and perceptual processing necessities. Those processing requirements are very close to the requirements used in any representative

activity such as decision-making (North et al., 2009). A number of researchers such as Farrow, McCrae, Gross, and Abernethy (2010); North et al. (2009); Williams and Davids (1995) have found that pattern recall is probably a sustaining process that enhances the customer's perceptual capability. Further investigational studies focused on the differences among the exhibited visual materials. Some studies adopted a sample of static images whereas other studies considered the moving or animation images (Ericsson et. al 2009).

Others claim that despite the instinctive charm of those ideas, studies exploring the degree of the association between pattern recall and expectation of a behavioral intention indicates that the relationship between the two variables incline to be quite limited (Ericsson and Smith, 1991; Williams and Ericsson, 2005; see also Farrow et al., 2010; Gorman et al., 2013a; Williams and Davids, 1995). For instance, the study of Ward and Williams (2003) is a unique research that investigated the customer's attainment of conceptual-reasoning ability across the evolving variety of experienced professional soccer players and amateur incompetent players revealed that illustrative activities such as expectation and the competence to precisely recognize main players in a game were solidier forecasters of skill level than performance on a recall activity. Likewise, Williams and Ericsson (2005) maintained that though Williams and Davids (1995) concluded that performance in an anticipation test was thoroughly related to performance on a pattern recall activity, only a very limited extent of the whole discrepancy in anticipatory skill was clarified by recall.

One tool to investigate the nature of examining the processing strategy of any visual perception is to investigate the variances in that visual search features (Williams and Ericsson, 2005). In other words, North et al. (2009) concluded that eye gazes of experienced and less experienced footballers while they accomplished a recall activity differ when conducting an expectation activity. The expectation activity required contributors to foresee the last position of the footballer' kick performed in a temporally blocked video action order. In the recall activity, contributors were asked to recognize formerly displayed action arrangements which were displayed in the previous anticipation test along with the new action arrangements.

The findings of the studies revealed that an expert dominance in both activities, which is in harmony with prior research works. (Farrow et al., 2010; Williams and

Davids, 1995). However, the findings of the visual search data demonstrated that both relationships and variances in the processing strategies were implemented by the subjects of the studies. For the unexperienced participants, there were no noteworthy variances in the number of positions fixated and the number of fixation transition in both activities, whereas skilled participants exhibited more fixations in the expectation test and meaningfully longer fixations in the recall test.

In this dissertation, the results show that, according to the correlation table, there was a positive correlation between the two variables (i.e. recall and TVD), $r = 0.369$, $n = 42$, $p = 0.016$. In other words, there was a strong positive correlation between participants' (TVD) on the photo of (CHP: A) advertisement and the level of its recall. Likewise, there was a positive correlation between the two variables, $r = 0.253$, $n = 80$, $p = 0.024$. In other words, there was a positive correlation between participants' (TFF) on the logo of (CHP: C). Finally, there was a positive correlation between the two variables, $r = 0.233$, $n = 80$, $p = 0.038$. In other words, there was a positive correlation between participants' (TFF) on the photo of (MHP: H).

Thus, it can be concluded that the fifth hypothesis, there might be correlation between voters' visual attention on AOI and the recall of the printed political advertisements, was not supported because there has been correlation between voters' attention and their recall ability in only 3 advertisements out of the 16 advertising materials and that is not statistically significant percentage.

6. IMPLICATIONS FOR THEORY, PRACTICE AND RESEARCH

This dissertation has several contributions to the theory, practice and future research. Based on the model development, analysis, results, conclusions and limitations of the dissertation, the contributions and implications are described below.

6.1 Theoretical implications and contributions to political marketing and advertising

This dissertation has made several important theoretical contributions to the literature. This dissertation with its all-inclusive model, syndicates and unique methodologies used in the field of political marketing and advertising. This study main objective is to avoid the inadequacies of the previous research in the field of political marketing and it aims at providing a sharper picture of the valuation of advertisements' effect and design. The participants' gender, age, and political affiliation along with their likeability level to the advertisements are considered as a variable that is predicted to affect the respondents' attention, memory activity and attendance to the examined advertisements.

Another contribution of the dissertation is the laboratory study of the eye tracking method has been used in preference to a survey methodology simply due to the fact that it saves a genuine chance to manage the context variables and other moderating or intervening factors that could affect advertisement effectiveness. Also, the advertisements examined in this study were chosen, following a large-scale pretest investigation, in order to genuinely involve the respondents in ranking the advertisements so that it is much more authentic. The pretest indicated that the advertisements did not differ sharply.

Another extra methodological enhancement is the participation of the respondents who were carefully and deliberately chosen from the overall population of Istanbul from different age groups, with different political backgrounds and from both genders. This by return has enhanced the external validity of the study in contrast to

those that have been limited to only university students. Eye tracking as a unique technique is used to measure the movements of respondents' eye gazes on the elements of the advertisements had never been seen before by any of the participants. This tool facilitates the objectivity of the test and the analysis as it minimizes the interference of the personal judgement of the subjects. In other words, it mechanically measures the attention of the subjects regardless their own feelings or verbal declarations that might reveal their real feelings or judgments. It also solved the ubiquitous problem of infection from previous experiences.

Moreover, the sophisticated measures of memory test by recalling the advertisements content and figure it from others and connecting the results with the results of the eye tracking results is a genuine addition to the literature. The ability to track eye activities has existed for over a long period of time though it was limited to academic field because the technology was not validly manageable or flexible. Lately, nevertheless, eye tracking technology has stretched to be feasible in marketable developments. Eye tracking is now flexibly and straightforwardly applied and used in marketing settings, that many unique applications are obtainable, principally those that can study phenomena in ordinary setting rather than a laboratory.

In the domain of marketing, eye tracking technology is a novel but recognized field of study identified as visual marketing. Pietersand and Wedel (2004, 2008, and 2013) carried out quite a few number of research works on magazine advertisements investigating the effect of each advertising component: brand name, the image and the text. Similarly, Lohse and Rosen (2013) commenced a substantial research study ascertaining which yellow page advertisements were most effective, and finally Lundquist and Holmqvist (2003) examined newspaper advertisements. This current research project will try to add to the accumulative conclusions of these studies.

The findings of the dissertation also enhanced conclusions of recent research that have has revealed noteworthy evidences for the instinctive premises that customers' gaze at what they like, and they like what they stare at. The fundamental path of this association is still unidentified, if this connection is causative or not, nevertheless the very being of the bond between connection has vital consequences for marketing. In a study of Boerman, Reijmersdal, and Neijens (2015) eye tracking experiment, the outcomes displayed that the amalgamation of text, "product placement", and or the

brand image was most effective in strengthening the appreciation of promoting that product and that logo alone was least effective. It also concluded that this result was interceded by observers' visual attention to the revelation and brand positioning. Also, it asserted that the perception of advertising subsequently amplified product memory and directed to more desirable brand attitudes.

On the other hand, the dissertation contributed largely to the literature of Neuromarketing and eye tracking methodology by reflecting and shedding more light on the AOI and the different eye gazes are related. The results correspond with the study of Purucker, Landwehr, Sprott and Herrmann (2013) who tried to analyze eye-tracking data in marketing research and relied upon Areas of Interest (AOIs) methodology and the use of heat-maps. Unfortunately, both these two methods have some unblemished drawbacks. Tackling this gap, the aforementioned researchers tried to apply spatiotemporal scan statistics to the investigation and picturing of the eye tracking records and the outcomes of their experimentations that utilized anthropomorphic car faces validated numerous benefits provided by the new technique. On the contrary to the old-fashioned methods, scan statistics offered a measurement to scan eye tracking records mechanically both in space and time with divergent gaze collections, with outcomes able to be expansively envisaged and statistically evaluated.

The study herein basically aims to investigate the impact of advertisement schematic design and the arrangement of the position and placement of the three main features or elements of a political advertisement, i.e. AOI (Area of Interest) (logo, photo, claim/text) and how juggling these three elements with different designs may alter voters' gaze plots and divert their gaze fixation. The unique feature of the study is that the measurement of these effects is performed by applying eye-tracking method not through conventional marketing research tools (i.e. questionnaires or focus groups), therefore it is expected to reach precisely real findings to be able to assist political parties and advertising agencies choose their right adjustments and layouts of their visual materials.

Earlier studies on the effectiveness of advertising materials and their effect on viewers' perceptions have largely relied on self-reported indicators of the customer's memory to determine participants' attention to the brand locations and designs (e.g.,

Boerman, Van Reijmersdal, and Neijens 2012a, 2012b; Campbell, Mohr, and Verlegh 2013; Tessitore and Geuens 2013; Van Reijmersdal, Tutaj, and Boerman 2013). Self-reported methods have some considerable drawbacks as subjects who receive the messages or attend to the printed advertisements with comparatively slight focus are hesitant to recall their content in the context of a memory task (Slater 2004). Viewers' concentration is not always vigorous or active and that is why their physical indicators of attention have been argued to be more reliable (Rosbergen, Pieters, and Wedel 1997).

In the study of both Lee and Ahn (2012), they exploited eye tracking contemporary technology to assess the efficiency of online posters. Nevertheless, in the study of Atalay et al (2012), eye tracking technology was utilized to measure the influence of brand positioning and customers' ultimate choices on products. However, in the study of Teixeira, Wedel, and Pieters (2012), eye tracking techniques were used to assess the effectiveness of advertisements including emotion-inducing factors. Finally, it has been concluded that advertisements containing constructive and destructive sensitive stimuli ominously influenced the gaze plots and duration of eye fixations (Berger et al., 2012, Pieters and Wedel, 2004, Teixeira et al., 2012).

Finally, in a study of Bebko, Charlene, Sciulli, Bhagat, Parimal (2014), the researchers, scrutinized print advertisements of Non-Profit Organizations (NPOs) by means of eye-tracking tools and emotive measure to evaluate donor's behavior. Attention to three areas of interest, including the text, face, and the NPO's logo, was tracked. Afterward, the three eye-tracking metrics (Time to First Fixation, Fixation Count, and Total Visit Duration) and matching benefactor performance were assessed. The eye-tracking metrics were influential signs of an advertisement's tendency to arouse the benefactor behavior. The outcomes revealed that NPO commercials should urge donors to look at the face in the commercial design. The more times the donors went back and gazed at the advertising character's eyes, and the more entire time spent observing the character's face, the more probable donors would indorse the NPO to others to bestow.

Predominantly, integrated influential messages, such as brand or logo positioning, can be processed indirectly or obliquely and thus such messages call for implied measures of processing (Smit and Neijens 2013). Consequently, this research tended

to utilize eye tracking to guesstimate voters' visual gaze while staring at printed political party advertisement. Eye tracking method is mainly valuable because it qualifies to inconspicuously and unswervingly measure voter's attention to specific visual elements of an advertisement, i.e. claim, logo, and image. Interestingly, it is well-known that babies, teenagers and adults prefer to gaze at open-eyed-faces rather than close-eyed-faces (Batki, 2000). Also, it is evident that from early childhood, babies innately gaze at the eyes of the subject of a photo or a printed material. There are a host of studies that have concluded that eyes are the most influential facial feature (Vinette et al., 2004; Itier et al., 2007; Sather et al., 2009). Thus, studies have considered exploring eye movements and different levels of eye gazes to find a relation between those elements of eye fixations and other mental activities.

Therefore, the major significance of the study is to use different eye gazes as a measurement tool in political advertising field to give more explanation to meanings of these gazes and how advertising materials can be adjusted to match the viewers' various gazes. And the ultimate goal of the thesis is to offer better understanding of individuals' perceptions in term of their eye gazes and fixations toward printed advertisements' design. In the field of political marketing, it aims to offer gaze plots' measurement and voters' eye-tracking techniques as novel methods that may fundamentally change propensities in the advertising field mainly when designing the logo, text and pictures of printed advertisements.

6.2 Managerial implications

In the past few years, Turkey has gone through a range of parliament, presidential and municipal elections. Recently, the political parties severely competed to gain the votes of the citizens especially in the second snap election in November 2015 where the electoral campaigns, along with other influential moderating and intervening variables, have been vital factors to affect people's opinions. Therefore, every party has tried to do its best to make use of the advertising campaign tools efficiently to win the political battle.

This dissertation main contribution is by investigating both 'focus selection' which means what the voter chooses to gaze at, and 'focus engagement' which means the time a voter spends gazing at the components of the political advertisement, it

eventually reflected on the choice of which areas of a political advertisement the voter opts to gaze at. Both focus selection and focus engagement are offered as indicators of voters' tendencies. This suggests that eye-tracking data will help predict whether different printed advertisement will arouse higher levels of voters' engagement and stimulate participants' memories to remember the content of the advertisement.

Considering eye tracking techniques to measure the objective consequences of advertising impact offers instantaneous indication of the voter's focus on an advertisement. Thus, the different parties can capitalize and build on the results and findings of this study to rearrange their advertising materials based on their voters' preferences based on the four variables that have been chosen in the study. Eye-tracking device along with other established valuation appliances unquestionably produce more vigorous conclusions for prospect voter-related perception and understandings. A voter's focus involvement offers an understanding to the analytical nature of the printed advertising materials as they appeal to voter's attention. The research intends to examine whether political campaigners should use certain positions and outlines for images, claims and logos when advertising and whether such positioning ultimately lead to faster fixation time on the faces of the image, the claim or the logo and which element needs more focus to delicate enough to arouse instant fixation on areas of interest.

Concisely, this dissertation filled the void of eye-tracking mechanisms in the field of social marketing and mainly in political advertising campaign by investigating the effect of various variables such as age, gender, political affiliation and likeability on the voter's gaze plot and recall of the printed political advertisements. More specifically, it helped identify voters' different gaze areas that selectively respond to the exposure to different political parties' advertisements by using eye-tracking method. It also tested the relevance of the aforementioned factors (i.e. gender, age, political affiliation and likability) to eye tracking approach and how they are supported within political advertising context. Advertising experts can develop their alternative designs for advertisers that could be more effective for political campaigns. Moreover, the recommendations could be utilized not only in the field of social marketing but also in the field of commercial advertising.

6.3 Limitations of the thesis and future research directions

As every study, this dissertation also has some limitations, which put forward some guidelines for future research. First, the eye-tracking experiment was conducted in a single country, Turkey. It was selected due to necessity to elaborate more on political advertising for the need in various election campaigns. It was also selected because of the difficulty of conducting such a highly technical experiment in different countries.

Also, the eye tracking experiment is nearly close to real-life bill board or static printed advertisement display, but it is still conducted in a forced-exposure situation and that should be considered into account. The eye tracking study is conducted in a laboratory setting, and consequently the findings may have limited potential for generalization to other populations. In other words, the expected conclusions are only valid for the Turkish context. That is why further research should be focusing on different geographical and cultural contexts.

Moreover, the limitation of the sample size. The sample size of this study was disseminated among three factors; age, gender and affiliation and that would diminish the number of participants in each variable. That is why additional research with a larger sample size could generate more robust results.

And finally, the examined advertisements were mainly collected from official websites of the political parties and they were used in the last two elections. However, an unexpected change in the Turkish cabinet has happened within the study period. Mr. Davudoglu, the leader of AKP at the time of the two elections, has resigned and was replaced by another prime minister Mr. Binali Yildirim, who was not involved in any of the elections and that might affect the perception of the respondents or divert their gazes or at least distract their attention when looking at the printed advertisements of the AKP. Nonetheless, as previously asserted, Yildirim was not involved in the elections and it is therefore believed that his photo would not genuinely affect the voters' perception.

Finally, future research is still needed in order to understand the nature of voters' areas of interest and the way they view advertisements and visual materials. This understanding will definitely help developing and rearranging elements according to

people's preferences not to advertisers' stereotypes. Another important gap that was missing in this stream was a synthesis of these studies on a bird's-eye-view landscape to summarize what we already know and what we need to know in the future. A review study on this research stream should also contribute to this field. Further research is also recommended to navigate more variables and multi-trait and multi-method matrix to better understand the mind and the nonverbal characteristics of human beings.

REFERENCES

- Abelson, R. P., D. R. Kinder, M. D. Peters, and S. T. Fiske.** (1982). Affective and semantic components in political person perception. *Journal of Personality and Social Psychology*, 42(4), 619–630.
- Achen, C.** (1992). Social Psychology, Demographic Variables, and Linear Regression: Breaking the Iron Triangle in Voting Research. *Political Behavior*, 14: 195-211.
- Achen, Christopher.** (2002) An Agenda for the New Political Methodology: Microfoundations and ART.” *Annual Review of Political Science*, 5: 423-50.
- Adolphs, R., Gosselin, F., Buchanan, T. W., Tranel, D., Schyns, P., & Damasio, A. R.** (2005). A mechanism for impaired fear recognition after amygdala damage. *Nature*, 433, 68 72.
- Amabile, T. A.** (1983). The social psychology of creativity. New York: *Springer-Verlag*.
- Ansolabehere, S., and Shanto Iyengar.** (1995) Going Negative: How Political Advertisements Shrink and Polarize the Electorate. *New York: Free Press*.
- Ansolabehere, Stephen, Shanto Iyengar, and Adam Simon.** (1999). Replicating Experiments Using Aggregate and Survey Data. *American Political Science Review* 93(4): 901–10.
- Arceneaux, Kevin, Alan S. Gerber, and Donald P. Green.** (2006). Comparing Experimental and Matching Methods Using a Large-Scale Field Experiment on Voter Mobilization. *Political Analysis* 14(1): 37–62.
- Arceneaux, Kevin, Alan S. Gerber, and Donald P. Green.** (2006) Comparing Experimental and Matching Methods Using a Large-Scale Field Experiment on Voter Mobilization. *Political Analysis* 14(1): 37–62.
- Aribarg, A., Pieters, R., & Wedel, M.** (2010). Raising the BAR: Bias adjustment of recognition tests in advertising. *Journal of Marketing Research*, 47, 387–400.
- Aribarg, A., Pieters, R., & Wedel, M.** (2010). Raising the BAR: Bias adjustment of recognition tests in advertising. *Journal of Marketing Research*, 47, 387–400.

- Ariely, D., & Berns, G. S.** (2010). Neuromarketing: The hope and hype of neuroimaging in business. *Nature Reviews Neuroscience*, 11, 284–292.
- Ashworth, Scott, and Joshua D. Clinton.** (2007). Does Advertising Exposure Affect Turnout?" *Quarterly Journal of Political Science* 2(1): 27–41.
- Atalay, A. S., Bodur, H. O., & Rasolofoarison, D.** (2012). Shining in the center: Central gaze cascade effect on product choice. *Journal of Consumer Research*, 39, 848–866.
- Atkin, Charles, and Gary Heald.** (1976). Effects of Political Advertising. *Public Opinion Quarterly* 93(4): 901–10.
- Axelrod, J. N.** (1963). Induced moods and attitudes toward products. *Journal of Advertising Research*, 3 (2), 19-24.
- Baines P. R., Scheucher C. and Plasser F.** (2001) The “Americanisation” myth in European political markets: a focus on the United Kingdom. *European Journal of Marketing*, vol. 35, no.9-10, pp. 1099-1116
- Barclay, W. D., Doub, R. M., & McMurtrey, L. T.** (1965). Recall of TV commercials by time and program slot. *Journal of Advertising Research*, 5 (2), 41-47.
- Barclay, W. D., Doub, R. M., & McMurtrey, L. T.** (1965). Recall of TV commercials by time and program slot. *Journal of Advertising Research*, 5 (2), 41-47.
- Barclay, W. D., Doub, R. M., & McMurtrey, L. T.** (1965). Recall of TV commercials by time and program slot. *Journal of Advertising Research*, 5 (2), 41-47.
- Barral, J. and B. Debu,** (2004). Aiming in adults: Sex and laterality effects. *Laterality*, 9: 299-312. DOI: 10.1080/13576500342000158
- Bartels, L.** (1993). Messages Received: The Political Impact of Media Exposure. *American Political Science Review* 87: 267-81.
- Batki, A., Baron-Cohen, S., Wheelwright, S., Connellan, J., & Ahluwalia, J.** (2000). Is there an innate gaze module? Evidence from human neonates. *Infant Behavior & Development*, 23, 223–229. [http://dx.doi.org/10.1016/S0163-6383\(01\)00037-6](http://dx.doi.org/10.1016/S0163-6383(01)00037-6)
- Bayliss, A. P., Murphy, E., Naughtin, C. K., Kritikos, A., Schilbach, L., & Becker, S. I.** (2013). Gaze leading: Initiating simulated joint attention influences eye movements and choice behavior. *Journal of Experimental Psychology: General*, 142, 76–92. <http://dx.doi.org/10.1037/a0029286>

- Behe, B. K., Zhao, J., Sage, L., Huddleston, P. T., & Minahan, S.** (2013). Display signs and involvement: The visual path to purchase intention. *International Review of Retail, Distribution and Consumer Research*, 23, 511-522. <http://dx.doi.org/10.1080/09593969.2013.832695>
- Bello, D. C., Pitts, R. E., & Etzel, M. J.** (1983). The communication effects of controversial sexual content in television programs and commercials. *Journal of Advertising*, 12 (3), 32-42. Bryant, J. (1974).
- Bercea, M. D.** (2013). Quantitative versus qualitative in neuromarketing research (Munich Personal RePEc Archive, Paper No. 44134, pp. 1-12). Retrieved from http://mpra.ub.uni-muenchen.de/44134/1/MPRA_paper_44134.pdf
- Berger, S., Wagner, U., & Schwand, C.** (2012). Assessing advertising effectiveness: The potential of goal-directed behavior. *Psychology and Marketing*, 29(6), 411–421.
- Bettman, James R.** (1979). Memory Factors in Consumer Choice: A Review, *Journal of Marketing*, 43 (Spring), 37–53.
- Bhargava, Mukesh ve Donthu, Naveen.** (1999). Sales Response to Outdoor Advertising. *Journal Advertising Research*. Vol. 39. No.5.
- Bianco, W.** (1998). Different Paths to the Same Result: Rational Choice, Political Psychology, and Impression Formation in Campaigns. *American Political Science Review* 42: 1061-81.
- Biel, AL., Bridgewater, CA.** (1990). Attributes of Likeable Television Commercials. *Journal of Advertising Research*, vol.30(3), p38–44.
- Blasko, V. J., & Mokwa, M. P.** (1986). Creativity in Advertising: a janusian perspective. *Journal of Advertising*, 15(4), 43–72.
- Boerman, Sophie C., Eva A. Van Reijmersdal, and Peter C. Neijens** (2012a), Sponsorship Disclosure: Effects of Duration on Persuasion Knowledge and Brand Responses, *Journal of Communication*, 62 (6), 1047–64.
- Brady, H., and Richard J.** (1987). What’s the Primary Message: Horse Race or Issue Journalism?” In G. Orren and N. Polsby, eds, *Media and Momentum*. Chatham, NJ: Chatham House.
- Breuer, R. and Brettel, M.** (2012). Short- and long-term effects of online advertising: Differences between new and existing customers. *Journal of Interactive Marketing*, 26, 155–166.
- Breuer, R., & Brettel, M.** (2012). Short- and long-term effects of online advertising: Differences between new and existing customers. *Journal of Interactive Marketing*, 26, 155–166.

- Brians, Craig Leonard, and Martin P. Wattenberg.** (1996). Campaign Issue Knowledge and Salience." *American Journal of Political Science* 40(1): 172–93.
- Bryant, J., & Comisky, P. W.** (1978). The effect of positioning a message within differentially cognitively involving portions of a television segment on recall of the message. *Human Communication Research*, 5 (1), 63-75.
- Butler, M. J.** (2008). Neuromarketing and the perception of knowledge. *Journal of Consumer Behaviour*, 7, 415-419. <http://dx.doi.org/10.1002/cb.260>
- Calvo, M. G., & Lang, P. J.** (2004). Gaze patterns when looking at emotional pictures: Motivationally biased attention. *Motivation and Emotion*, 28(3), 221–243.
- Campbell, Gina Mohr, and Peeter W. J. Verlegh** (2013). Can Disclosures Lead Consumers to Resist Covert Persuasion? The Important Roles of Disclosure Timing and Type of Response," *Journal of Consumer Psychology*, 23 (4), 483–95.
- Charlene Bebeko, Lisa M. Sciulli & Parimal Bhagat** (2014). Using Eye Tracking to Assess the Impact of Advertising Appeals on Donor Behavior, *Journal of Nonprofit & Public Sector Marketing*, 26:4, 354-371, DOI: [10.1080/10495142.2014.965073](https://doi.org/10.1080/10495142.2014.965073)
- Clancy, K. J., & Kweskin, D. M.** (1971). TV commercial recall correlates. *Journal of Advertising Research*, 2, 18-20.
- Colman, A. M., Grimes J. E., & Wober, M.** (1989, December). Effects of program context on recall and recognition of television advertisements (final report to the Independent Broadcasting Authority). London
- Crane, L. E.** (1964). How product, appeal, and program affect attitudes toward commercials, *Journal of Advertising Research*, 4 (1), 15-18.
- Cwalina, W. and A. Falkowski.** (2000). Psychological mechanisms of political persuasion: The influence of political advertising on voting behavior. *Polish Psychological Bulletin*, 31(3), 203–222.
- Cwalina, W. and Falkowski, A.** (2003). Advertising and the image of politicians. National elections in Poland, France, and Germany", in Hansen, F. and Christensen, L.B. (Eds), *Branding and Advertising*, Copenhagen Business School Press, Copenhagen, pp. 205-31.
- Cwalina, W. and Falkowski, A.** (2003). Advertising and the image of politicians. National

- Cwalina, W., Falkowski, A. and Kaid, L.L.** (2000). Role of advertising in forming the image of politicians: comparative analysis of Poland, France, and Germany, *Media Psychology*, Vol. 2, pp. 119-46
- Cwalina, W., Falkowski, A. and Kaid, L.L.** (2005). Advertising and the image of politicians in evolving and established democracies: comparative study of the Polish and the US presidential elections in 2000. *Journal of Political Marketing*, Vol. 4, pp. 19-44
- Dane, S. and A. Erzurumluoglu,** (2003). Sex and handedness differences in eye-hand visual reaction times in handball players. *Int. J. Neurosci.*, 113: 923-929. DOI: 10.1080/00207450390220367
- Dapkevičius, A., & Melnikas, B.** (2011). Influence of price and quality to customer satisfaction: neuromarketing approach. *Science–Future of Lithuania/Mokslas–Lietuvos Ateitis*, 1(3), 17-20
- de Groot, A. D.** (1965). *Thought and choice in chess*. The Hague, Netherlands: Mouton.
- Der, G. and I.J. Deary.** (2006). Age and sex differences in reaction time in adulthood: Results from the United Kingdom health and lifestyle survey. *Psychol. Aging*, 21: 62-73. DOI: 10.1037/0882-7974.21.1.62
- Dermody, J. and Scullion, R.** (2000). Delusions of Grandeur? Marketing's Contribution to 'Meaningful' Western Political Consumption, *European Journal of Marketing*, Vol. 35, N. 9/10, pp. 1085-1098
- Didierjean, A., & Marmeche, E.** (2005). Anticipatory representation of visual basketball scenes by novice and expert players. *Visual Cognition*, 12, 265-283.
- Donthu, N., Joseph Cherian, and Mukesh Bhargava** (1993). Factors Influencing Recall of Outdoor Advertising. *Journal of Advertising Research*, May/June, 64-72.
- Donthu, Naveen, Cherian, Joseph ve Bhargava, Mukesh.** (1993). Factors Influencing Recall of Outdoor Advertising? *Journal Advertising Research*. Vol.33, No.3.
- Dreze, X., and Hussherr, F. X.** (2003). Internet advertising: Is anybody watching? *Journal of Interactive Marketing*, 17, 8–23.
- Emma, L., Eszter, J. and Peter, H. B.** (2010). Eye tracking analysis: Application in a case study of a fast-moving consumer goods product. *Proceedings of Measuring Behavior*. August, 215-217.
- Ericsson, K. A., and Smith, J.** (1991). Prospects and limits of the empirical study of expertise: An introduction. In K. A. Ericsson & J. Smith (Eds.),

Toward a general theory of expertise: Prospects and limits (pp. 1-38).
New York, NY: Cambridge University Press.

- Ericsson, K. A., and Towne, T. J.** (2010). Expertise. *Wiley Interdisciplinary Reviews: Cognitive Science*, *1*, 404-416.
- Ericsson, K. A., and Ward, P.** (2007). Capturing the naturally-occurring superior performance of experts in the laboratory: Toward a science of expert and exceptional performance. *Current Directions in Psychological Science*, *16*, 346-350.
- Evans, G. W., Hygge, S., and Bullinger, M.** (1995). Chronic noise and psychological stress. *Psychological Science*, *6*, 333-338.
- Falkowski, A. and Cwalina, W.** (1999). Methodology of constructing effective political advertising: an empirical study of the Polish presidential election in 1995. in Newman, B.I. (Ed.), *Handbook of Political Marketing*, Sage Publications, Thousand Oaks, CA pp. 283-304.
- Falkowski, A. and Cwalina, W.** (2002), "Structural models of voter behavior in the 2000 Polish presidential election", *Journal of Political Marketing*, Vol. 1, pp. 137-58
- Fam, K-S** (2006a). What drives ad likeability/dislikeability in Hong Kong and Thailand? *International Journal of Business and Society*, vol.7(2), p10-32
- Fam, KS, Waller, D** (2006). Identifying Likeable Attributes: A Qualitative Study of Television Advertisements in Asia. *Qualitative Market Research*, vol.9(1), p.8 - 50.
- Farrow, D., & Abernethy, B.** (2002). Can anticipatory skills be learned through implicit video based perceptual training? *Journal of Sports Sciences*, *20*, 471-485.
- Farrow, D., Chivers, P., Hardingham, C., & Sachse, S.** (1998). The effect of video-based perceptual training on the tennis return of serve. *International Journal of Sport Psychology*, *29* (3), 231-242.
- Farrow, D., McCrae, J., Gross, J., & Abernethy, B.** (2010). Revisiting the relationship between pattern recall and anticipatory skill. *International Journal of Sport Psychology*, *41*, 91 106.
- Fiske, S., and Neuberg, S.** (1990). A Continuum of Impression Formation from Category-Based to Individuating Processes: Influences of Information and Motivation on Attention and Interpretation. In M. P. Zanna, ed., *Advances in Experimental Psychology*. San Diego: Academic Press.

- Fiske, S.** (1993). Social Cognition and Perception. *Annual Review of Psychology* 44: 155-94.
- Fizman, B. P., Velasco, C., Salgado-Montejo, A., & Spence, C.** (2013). Using combined eye tracking and word association in order to assess novel packaging solutions: A case study involving jam jars. *Food Quality and Preference*, 28, 328-338. <http://dx.doi.org/10.1016/j.foodqual.2012.10.006>
- Ford, P. R. Ward, P., Hodges, N. J., & Williams, A. M.** (2009). The role of deliberate practice and play in career progression in sport: The early engagement hypothesis. *High Ability Studies*, 20, 65-75.
- Fox, R. J., D. M. Krugman, J. E. Fletcher, and P. M. Fischer.** (1998) Adolescents' Attention to Beer and Cigarette Print Advertisements and Associated Product Warnings. *Journal of Advertising* 17, 3: 57-68.
- Fredricksen, C.** (2011). Online advertising market poised to grow 20% in 2011. eMarketer. (available at www.emarketer.com/PressRelease.aspx?R=1008432).
- Freedman, P., and Goldstein, K.** (1999). Measuring Media Exposure and the Effect of Negative Advertisements. *American Journal of Political Science* 43: 1189-1208.
- Freedman, Paul, Michael Franz, and Kenneth Goldstein.** (2004). Campaign Advertising and Democratic Citizenship. *American Journal of Political Science* 48(4): 723-41.
- Friedman, M.** (1970, September 13). The social responsibility of business is to increase its profits. *New York Times Magazine*, 33.
- Fugate, D. L.** (2008). Marketing services more effectively with neuromarketing research: A look into the future.
- Gelman, Andrew, and Gary King.** (1993). Why Are American Presidential Election Campaign Polls So Variable When Votes Are So Predictable? *British Journal of Political Science* 23(4): 409-51.
- Gerard B. Hastings, Philip P. Aitken,** (1995). Tobacco advertising and children's smoking: a review of the evidence. *European Journal of Marketing*, Vol. 29 Issue: 11, pp.6-17
- Glimcher, P. W., Camerer, C. F., Fehr, E., and Poldrack, R. A.** (2009). Introduction: A brief history of neuroeconomics. In P. W. Glimcher, C. Camerer, E. Fehr, & R. A. Poldrack (Eds.), *Neuroeconomics: Decision making the brain* (pp. 1-12). San Diego, CA: Academic Press.

- Goldberg, Marvin E. and Gerald J. Gorn** (1987). Happy and Sad TV Programs: How They Affect Reactions to Commercials. *Journal of Consumer Research*, 14 (December), 387-403.
- Goldstein, Kenneth, and Travis N. Ridout.** (2004). Measuring the Effects of Televised Political Advertising in the United States. *Annual Review of Political Science* 7: 205–26.
- Goldstein, Kenneth, Michael Franz, and Travis Ridout.** (2002). Political Advertising in 2000. Combined File [dataset]. Final release. Madison, WI.
- Goldstein, K.** (1997). Political Advertising and Political Persuasion in the 1996 Election. Paper presented at the Annual Meeting of the American Political Science Association.
- Haberland, G.S., and Dacin, P.A.** (1992). The development of a measure to assess viewer's judgments of the creativity of an advertisement: a preliminary study. *Advanced Consumer Research* 19, 817-825.
- Hall, J. A.** (1978). Gender effects in decoding nonverbal cues. *Psychological Bulletin*, 85, 845–857.
- Hall, J. A.** (1984). Non-verbal sex differences: Communication accuracy and expressive style. Baltimore: John Hopkins University Press.
- Hall, J. A., and Matsumoto, D.** (2004). Gender differences in judgments of multiple emotions from facial expressions. *Emotion*, 4, 201-206.
- Hall, J. A., Carter, J. D., & Horgan, T. G.** (2000). Gender differences in the nonverbal communication of emotion. In A. H. Fischer (Ed.), *Gender and emotion: Social psychological perspectives* (pp. 97–117). Paris: Cambridge University Press.
- Hall, J. K., Hutton, S. B. and Morgan, M. J.** (2010) Sex differences in scanning faces: Does attention to the eyes explain female superiority in facial expression recognition? *Cognition and Emotion*, 24 (4), pp. 629-637
- Harrop M.** (1990) Political marketing. *Parliamentary Affairs*, vol. 43, pp. 277-291
- Kavanagh D.** (1995) Election campaigning: the new marketing of politics. Oxford: Blackwell Publishers
- Higie, R.A., Sewall, M.A.** (1991). Using Recall and Brand Preference to Evaluate Advertising Effectiveness, *Journal of Advertising Research*, Vol:31 No.2, 56-63.
- Hill, D.** (2011). *Emotionomics: Leveraging emotions for business success* (2nd ed.). London, United Kingdom: Kogan Page.

- Holmqvist, K., M. Nystrom, R. Andersson, R. Dewhurst, H. Jarodzka, and J. Van D e W eijer** (2011). *Eye Tracking: A Comprehensive Guide to Methods and Measures*. Oxford, UK: University Press.
- Hom, Martin I. and William J. McEwan** (1977). The Effects of Program Context on Commercial Performance. *Journal of Advertising*, 11 (1), 23-27.
- Hood, B. M., Macrae, C. N., Cole-Davies, V., & Dias, M.** (2003). Eyes remember you: The effects of gaze direction on face recognition in children and adults. *Developmental Science*, 6, 67-71. <http://dx.doi.org/10.1111/1467-7687.00256>
- Horace A.** (1958), Do Today's Programs Provide the Wrong Commercial Climate? *Television Magazine*, 15 (8), 44- 47,90-91.
- Hubert, M., & Kenning, P.** (2008). A current overview of consumer neuroscience. *Journal of Consumer Behaviour*, 7, 272-292. <http://dx.doi.org/10.1002/cb.251>
- Huettel SA, Song AW, McCarthy G.** (2009). *Functional magnetic resonance imaging*, 2nd edn. Sinauer, Sunderland
- Hutton, S. B., & Nolte, S.** (2011). The effect of gaze cues on attention to print advertisements. *Applied Cognitive Psychology*, 25, 887-892. <http://dx.doi.org/10.1002/acp.1763>
- Hyun, Y. J., Gentry, J. W., Chanwook, P., & Sunkyu, J.** (2006). An investigation of newspaper ad memory as affect context involvement and ad size—A Korean case. *Journal of Current Issues & Research in Advertising*, 28, 45-56.
- Insingrini, M., Vazou, F., & Leroy, P.** (1995). Dissociation of implicit and explicit memory tests: Effect of age and divided attention on category exemplar generation and cued recall. *Memory and Cognition*, 23, 462-467.
- Pavelchak, M. A., Antil, J. H., & Munch, J. M.** (1988). The super bowl: An investigation into the relationship among program context, emotional experience, and ad recall. *Journal of Consumer Behaviour*, 7, 272-292
- Itier, R. J., Villate, C., & Ryan, J. D.** (2007). Eyes always attract attention but gaze orienting is task-dependent: Evidence from eye movement monitoring. *Neuropsychologia*, 45, 1019-1028. <http://dx.doi.org/10.1016/j.neuropsychologia.2006.09.004>
- Iyengar, Shanto, and Adam F. Simon.** (2000). New Perspectives and Evidence on Political Communication and Campaign Effects.” *Annual Review of Psychology* 51: 149-69.

- Janiszewski, C.** (1998). The influence of display characteristics on visual exploratory search behavior. *Journal of Consumer Research*, 25, 290–301.
- Jausovec, N. and K. Jausovec.** (2009). Gender related differences in visual and auditory processing of verbal and figural tasks. *Brain Res.*, 1300: 135–145. DOI: 10.1016/j.brainres.2009.08.093
- Javor, K., Koller, M., Lee, N., Chamberlain, L., and Ransmayr, G.** (2013). Neuromarketing and Consumer Neuroscience: Contributions to Neurology. *BMC Neurology*.
- Jin, S. H., Kang, I. H., Lee, D. H., Kang, J. K. and Lee, S.** (2003). Analysis of mutual information content for EEG responses to odor stimulation for subjects classified by occupation. *Chemical Senses*, 28(9), 741–749.
- Johansson, R., Holsanova, J., and Holmqvist, K.** (2006). Pictures and spoken descriptions elicit similar eye movements during mental imagery, both in light and in complete darkness. *Cognitive Science*, 30, 1053–1079.
- Kamins, M. A., Marks, L. J., & Skinner, D.** (1991). Television commercial evaluation in the context of program-induced mood: Congruency versus consistency effects. *Journal of Advertising*, 20 (2), 1-14.
- Kamins, Michael A., Lawrence J. Marks and Deborah Skinner** (1991). "Television Commercial Evaluation in the Context of, Program Induced Mood: Congruency Versus Consistency Effects: *Journal of Advertising*, 20 (2), 1-14.
- Kano, F., & Call, J.** (2014). Cross-species variation in gaze following and conspecific preference among great apes, human infants and adults. *Animal Behaviour*, 91, 137–150. <http://dx.doi.org/10.1016/j.anbehav.2014.03.011>
- Kavanagh D.** (1996). New campaign communications: consequences for political parties. *Harvard International. Journal of Press and Politics*, vol. 1, no. 3, pp. 60- 76.
- Keller, K. L.** (2008). *Strategic brand management: building, measuring, and managing brand equity* (3 rd ed.). Upper Saddle River, NJ: Pearson/Prentice Hall.
- Kennedy, J. R.** (1971). How program environment affects TV commercials. *Journal of Advertising Research*, 11(1), 33-38.
- Kenning, P. H., & Plassmann, H.** (2008). How neuroscience can inform consumer research. *Neural Systems and Rehabilitation Engineering, IEEE Transactions on*, 16(6), 532-538.

- Kenning, P., and Linzmajer, M.** (2011). Consumer neuroscience: an overview of an emerging discipline with implications for consumer policy. *Journal für Verbraucherschutz und Lebensmittelsicherheit*, 6(1), 111-125.
- Kenning, P., and Plassmann, H.** (2005). NeuroEconomics: An overview from an economic perspective. *Brain Research Bulletin*, 67(5), 343-354.
- Kenning, P., Plassmann, H., & Ahlert, D.** (2007). Applications of functional magnetic resonance imaging for market research. *Qualitative Market Research: An International Journal*, 10(2), 135-152.
- Kirouac, G., and Dore, F. Y.** (1985). Accuracy of the judgement of facial expression of emotions as a function of sex and level of education. *Journal of Nonverbal Behavior*, 9(1), 3-7.
- Koshino H, Kana RK, Keller TA, Cherkassky VL, Minshew NJ.** (1991). fMRI Investigation of Working Memory for Faces in Autism: Visual Coding and Underconnectivity with Frontal Areas. *Cerebral cortex* (New York, NY).
- Koshino, H., G.A. Boese and F.R. Ferraro.** (2000). The relationship between cognitive ability and positive and negative priming in identity and spatial priming tasks. *J. General Psychol.*, 127: 372-382. DOI: 10.1080/00221300009598591
- Kover, A. J., Goldberg, S., & James, W.** (1995). Creativity vs Effectiveness *Journal of Advertising Research*.
- Kover, Arthur J., William L. James and Brenda S. Sonner.** (1997). To Whom Do Advertising Creatives Write? An Inferential Answer. *Journal of Advertising Research*, 37 (January/February), 41-53.
- Krugman, D. M., Fox, R. J., Fletcher, J. E., Fischer, P. M., and Rojas, T. H.** (1994). Do adolescents attend to warnings in cigarette advertising? An eye-tracking approach. *Journal of Advertising*, 34, 39-52.
- Krugman, D.M., Fox, R.J., Fletcher, J.E., Fischer, P.M. & Rojas, T.H.** (1994) Do adolescents attend to warnings in cigarette advertising? An eye-tracking approach. *Journal of Advertising Research*, 34, 39-52.
- Krugman, H. E.** (1983). Television program interest and commercial interruption: Are commercials on interesting programs less effective? *Journal of Advertising Research*, 23 (1), 21-23.
- Kuppens, P., Tuerlinckx, F., Russell, J. A., & Barrett, L. F.** (2013). The relation between valence and arousal in subjective experience. *Psychological Bulletin*, 139(4), 917-940.

- Kuppens, P., Tuerlinckx, F., Russell, J. A., & Barrett, L. F.** (2013). The relation between valence and arousal in subjective experience. *Psychological Bulletin*, 139(4), 917–940.
- Lambert, D. R.** (1980). Transactional analysis as a congruity paradigm for advertising recall. *Journal of Advertising*, 9, 37-41, 44-45.
- Lambourne, K.,** (2006). The relationship between working memory capacity and physical activity rates in young adults. *J. Sports Sci. Med.*, 5: 149-153.
- Lang, A.** (2000). The limited capacity model of mediated message process. *Journal of Communication*, 50, 1, 46–70.
- Lazarsfeld, Paul, Bernard Berelson, and Hazel Gaudet.** (1944). *The People's Choice*. New York: Duell, Sloane, and Pearce.
- Leach, D. C.** (1981). Should advertisements be tested? *Advertising Age*, July 13, 47-48.
- Lloyd, D. W., & Clancy, K. J.** (1991). CPMs versus CPMTs: Implications for media planning.
- Leather, Phil, Sally McKechnie and Manon Amirkhanian** (1994). The Importance of Likeability as a Measure of Television Advertising Effectiveness. *International Journal of Advertising*, 13 (3), 265-280.
- Lin Y, Duan X, Zhao C, Xu L.** (2013). *Systems Science Methodological Approaches*. CRC Press: New York.
- Lloyd, D. W., & Clancy, K. J.** (1991). CPMs versus CPMTs: Implications for media planning. *Journal of Advertising Research*, 31 (4), 34-44.
- Logo, Emma, Jozsa, Eszter, and Hamornik, Balazs Peter** (2010). Eye Tracking Analysis: Application in a Case Study of a Fast-Moving Consumer Goods Product”, *Proceedings of Measuring Behavior*, Eindhoven, The Netherlands.
- Lohse, G. L. and Rosen, D. L.** (2001). Signaling quality and credibility in yellow pages advertising: The influence of color and graphics on choice. *Journal of Advertising*, Vol. 30, No. 2, pp. 73–86.
- Lohse, G. L., & Wu, D. J.** (2001). Consumer eye movement patterns on Chinese Yellow Page advertising. *Journal of Advertising*, 26, 61–73.
- Lutz, Richard J.** (1996). Some General Observations About Research on Integrated Marketing Communications. *Integrated Communication: Synergy of Persuasive Voices*, Esther Thorson and Jeri Moore, eds., Mahwah, NJ: Lawrence Erlbaum, 355–367.

- Maarek P. J.** (1995) Political marketing and communication. London: John Libbey and Co. Mancini P. (1999) New Frontiers in Political Professionalism. *Political Communication*, vol. 16, pp. 231-245
- MacKinnon, D. P.** (1994). Analysis of mediating variables in prevention and intervention research. In A. Cazares & L. A. Beatty (Eds.), *Scientific methods in prevention research. NIDA Research Monograph 139* (pp. 127–153); DHHS Publication No. 94-3631. Washington, DC: U.S. Government Printing Office.
- Mann, D. L., Farrow, D., Shuttleworth, R., & Hopwood, M.** (2009). The influence of viewing perspective on decision-making and visual search behavior in an invasive sport. *International Journal of Sport Psychology*, 40, 546-564.
- Mann, D. L., Abernethy, B., & Farrow, D.** (2010). Action specificity increases anticipatory performance and the expert advantage in natural interceptive tasks. *Acta Psychologica*, 135, 17-23.
- Marotta, A., Casagrande, M., & Lupiáñez, J.** (2013). Object-based attentional effects in response to eye- gaze and arrow cues. *Acta Psychologica*, 143, perceived gaze direction modulates ad memorization 317–321. <http://dx.doi.org/10.1016/j.actpsy.2013>
- Maughan, L., Gutnikov, S., and Stevens, R.** (2007). Like more, look more. Look more, like more: The evidence from eye-tracking. *Brand Management*, 14(4), 335–342.
- Marra, J.L.** (1990). Advertising Creativity. Englewood Cliffs, NJ: Prentice Hall.
- Martinez, P.** (2011). *The consumer mind: Brand perception and the implication for marketers*. London, United Kingdom: Kogan Page.
- Maughan, L., Gutnikov, S., and Stevens, R.** (2007). Like more, look more. Look more, like more: The evidence from eye-tracking. *Brand Management*, 14(4), 335–342.
- Mitchell, AA and Olson, JC** (1981). Are Product Attribute Beliefs the Only Mediator of Advertising Effects on Brand Attitude? *Journal of Marketing Research*, vol.18, p318-32
- Molosavljevic, M., and Cerf, M.** (2008) First attention then intention: Insights from computational neuroscience of vision. *International Journal of Advertising*, 27, 3, 381–398.
- Montagne, B., Kessels, R. P. C., Frigerio, E., de Haan, E. H. F., & Perrett, D. I.** (2005). Sex differences in the perception of facial expressions: Do men really lack emotional sensitivity? *Cognitive Processing*, 6(2), 136 141.

- Morin, C.** (2011). Neuromarketing: the new science of consumer behavior. *Society*, 48(2), 131-135.
- Muehling, Darrel D., Jeffrey J. Stoltman, and Sanford Grossbart** (1990). The Impact of Comparative Advertising on Levels of Message Involvement," *Journal of Advertising*, 19 (4), 41-50.
- Mulligan, N.W.** (1998). The role of attention during encoding in implicit and explicit memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 24, 27-47.
- Murphy, John H., Isabella C. M. Cunningham and Gary B. Wilox.** (1978). The Impact of Program Environment on Recall of Humorous Television Commercials," *Journal of Advertising*, 8 (2), 17-21.
- Nimmo, D.** (1999). The Permanent Campaign: Marketing as a Governing Tool, in B. I. Newman (Ed.), *Handbook of Political Marketing*, Sage, Thousand Oaks, pp. 73- 86
- Noble, C.E., B.L. Baker and T.A. Jones.** (1964). Age and sex parameters in psychomotor learning. *Perceptual Motor Skills*, 19: 935-945. DOI: 10.2466/pms.1964.19.3.935
- Ooms, K., Dupont, L., Lapon, L., & Popelka, S.** (2015). Accuracy and precision of fixation locations recorded with the low-cost eye tracker in different experimental set-ups. *Journal of Eye Movement Research*, 8 (4), 1-24
- Orquín, J. L., & Loose, S. M.** (2013). Attention and choice: A review on eye movements in decision making. *Acta Psychologica*, 144, 190-206. <http://dx.doi.org/10.1016/j.actpsy.2013.06.003>
- Page, G.** (2012). Scientific realism: What 'neuromarketing' can and can't tell us about consumers. *International Journal of Market Research*, 54, 287-290.
- Park, C. W., & McClung, G. W.** (1986). The effect of TV program involvement on involvement with commercials. *Advances in Consumer Research*, 13, 544-548.
- Pavelchak, M. A., Antil, J. H., & Munch, J. M.** (1988). The super bowl: An investigation into the relationship among program context, emotional experience, and ad recall. *Journal of Consumer Research*, 15 (3), 360-367.
- Krugman, H.E.** (2000). Memory without recall, exposure without perception. *Journal of Advertising research*, 40, 6, 49-54.

- Pavelchak, M. A., Antil, J. H., and Munch, J. M.** (1988). The super bowl: An investigation into the relationship among program context, emotional experience, and ad recall. *Journal of Consumer Research*, 15 (3), 360-367.
- Pelphrey, K. A., Sasson, N. J., Reznick, J. S., Gregory, P., Goldman, B. D., and Piven, J.** (2002). Visual scanning of faces in autism. *Journal of Autism and Developmental Disorders*, 32(4), 249-261.
- Johnson, H.** (1992). Attention seekers. *Media Week*, January 17, 14-15.
- Johnson, R. W.** (1981). An application of Helson's adaptation level theory to the problem of
- Perloff, R. M.** (1999) "Elite, Popular, and Merchandised Politics", in B. I. Newman (Ed.), *Handbook of Political Marketing*, Sage, Thousand Oaks, pp. 19-40
- Pfeiffer, U. J., Timmermans, B., Vogeley, K., Frith, C. D., & Schilbach, L.** (2013). Towards a neuro-science of social interaction. *Frontiers in Human Neuroscience*, 7, 22. <http://dx.doi.org/10.3389/fnhum.2013.00022>
- Pieters, R., Wedel, M. & Batra, R.** (2010) The stopping power of advertising: measures and effects of visual complexity. *Journal of Marketing*, 74, 5, pp 48-60
- Pieters, R. & Wedel, M.** (2004) Attention capture and transfer in advertising: brand, pictorial, and text-size effects. *Journal of Marketing*, 68, 2, pp 36-50
- Pieters, R. & Wedel, M.** (2007) Goal control of attention to advertising: the Yarbus implication. *Journal of Consumer Research*, 34, 2, pp 224-233
- Pieters, R.; Warlop, L.; and Wedel, M.** (2002). Breaking through the clutter: Benefits of advertisement originality and familiarity for brand attention and memory. *management Science*, 48, 6, 765-781
- Pieters, Rik and Michel Wedel** (2004). Attention Capture and Transfer in Advertising: Brand, Pictorial, and Text-Size Effects. *Journal of Marketing*, 68 (April), 36-50.
- Pollay, R. W., and Mittel, B.** (1993). Here's the Beef: Factors, Determinants, and Segments in Consumer Criticism of Advertising. *Journal of Marketing*, 57, 3, 99-114.
- Poole, A., & Ball, L.** (2005). Eye tracking in HCI and usability research. In C. Ghaoui (Ed.), *Encyclopedia of consumer interaction* (pp. 211-219). Hershey, PA: Idea Group. Eye Tracking to Assess Advertising Appeals 371

- Popkin, Samuel, John Gorman, Charles Phillips, and Jeffrey Smith.** (1976). "What Have You Done for Me Lately? Toward an Investment Theory of Voting." *American Political Science Review* 70: 779-805.
- Popkin, S.** (1991). *The Reasoning Voter*. Chicago: University of Chicago Press.
- Purucker, Christian, Jan R. Landwehr, David E. Sprott, and Andreas Herrmann.** (2013). Clustered Insights: Improving Eye Tracking Data Analysis using Scan Statistics. *International Journal of Market Research*, 55 (1), 105–30.
- Rahman, Q., Wilson, G. D., & Abrahams, S.** (2004). Sex, sexual orientation, and identification of positive and negative facial affect. *Brain and Cognition*, 54(3), 179-185.
- Rajaram, S., & Srinivas, K.** (1998, November). The effects of attention on perceptual implicit memory. Paper presented at the 39th Annual Meeting of the Psychonomic Society, Dallas.
- Rajaram, S., Srinivas, K. & Travers, S.** (2001) The effects of attention on perceptual implicit memory. *Memory and Cognition*, 29(7), 920–930.
- Rayner K, Rotello C, Stewart A, Duffy S.** (2001). Integrating Text and pictorial information: eye movements when looking at print advertisements. *Journal of Experimental Psychology: Applied* 7(3): 219–226.
- Rayner, K., B. Miller, and C. M. Rotello.** (2008). Eye Movements When Looking at Print Advertisements: The Goal of the Viewer Matters." *Applied Cognitive Psychology* 22 (2008): 697-707.
- Rayner, K., Rotello, C., Stewart A. and Duffy, S.** (2001). Integrating text and pictorial information: eye movements when looking at print advertisements. *Journal of Experimental Psychology: Applied* 7(3): 219–226.
- Renvoisé, P., & Morin, C.** (2005). *Neuromarketing: Is There a 'buy Button' in the Brain? how Selling to the Old Brain Will Bring You Instant Success*. Thomas Nelson Inc.
- Riccio, C.A., C.R. Reynolds and P.A. Lowe** (2001). *Clinical Applications of Continuous Performance Tests: Measuring Attention and Impulsive Responding in Children and Adults*. 1st Edn., John Wiley and Sons, New York, ISBN-10: 0471380326, pp: 408.
- Rosbergen, E., Pieters, R., and Wedel, M.** (1997). Visual attention to advertising: A segment-level analysis. *Journal of Consumer Research*, 24 (December), 305-314.
- Rotter, N. G., & Rotter, G. S.** (1988). Sex differences in the encoding and

decoding of negative facial emotions. *Journal of Nonverbal Behavior*, 12(2), 139

- Rundus, Dewey** (1973), "Negative Effects of Using List Items as Recall Cues," *Journal of Verbal Learning and Verbal Behavior*, 12 (February), 43–50
- Russo, J. E.** (1978). Eye fixations can save the world: A critical evaluation and a comparison between eye fixations and other information processing methodologies. *Advances in Consumer Research*, 5, 561-570.
- Rutter, M.** (1994). Beyond longitudinal data: Causes, consequences, changes, and continuity. *Journal of Consulting and Clinical Psychology*, 62, 928-940.
- Sajjacholapunt, P., & Ball, L. J.** (2014). The influence of banner advertisements on attention and memory: Human faces with averted gaze can enhance advertising effectiveness. *Frontiers in Psychology*, 5, 166.
- Sather, L., Van Belle, W., Laeng, B., Brennen, T., & Øvervoll, M.** (2009). Anchoring gaze when categorizing faces' sex: Evidence from eye-tracking data. *Vision Research*, 49, 2870–2880. <http://dx.doi.org/10.1016/j.visres.2009.09.001>
- Schumann, D. W.** (1986). Program impact on attitude toward TV commercials. In J. Seagert (Ed.), *Proceedings of the Division of Consumer Psychology* (pp. 67-73). Washington, DC: American Psychological Association.
- Soldow, G. F., & Principe, V.** (1981). Response to commercials as a function of program context. *Journal of Advertising Research*, 21 (2), 59-65.
- Schumann, David W., Esther Thorson and D. Rosen** (1989). Testing the Selection-Processing Model: The Influence of Program Related Needs: *Advances in Consumer Research*, 16,495-501. Schwerin,
- Schwerin, H. S.** (1958). Do today's programs provide the wrong commercial climate? *Television Magazine*, 15 (8), 44-47, 90-91.
- Senju, A., & Hasegawa, T.** (2005). Direct gaze captures visuospatial attention. *Visual Cognition*, 12, 127–144. <http://dx.doi.org/10.1080/13506280444000157>
- Seo, Y. W.; Chae, S. W. & Lee, K. C.** (2012). The impact of human brand image appeal on visual attention and purchase intentions at an e-commerce website. *Intelligent information and database systems*, 7168, 1-9.
- Shikhman, M.** (2007). *Age, Gender, General Intelligence and Educational Level Influences on Working Memory*. 1st Edn., City University of New York, USA., ISBN-10: 0549267816, pp: 107.
- Simon, H. A., & Chase, W. G.** (1973). Skill in chess. *American Scientist*, 61, 394-403.

- Singh, S. N., Churchill, G. A., & Hitchon, J. C.** (1987). The intensifying effects of exciting television programs on the reception of subsequent commercials. Unpublished working paper, Department of Marketing, University of Kansas.
- Singh, Surendra N., Michael L. Rothschild, and Gilbert A. Churchill, Jr.** (1988). Recognition Versus Recall as Measures of Television Commercial Forgetting. *Journal of Marketing Research*, 25 (February), 72–80.
- Smit, E. G., P. C. Neijens, and R. Heath.** (2013). The Differential Effects of Position, Ad and Reader Characteristics on Readers' Processing of Newspaper Advertisements. *International Journal of Advertising* 32, 1 (2013): 65-84.
- Soldow, G. F., & Principe, V.** (1981). Response to commercials as a function of program context. *Journal of Advertising Research*, 21 (2), 59-65.
- Steiner, G. A.** (1966). The people look at commercials: A study of audience behavior. *Journal of Business of the University of Chicago*, 39, 272-304.
- Stewart, David W. and Scott Koslow** (1989). Executional factors and Advertising Effectiveness: A Replication,” *Journal of Advertising*, 18 (3), 21-32.
- Stone, G., Besser, D., & Lewis, L.** (2000). Recall, Liking, and Creativity in TV Commercials: A New Approach. *Journal of Advertising Research*, 40(3), 7– 18.
- Strasburger, V.C.** (1995). *Adolescents and the media: Medical and psychological impact. Developmental Clinical Psychology and Psychiatry. Vol. 33.* Thousands Oaks, CA: Sage.
- Tellis, G. J., Chandy, R. K., MacInnis, D., and Thaivanich, P.** (2005). Modeling the microeffects of television advertising: Which ad works, when, where, for how long, and why? *Marketing Science*, 24, 359–366.
- Thaivanich B. R., Brettel, M., and Engelen A.** (2011). Incorporating long-term effects in determining the effectiveness of different types of online advertising. *Marketing Letters*, 22, 327–340.
- Thorson, E., and Reeves, B.** (1986). Effects of over-time measures of viewer liking and activity during programs and commercials on memory for commercials. In R. Lutz (Ed.), *Advances in consumer research* (Vol. 13). Provo, UT: Association for Consumer Research.
- Thorson, E., Friestad, M., and Zhao, X.** (1987, October). Attention to program context in a natural viewing environment: Effects on memory and attitudes toward commercials. Paper presented at the Association for Consumer Research, Boston.

- Thorson, E., Reeves, B., and Schleuder, J.** (1985). Message complexity and attention to television. *Communication Research*, 12, 427-454.
- Thorson, Esther, Byron Reeves and Joan Schleuder** (1985), "Message Complexity and Attention to Television," *Communication Research*, 12 (August), 427-454.
- Tobii eye tracking. (2010).** An introduction to eye tracking and Tobii Eye Trackers. White Paper, Tobii Technology, Danderyd, Sweden, January 27, 2010 (available at www.scribd.com/doc/25907389/Tobii-Eye-Tracking-An-introduction-to-eye-tracking-and-Tobii-Eye-Tracker).
- Twyman, W. A.** (1974). Setting TV advertising in context. Unpublished manuscript, Research Bureau Limited, London.
- Van Reijmersdal, Eva A., Karolina Tutaj, and Sophie C. Boerman** (2013). The Effects of Brand Placement Disclosures on Skepticism and Brand Memory. *Communications. The European Journal of Communication Research*, 38 (2), 127–47.
- Vashishta, D. S., and Balaji, B.** (2012). Social cognitive neuroscience, marketing persuasion and customer relations. *Procedia-Social and Behavioral Sciences*, 65, 1033-1039. <http://dx.doi.org/10.1016/j.sbspro.2012.11.238>
- Vecchiato, G., Astolfi, L., De Vico Fallani, F., Toppi, J., Aloise, F., Bez, F., and Babiloni, F.** (2011). On the use of EEG or MEG brain imaging tools in neuromarketing research. *Computational intelligence and neuroscience*, 2011, 3.
- Velásquez, J. D.** (2013). Combining eye-tracking technologies with web usage mining for identifying Website Keyobjects. *Engineering Applications of Artificial Intelligence*, 26, 1469-1478. <http://dx.doi.org/10.1016/j.engappai.2013.01.003>
- Venkatraman, V., Clithero, J. A., Fitzsimons, G. J., & Huettel, S. A.** (2012). New scanner data for brand marketers: How neuroscience can help better understand differences in brand preferences. *Journal of Consumer Psychology*, 22(1), 143-153.
- Vertegaal, Roel.** (2008). A Fitts Law comparison of eye tracking and manual input in the selection of visual targets. 241-248. 10.1145/1452392.1452443.
- Vertegaal, Roel.** (2008). A Fitts Law comparison of eye tracking and manual input in the selection of visual targets. 241-248. 10.1145/1452392.1452443.
- Vinette, C., Gosselin, F., & Schyns, P. G.** (2004). Spatio-temporal dynamics of face recognition in a flash: It's in the eyes. *Cognitive Science*, 28, 289–301.
- Vuilleumier, P., George, N., Lister, V., Armony, J., & Driver, J.** (2005). Effects

of perceived mutual gaze and gender on face processing and recognition memory. *Visual Cognition*, 12, 85–101. <http://dx.doi.org/10.1080/13506280444000120>

- Wagner, U., & Schwand, C.** (2012). Assessing advertising effectiveness: The potential of goal-directed behavior. *Journal of Psychology and Marketing*, 29(6), 411–421.
- Walker, D. and Von Gonten, H.F.** (1989) Explaining related recall outcomes: new answers from a better model. *Journal of Advertising Research*, 41(6), 27–34.
- Webb, P. H.** (1979). Consumer initial processing in a difficult media environment. *Journal of Consumer Research*, 6, 225-236.
- Webb, Peter H. and Michael L. Ray** (1979). Effects of TV Clutter. *Journal of Advertising Research*, 19 (3), 7-12.
- Wedel, M and Pieters, R.** (2000). Eye fixations on advertisements and memory for brands: a model and findings *Marketing Science*, 19, 4, pp 297–312
- Wedel, M., and Pieters, R.** (2008) A review of eye-tracking research in marketing. In N. Malhotra (ed.), review of marketing research. Armonk, NY: M.E. Sharpe, 2007, pp. 123–147.
- Yaveroglu, I., and Donthu, N.** (2007). Advertising repetition and placement issues in on-line environments. *Journal of Advertising*, 37, 2, 31–43.
- Welford, A.T.** (1980). Choice Reaction Time: Basic Concepts. In: Reaction Times, Academic Press, New York, ISBN-10: 0127428801, pp: 73-128.
- Wells, W.D.** (2000) Recognition, recall and rating scales. *Journal of Advertising Research*, 40(6), 14–20.
- Wicker, B., Perrett, D. I., Baron-Cohen, S., & Decety, J.** (2003). Being the target of another’s emotion: A PET study. *Neuropsychologia*, 41, 139 –146. [http://dx.doi.org/10.1016/S0028-3932\(02\)00144-6](http://dx.doi.org/10.1016/S0028-3932(02)00144-6)
- Wilkinson, Krista M., and Teresa Mitchell.** (2018). Eye Tracking Research to Answer Questions about Augmentative and Alternative Communication Assessment and Intervention.” *Augmentative and alternative communication* (Baltimore, Md.: 1985) 30.2 (2014): 106–119. PMC. Web. 1 May 2018.
- Williams, A. M., and Davids, K.** (1998). Visual search strategy, selective attention, and expertise in soccer. *Research Quarterly for Exercise and Sport*, 69, 111- 128.

- Williams, A. M., and Ericsson, K. A.** (2005). Perceptual-cognitive expertise in sport: Some considerations when applying the expert performance approach. *Human Movement Science*, 24, 283-307.
- Williams, A. M., Davids, K., & Williams, J. G.** (1999). *Visual perception and action in sport*. London, UK: E. and F. N. Spon.
- Williams, A. M., Davids, K., Burwitz, L., and Williams, J. G.** (1994). Visual search strategies in experienced and inexperienced soccer players. *Research Quarterly for Exercise and Sport*, 65, 127-135.
- Williams, A. M., Hodges, N. J., North, J., and Barton, G.** (2006). Perceiving patterns of play in dynamic sport tasks: Investigating the essential information underlying skilled performance. *Perception*, 35, 317-332.
- Yi, Y.** (1990). Cognitive and affective priming effects of the context for print advertisements. *Journal of Advertising*, 19 (2), 40-48.
- Yoo C. Kim K. and Stout P.** (2004). Assessing the effects of animation in online banner advertising: Hierarchy of effects model. *Journal of Interactive Advertising* 4(2): 49-60.
- Zaichkowsky, J. L.** (1984). Measuring the involvement construct. Unpublished doctoral dissertation, University of California at Los Angeles.
- Zaller, John.** (1992). *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.
- Zurawicki, L.** (2010). *Neuromarketing: Exploring the brain of the consumer*. Boston, MA: Springer.

APPENDICES

APPENDIX A – Political Parties’ Advertisements

APPENDIX B – Filtering Questionnaire

APPENDIX C– Eye tracking experiment (Entrance AND Exit survey)

APPENDIX A.

Different electoral campaign advertisements used in the past two elections in Turkey

AKP, CHP, MHP and HDP

AKP	CHP	MHP	HDP



APPENDIX B.

Filtering Survey

This section contains a few classification questions. Please check the most appropriate option. Please be assured that all responses are completely confidential and will be used for statistical purposes only.

What is your gender?

Male _____ Female _____

What is your age?

Under 18 _____

18 –25 _____

26 – 35 _____

36 – 49 _____

50 – 65 _____

Over 65 _____

Are you currently a full-time student? Yes _____ No _____

What is your education level?

High School _____ Some College _____ College Degree _____ Graduate Degree _____

What do you do? Occupation: -----

How much do you earn in a month? Your income:

Less than 1000TL _____

1000 –2000 _____

2000 – 3000 _____

3000 – 4000 _____

4000 – 5000 _____

Over 5000 _____

Are you officially a member of any political parties?

Yes _____ No _____

If yes, which one?

AKP _____ CHP _____ MHP _____ HDP _____ others

Did you vote in the last two Parliamentary elections: 1st November 2015?

Yes _____ No _____

To whom did you vote?

AKP _____ CHP _____ MHP _____ HDP _____ others

Did you vote in the last two Parliamentary elections: 7th June 2015?

Yes _____ No _____

To whom did you vote?

AKP _____ CHP _____ MHP _____ HDP _____ others

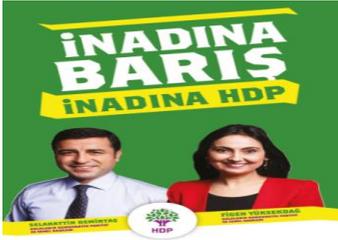
Based on your own judgement, please rate your preferences to the following political print advertisements. Please indicate Excellent if you would like it the most, and indicate poor if you would not like it.

(1) Poor, (2) fair, (3) good, (4) very good and (5) excellent

AKP					
Ad. No.	Ad.	Ratings			
A					
B					
C					
D					
E					

F						
G						
H						
CHP						
A						
B						
C						
D						
E						

F						
G						
H						
HDP						
A						
B						
C						
D						
E						

F						
G						
H						
MHP						
A						
B						
C						
D						

E						
F						
G						
H						

APPENDIX C.

A. Eye Tracking Entrance Survey

This section contains a few classification questions. Please check the most appropriate option. Please be assured that all responses are completely confidential and will be used for statistical purposes only.

Gender? Male_____ Female_____

Age?

Do you have a job? Yes _____ NO _____

If yes? What? :

Your level of education?

Primary School_____ Preparatory School _____High School_____

Undergraduate _____Postgraduate_____

Less than 1000TL _____

1000 –2000 _____

2001 – 3000 _____

3001 – 4000 _____

4001 – 5000 _____

Over 5001 _____

Are you officially a member of any political parties?

Yes_____ No_____

If yes, which one?

AKP _____ CHP _____ MHP _____ HDP _____ others

Can you please mark the level of your support to the political party you support. 0 represents the least support and 100 represents the highest level of support.



0 10 20 30 40 50 60 70 80 90 100

Did you vote in the last two Parliamentary elections: 1st November 2015?

Yes _____ No _____

To whom did you vote?

AKP _____ CHP _____ MHP _____ HDP _____ others

Did you vote in the last two Parliamentary elections: 7th June 2015?

Yes _____ No _____

To whom did you vote?

AKP _____ CHP _____ MHP _____ HDP _____ others

B. Exit Survey

Thank you for the support you showed by attending and participating to this scientific research. We would be extremely thankful for completing this exit survey. All your answers will be used just for statistical purposes.

1) Can you please write down the claim/ message of the political parties' advertisements you have just watched?

AKP:

CHP:

HDP:

MHP:

2) Check the box of the party that offered these claims as their messages.

	AKP	CHP	MHP	HDP
Birlik var, kardeşlik var				
.... Vakti geldi				
Ülkede birlik için. Devlette dirlik için				
Sen ben yok, Türkiye var.				
Büyük insanlığa evet de.				
Ne ezen ne ezilen insanca hakça bir düzen				
Onlar konuşur Yapar				
Bizler meclise				
Türkiye rahat bir nefes alacak				
İnadına özgürlük				

Ahlaklı bir kalkınma. Bizimle yürü Türkiye				
Bayrağımız bir. Vatanımız bir. Huzurumuz bir. Sevincimiz bir				
Her yıl 700 bin işsize iş sağlanacak.				
Gençler rahat bir nefes alacak				
Artık yeter. Şimdi söz senin Türkiye				

3) Based on your own judgement, please rate your preferences to the following political print advertisements. Please indicate Excellent if you would like it the most, and indicate poor if you would not like it.

(1) I did not like it at all (2) I did not like it (3) neutral (4) I liked it (5) I liked it a lot.

No.	Advertisement	1	2	3	4	5
A						
B						
C						
D						

E						
F						
G						
H						
No.	Advertisement	1	2	3	4	5
A						
B						

C						
D						
E						
F						
G						
H						

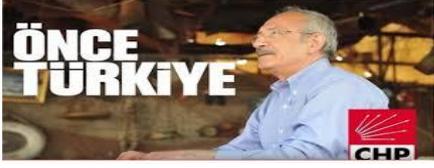
No.	Advertisement	1	2	3	4	5
A						
B						
C						
D						

E						
F						
G						
H						
NO.	Advertisement	1	2	3	4	5
A						

B					
C					
D					
E					
F					
G					
H					

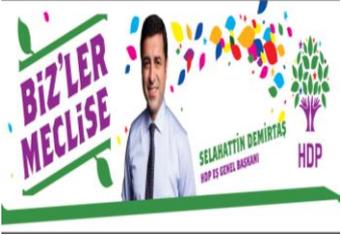
4. Check the box that represents the level of your memory level answering the question: Do you recall / remember this advertisement
- (1) I remember it completely (2) I partially remember it (3) I do not remember it at all

No.	Advertisement	1	2	3
A				
B				
C				
D				
E				
F				

G				
H				
No.	Advertisement	1	2	3
A				
B				

C				
D				
E				
F				
G				
H				

No.	Advertisement	1	2	3
A				
B				
C				
D				
E				
F				

G				
H				
No.	Advertisement	1	2	3
A				
B				

C				
D				
E				
F				

G	 <p>HDP'nin "Büyük İnsanlık" mitingi bugün.</p>			
H	 <p>BÜYÜK İNSANLIK MİTINGİ 30 MAYIS CUMARTESİ 16.00 KAZLIÇEŞME MEYDANI</p> <p>EVET</p> <p>HALKLARIN DEMOKRATİK PARTİSİ</p>			

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