Consumer's awareness and privacy concerns regarding online behavioral advertising

Priyanka[1], Sadaf Siraj[2,*]

[1]PhD. Scholar, [2]Assistant Professor, Dept. of Management, School of Management Business Studies, Jamia Hamdard, Delhi, India

***Corresponding Author:**
Email: sadafsiraj@gmail.com

Abstract
In this digital age where it is becoming difficult for marketers to win customer's expectations all the time. And consumers are getting more products online and offline for comparisons. Marketers started tracking consumers on the basis of their internet use and provide them customized advertising, this whole process is known as online behavioral advertising. The study aims to find: awareness level of OBA in consumers based on their age and gender, privacy concerns of consumers based on age and gender, whether there is any relation between the awareness level of OBA and Privacy concerns of the respondents and to understand the role of cookies in online behavioral advertising was also the objective. The findings were there is no difference among knowledge of online behavioral adverting and related concepts based on gender and age of the respondents. Level of privacy concerns does not differentiate between gender and age of the respondents. And there is no correlation between level of awareness regarding online behavioral advertising and privacy perception of the respondents.

Keywords: Privacy, Online behavioral advertisement, Behavioral targeting, Cookies.

Introduction
Recently the news of Facebook selling user's data to Cambridge Analytica[1] created trust issues among Facebook users. With everything on online platform, things are becoming transparent and use of personal data of consumers by marketers is a common technique. Due to which some may feel their privacy is invaded and their freedom is undermined.[10] On the basis of internet surfing of an individual, marketer provides targeted advertisements to him. For example; if a person had searched for shoes on the internet, shopping websites will provide him advertisements of shoes when he opens his social network account to chat with friends. This whole process of targeted advertisement is based on individual's internet behavior, making Online Behavioral Advertising a widely used technique by marketers nowadays.

Online Behavioral Advertising is a system of gathering information about a person's online activity in choosing which ad to show.[16] Online Behavioral Advertising is a practice of web promoting in view of person's online history and behavior.[5] For this form of personalized advertising data of an individual is collected by marketers, generally by installing cookies.[20] Cookies are small bits of information sent from a site and put away on the client's PC by the client's web program while the client is surfing.[11] These cookies may be in the form of flash cookies, session cookies, first-party cookies or third-party cookies.

OBA or Targeted Advertising is made possible by Following Online Movements of a person and Buying Behavior of consumers.[18]

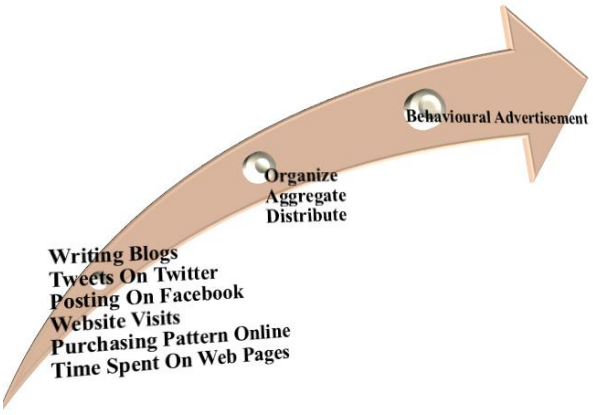

Fig. 1: Framework of Behavioural Advertisement

Whenever someone does anything on internet-writing a blog, posting and tagging on Facebook, writing tweets on Twitter, simply search for something online, visiting different websites, shopping online, everything is traced by online marketers. Even the amount of time spent on a particular web page, number of visits on a particular web page is not left behind. Understanding of consumer's online buying behavior by recording latest purchases made by them and what products are returned or exchanged by a consumer. All these things are gathered, organized, aggregated and distributed among potential online marketers because they have the ability to use this information to predict consumer's future purchases. This consumer's future purchase is known as 'Predictive Analytics'[18]. Predictive Analytics helps marketers to provide online behavioral advertisements to a visitor to make him a potential customer.

Research questions and objectives

The research questions are:

a) What is consumer's understanding of online behavioral advertisements and related concepts like targeting and cookies?
b) Does consumers concern about their privacy?

The objectives of the research are:

a) To understand the level of awareness of consumers regarding OBA and related aspects.
b) To understand the knowledge of cookies.
c) To know the level of consumer's privacy concerns.

Related work

Consumer's Understanding Regarding Online Behavioural Advertising and Related Concepts.

Research has been already conducted to know consumer's knowledge regarding online behavioral advertisement. One study of Alreck and Settle (1) finds consumers are not ignorant of practices associated with tracking and targeting. About 3/4th of the people understands that online marketers use cookies to track. In the in-depth interview conducted by Mc Donald and Cranon (16) participants were not exactly aware of the words behavioral targeting and online advertisements. But some were in preference of relevant ads. And they did not like the concept of data mining for targeted ads. Participants were unaware of how cookies were used. Only 3 out of 14 participants said cookies and targeted advertisements are related Smit, Noort, & Voorveld (20) concluded from an online survey that users have inadequate knowledge OBA technique. Only 12.1% people were fully aware of this concept. 0.2% of their respondents were fully aware of the work of cookies and rest was ignorant. Even the ignorance level of cookies was less than OBA awareness. Also, Wohn and Sarkar (23) try to find out the difference of awareness level between expert, semi-expert, and novice. Their results say some participants are in favor of behavioral targeting while some are not. The only reason they like behavioral advertisements is that of usefulness and personal relevance.

The researcher here wants to know the level of understanding among consumers and do these findings differ.

Ho1: There is no significant difference between consumer's awareness levels towards online behavioral advertising on the basis of gender.

Ha1: There is a significant difference between consumer's awareness levels towards online behavioral advertising on the basis of gender.

Ho2: There is no significant difference between consumer's awareness levels towards online behavioral advertising on the basis of age.

Ha2: There is a significant difference between consumer's awareness levels towards online behavioral advertising on the basis of age.

Consumer's Privacy Concern Level

Wirtz, Lwin, and Williams (22) concluded that due to changed business policies and government norms consumers have shown reduced privacy concerns. McDonald and Cranon (16) found that behavioral targeting invades user's belief and people feel it as privacy exploitation. Online behavioral advertisements spur privacy concerns as marketers do track each and every movement of the web surfer. Berger (6) believe the data of consumers maintained by marketers would place their information in danger as it takes away all the intimacy and all the sensitive data is out for every marketer to use. Kuehn (12) compares NebuAds and Facebook case consisting of behavioral targeting and find that there's always a conflict between privacy expectation of consumers and personalized ads provided by marketers. Sheehan and hoy (19) find that the relationship with privacy concerns with a registration of websites is inverse i.e. when privacy concerns increase registration with the website falls. Also, they found that even if a user shows privacy concerns they usually do not provide false information. Smit et al. (20) in a survey proved that people have concerns regarding privacy. Methews-Hunt (15) while explaining Australian Privacy Law and Alreck and Settle (1) also says consumers either do not read privacy policies or even if some reads them, they do not understand because of jargons. Lankton, McKnight, and Tripp (13) used cluster analysis to find out "about their privacy management behaviors, privacy perceptions, technology usage perceptions, and demographics" with two data set- college students and the general public. Their research says older users with the highest privacy concerns and the lowest trust and technology usage perceptions are most private as compared to younger users Merreiros et al (14) conducted a research on person's reaction to news articles and privacy concerns; they found that if it is about privacy sort of data does not make a difference be it as positive data or negative data.

The researcher here wants to know the level of privacy concerns shown by respondents.

Ho3: There is no significant difference between privacy concerns on the basis of gender.

Ha3: There is a significant difference between privacy concerns on the basis of gender.

Ho4: There is no significant difference between privacy concerns on the basis of age.

Ha4: There is a significant difference between privacy concerns on the basis of age.

The researcher is also interested in knowing the relationship between awareness of Online Behavioral Advertising and Privacy Concerns.

Ho5: There is no correlation between awareness of OBA and Privacy concerns.

Ha5: There is a correlation between awareness of OBA and Privacy concerns.

Role of cookies in OBA

Cookies are small bits of information sent from a site and put away on the client's PC by the client's web program while the client is surfing[11]. Cookies are helpful for a person as it stores information and works as a reminder for a user. For example, while filling a form or logging into the same website again. The user need not provide the same things again. Cookies have stored all of it. McDonald and Carnor (16) found that people are not aware of cookies and their functions. They have different notions about cookies and many were not aware of Session cookies, Third party cookies, and Flash cookies. Tirtea, Castelluccia, Ikonomou (21) explains First party cookies as related with the web server demonstrated by the URL of the page the customer is going to; they are set by primary party server. For example: whenever a person visits a website, the owner of that website sends cookies to that user's computer may be to check the duration of the visit and number of the visit made by that person. Tirtea et.al. (21) also explained Third party cookies as those cookies that can be gotten by the program while the client is going by a page that contains outsider's substance like, advertisements, pictures etc. from outsider's suppliers. Usually, these cookies are sent by online marketers. For example, whenever a user opens up a webpage and sees ads on the page in different places, those ads are provided by the third party who is not the owner of the web page but had sent cookies (third party cookies) to track that user. Ayenson et al (3) talked about flash cookies are program is utilized by adobe flash organizers to store information on client's PC. This is acquired by some marketers because it permits continuous tracking of users, even if they have taken actions to keep off e-profiling. According to Kuhen (12), the mediator runs internet facility like, web searches, social networking, e-mails etc. where they track client's online conduct by cookies like, what exchanges are made, what web pages are gone through etc. then all this information is used to provide personalized advertisements to the users. He also says cookies could be a short term known as single-session cookies or they could be never-ending known as multi-session cookies.

Materials and Method

The survey was conducted online for one week and 94 responses were gathered. First participants were asked to answer questions on internet usage and advertisements. Like, how long they have been using the internet, do they shop online, and have they searched for some products online, have they ever seen advertisements for those products. All these questions were asked to get an insight about the participants. As only those responses were included who have seen advertisements from relevant shopping portals after purchasing a product online or searching for the product online, the researcher had to delete one response because this qualifying criterion was not fulfilled. So, the total number of responses taken for analysis was 93. [Refer Annexure 1]

Nature of Respondents

Out of 93 respondents; there were 50 (53.3%) Female respondents and 43 (46.2%) were Male respondents. 4 (4.3%) were below 18 of age, 60 (64.5%) were in the age brackets of 18 to 25, 24 (25.8%) respondents belong to the age group of 26 to 35 and 5 (5.4%) were above 35 years. 41 (44.1%) were students, 8 (8.6%) were self-employed, 37 (39.8%) were employed and 7 (7.5%) were unemployed. 3 (3.2%) respondents were high school graduates, 5 (5.4%) respondents were undergraduates, 30 (32.3%) were graduates, 47 (50.5%) were postgraduates and 8 (8.6%) had the doctorate degree. 11 (11.8%) respondents earned annual salary up to 2.5 lakhs, 19 (20.4%) earned between 2.5 to 5 lakhs, 9 (9.7%) earned 5 to 10 lakhs, 5 (5.4%) earned 10-15 lakhs, 3 (3.2%) respondents earned a salary above 15 lakhs and 46 (49.5%) were not earning because either they were students or were unemployed. The mean and standard deviation of the respondents could be seen in the annexure 2.

Reliability and Adjustments

Awareness Level 6 and Awareness Level 8 Statements were recoded. And Privacy Concerns 4 statement was also recoded and the means and the standard deviation were noted. [Refer Annexure 3 and Annexure 4]

Cronbach's Alpha was used to test the reliability of the items in the variables. There were 10 items in awareness and 5 items in privacy. The Cronbach's Alpha of Awareness level came to be 0.830 when two items were removed from the analysis. And the Cronbach's Alpha of privacy concerns was 0.801 when one item was removed from the analysis.

[Note: REGR factor score 1 is awareness level. And REGR factor score 2 is privacy concerns.]

Table 1: Test for Reliability

Variables	Cronbach's Alpha	No. of Items	Remarks
Awareness	0.830	8	Awareness Level 6 and Awareness Level 8 removed
Privacy	0.801	4	Privacy Concern 4 removed

Then Factor Analysis was conducted to identify variations and correlations among items in the variable. To get correlated items Awareness Level 5, 6, 7 and 8 were removed. Also, in Privacy, Privacy Concern 4 was removed from the analysis. [Refer Annexure 5]

Analysis

Data was tested to check Normality and it was found that Awareness level is normal but Privacy Concerns was not normal.

Table 2: Test for Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	f	Sig.	Statistic	Df	Sig.
REGR factor score 1 for analysis 1	.070	93	.200*	.978	93	.120
REGR factor score 2 for analysis 1	.100	93	.023	.952	93	.002
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Table 3: Independent t-Test

		Levene's Test for Equality of Variance		t-test for Equality of means					95% Confidence Interval of the Differences	
		F	Sig.	t	Df	Sig. (2 Tailed)	Mean Difference	Std. Error Difference	Lower	Upper
REGR Factor Score 1 for Analysis 1	Equal Variances not assumed	4.350	0.40	-1.599	91	0.113	-.29821964	.18649826	-.66867553	.07223624
	Equal Variances assumed			-1.638	88.496	0.105	-.29821964	.18209347	-.66006388	.06362459

Independent t-test showed that both males and females have somewhat equal knowledge of online behavioral advertisements and its related aspects. P-value came to be 0.105 which is more than 0.05. So, researcher failed to reject the null hypothesis.

Table 4: One-way ANOVA

REGR factor score 1 for analysis 1					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.047	3	1.016	1.252	.296
Within Groups	72.182	89	.811		
Total	75.228	92			

One-way ANOVA showed age is not a criterion to decide how much a consumer is aware of OBA. Here P-value came to be 0.296, which is less than 0.05.

Table: 5 Mann-Whitney U Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of REGR factor score 2 for analysis 1 is the same across categories of gender.	Independent-Samples Mann-Whitney U Test	.784	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

To see how privacy concerns changes among gender Mann-Whitney U Test was used as Privacy Concerns were not normal. It was found that P-value is 0.784, which is greater than 0.05 showing male and female shows equal privacy concerns and there is no difference in between their attitude towards privacy.

Table 6: Kruskal-Wallis Test

Ranks				Test Statistics [a,b]		
	age	**N**	**Mean Rank**	**Chi-Square**	**df**	**Asymp. Sig.**
REGR factor score 2 for analysis 1	Below 18 Years	4	44.75	.407	3	.939
	18-25 Years	60	48.23			
	26-35 Years	24	44.23			
	Above 35 Years	5	47.30			
	Total	93				

a. Kruskal Wallis Test
b. Grouping Variable age

Also, Kruskal-Wallis test was done and it was found that as P-value is 0.939>0.05. In other words, different age groups show similar privacy concerns.

Table: 7 Kendall's tau b

Correlations				
			REGR factor score 1 for analysis 1	**REGR factor score 2 for analysis 1**
Kendall's tau_b	REGR factor score 1 for analysis 1	Correlation Coefficient	1.000	.056
		Sig. (2-tailed)	.	.430
		N	93	93
	REGR factor score 2 for analysis 1	Correlation Coefficient	.056	1.000
		Sig. (2-tailed)	.430	.
		N	93	93

As the researcher was interested in knowing the relationship between awareness level of OBA and privacy concerns of individuals. Kendall's Tau Test was conducted. And the results show that P-value is greater than 0.05 which is the significant value. So, it may be concluded that there is no correlation between awareness of online behavioral advertising and privacy concerns of consumers.

It was also found that majority of respondents were aware of cookies and its functions though they were not much aware of the type of cookies [Refer Annexure 6]. When respondents were asked that what type of cookies they are familiar with. 50 (53.8%) people were not familiar with any cookies. Followed by session cookies: 16 (17.2%) people know about them. And 9 (9.7%), 9 (9.7%) and 9 (9.7%) people are familiar with first-party cookies, third-party cookies, and flash cookies respectively.

Results

Table 8 a

Hypothesis	**Independent Variable**	**Dependent Variable**	**Normality**	**Test Statistics**	**P-value**	**Result**
There is no significant difference between consumer's awareness levels towards online behavioral advertising on the basis of gender	Gender	Awareness Level	Normal	Independent Sample t-test	0.105	Accept
There is no significant difference between consumer's awareness	Age	Awareness Level	Normal	One Way ANOVA	0.296	Accept

levels towards online behavioral advertising on the basis of age.						
There is no significant difference between privacy concerns on the basis of gender	Gender	Privacy Concerns	Not Normal	Mann-Whitney U Test	0.784	Accept
There is no significant difference between privacy concerns on the basis of age	Age	Privacy Concerns	Not Normal	Kruskal Wallis	0.939	Accept

Table 8 b

Hypothesis	Variable 1	Variable 2	Normality	Test Statistics	P-Value	Results
There is no correlation between awareness of OBA and Privacy concerns.	Awareness Level	Privacy Concerns	Not Normal (as Privacy concerns came not normal)	Kendall's Tau_b	0.430	Accept

Discussions

This study aimed to understand the awareness level of consumers towards online behavioral advertising and their privacy concern level. This study also talked about cookies and its role in online behavioral advertising. According to the responses collected through an online survey, it was found that consumers are fairly aware of online behavioral advertising, cookies and targeting and tracking done is by marketers. These results are not counterpart with some past research done. But they are alike with the results of Nurse and Buckley (17), Alreck and Settle (1). It could be concluded that majority of consumers have knowledge of OBA more than expected by the researcher. Also, they have negative privacy perception. But the majority do not read the privacy policy and terms and conditions of using any social networking sites and email websites, as asked to them. Correlation between knowledge of OBA and privacy concerns was checked too and it was found that there is no correlation.

Some countries understood privacy concerns of consumers and adopted several acts and norms regarding online behavioral advertising. As Article 29 of Data Protection Working Party (Europe) (2) is profoundly worried about the privacy and data protection ramifications of this growingly far-reaching the practice. This article aims to advise marketers and advertisers to abide by laws given. US Federal Trade Commission asked marketers to allow web clients to opt-out Online Behavioral Advertising. And Digital Advertising Alliance (DAA) created self-administrative rules that expect organizations to advice client about behavioral advertising and enable them to pick out.

But recently trust of Facebook users demolished after they heard about how their Facebook data was sold to Cambridge Analytica.[9] "#Deletefacebook" campaign was also growing on many social media platforms. It shows that in today's digital age it is difficult to maintain privacy.

Conclusion

An online survey was conducted to understand the level of awareness regarding online behavioral advertising. And how does it differ on the basis of gender and age of the respondents? And it was found that there is no difference in the level of awareness on the basis of gender and age. In other words, be it male or female of any age group, their knowledge of behavioral targeting is more or less similar. Another objective of the study was to understand the concept of cookies and find out consumer's belief about it. And it can be said that cookies are the vital element of tracking consumers. Marketers save every information of web clients via cookies. The majority of respondents were aware of the functions of cookies. Though they were not aware of types of different cookies. The respondents were very much concerned about their privacy. The aim of this study also included knowing the level of privacy concerns among different genders and age groups. It was seen that perception towards privacy does not differ among gender and any age group. When the relation between awareness level and privacy was seen through correlation, it was found that there is no correlation between them.

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ANNEXURES

Annexure 1: Seen targeted advertisements on email id or social network

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	93	98.9	98.9	98.9
	No	1	1.1	1.1	100.0
	Total	94	100.0	100.0	

Annexure 2: Statistics

		Age	Gender	Employment Status	Educational Qualification	Annual Salary
N	Valid	93	93	93	93	93
	Missing	0	0	0	0	0
Mean		2.3226	1.4624	2.1075	3.5591	4.1613
Std. Deviation		.64541	.50128	1.06794	.85290	2.00158

Annexure 3

Items	Statements	Mean	Standard Deviation
Awareness Level 1	Usually online marketers save their buyers information.	4.9785	1.71298
Awareness Level 2	Online marketers could tell about webpage visits even if the shopper have not purchased from their site.	4.8925	1.80255
Awareness Level 3	Online marketers exchange visitor's information with one other.	4.3978	1.79456
Awareness Level 4	Online marketers can tell bout repeat visits of a shopper by saving IP addresses ID numbers of that shopper's computer.	4.3763	1.92757
Awareness Level 5	Online marketers would know the duration of a shopper's stay at their website on a particular visit.	4.7097	1.74817
Awareness Level 6*	The only way an online marketer can tell about visitor's information is when that shopper has submitted some information.	3.4731	1.80333
Awareness Level 7	The price of goods advertised in e-mail messages/social networking sites with links to their websites is usually less.	4.9677	1.68401
Awareness Level 8*	If the visitor has not purchased anything before, online marketers cannot tell about No. of visits.	3.9677	1.78430
Awareness Level 9	Our browsing history determines which ads we are going to see during our next visits.	4.9570	1.76262
Awareness Level 10	Targeted ads are shown to different segments created by companies based on user's internet behavior.	5.2796	1.72176

[*represents recoded statements. Statements were given in random order and were rated using the 7-point Likert scale. Adopted from McDonald and Cranor (16), Smit et al (20) and Alreck and Settle (1)] [Removed by Cronbach's Alpha and Removed by Factor Analysis]

Annexure 4

Items	Statements	Mean	Standard Deviation
Privacy Concern 1	I worry that I receive ads in which I am not interested.	5.4301	1.46997
Privacy Concern 2	I feel uneasy about the potential misuse of personal data.	5.6344	1.40484
Privacy Concern 3	I worry that information has not been kept safe.	5.5484	1.47085
Privacy Concern 4*	I don't anxious when data are shared without permission.	4.9355	1.76196
Privacy Concern 5	I feel that personal data have been misused too often.	5.1183	1.70581

[*represents recoded statements. Statements were given in random order and were represented in the 7-point Likert scale. Adopted from Baek and Morimoto (4) and Smith et.al (20)] [Removed from Cronbach's Alpha]

Annexure 5: Factor analysis

Descriptive Statistics			
	Mean	**Std. Deviation**	**Analysis N**
awareness level 1	4.9785	1.71298	93
awareness level 2	4.8925	1.80255	93
awareness level 3	4.3978	1.79456	93
awareness level 4	4.3763	1.92757	93
awareness level 9	4.9570	1.76262	93
awareness level 10	5.2796	1.72176	93
privacy concern 1	5.4301	1.46997	93
privacy concern 2	5.6344	1.40484	93
privacy concern 3	5.5484	1.47085	93
privacy concern 5	5.1183	1.70581	93

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.758
Bartlett's Test of Sphericity	Approx. Chi-Square	339.428
	Df	45
	Sig.	.000

Communalities

	Initial	**Extraction**
awareness level 1	.465	.379
awareness level 2	.546	.518
awareness level 3	.349	.374
awareness level 4	.395	.487
awareness level 9	.521	.433
awareness level 10	.503	.488
privacy concern 1	.493	.598
privacy concern 2	.473	.483
privacy concern 3	.448	.459
privacy concern 5	.525	.560
Extraction Method: Maximum Likelihood.		

Rotated Factor Matrix[a]

	Factor	
	1	**2**
awareness level 2	.698	
awareness level 4	.694	
awareness level 10	.693	
awareness level 9	.607	
awareness level 1	.606	
awareness level 3	.579	
privacy concern 1		.773
privacy concern 5		.747
privacy concern 2		.658
privacy concern 3		.620
Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization.[a] a. Rotation converged in 3 iterations.		

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.783	37.832	37.832	3.237	32.372	32.372	2.646	26.456	26.456
2	2.010	20.098	57.930	1.543	15.431	47.803	2.135	21.347	47.803
3	0.991	9.911	67.841						
4	0.666	6.660	74.501						
5	0.631	6.306	80.806						
6	0.541	5.406	86.213						
7	0.478	4.782	90.995						
8	0.382	3.817	94.812						
9	0.271	2.708	97.520						
10	0.248	2.480	100.000						
Extraction Method: Maximum Likelihood.									

Annexure 6: Analysis of cookies

what cookies are you familiar with					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Party Cookies	9	9.7	9.7	9.7
	Third Party Cookies	9	9.7	9.7	19.4
	Session Cookies	16	17.2	17.2	36.6
	Flash Cookies	9	9.7	9.7	46.2
	None	50	53.8	53.8	100.0
	Total	93	100.0	100.0	

Questions Asked	Actual Work of Cookies	Respondents Belief
Cookies are the small software that saves your browsing history and web pages visited.	True	True- 78 (83.9%) False- 15 (16.1%)
A virus scanner stops companies from storing user's information based on online shopping, web page visits and search behavior.	False	True- 33 (35.5%) False- 60 (64.5%)
Cookies save browsing history.	True	True- 74 (79.6%) False- 19 (20.4%)
Cookies stores the websites we visit by collecting our browsing history.	True	True-76 (81.7%) False- 17 (18.3%)
cookies help online marketers to tell who has visited their websites.	True	True- 66 (71.0%) False- 27 (29.0%)
Cookies are used to place targeted ads.	True	True- 64 (68.8%) False- 29 (31.2%)
Cookies can be automatically removed by some software	False	True- 57 (61.3%) False- 36 (38.7%)
Your passwords are stored by cookies	True	True- 51 (54.8%) False- 42 (45.2%)
If cookies are not cleared, the computer will slow down.	False	True- 66 (71.0%) False- 27 (29.0%)

[Statements were given in random order. And it was adopted from Smit et. al (20), McDonald and Cranor (16) and Alreck and Settle (1)]