

CHAPTER 3a

DATA ANALYSIS (HYPOTHESIS TESTING)

Responses to each item on the survey were tabulated into frequency distribution and cross tabulation tables in order to obtain descriptive statistics. The descriptive statistics show the relationship between the instrument questions and the data itself.

Total number of niche magazines- 30

List of the selected niche magazines with their events-

Sr. No.	Name of the Niche Magazines	Language	Periodicity	Launch Year of the Niche Magazines	Events Organized
1	Champak	Hindi	Monthly	1968	Champak Creative Child Contest.
2	Wisdom	Telgu	Monthly	1973	Wisdom Award 2007
3	Matrubhumi Aarogya Masika	Malyalam	Monthly	1997	Patient Education Program
4	Digit	English	Monthly	2001	Icons of Trust Award
5	Watch Time	English	Quarterly	2008	watch time contest
6	New Global Indian	English	Monthly	2008	GIBM 2012
7	Biospectrum	English	Monthly	2011	BSI Award
8	Good Housekeeping	English	Monthly	2004	Good Housekeeping weekend , summit
9	Pitch	English	Monthly	2003	PMMAO Award , Pitch Youth Marketing Awards 2013
10	Impact	English	Monthly	2002	Impact Person of the year Award
11	BBC Top Gear	English	Monthly	2005	TopGear Magazine Awards 2012
12	people magazine	English	Monthly	2009	People Choice Award

Sr. No.	Name of the Niche Magazines	Language	Periodicity	Launch Year of the Niche Magazines	Events Organized
13	Men's health	English	Monthly	1996	International Men's Day celebration event
14	Experiential Marketing	English	Monthly	2006	Mobile and Laptop Expo, Auto Mation 2011, WOW Award
15	Stuff India	English	Monthly	2008	Top Gadget Tittle Award
16	Auto Car India	English	Monthly	2007	Auto car India performance show
17	Campaign India	English	Fortnightly	2007	Campaign India Media night, Campaign India Digital Media Awards 2012
18	What Car? India	English	Fortnightly	2006	India best young driver award
19	What HiFi? Sound and vision India.	English	Fortnightly	2009	Award Show
20	Better Photography	English	Monthly	2005	Workshop, Photographer of the year, Photokina 2012
21	Anandalok	Bengali	Fortnightly	1995	Anandalok Puraskar
22	Unish-Kuri	Bengali	Fortnightly	1999	Unish-Kuri model hunt, and melodious voice hunt from 2005. These talent hunts have been popular.
23	Anandamela	Bengali	Fortnightly	2005	The Anandamela Club has a system of paid membership that arranges various programs, competitions and activities throughout the year

Sr. No.	Name of the Niche Magazines	Language	Periodicity	Launch Year of the Niche Magazines	Events Organized
					for children.
24	Education World	English	Monthly	1999	Education World-C fore Survey of India's Most Respected Schools 2011 , Award
25	My Mobile	English	Monthly	2006	Award for the Best Mobile of the year, Smart Phone Expo, T20 of Indian Telecom, Indian Digital Summit
26	Ritz	Tamil	Monthly	2004	Ritz Award
27	Bismoi	Assamese	Monthly	1999	Workshop, Priyo Bandhu
28	Krushi Vigyan	Gujarati	Monthly	2002	Farmer Training Program
29	Film Fare	English	Monthly	1952	Filmfare Award
30	Business Today	English	Fortnightly	1992	Most Powerful Women Award, Managing Tomorrow Series, Pro-Am of Champions, Strategy Summit, Corporate Governance Summit, Crossfire and the Knowledge Management Forum

Table 3a.1: Niche magazines details

3.1) Hypothesis Testing

Hypothesis

1. Event is a successful and important tool of generating revenue for all genre of niche magazines.

2. Event has more impact than other below the line advertising options offered by niche magazines.
3. Different types of events are equally effective in revenue generation capability. There is no particular type of event which brings revenue.

Frequencies

		Event Revenue	Advertising Revenue	Circulation Revenue	Subscription Revenue
N	Valid	39	33	5	4
	Missing				
Mean		75.01	54.41	38.39	17.82
Median		80.00	60.00	45.00	.00
Mode		80(a)	0	0	0
Std. Deviation		26.597	34.711	30.347	26.817
Variance		707.423	1204.847	920.911	719.169
Skewness		-1.609	-.460	.017	1.212
Std. Error of Skewness		.198	.198	.198	.198
Minimum		0	0	0	0
Maximum		100	100	100	95
Percentiles	10	70.00	20.00	.00	.00
	10	80.00	60.00	45.00	.00
	10	90.00	85.00	60.00	30.00

Table 3a.2: Frequency of niche magazines event, circulation, subscription and advertising revenue.

Revenue Generation Source

Revenue Generation Source	Cumulative Rating	Average Rating
Event	9721	64.80667
Advertising	9000	60
Circulation	7818	52.12
Subscription	6790	45.26667

Table 3a.3: Cumulative v/s Average Rating.

Analysis: The highest preference is given to Events that generate maximum revenue for the niche magazines. The next highest priority is advertising Revenue.

Cross Tabulation can be undertaken

For proving the Hypothesis t- test, Chi Square test is used as because sample size is smaller, and t test compares the mean of two continues variables.

Hypothesis 1:

Event is a successful and important tool of generating revenue for all genre of niche magazines.

Total Revenue of selected niche magazines 2010, 2011 and 2012

Total Revenue Analysis of Events organized by a Niche Magazine	TOTAL REVENUE (Crores)						
	2010	%	2011	%	2012	%	TOTAL
Number of Niche Magazine	30						
Total Revenue of a Niche Magazine	22	27.5	28	35	30	37.5	80
Advertising Revenue	9	28.12	11	34.37	12	37.5	32
Subscription Revenue	1	20	2	40	2	40	5
Circulation Revenue	1	25	2	50	1	25	4
Total Events Revenue	11	28.2	13	33.33	15	38.46	39

Table 3a.4 : Total Revenue of Niche Magazines in 2010,2011& 2012

		GENRE									Total
		Automobile	Business	Women	Agriculture	Life Style	Men	Children	Education	Technology	
	Count	9	27	0	10	4	1	1	0	15	
	Expected Count	7.6	24.6	0.4	9.8	4.5	0.4	0.4	0.9	18.3	
1	Count	3	10	0	5	2	0	0	1	12	
	Expected Count	3.7	12.1	0.2	4.8	2.2	0.2	0.2	0.4	9	
NA	Count	5	18	1	7	4	0	0	1	14	
	Expected Count	5.7	18.3	0.3	7.3	3.3	0.3	0.3	0.7	13.7	
Total	Count	17	55	1	22	10	1	1	2	41	
	Expected Count	17	55	1	22	10	1	1	2	41	30

Table 3a.5 : Niche magazines genres wise analysis

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.163(a)	16	.907
Likelihood Ratio	10.742	16	.825
N of Valid Cases	30		

Table 3a.6 : Pearson Chi Square analysis

Chi-Square Tests

Null Hypothesis: H₀: p is greater than .01 (Events are beneficial and a maximum Revenue source for all genre of a niche magazine exist at 99% confidence interval)

Alternative Hypothesis: H₁: p is less or equal to .01 (Events are not beneficial and not a maximum Revenue source for a all genre of a niche magazine)

Level of confidence = .01 (99% confidence interval)

Sample Size. n =30

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.061(a)	99.9	99.9	.240
2	.000(a)	.1	100.0	.009

a First 2 canonical discriminate functions were used in the analysis.

Table 3a.7: Eigen values analysis

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.942	8.687	4	.069
2	1.000	.011	1	.917

Table 3a.8: Wilks Lambda analysis

Since EV is lesser than 1 and since Wilks Lambda is greater than .5, the groups are not significantly different with each other and hence the H1 is not accepted.

Since $H_0 > .01$ reject H1

Analysis

- There is strong association thus Event is a successful and important tool of generating revenue for all genre of niche magazines.
- Decision: Reject the H1 because the calculated P value ($P = .000$) from the sample results on the proportion of respondents that is most likely as Event is a successful and important tool of generating revenue for all genre of niche magazines.

Hypothesis 2:

- Event has more impact than other below the line advertising options offered by niche magazines.

Analysis

Taking frequency of event as compare to the other the below line adverting option, the following results can be derived.

		Event	Outdoor Publicity
N	Valid	19	15
	Missing		
Mean		9.01	7.41
Median		4.00	2.00
Mode		3(a)	0
Std. Deviation		16.597	14.711
Variance		0.0679	0.1117
Skewness		-1.609	-.460
Std. Error of Skewness		.198	.198
Minimum		0	0
Maximum		100	100
Percentiles	10	70.00	20.00
	10	80.00	60.00
	10	90.00	85.00

*Difference from the mean, median, S.d. is significant at the level 1%

Table 3 a.9: Frequency of event and outdoor publicity.

Canonical Discriminate Function Coefficients

	Function	
	1	2
Event	.047	.006
Other Below the Line advertising Option	-.507	1.295

Table 3a.10: Coefficient table

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.123(a)	11	.907
Likelihood Ratio	9.742	10	.885
N of Valid Cases	30		

a 17 cells (63.0%) have expected count less than 5. The minimum expected count is .22.

Table 3 a.11: Chi Square Test.

Null Hypothesis: H_0 : p is greater than .01 (Event has more impact than other below the line advertising options offered by niche magazines exist at 99% confidence interval)

Alternative Hypothesis: H_1 : p is less or equal to .01 (Event has no impact than other below the line advertising options offered by niche magazines)

Level of confidence = .01 (99% confidence interval)

Sample Size. $n = 30$

Since $H_0 > .01$ accept H_0

Event has more impact than other below the line advertising options offered by niche magazines.

Decision: Accept the null hypothesis because the calculated P value ($P = .213$) from the sample results on the proportion of respondents that is most likely to tell that Event has more impact than other below the line advertising options offered by niche magazines.

Hypothesis 3:

- Different types of events are equally effective in revenue generation capability. There is no particular type of event which brings maximum revenue.

Crosstab

			Type of Event - No. of respondents				Total
			11	8	3	8	
Type of Events	Award	Count	0	1	0	0	1
		Expected Count	.3	.3	.3	.3	1.0
	Expo	Count	0	0	0	1	1
		Expected Count	.3	.3	.3	.3	1.0
	Contest/ Summit	Count	0	0	1	0	1
		Expected Count	.3	.3	.3	.3	1.0
	Fashion Show	Count	1	0	0	0	1
		Expected Count	.3	.3	.3	.3	1.0
Total		Count	1	1	1	1	4
		Expected Count	1.0	1.0	1.0	1.0	4.0

Table 3.a12: Cross Tab**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.000(a)	9	.213
Likelihood Ratio	11.090	9	.270
N of Valid Cases	4		

a 16 cells (100.0%) have expected count less than 5. The minimum expected count is .25

Table 3.a 13: Chi Square Test.

Null Hypothesis: H_0 : p is greater than .01 (Different types of events are equally effective in revenue generation capability. There is no particular type of event which brings maximum revenue)

Alternative Hypothesis: H_1 : p is less or equal to .01 (Different types of events are not equally effective in revenue generation capability. There is a particular type of event which brings maximum revenue)

Level of confidence = .01 (99% confidence interval)

Sample Size. $n = 30$

P value = .213 which is greater than .01 at 99% confidence interval. Hence, accept H_0 .

Result- Different types of events are equally effective in revenue generation capability. There is no particular type of event which brings maximum revenue.

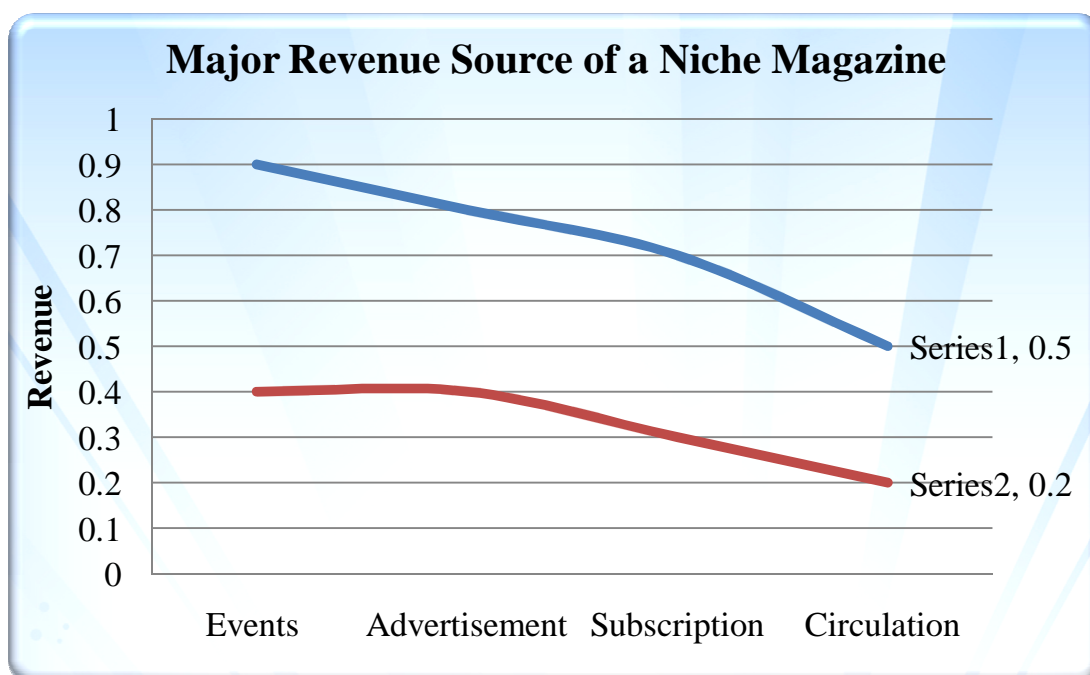


Figure 3a.1: Major Revenue Source of a Niche Magazine.