Effectiveness of Alternative Advertising and Promotional Media Vehicles in Garden Center Advertising [1]

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Significance to the Nursery Industry

Behind any business lies the assumption that customers must know what the business has to offer before they can decide whether or not to patronize it. This implies a need for advertising and promotion to present that story to the customer. The media vehicles used to portray these messages, and the quality of the message execution positively or negatively, affect the incidence of customer patronage.

Garden centers are no different from any other business in this respect. This research provides owner/operators, depending on the size of the population center in which they operate, information regarding which media vehicles will likely be most effective. Following these results should, theoretically, improve the efficiency of the dollars currently being spent on advertising and promotions by garden center owner/operators.

Introduction

The purpose of this research was to evaluate the different types of media vehicles currently being used by garden centers to determine which are perceived as most successful. Determining this information should aid garden center owners and managers in selecting the most effective advertising and promotional tools for their particular environment.

Materials and Methods

From a mailing list of 944 members of the Garden Centers of America, supplied by the Horticultural Research Institute, 312 randomly selected respondents were mailed introductory letters and questionnaires. One hundred twenty-two (122) valid responses were received from a response

rate of 39.1%. The average response rate on general mail surveys is between 5 and 10%. Because of the significantly higher response rate for this study, a non-response study was not deemed necessary. Questionnaires were mailed mid-February, 1989 and acceptance of responses was terminated March 20, 1989.

Statistical analyses performed included the Wilk-Shapiro Test of Normality on each medium, categorized by geography for both the percent of advertising dollars allocated for advertising and for the ratings of effectiveness for each medium. Spearman Rank Order Correlations were run between the percent of monies allocated to a specific medium and the ratings of effectiveness assigned to that medium.

A key point to remember is that each medium's test distribution for both budget allocation and effectiveness ratings, in the absence of knowing the actual distribution, assumes a normal distribution for the sample data on each measurement. It is more important that the effectiveness ratings be normally distributed since, often, budget allocations to a particular medium may "not be able to be normally distributed" due to market conditions. Some media may simply not be available to a specific market. Budget allocations may be made on the basis of facts other than effectiveness, including the effect of salesperson, the purchasing of certain media because of community pressures, and/or the particular effectiveness of a specific medium in a market that may not translate to other markets.

Analysis of variance and Tukey's D (Least Significant Difference) Test were performed in an attempt to determine the key variables for examination of specific media recommendations. These test were conducted on the ratings and the percent of funds allocated to the alternative media by respondents in the four geographical segments. From this analysis, it was determined that effectiveness rating was the key differentiating issue that segmented successful garden center advertising and promotional techniques.

Results and Discussion

The average percentage of gross sales currently being spent on advertising and promotions in garden centers is 4%. Although this varies to a small degree by population area, the only significantly different segment noted was the small metro population center, which spends a significantly higher percentage of gross revenues than other tested areas

(Table 1).

Since the percentage of gross sales spent on advertising and promotional activities are similar, this lends further credibility to concentrating on effectiveness ratings as a more reliable form of analysis. In most industries, known "effectiveness" of media vehicles tends to drive the amount spent for a particular medium. Therefore, it was first assumed the most effective analysis would be one of determining those media where a correlation exists between "budget allocation spent on a specific medium" and the "perceived effectiveness of that medium." Since some differences do exist between the four geographies, a study of this above relationship for each of the geographies would lead to implementable data for owner/operators depending on the type of population centers in which they have their business. For example, Table 2 shows the strongest correlations emerging for the four geographical areas.

The immediate temptation is to recommend these media in descending order for the owner/operators operating in the respective population environments. The assumption underlying this analysis is that owner/operators of these centers utilize logical, empirical data to make the decisions regarding how much of their budget to allocate to specific media. Two facts do not support this assumption. First, no existing research was found that offered any evidence that one or more media vehicles performed better than others in this environment. Second, and more important, an analysis of variance of the percent of funds allocated to the different media used by these respondents showed that the null hypothesis that the samples came from populations with equal means could not be rejected (with one exception:Local Newspapers). This indicates there were no real differences in the way funds were allocated to these various media in the four regions. In fact, from a statistical standpoint, the allocations were essentially equal.

As mentioned, the only exception was local newspapers and the allocations were virtually equal in all segments except large metro areas, which was significantly lower than the remaining three segments.

As a result of these analyses, it became apparent that the key differentiating factor was the effectiveness ratings of the media vehicles. An analysis of variance revealed that there were five media vehicles that emerged as significantly different among all those being used by garden center owners/operators. These five media vehicles were:

radio; neighborhood newspapers; customer mailings; posters in the store (product descriptions and/or advertising); and, posters advertising special values (Table 3).

Five specific media vehicles tested significantly different in terms of performance ratings between the different segments and only one medium tested significantly different regarding budget allocations. (Table 4). This finding is not surprising, since in the absence of definitive reasons to allocate more funds to one medium versus another, there is little rational basis on the part of the garden center owner/operator to do so. Hence, relative spending is statistically similar for the media regardless of the geographical segment in which the center operates. The findings that the effectiveness of some media vehicles are significantly different, depending on the geographical location in which they operate, gives credence to media performance rating as the key variable for analysis of the data.

Since differentiation did not exist with respect to monies allocated, and because of this fact, correlations between monies allocated and performance ratings would likely be spurious at best -- and certainly misleading, performance ratings of these five key vehicles should serve as the basis for recommendations for future advertising and promotional emphasis in garden centers depending on the population center in which the center operates.

For operators in small cities/towns (-50K), the media vehicles with the greatest potential for successful sales are, posters in the store and neighborhood newspapers. Although in individual markets where may be other media that are effective, these data suggest that generally these will be more effective than others studied.

For operators in large cities/towns (50-90K), the most effective media vehicles are likely to be, in descending order, posters in the store, posters advertising special values, neighborhood newspapers, customer mailings, and radio.

For garden center operators in small metro populations centers (100 - 499K), the most effective media vehicles tend to be, customer mailings, posters advertising special values, posters in the store, and radio.

For operators in large metro areas (500K +), the most effective media vehicles are, customer mailings, posters advertising special values, and radio.

Most interesting in these findings are that media vehicles most

frequently used for consumer goods are conspicuously absent from these lists, e.g., television, local newspaper, and yellow pages. This is interesting also from the perspective that these are considerably more expensive than the media rated most effective, yet they do not appear to be working well in the garden center environment. It was also observed that the media that most directly affect consumers on a more "personal" basis are present in almost all locations e.g., customer mailings, posters in the store (highlighting specific products and services), and posters advertising special values (which seem to work well in all locations with the exception of small cities/towns).

As population density increase, neighborhood newspapers seem to lose their value for garden center advertising. The only mass media vehicle that seems to work well in the larger markets is radio and it works well in all markets except the small cities/towns.

In the garden center business there appear to be few effective substitutes for the more "personal" selling approach of direct contact with the customers. These data suggest that mass media vehicles, with the exception of radio, do not work as effectively in this selling environment as do the more personal approaches such as customer mailings, posters in the store providing visual contact for the customer, posters advertising specials, and, neighborhood newspapers in the smaller locations, which tend to provide more "personal" types of news than that afforded by larger local newspapers.

Literature Cited

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3. Kress, G. 1988. Marketing Research. Prentice Hall, Englewood Cliffs, NJ.
4. Tull, D.S. and D.I. Hawkins. 1987. Marketing Research: Measurement and Method. Macmillian Publishing Company, New York, NY.
5. Welkowitz, J., R.B. Ewen, and J. Cohen. 1982. Introductory Statistics for the Behavioral Sciences. Third Edition Academic Press, New York, NY.

[1] Reprinted from J. Environ. Hort. 8(2):99-101. June 1990.

Table 1. Evaluation of the mean percent spent on advertising vs. population area.

Population area	Mean percent spent on advertising
Small city/towns (- 50K)	3.75%
Large city/towns (50-99K)	3.41%
Small metro areas (100-499K)	5.01%
Large metro areas (500K +)	3.14%

Table 2. Correlations media effectiveness and percent of funds allocated to various advertising strategies by population segment.

Media Vehicles	SC-r[z]	Sig	LC-r	Sig	SM-r	Sig	LM-r	Sig
Radio	0.53	p<.01	*	*	0.68	p<.01	*	*
Television	*	*	0.82	p<.01	0.54	p<.01	0.44	p<.05
Local Newspapers	0.33	p<.05	*	*	*	*	0.36	p<.05
Neigh Newspapers	0.35	p<.05	*	*	0.78	p<.01	*	*
Customer mailings	0.30	p<.05	*	*	*	*	*	*
General mailings	0.59	p<.01	*	*	0.52	p<.01	*	*
Signs near store	0.39	p<.05	0.52	p<.05	0.58	p<.01	0.32	p<.05
Posters in store	0.85	p<.01	0.44	p<.05	*	*	*	*
Posters/specials	0.93	p<.01	0.38	p<.05	0.48	p<.01	*	*
Circular mailboxed	0.60	p<.01	0.40	p<.05	0.50	p<.01	*	*
Yellow pages	0.53	p<.01	*	*	*	*	*	*

[z]SC = small city (- 50K); LC = large city (50-99K); SM = small metro (100-499K); LM = large metro (500K +); r = correlation; p = significance

Table 3. Relationship of population density to the effectiveness of advertising vehicles for garden center operations.

Advertising Vehicle	F Value	Sig/p	Tukey Test LSD	Mean SCz	LC	SM	LM
Radio	9.96	p<.05	0.93	4.1	6.4	5.4	6.3
Television	1.71	*	*	*	*	*	*
Local newspaper	2.09	*	*	*	*	*	*
Neigh Newspapers	17.62	p<.05	1.40	5.4	7.3	3.7	5.4
Customer mailings	4.07	p<.05	1.69	5.6	7.1	7.7	6.7
General mailings	1.00	*	*	*	*	*	*
Signs in the store	0.22	*	*	*	*	*	*
Posters in the store	6.55	p<.05	1.20	6.1	7.6	6.6	5.3
Poster/Specials	6.55	p<.05	1.06	5.1	7.5	7.4	6.5
Circulates mailboxed	1.73	*	*	*	*	*	*
Yellow pages	0.57	*	*	*	*	*	*

Table 4. Relationship of population density to the effectiveness of advertising vehicles for garden center operations.

Advertising vehicles	F Value	Sig/p	Tukey Test LSD	Mean SCz	LC	SM	LM
Radio	0.52	*	*	*	*	*	*
Television	0.96	*	*	*	*	*	*
Local newspaper	8.19	p<.05	8.86	50	54	51	35
Neighborhood newspapers	2.60	*	*	*	*	*	*
Customer mailings	1.80	*	*	*	*	*	*
General mailings	0.07	*	*	*	*	*	*
Signs in the store	0.37	*	*	*	*	*	*
Posters in the store	2.00	*	*	*	*	*	*
Posters/Specials	0.97	*	*	*	*	*	*
Circular mailboxed	2.01	*	*	*	*	*	*
Yellow pages	0.63	*	*	*	*	*	*

zSC = small city (-50K); LC = large city (50-99K); SM = small metro (100-499K); and, LM = large metro (500K +); Sig/p = significance

Remember!

1) Bract size increases as temperature increases up to approximately 75oF. Therefore when bract leaves are expanding, try to maintain warmer day and night temperatures to maximize bract size.

2) Cooler temperatures tend to increase red coloration in poinsettia bracts. Therefore, keep temperatures cool when you want to 'color up' your bracts. Often a 57-63oF temperatures is best for this. Be careful! Cool moist conditions tend to promote Pythium, therefore, make sure that you have applied the proper fungicides before this period.

3) Easter lily bulbs must be moist to perceive the cool/moist vernalization treatment. Bulbs that are cooled in a dry pot or in a dry case of peat will not perceive the cooling treatment!

4) You may want to apply Ethephon to geranium stock plants to reduce flowering. Ethephon has been shown to decrease flowering and increase branching. The recommended rate is 500 ppm. Keep in mind that a single application of Ethephon will inhibit flower formation for approximately 4 weeks. This is also a method for increasing the proportion of growth dedicated to vegetative development if you are growing pillar geraniums.

5) Set up an area to expose lily plants to night interruption lighting. Lily bulbs vary in their maturity. Therefore, some bulbs may not perceive the entire cold treatment. Long day treatments after emergence can also induce bulbs to flower. Therefore, to insure that flowering has been induced in all bulbs you may want to expose all bulbs to night interruption lighting from 10 P.M. - 2 A.M. Light with 'mum lighting' at an intensity of 10 footcandles.

Minnesota Flower Growers Short Course

November 6, 7, and 8 1990

I. Greenhouse Tours

November 6

2:30-3:00 **Como Park Conservatory**
Midway Parkway
St. Paul, Minnesota
612-489-5378

3:15-3:45 **University Of Minnesota Horticulture Greenhouse**
1970 Folwell Ave.
St. Paul, Minnesota
612-624-9703

4:00-4:30 **Leben's Greenhouses**
1021 W. Larpentuer Ave.
St. Paul, Minnesota
612-488-6707

4:45-5:15 **Linder's Greenhouses**
270 W. Larpentuer Ave.
St. Paul, Minnesota
612-488-1927

II. Evening Schedule

Location:

Ol' Mexico Restaurant
1754 N. Lexington Ave.
St. Paul, Minnesota
612-487-2847

6:00-6:30 Social

6:30-7:30 Dinner

7:30-8:00 Business Meeting
8:00- Panel Discussion Of:

The Future Of Floriculture In The Upper Midwest

III. Short Course

Wednesday November 7 and Thursday November 8

Location:

Rolling Green Country Club
400 Evergreen Road
Hamel, Minnesota 55340
612-478-6021

Moderator: Steve Maslowski

8:30-9:15 **Water Management: The Key To Understanding Irrigation, Media, and Fertilization.**
Dr. John Biernbaum
Michigan State University

9:15-10:00 **Basic Considerations For Greenhouse Media for Traditional and Recirculating Solutions.**
Dr. Bill Fonteno
North Carolina State University

10:00-10:15 **Break**

10:15-10:45 **Use Of Ebb and Flow Benches For Pot Plant Production.**
Joyce Kreidermacher
Pork and Plants

10:45-11:00 **Use Of Recirculating Hydroponics Systems In Cut Rose Production.**
Mark Whitman
Len Busch Roses Inc.

11:00-11:45 **Discussion Group**

11:45-1:00 **Lunch**

Moderator: Scott Carbonneau

1:00-1:45 **Interpretation Of University Of Minnesota Soil and Tissue Tests.**
Dr. John Erwin
The University Of Minnesota

1:45-2:30 **Media and Water pH Management**
Dr. John Biernbaum
Michigan State University

2:30-2:45 **Break**

2:45-3:15 **Review Of Bacterial Disease Problems On Geranium.**
Dr. Frank Pfleger
The University Of Minnesota

3:15-3:45 **Graphical Tracking**
Dr. John Erwin
The University Of Minnesota

Thursday, November 8

Moderator: Mark Whitman

8:30-9:30 **Postharvest Considerations In Greenhouse Production.**
Dr. Terill Nell
The University Of Florida

9:30-10:15 **Field Cut Dried Flower Production**
Dell Christianson
Detroit Lakes Technical College

10:15-10:45 **Temperature Effects On Whitefly Development.**
Dr. Mark Ascerno
The University Of Minnesota

Greenhouse Non-Commercial Pesticide Applicator's Recertification Training Turf and Ornamentals Category

November 8, 1990

11:00-11:45 **Chemigation and Fertigation Regulations.**
John Peckham
The Minnesota Department Of Agriculture

11:45-1:00 **Lunch**

1:00-1:30 **Laws and Regulations**
Wayne Dally
The Minnesota Department Of Agriculture

1:30-2:15 **Label Comprehension, Safety, and Protective Clothing.**
Dean Hertzfeld
The University Of Minnesota

2:15-3:00 **Waste Pesticide Management**
Joe Spitzmueller

3:00-3:15 **Break**

3:15-4:15 **Greenhouse Integrated Pest Management**

Growth Regulators	John Erwin
Disease Control	Frank Pfleger
Insect Control	Mark Ascerno

This bulletin was composed and edited by Dr. John Erwin, Assistant Professor and Floriculture Specialist, The Department Of Horticultural Science, The University of Minnesota, 1970 Folwell Ave., St. Paul, Minnesota, 55108. Phone: (612)-624-9703. Opinions and opposing comments regarding the content of this bulletin are welcome and encouraged. This bulletin is published in cooperation with the Minnesota Flower Growers Association and The University of Minnesota Extension Service. The bulletin is distributed to members of the Minnesota Flower Growers Association, c/o Mark Whitman, Len Busch Roses Inc., 4045 Highway 101, Plymouth, Minnesota, 55446.

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Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Patrick J. Borich, Dean and Director of Minnesota Extension Service, University of Minnesota, St. Paul, Minnesota 55108. The University of Minnesota, including the Minnesota Extension Service, is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age, veteran status, or sexual orientation.

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