

**Affluent women's consumer magazines: Using the theory of the niche
to explain advertiser spending**

by

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ABSTRACT

The purpose of this study was to determine the extent to which the theory of the niche could be applied to explain media buying in competing lifestyle consumer magazine sub-classifications.

A content analysis was conducted of four competing magazines published from 2001 to 2004 to determine the extent to which competing magazine sub-classifications rely on the same advertising resources to ensure continued survival. The levels of niche breadth and niche overlap were calculated for the competing magazines.

The findings from this study, while not entirely consistent with the theory of the niche, provide a framework for the understanding of media buying changes and competition amongst competing magazine sub-classifications over time. The findings also indicate that more research into competing magazine sub-classifications could better determine the extent to which the theory of the niche could explain competition and coexistence on the sub-population level with media.

CHAPTER I.

INTRODUCTION

Women have become the target for many marketers because they control 60% of the wealth in the United States and 80% of all purchasing decisions (Cuneo & Petrecca, 1997). Women have influence over everyday purchases--from grocery items to larger investments such as automobiles and home improvement projects.

Traditionally, magazines haven't targeted the subgroup of women of affluence. However, in the late 1990s, several lifestyle consumer magazines were introduced into the market to reach this specific influential audience. Therefore, it's important to determine to what extent these magazines compete within the marketplace with lifestyle consumer magazines that target a more generalized female population. This study will provide a better understanding of the competition and coexistence that exists between these competing magazines.

Women of Affluence

While women in general have extensive control over purchasing decisions, an even more lucrative market is women of affluence, those who are from households with annual household incomes exceeding \$75,000 (Arora & Saad, 2005). According to Leeming and Tripp (1994), 17% of American households control nearly half of the American wealth. Married women are living in 85% of these households, making them powerful consumers. These women have influence over everyday purchases and larger investments, with 94% influence over home furnishing purchases, 89% influence over do-it-yourself products, and 60% influence over automobile purchases (Arora & Saad, 2005).

While an annual household income of \$75,000 falls at the lower end of the spectrum, it has been determined that those who fall into this category spend “significantly more money” on consumer products such as home furnishings, personal computers, and home exercise equipment than the less wealthy (Leeming & Tripp, 1994, p. 220). The wealthiest segment with an annual household income of over \$200,000 spent nearly three times as much on such products as those in the less wealthy segment of the affluent market.

Considering the spending power of the affluent female and her influence on buying decisions of household products and larger investments, it is not surprising that various media categories have created an advertising niche to target this audience. Affluent women are often balancing busy schedules with their professional lives, family, and roles within communities; therefore, their media time is limited.

Women with an annual household exceeding \$75,000 spend approximately 8.2 hours a day with various forms of media (Leeming & Tripp, 1994). Compared to the average American who spends 10.2 hours a day with media, this audience has fewer hours to devote to media (Baran, 2004). The affluent female spends 48%, or 3.9 hours, of her media time with television with most of her viewing time between the hours of 8:00 p.m. and 1:00 a.m. She spends 37%, or 3 hours, of her media time with radio, with the majority of listening time during the morning drive time. Affluent women spend 10% of their media time with newspapers, with almost 80% of the affluent female population picking up a Sunday paper. The least amount of media time is spent with magazines at 5%. Magazines are able to target specific lifestyles or demographics, therefore the affluent female enjoys her magazine subscriptions. The affluent female audience tends to subscribe to “home-centered or mainstream news and informational magazines” (Leeming & Tripp, 1994, p. 231).

Thus far, we have stated these important points about women of affluence: nearly 20% of the population in the United States controls roughly 50% of the money, women have the primary control over purchasing decisions, and they spend less time than the average American with media. Therefore, it becomes important to take advantage of the time this highly prestigious market does spend with various media categories. With nearly unlimited spending power, this audience is highly attractive to marketers trying to sell their products. However, their limited media usage creates a challenge to many media buyers as to where to distribute their client's advertising dollars in order to reach this very appealing audience.

Magazines in the Marketplace

Magazines have been distributed in the United States since the mid 1700s (Peterson, 1956). As sources provide a range of magazines published annually, approximately 5,500-20,000 magazines are published in the United States every year, providing options to target various demographics (Johnson & Prijatel, 2000).

The magazine company is comprised of two divisions: the business side and the editorial side (Worthington, 1994). The business division is in charge of marketing, advertising, finance, and personnel. The editorial division is made up of everyone in charge of producing the magazine. This includes editors, writers, photographers, and graphic artists.

Since the mid 1700s, magazines have gone through many changes (Albarran, 2002). They no longer target mass audiences but since the 1920s have begun demographically targeting audiences and developed as niche publications (Johnson & Prijatel, 2000). Individual magazines now target very specialized audiences. The term demassification has often been used to describe magazines because they target specific audiences with specific needs and wants (Vivian, 1995).

As with most media, most consumer magazines operate in a dual economy. They target consumers as well as advertisers and earn revenues through both of these sources (Albarran, 2002). They “sell” their audience and its makeup to advertisers, making a product reaching the affluent female audience that much more appealing. Although sources again vary, according to Johnson and Prijatel (2000), advertising accounted for 45% of magazine’s revenue whereas 54% was acquired from circulation.

Circulation may be drawn from two separate sources: subscriptions and individual newsstand sales (Albarran, 2002). The majority of consumer magazines are purchased from annual subscriptions, accounting for 39% of the profits (Johnson & Prijatel, 2000). The subscription base often provides the demographic information used to target specific advertisers. The much higher priced individual newsstand sales, however, typically account for 15% of total revenue.

Magazines can be broken down into several types. The four magazine types are consumer magazines, organizational magazines, business or trade magazines, and scholarly journals (Peterson, 1956). Consumer magazines can then be subdivided into general or specialized categories according to the audience they attract or the editorial content (Johnson & Prijatel, 2000). Additionally, magazines can be categorized according to their classification in such directories as SRDS that could include a classification as women’s magazines, news magazines, or lifestyle magazines (SRDS, 2005). These classification vary according to directory an individual magazine can be included in more than one classification. A further breakdown of these classifications into sub-classifications includes and additional audience segmentation based on such factors as income, age, and interest.

Magazine advertising has averaged 5.4% of the total advertising dollars spent in the United States (Albarran, 2002). The total revenue for magazine advertising totaled more than \$21.3 billion in 2004 (Domestic, 2005).

The magazine industry is made up of large media giants and small publishing houses (Albarran, 2002). The largest consumer magazine producers in the United States are Time Warner, Conde Nast, New York Times Co., Parade, Hearst, and Meredith (MRI, 2004). Time Warner, the largest, accounts for roughly 18% of the market share (Albarran, 2002).

Magazines function as a monopolistic competition marketplace (Picard, 1989). Several media producers exist in the market and produce magazines that are similar in content but that cannot be perfectly substituted for one another. While magazines that target the affluent female audience may offer very similar content, each is packaged differently and provides varying stories and personalities to the consumers.

Magazine publishers face tough competition from other publishers and the electronic media (Albarran, 2002). To maintain their market share in the future, it is essential that they continue to seek more targeted audiences that can meet consumer's wants and needs and provide a very specific market to advertisers.

Over the past two hundred years, magazines have evolved from a mass publication to a diversified niche product. In order to continue to maintain their position in the marketplace, magazines will likely have to segment and provide extremely narrow audiences to attract advertisers.

Media Buying Behaviors

Media buyers within media agencies make most media buying decisions for products advertised nationally. While media buyers may have their client's best interest in mind, there are also additional factors that influence a media buyer's decisions.

Based on what we know about the affluent female population, one could ask, given the relative ability of women to control purchasing decisions across product categories and the spending power of women with affluence, are media buyers taking advantage of this population and purchasing advertising space in magazines targeted toward affluent women? Before answering this question, it is necessary to understand what influences a media buyer's decision when selecting what media will carry a client's product ads.

Magazines compete directly with newspapers and radio for national advertising dollars (Reid & King, 2000). Their placement decisions depend on such key factors as cost, audience delivery, communication effectiveness, and value-added opportunities. Cost is most often the primary concern when media buyers select publications in which to place advertising. However, regardless of cost, a medium may be selected if it is able to "deliver the largest percentage of the targeted audience at the right time with the most frequency and the greatest communication impact" (Reid & King, 2000, p. 303). The ability to target niche audiences within magazines as well as promotional efforts can prove beneficial when media buyers are working with limited advertising dollars.

Objectives of the Study

As media buyers are working with limited advertising dollars, assessing how media buyers place advertising within magazines targeting affluent women is necessary to determine if this audience is appropriately catered to. The purpose of this study is to

determine the current media buys within magazines targeting affluent females. From this, recommendations may be made to strengthen the marketing geared toward this target audience.

Specifically, this study asks: Are national advertisers targeting affluent females by placing advertisements within magazines directed toward this market? Are media buyers making the decision to place advertisements in magazines that are designed to target this affluent female market versus a more general female market?

It is also necessary to determine to what extent more expensive product categories are placed within magazines aimed at this highly influential market. For example, do multiple automobile brands appear within the pages of magazines targeting affluent females?

This study also addresses the issue of media buying crossovers, or the extent to which product categories appear within multiple magazines targeting a similar audience. More specifically, among the magazines that target affluent females, what specific advertisers or product categories are found within multiple publications?

An understanding of media buying behaviors when placing advertisements is an essential part of determining whether influential and affluent females are appropriately targeted.

There are numerous groups that would benefit from a more thorough knowledge of the media buyer's advertising placement decisions. The most obvious beneficiaries are the magazines themselves. However, it can be assumed that media buyer's placement decisions would not benefit simply the magazines geared toward the affluent female audience. For example, magazines targeting women in general could benefit as well.

To compete with other traditional media such as newspapers and radio, magazines targeting women in general could potentially use what is learned from this study to expand product categories currently advertised within their publications.

Beyond specific magazines, media that target the affluent American population could also benefit from this study. Newspapers, television programs, radio stations, magazines, and Websites geared toward the affluent market could potentially use what is learned from this study to determine what product categories are lacking from their advertising lineup.

Media buyers could also potentially benefit from this study. To ensure that media buyers are making the best use of their client's advertising dollars, an understanding of the affluent female market could provide insight into their future advertising plans.

In the end, an understanding of the purchasing influence of affluent women and the media buyer's behavior will provide a more thorough insight into how advertisers could capture the affluent female market.

CHAPTER II.

LITERATURE REVIEW

The theoretical framework that describes how media compete and coexist in the marketplace is the theory of the niche (Dimmick and Rothenbuhler, 1984). The theory of the niche was first introduced in the early 1920s to explain how species compete and coexist within an environment and has since been applied to organizations and more recently media populations. This chapter is going to explore the evolution of the niche theory from its inception to its adaptation to the world of media.

Niche Theory

The theory of the niche was first introduced in 1917 by ecologist Joseph Grinnell to explain an animal's ecological positioning within an environment (Grinnell, 1917). Grinnell looked at both an animal's distributional and potential nature. The distributional nature was used to explain why animals were dispersed over geographical areas or among differing types of habitats. A species's potential nature explained the idealized dispersion of animals if we were to eliminate their interactions with other species. Grinnell studied the areas in which a species had the potential to thrive versus the areas in which the species were found living, and realized that these distributional restrictions were the consequence of either physical or climatic limitations.

While Grinnell was developing niche theory to explain animal dispersion patterns, another ecologist, Charles Elton, was using a similar framework to explain a species' food habits (Elton, 1927). Elton believed that "the niche of an animal can be defined to a large extent by its size and food habits," (Vandermeer, 1972, p. 107). Rather than looking at the

potential for a species, Elton delved much more deeply into the impact of other organisms on an existing organism within a community or ecosystem.

Elton (1927) was able to illustrate the impact of other organisms on existing organisms by studying the feeding habits of several bird species. The birds follow herds of larger animals in order to feed off the insects kicked up by the larger animal's hooves. This illustration shows the powerful effects of the larger animal's behaviors on the survival of various bird species.

Based on the work of Grinnell and Elton, Gause added to the theory of the niche by introducing such concepts as niche overlap and competitive displacement. These will be defined later in this chapter. In 1934, Gause studied the effects of competition on the coexistence of species. He concluded "as a result of competition, two similar species scarcely ever occupy similar niches, but displace each other in such a manner that each takes possession of certain peculiar kinds of food and modes of life in which it has an advantage over its competitor," (Gause, 1934, p. 27).

Gause observed this phenomenon while studying a nesting colony of hundreds of terns on Jorilgatch, an island in the Black Sea. Four different types of terns nested on this island in relatively close proximity to each other. He identified the *Sterna cantiaca* (sandwich-tern), the *Sterna fluvialis* (common-tern), *Sterna anglica* (blackbeak-tern), and the *Sterna minuta* (little-tern). While these birds were all relatively similar, and all inhabited this small island, Gause realized each species of tern differed greatly from the next on its eating patterns. While the sandwich-tern flew far out to sea to eat fish, the blackbeak-tern remained on land consuming locusts and lizards. While the little-tern fished close to shore in the shallow swampy waters, the common-tern flew a little further out into the water still

searching for fish (Gause, 1934). From these studies, Gause realized that although a number of species can be very similar, they would adapt their niches or eating habits to ensure continued survival.

In the early 1960s, another scientist, G. Evelyn Hutchinson, realized the concepts in the theory of the niche were rather vague. Hutchinson developed a “hyper volume” in which to “map” out the areas in which a species can survive within a multi-dimensional space (Hutchinson, 1961). Each point within this multi-dimensional space depicts a place where this species could ideally survive. This multi-dimensional space became known as the fundamental niche, or as Grinnell referred to it, the idealized dispersion of a species if we were to eliminate its interactions with others. The realized niche then became the space within the fundamental niche that was still occupied by the species after its interactions with other species.

Hutchinson was better able to illustrate this mapping through studying the habitats of two species of planktonic copepod. Each requires the same temperature range, chemical composition of the water, and consumes algae in order to survive; therefore their fundamental niche when mapped would appear relatively similar. However, the two species’ realized niches are different, as one species survives on small algae while the other must consume larger algae to survive (Hutchinson, 1961).

While Grinnell, Elton, Gause, and Hutchinson laid the groundwork for the theory of the niche, many scientists have refined the theory into what it has become today. Scientists have worked to define the niche dimensions, develop upper limits, and apply the theory to species all around the world.

There are several key concepts that are used throughout the articles on the theory of the niche that should be defined before addressing the theory further. Ecologists often refer to a population as a set of species that live within a community. Niche breadth has often been studied and refers to the number of resources used by a population (Colwell & Futuyma, 1971). Niche breadth has been used to compare both species within a community or species of different communities. These species can fall into two categories depending on the number of resources they rely on. A generalist relies on numerous places to get its resources, whereas a specialist pulls its resources from a limited number of places in order to survive.

A resource can be defined as any necessity for survival. Resources can be food, shelter, and means of protection. A koala bear that is primarily reliant on eucalyptus trees would be an example of a specialist; it survives only on one source of food. A hunter such as a lion would be an example of a generalist; it can rely on numerous food sources, including zebras, wilder beasts, and antelope, in order to survive.

Niche overlap is an outcome of niche breadth and explains the degree to which two species rely on the same resources in order to survive (Colwell & Futuyma, 1971). Gause's earlier illustration of the terns on the island in the Black Sea is an example of niche overlap in effect. The four species of tern overlapped on many levels except for food habits. Each pulled its diet from different resources, allowing each species of tern to survive.

Competition between species is a primary concept within the theory of the niche. Competition can be defined by the fact that once a resource is consumed by one species, it is no longer available to any other species (Gause, 1934). According to the theory of the niche, two species cannot survive if their niches are exactly the same and their resources are limited

(Hardin, 1960.) Therefore, there are two outcomes of competition and niche overlap with limited resources: competitive displacement or extinction. Competitive displacement takes place when the less superior species alters its niche to rely on other resources. Extinction takes place when the superior species drives the less superior species out of the community or into extinction.

Colwell and Futuyma (1971) argued that niche overlap could either be evidence for or against the existence of competition between species. Their study showed that if the resource under consideration is in oversupply, then it is no longer relevant to either species and no competition will take place between the two species. Therefore, Colwell and Futuyma identified a third outcome of competition if the resources are unlimited: No such competition will take place.

The theory of the niche has been used in recent studies to explain the levels of niche overlap that can exist before extinction or competitive displacement take place. According to Hardin (1960), there is an upper limit to niche overlap in which extinction or competitive displacement will take place. When a new species is introduced into the environment, a high level of niche overlap will exist between the new species and existing species. However, over time, competitive displacement will take place and both species will adjust their niches so that a comfortable level of niche overlap will be achieved.

Pianka (1974) has also used the theory of the niche to look at both niche overlap and a new concept that he coined “diffuse competition.” Pianka agreed with Colwell and Futuyma that niche overlap can be very different from competition itself. He understood that a community that experiences more niche overlap could in turn actually support more species. He then argued that if a two species are competing for the same resource that is in

abundant supply, then no competition will take place. He believed that the two species would be able to share the resource without being in direct competition with each other.

Thus, Pianka introduced the concept diffuse competition to describe the competitive effects of a number of competitors (Pianka, 1974). Pianka was best able to demonstrate this new concept through a study of desert lizards. Pianka noted that in desert environments, water and rain are often in short supply. As rain affects the growth of food, the lizards are reliant on both resources for their survival. Pianka also discovered that desert lizards differ in what type of foods they eat, where they find these foods, and what time of day they hunt for these foods. From this study, Pianka concluded that rather than niche overlap existing with just a single resource; it is more likely that competing species compete for multiple resources simultaneously.

Pianka also concluded that if two species experienced high niche overlap with one resource such as what type of food they eat, they would rarely overlap with other resources, such as where they find this food (Pianka, 1974). This in turn lowered the two species' overall niche overlap.

At the conclusion of this study, Pianka stated, "the extent of tolerable niche overlap is more closely related to the number of competing species and the intensity of diffuse competition," (Pianka, 1974, p. 239). He concluded that the maximum tolerable level of niche overlap should decrease with an increase in the number of competitors in the environment.

Ecology first introduced and enlarged the theory of the niche to explain how two species of animals can rely on similar resources and continue to coexist and compete within

their environments. The first transition was to apply these concepts to competing organizations.

Niche Theory Applied to Organizations

In the late 1970s sociologists proposed that if the theory of the niche could be used to explain competition and coexistence among animals, it could also be applied to competing organizations. Thus, the theory of the niche began its first evolution and was adapted to organizations.

In 1977, Hannan and Freeman applied the theory of the niche to determine how organizations adapt to a changing environment. They identified eight internal and external constraints that can restrict an organization's ability to adapt in a changing environment.

The internal limitations that inhibit an organization's ability to adapt are overhead, the flow of information within an organization, internal political restrictions, and history (Hannan & Freeman, 1977). The overhead can be defined by the organization's investment in its plant, equipment, and staff, which all tie up money that could be used in other ways. According to research on the flow of information within an organization, decision makers often times are not fully informed about issues and activities within the organization that can limit its ability to make changes. Often times when changes are made within an organization, they upset the political equilibrium. These include reorganizing departments, making changes to job responsibilities, or eliminating unnecessary positions. The history of an organization can also constrain changes within an organization. Changing the standards and procedures that have been implemented for a number of years can disrupt what has been done in the past.

The external constraints that organizations face when trying to adapt in a changing environment are legal and economic barriers, availability of information about the environment, legitimacy, and collective rationality. Legal and economic barriers limit the entry into and exit from the market, which in turn limit the niche breadth needed for adaptation (Hannan & Freeman, 1977). Research on the changing environment is also often difficult and rather expensive to perform. Limiting the availability of information about the environment affects the organization's ability to make crucial decisions. Hannan and Freeman realized that any legitimacy an organization is able to create is an advantage when trying to adapt in a changing environment. The extent that the organization breaches this legitimacy through the adaptation process also affects its ability to survive. Collective rationality refers to the idea that what works for one organization does not necessarily work for all of them. Therefore, studying how other organizations have adapted in a changing environment does not always prove beneficial in adaptation decisions.

Hannan & Freeman (1977) went further in this study to explain how generalist and specialist organizations operate within their environments. They were able to differentiate specialists from generalists as "the distinction between specialism and generalism refers to whether a population of organizations flourishes because it maximizes its exploitation of the environment and accepts the risk of having the environment change or because it accepts a lower level of exploitation in return for greater security" (Hannan & Freeman, 1977, p. 948).

Hannan and Freeman (1977) hypothesized that all organizations have a "sum" or amount of resources that can be allocated to various strategies in order to ensure their success as an organization. The primary difference between a generalist and a specialist is the amount of "excess capacity" of this "sum." Generalists usually maintain a portion of their

resources on reserve, whereas specialists distribute their resources in a limited number of tactics in order to survive in their environment.

Their study also pointed out that “excess capacity” is constantly changing; what is used today may become excess tomorrow, and what is excess today may be needed tomorrow (Hannan & Freeman, 1977). However, according to Hannan and Freeman, this “excess capacity” can be used by generalists to invest in technology, specialized units, and personnel with skills that exceed their requirements, enabling them to be more flexible in changing environments.

In 1983, Freeman and Hannan added to their previous studies by applying the concept of niche width (often referred to as niche breadth) to explain the survival patterns of restaurants. They defined niche width as “a population’s tolerance for changing levels of resources, its ability to resist competitors, and its response to other factors that inhibit growth,” (Freeman & Hannan, 1983, p.1118). Niche width was able to further explain the distribution of both specialist and generalist restaurants across the environments they studied. In the study of restaurants, specialists were defined as those that specialized in a specific type of food, such as Asian; that catered to specific hours, such as a diner that only served breakfast; or that were limited on the number of staff, and, for example, did not have a position titled “chef.”

Freeman and Hannan (1983) also built on the concept of excess capacity to determine how generalists and specialists survived in their changing environments. They realized that every time the environment changed, the chances of survival also changed for the restaurants. From their study, they concluded that stable environments favor specialist organizations, as all of their resources are used to ensure their survival, while generalists maintain their

reserve. Maintaining the reserve resources is often interpreted as waste. Freeman and Hannan (1983) also concluded that in turbulent environments, generalists are favored, as they are able to adapt to the changing environment by using their reserve to expand into new geographical areas, integrate vertically, and diversify products, whereas specialists do less well because their resources are already committed.

As the theory of the niche was applied to organizations in general, the theory provided insight into how organizations adapt to the changing environment. The theory of the niche also provided a basis to determine the organizations that were most fit to survive in a changing environment.

Niche Theory Applied to Media

In the early 1980s, the theory of the niche made yet another evolution when it was applied to media populations. Media are a rather competitive business, and adaptation to changing environments is essential for success. Therefore, Dimmick and later scholars applied concepts from the world of ecology to explain the competition and coexistence of media populations.

The theory of the niche applied to media populations has most often been used to explain the effects of an emerging medium on the existing media. The theory of the niche has thus been used to explain how the existing media were able to adapt to the changing environment after the introduction of a new medium. The theory of the niche has also been used along with uses and gratifications theory to determine advertiser and consumer spending on media.

Dimmick and Rothenbuhler (1984) studied the specific effects of the introduction of television on the existing media, such as radio, newspaper, and outdoor media. They

discovered that after the introduction of television, radio, newspaper, and outdoor adapted their niches over time to become more reliant on local advertising. This competitive displacement was most evident with radio, as radio experienced the highest levels of niche overlap when television entered the market. As a result of television's introduction into the marketplace, radio's niche breadth decreased to reflect the reliance on local resources.

Dimmick and Rothenbuhler's (1984) study also determined that those populations with the broadest niche breadth, media that are considered generalists are more likely to be able to survive with the introduction of a new medium. A generalist medium is more reliant on several places in which to pull its resources and generally maintains an excess capacity. Therefore, if a new medium enters the marketplace, the generalist medium has more places in which to make up lost revenues.

The theory of the niche has also been used to explain consumer spending and advertiser spending on media. Dimmick (1997) looked into niche micro and macro dimensions, such as gratifications opportunities, gratifications obtained, consumer time allocation, consumer spending, and advertiser spending to determine the competitively superior medium. Gratification opportunities can include "fit your schedule, convenient times, choice and variety, same time daily, number of choices, fit family time, and fit free time" (Dimmick, 1997, p. 36). Gratifications obtained can include "things too quiet, less tense, help calm down, help unwind, fill time, forget cares, put mind at ease, and get away from pressure" (Dimmick, 1997, p. 36). Consumer spending can include buying subscriptions, buying the equipment or hardware, or buying the software to use with the equipment.

Dimmick (1997) discovered that the superior medium could be determined by the medium most likely to meet consumer's gratification opportunities and gratification demands. Therefore, he also found that greater consumer time allocation, consumer spending, and advertiser spending would be given to the competitively superior medium.

Randle's (2003) study applied the uses and gratifications approach to explain the complementarity and displacement effect of the Web on special-interest magazine subscribers. This study determined that the Internet and print magazines have both a complementary and a displacement effect on one another. While magazine subscribers that reported an increasing use of magazines also reported an increasing use of the Internet, magazine subscribers with a decrease in magazine usage also reported a similar effect. Static magazine users reported a decreasing use of the Internet. This study additionally found that the Internet was viewed as the more superior medium, compared to magazines, at meeting the gratification needs of users.

Dimmick, Chen, and Li's (2004) study also used uses and gratifications to explain the displacement effects of the Internet on traditional media. These authors concluded that the Internet has competitive displacement effects on existing media, with the largest effects on newspaper and television. Internet is viewed as a generalist medium as it is reliant on numerous resources to survive and provides consumers a wide range of gratification opportunities. This study also determined that the Internet is competitively superior to newspapers, broadcast television, and cable by providing more gratification opportunities, such as greater choice with more options and more control over content.

One area that the theory of the niche has overlooked is the impact of introducing a sub-population within an existing media population. New media sub-populations are

introduced into the market on a consistent basis, and according to the theory of the niche they must compete for the same resources in order to survive. Existing media must also compete for these resources to ensure their continued success. It is important to address this issue of competition and coexistence within media populations to understand which media sub-populations, as categorized according to the audiences they attract, compete and how they manipulate their resources in order to survive.

Population ecology was adopted as a term to refer to the adaptation by a collection of organisms rather than as the individuals themselves (Randle, 2003). Researchers have looked at sub-populations within larger populations of media to explain the effects of competition. Rather than looking at the individual vehicle, the theory of the niche has used a collection of sub-populations of vehicles to explain such measures as niche overlap and niche breadth to determine the levels of competition within the media population. The theory of the niche has yet to be used to explain such competition among the media sub-population such as vehicles attracting a segmented audience within various media such as television, magazines, and newspapers.

With the invention of cable television, hundreds of channels have been created to target most every type of lifestyle, hobby, and demographic category. It is important to address the impact of these individual television stations on existing broadcast television stations. In the world of magazines, again there is a magazine to meet almost every lifestyle, hobby, and demographic. However, what is the impact of the introduction of newly targeted magazines on existing magazines?

Just as ecologists used the theory of the niche to study the effects of competition among species, the next step is to use the theory of the niche to study the effects of

competition between magazines competing for advertising dollars targeting women. In the past, the theory of the niche has been used to explain the effects of competition on entire media populations; the next step is to study the effects of competition of magazine sub-classifications.

Niche Theory Applied to Magazines

This study will look more specifically at the effects of a new magazine sub-classification on an existing magazine group. Therefore, it is essential to take the concepts defined earlier in ecological terms and redefine them into mass media terms.

According to the theory of the niche, competition is described as ecological similarity or the use of the same resources (Dimmick, 2003). Two media that target a similar audience and try to attract similar advertisers are in direct competition with one another. Therefore, two magazines that try to attract the same audience and same advertisers are in direct competition with one another. There are two outcomes of such competition: extinction or displacement (Dimmick, 1984). Extinction in the field of media is when the superior medium drives the other out of the community and forces it to exist within a different market or the superior medium forces the other to cease existence. Competitive displacement is when the less superior medium adjusts its niche thus lowering the level of niche overlap. This is evident in magazine's adaptation to more specified magazines by providing targeted publications after national television emerged.

According to the theory of the niche, niche breadth describes the number of resources used by a population (Dimmick, 1984). Media fall into two categories depending on the amount of resources they rely on. A specialist medium would pull its resources from a limited number of places, whereas, a generalist would rely on numerous places to get its

resources. A magazine would be an example of a specialist medium as it targets a unique audience with a specialized interest. Broadcast television would be an example of a generalist medium as it targets a mass audience with diverse interests.

When media buyers are selecting where to place advertising dollars, they purchase generalist media to reach "tonnage" or sheer audience size (Dimmick, 2003). Whereas, when media buyers purchase specialist media, they are purchasing based on demographics or psychographics and can select very specialized targets.

When a medium is successful in the marketplace, it is often imitated. The same process is the case when a medium is unsuccessful, as other media try to avoid imitating its actions. This is evident in the number of magazines that have emerged targeting cooking, gardening, and walking, all of which have similar content.

The richness of the environment determines the number of media that are able to exist within that environment (Dimmick, 2003). If there is no demand for a medium, then it will not continue to exist in the environment. This is evident in the number of magazines that become extinct within the first few years of publication. According to Albarran (2002), only 27% of all new magazine titles introduced in 1990 continued to survive in 2002.

Niche overlap also occurs when more than one medium targets a similar audience or with similar media content (Dimmick, 2003). According to the theory of the niche, the most overlap will take place when media use the same advertising resources, target the same market, and make use of the same media content. Therefore, two magazines with similar content, targeting the same audience, and trying to attract similar advertisers will experience a high level of niche overlap.

The mass media terms can be easily compared to ecological terms by referring to Table 1.

Another important aspect of the theory of the niche, when applied to media, is the uses and gratifications perspective (Dimmick, 2003). The uses and gratifications perspective is used as a part of the theory of the niche as it best describes which media are selected by their audiences based on the gratifications received from the medium.

According to this perspective, the demand for a specific medium is based on gratifications (Dimmick, 2003). These gratifications can be determined based on time spent with the medium as well as consumer spending to purchase the product. Gratifications can also be evident in the amount of advertising space purchased within the product.

Table 1. A comparison of ecological niche terms to mass media niche terms.

Ecological	Mass Media
Population	Population- <i>A set of media competing for the same resources within the marketplace.</i>
Species	Vehicles- <i>A specific medium through which something is expressed (ie. The New York Times, The Wall Street Journal).</i>
Resources	Resources- <i>The total means available to a company for increasing production and profit (ie. Plant, labor, raw material, sources of revenue, and assets).</i>
Niche Breadth	Niche Breadth- <i>The range of resources in which a vehicle can rely on in order to survive.</i>
Generalist	Generalist- <i>A vehicle that pulls its resources from a variety of places.</i>
Specialist	Specialist- <i>A vehicle that pulls its resources from a limited number of places.</i>
Niche Overlap	Niche Overlap- <i>The degree to which two vehicles rely on the same resources in order to survive.</i>
Competition	Competition- <i>When a resource is consumed by one vehicle, it is no longer available to other vehicles.</i>
Competitive Displacement	Competitive Displacement- <i>An outcome of competition. When the less superior vehicle alters its niche to rely on other resources.</i>
Extinction	Extinction- <i>An outcome of competition. When the superior vehicle drives the less superior vehicle out of the market or into extinction.</i>

Another important aspect in the uses and gratifications approach when applied to media is the ability to define substitutes that are able to satisfy a set of gratifications (Dimmick, 2003). If a medium is able to provide the same enjoyment, the opportunity to select that medium is equally likely to take place. This is evident in media buyer's decisions of where to place advertising dollars. If two media will provide the same outcome and one is more cost effective, the media buyer is likely to purchase the cheaper one based on the gratifications they'll receive by making a smart buying decision. According to Dimmick, media buyers see the mass media as substitutes for each other; therefore ad agencies have the ability to set advertising prices according to their demand.

The uses and gratifications approach is necessary to understand within this study, as media buying decisions are often based on uses and gratifications. Pricing can be determined for various media based on the uses and gratifications obtained by the subscriber or reader of such a publication. When studying the affluent female market, which has a limited amount of time with media, the uses and gratifications approach is necessary to determine which media members of this market will make time for.

The theory of the niche has evolved over the last 80 years from the world of ecology and now can be applied to media. With its inception, the theory of the niche was used to explain how species are able to adapt and coexist to a changing environment. Then applied to organizations in general, it was used to explain which organizations are most fit to adapt to their changing environment. The theory of the niche, when applied to media, has been used to explain the effects of new media on existing media and with the uses and gratifications approach to explain consumer and advertiser spending on media. It has yet to be applied to a

specific classification within a medium to study the effects of niche publications on existing publications.

This study will look at the effects of a specialized niche magazine on magazines that target a more generalized audience. However, as niche theory has never been applied to the competing classifications within the population of magazines and has strictly been applied to media, the underlying question as the basis of this study needs to address whether or not niche theory can be applied to a sub-classification of magazines.

RQ₁: To what extent can the theory of the niche be applied to magazine sub-classifications?

To further understand this question and more importantly this study, it is also important to understand the process by which media buyers select the various media in which to place their clients' advertising dollars. Therefore, we must determine how the use of the theory of the niche will help us understand media buying behavior.

RQ₂: To what extent can theory of the niche be used to understand media buying behavior?

These underlying questions will be addressed with the following research questions and hypotheses. The answer to these questions will be determined by the outcome of the following research questions.

Within the theory of the niche, media are separated into two categories based on their niche breadth. A generalist magazine relies on a broad range of resources and therefore can pull from a larger pool of resources in order to survive. A specialist relies on only a limited number of resources to ensure survival. Therefore, for the purposes of this study, it is important to understand the extent to which magazines competing for advertising targeted at women pull from a range of advertising resources in order to survive. As this study focuses

on advertising spending, it is important to determine the number of advertisers a magazine can pull from to ensure its survival.

RQ₃: Do generalists attract a broader range of advertisers than specialists?

Based on the literature, a generalist medium will pull from more resources than a specialist. Therefore, based on this information, we can hypothesize that:

H₁: Magazines that target a more specific audience will have fewer advertising product categories represented within their magazine than a magazine with a more general audience.

Another concept addressed within the theory of the niche is the level of niche overlap that exists between two competing media. This study will focus more specifically on the niche overlap that exists between magazines competing for advertising that targets women. A magazine that targets the affluent female audience is in direct competition with other magazines that target a similar audience as well as with all magazines that target the female population as they rely on the same resources in order to survive. Most magazines, regardless of readership, are dependent on subscriptions and advertising revenue for survival. When both magazine sub-classifications have a similar editorial content, as well, the similarity in advertising places them in direct competition with one another. Therefore, it is important to understand the degree to which competing magazines rely on the same resources in order to survive.

RQ₄: To what extent do competing magazines experience niche overlap?

Based on the foregoing literature on the theory of the niche, competing media categories experience niche overlap when they compete for the same resources in order to survive. Therefore, based on this information, we can hypothesize:

H₂: Magazines competing for an identical audience will experience more niche overlap than magazines competing for a dissimilar audience.

This can be further explained by stating that two magazines competing for the affluent female audience will experience more niche overlap between them than with a magazine targeting a more generalized female audience.

Additionally, the theory of the niche has addressed the level of competition and niche overlap between competing vehicles. When a high level of niche overlap exists and the competing sub-classifications are in direct competition with one another, one of three outcomes will take place. If the amount of resources is considered to be finite, then either competitive displacement or exclusion will take place. Competitive displacement explains that if competing media experience a high level of niche overlap, over time, they will adapt and draw from other resources in order to lower this level of niche overlap. Exclusion takes place when the high level of niche overlap drives one of the competing media into extinction. The third outcome of competition can only occur when an infinite number of resources are available. If this is the case, the competing media will be able to coexist with a high level of niche overlap. As we can assume that advertising expenditures are set at a fixed amount, it is important to determine the outcome of such competition between competing magazine sub-classifications.

RQ₅: To what extent does competitive displacement take place between competing magazines?

As the foregoing literature within the theory of the niche on competition states that there are two outcomes of competition when a resource is finite we can hypothesize:

H₃: Competitive displacement will take place between competing magazines.

H₄: The level of niche overlap that exists between the competing magazines will decrease over time.

The results of the preceding hypotheses will provide adequate data to determine if the theory of the niche is adaptable to competing magazine sub-classifications. By determining levels of niche breadth and niche overlap for competing magazine sub-classifications, the preceding research questions will be answered.

CHAPTER III.

METHODS

To investigate the extent to which the theory of the niche can be applied to media buying within competing magazine sub-classifications, a content analysis of four different magazine titles over a period of four years was conducted. A content analysis was used as it offers numerous benefits to advertising and marketing researchers. A content analysis enabled the researcher to extract nonobtrusive and nonreactive analyses of advertising content (Park, Han, Sung, & Soh, 2004). Additionally, as content has been stored over the years, a content analysis could be used to perform longitudinal studies using archived materials.

As this study's purpose was to explain the extent to which competing media coexist in the marketplace, a content analysis was the appropriate research method. Rather than surveying media buyers, the content analysis provided an unbiased result of media buyers' decision making. Additionally, as this study compared competing media over a period of four years, content analysis allowed the researcher to perform a longitudinal study of past archived issues of each magazine.

Study Design and Sampling

The magazines selected for the study were all large circulation publications and represented two different magazine sub-classifications. The magazines selected were *More*, *Real Simple*, *Redbook*, and *Ladies' Home Journal*. These magazines were selected as representatives of two magazine audiences, affluent females and a more generalized female population, based on their median annual household income (see Table 2).

More, published by Meredith Corporation, was launched in 1998 and posted one million paid circulation (*More* Reader Profile, 2004). The median age of *More* readers was 47.3, and their annual household income registered at \$87,626. As this median annual household income exceeded the level established for the affluent market at \$75,000, *More* was selected as a magazine that targets the affluent female audience (Arora & Saad, 2005).

Real Simple magazine, published by Time Inc., was launched in 2000 and reached a paid circulation of 1.8 million (*Real Simple* Reader Profile, 2004). The median age of *Real Simple* readers was 40, and their median annual household income was \$88,748. Again, as this median annual household income exceeded \$75,000, *Real Simple* was also selected as a magazine that attracts an affluent female readership (Arora & Saad, 2005).

Redbook, published by The Hearst Corporation was launched in 1903 and had a paid circulation of 2.4 million (*Redbook* Reader Profile, 2004). The median age of *Redbook* was 44 and the median annual household income was \$58,307. As *Redbook* reached nearly twice the audience as *More* and posted a median annual household income of less than \$75,000, *Redbook* was chosen as a magazine that targets a more general female population (Arora & Saad, 2005).

Ladies' Home Journal, published by Meredith Corporation, was launched in 1882 and had a paid circulation of 4.1 million (*Ladies' Home Journal* Reader Profile, 2004). The median age of *Ladies' Home Journal* was 51.1 with a median annual household income of \$54,613. As *Ladies' Home Journal* reached more than twice the audience of *Real Simple* and maintained a median annual household income of less than \$75,000, *Ladies' Home Journal* was also selected as a magazine that attracts a general female readership (Arora & Saad, 2005).

Table 2. Magazines used in the content analysis.

Magazine Title	Paid Circulation	Median Age	Median Household Income
<i>More</i> ^a	1 million	47.3	\$87,626
<i>Real Simple</i> ^b	1.8 million	42.4	\$88,748
<i>Redbook</i> ^c	2.4 million	44	\$58,307
<i>Ladies' Home Journal</i> ^d	4.1 million	51.1	\$54,613

^a(*More* Reader Profile, 2004), ^b(*Real Simple* Reader Profile, 2004), ^c(*Redbook* Reader Profile, 2004),

^d(*Ladies' Home Journal* Reader Profile, 2004)

These four magazines were also selected as Standard Rate and Data Service (SRDS) (2005) classified them under the same category--women's magazines. Under this classification, their primary topics were related to a woman's home, family, and life. These four magazines all overlapped in topic areas, however as their median annual household incomes were drastically different, it was determined that *More* and *Real Simple* targeted the affluent woman.

Additionally, SRDS had an established category denoted specifically for magazines targeting the affluent audience. In the March 2005 SRDS edition, *More* was included as a magazine under the affluent classification. *Real Simple* was yet to be included under this classification even though readers' median annual household income exceeded that of *More* by more than \$1,000. For this study, it was determined that both magazines met the qualifications of targeting the affluent female audience.

SRDS (2005) listed approximately 140 magazines published in the United States annually that targeted the female population, from early adults to the working mother. *Oprah* and *Harper's Bazaar* both targeted women in their 40's but provided a median annual household income nearing \$67,000 (MRI, 2004). These three magazines were eliminated from the study as the median annual household income fell near the range that was considered affluent. These magazines wouldn't be able to provide a clear comparison across

income levels to compare the magazines that attracted the affluent female population with the magazines that attracted a more general female readership.

Woman's Day also targeted women in their 40's and had a median annual household income of \$52,531 (*Woman's Day* Reader Profile, 2004). While *Woman's Day* met the requirements to be considered a magazine that attracted a general female audience, for the purposes of this study, it produced 19 issues annually. The additional seven issues provided *Woman's Day* a unique publication schedule that could bias the results of a content analysis, thus it was eliminated from this study. Additionally, magazines such as *Cosmopolitan*, *Marie Claire*, *Elle*, *In Style*, *Vogue*, *Lucky*, *Allure*, and *Glamour* targeted women in their 30's, from a broad range of income levels. These magazines were also eliminated from this study as they targeted a younger demographic that could have provided drastically different results during the content analysis.

The time frame for the study included issues printed from January 1, 2001, to December 31, 2004, as *Real Simple* was launched in December of 2000. It was determined that a census of the four magazines was unnecessary. A pilot study of four competing magazines looked only at automobile advertisements and suggested in an overlap of advertising content was most likely due to frequency contracts (Phillips, 2005). Therefore, for this study four issues of each magazine were selected using stratified sampling to allow for equal representation of each season. The issues were selected randomly to represent each season. February, May, July, and December were randomly selected to represent each magazine. A total of 64 issues were studied.

Unit of Analysis

The unit of analysis for this study was every full-page and larger advertisement in each magazine. This is consistent with the content analysis completed by Taylor and Bang (1997) in which they studied the portrayal of Latinos in magazine advertising pieces.

Advertising pieces that did not fit into the categories of full-page, two-page, or gatefold were arbitrarily classified as two-page spreads. This allowed for a balance of page and a quarter advertisements with advertising pieces larger than three pages. Full-page and larger advertising pieces in four issues of each magazine allowed for adequate analysis of each magazine. This consideration resulted in a sample of 4,440 advertising pieces.

Operational Definition of Variables

The following product categories were used to classify the products within the advertisements into 16 different categories. These product categories originated with the 16 categories used by Andersen (2000). These product categories included (1) apparel and accessories, (2) electronics, (3) cosmetics and beauty products, (4) pharmaceuticals, (5) household products, (6) furnishings, (7) entertainment, (8) financial services, (9) products for the opposite sex, (10) food, (11) cigarettes, (12) alcohol, (13) motor vehicles, and (14) feminine hygiene. A (15) mixed category was used when the product fell into more than one category simultaneously, and an (16) other category was used when a product did not fit into any of the other 15 categories.

These 16 product categories provided an accurate representation of the resource usage patterns presented within the theory of the niche. The product categories and resource usage patterns consisted of the various products being advertised and the number of advertising insertions.

Hypothesis Testing

The underlying question in this study determined the extent to which the theory of the niche could be applied to competing media sub-classifications. Randle (2003) argued that niche theory should only be applied to populations of organizations to explain how they competed and coexisted within an environment. However, for the purpose of this study, an argument remained that individual sub-populations could be compared with one another to also explain this coexistence. Therefore, the original research question remained:

RQ₁: To what extent can the theory of the niche be applied to magazine sub-classifications?

This research question was determined by the ability to adapt the formulae constructed within the theory of the niche to develop levels of niche breadth and niche overlap of competing magazine sub-classifications. As ecologists have used niche theory to explain how individual species competed within the environment, such as Elton's study on bird species or Gause's study on various tern species, this study argued that vehicles within media could also be studied to explain the coexistence of such magazine sub-classifications as they competed within the environment.

Additionally, it was important to understand the outcome of media buyers' decision making as could be determined by the media in which they placed their advertising dollars. It was important to understand the extent to which the theory of the niche could be used to develop an understanding of these outcomes. Therefore, an additional underlying question remained:

RQ₂: To what extent can we use the theory of the niche to understand media buying behavior?

While considering the additional criteria such as frequency discounts and sales, it was essential to determine the extent to which an understanding of the theory of the niche could enable others to determine media buying behavior. As ecologists have used the theory of the niche to explain the access and usage of resources by species competing in the environment, this study additionally argued that the theory could explain an individual magazine sub-classification's access to resources such as advertising dollars.

Within the theory of the niche, the concept of niche breadth was defined as the number of resources on which a vehicle relied on to survive. From this level of niche breadth, vehicles were then separated into two categories, generalists and specialists. Generalists pulled their resources from a large pool of resources in order to survive in their environment, whereas specialists remained with a limited number of resources in order to survive. To better understand a specific media sub-classification, it was important to determine whether a media sub-classification operated as a specialist or a generalist.

RQ₃: Do generalists attract a broader range of advertisers than specialists?

As the previous research on the theory of the niche stated that a generalist vehicle would pull its advertising resources from a broader range than a specialist vehicle, we could hypothesize:

H₁: Magazines that target a more specific audience will have fewer advertising product categories represented within their magazine than a magazine with a more general audience.

This hypothesis was explored by using a formula developed by Dimmick and Rothenbuhler (1984) to calculate a population's niche breadth.

$$B = \frac{1}{\sum_{i=1}^n p_i^2}$$

This formula was applied to vehicles within competing magazine sub-classifications where B ranged from a low of one to the upper limit and equaled the number of advertising resource categories used by the vehicle (Dimmick & Rothenbuhler, 1984). As this study focused on the 16 product categories advertised within these magazines, the proportion of advertisements that fell within the various categories would determine B. Within this theory, p was the proportion of the vehicle's total use of each advertising product category, i, used by the vehicle. This study focused on the 16 product categories available within each magazine title where p was the proportion of the products advertised within the competing magazine sub-classifications. The resource category, i, ranged from one to 16, depending on the advertising product category used.

A magazine was considered a specialist if its advertising niche breadth fell on the lower end toward one. A magazine was considered a generalist if the advertising niche breadth fell closer to the high end of the range at 16. This advertising niche breadth was calculated for all four magazines and then computed for the two competing magazine sub-classifications.

Additionally, niche overlap was a concept often used within the theory of the niche to determine the extent to which competing media relied on the same resources in order to survive. This study focused on the extent to which competing vehicles experienced niche

overlap. Competing media were in direct competition when they targeted an identical audience as well as with media that targeted a dissimilar audience as they made use of identical resources in order to survive. It was important to understand the extent to which competing vehicles relied on the same advertising resources. Therefore, the following research question remained:

RQ₄: To what extent do competing magazines experience niche overlap?

As the past research on the theory of the niche stated that competing species experienced niche overlap when they relied on the same resources in order to survive, we could hypothesize:

H₂: Magazines competing for an identical audience will experience more niche overlap than magazines competing for a dissimilar audience.

This hypothesis was investigated using the formula established by Dimmick and Rothenbuhler (1984) to determine the level of niche overlap experienced by competing media.

$$d_{i,j} = \sum_{h=1}^n (p_{ih} - p_{jh})^2$$

This formula could be applied to vehicles where $d_{i,j}$ determined the number of resources drawn upon by both species, for vehicles i and j , and h represented the resource categories used by the populations. Within this formula, p was the proportion of the vehicle's total use within each advertising product category denoted by h (Dimmick & Rothenbuhler, 1984). When calculated in this manner, niche overlap became an inverse measure where a small number approaching zero signified a greater niche overlap, and a

larger number denoted greater distance between the two vehicle's resource usage resulting in a lower niche overlap.

The number of advertising resources used within this study was determined by the number of different advertisements within each advertising product category placed within the pages of the magazines. The resource categories included the 16 product categories as identified earlier in this chapter.

As this hypothesis stated that magazines competing for an identical audience would experience more niche overlap than magazines competing for a dissimilar audience, six levels of niche overlap were calculated. The two magazines that attracted the affluent female audience were compared for niche overlap, and a higher niche overlap was expected as these two magazines competed for an identical audience. The two magazines with a general female readership were also compared, again expecting a higher level of niche overlap. Additionally, the magazines that targeted the affluent female population were compared with the magazines that targeted a general female population, and a lower niche overlap was expected as these vehicles were competing for a dissimilar audience. This can be explained in greater detail in Figure 3.

This niche overlap was determined for all four competing magazines. The levels of niche overlap were compared to determine the competing magazines that experienced the highest levels of niche overlap. Additionally, the niche overlap levels were calculated for the competing magazine sub-classifications to determine the level of competition experienced by these competing sub-classifications.

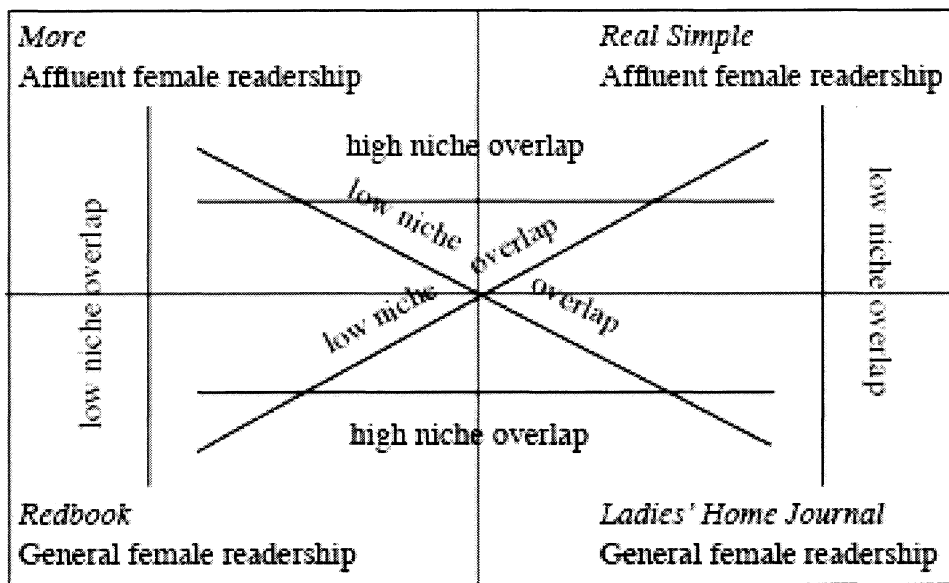


Figure 3. The level of niche overlap hypothesized between vehicles competing for an identical audience versus vehicles competing for a dissimilar audience.

After the level of niche overlap was determined, there were three possible outcomes to such competition. If resources were limited, then either competitive displacement or exclusion would take place. Competitive displacement would take place over a period of time if competing vehicles were experiencing a high level of niche overlap. Over the course of time, these competing vehicles would alter their niches thus lowering the level of niche overlap that existed. It is important to uncover the extent to which competitive displacement took place over a period of time with these competing magazine sub-classifications.

RQ₅: To what extent does competitive displacement take place between competing magazine sub-classifications?

As it could be assumed that advertising revenue was a fixed amount, we could hypothesize:

H₃: Competitive displacement will take place between competing magazines.

This hypothesis was explored by completing a longitudinal study of the competing magazine sub-classifications to determine their level of niche breadth over a period of time.

As *Real Simple* was launched in December of 2000, this longitudinal study spanned from January 1, 2001 to December 31, 2004. The levels of niche breadth were calculated for the competing magazine sub-classifications using Dimmick and Rothenbuhler's (1984) formula for niche breadth. Additionally, a comparison of advertising page counts for the competing magazine sub-classifications was determined to establish a change in advertising resources over the four-year time span.

An outcome of competitive displacement was the lowering of levels of niche overlap between competing magazine sub-classifications.

H₄: The level of niche overlap that exists between the competing magazine sub-classifications will decrease over time.

To determine the outcome of competitive displacement, the levels of niche overlap were calculated over the four years to determine the change in overlap between the competing magazine sub-classifications. As the theory of the niche stated that only those competing media with high levels of niche overlap and a finite amount of resources would experience competitive displacement, it could be hypothesized that those with high levels of niche overlap in the 2001 analysis would experience a reduction in niche overlap over the period of the four years.

The preceding hypotheses provided an adequate rationale for applying the theory of the niche to competing magazine sub-classifications by adapting the formulae for niche breadth and niche overlap to competing magazine sub-classifications.

Testing the Coding Scheme

To improve operational definitions and to determine the accuracy of coder interpretations, a pretest was conducted to measure inter-coder reliability. Holsti's (1969) formula was used to compute inter-coder reliability.

$$\text{Reliability} = \frac{2M}{N1 + N2}$$

This formula was used to calculate inter-coder reliability, as the reliability was determined by the number of coders (2), multiplied by the number of times the coders agreed (M). This was then divided by the sum of the number of coding responses (N1) and (N2). Inter-coder reliability was then the extent to which the two coders agree on the classification within the variable.

An inter-coder reliability test was conducted using 440 advertisements selected from each of the four magazines selected for this study. The test results showed an agreement on the variable "product" at 0.972. As this exceeds the recommended minimum level of agreement at 0.90, this coding scheme was determined to be reliable (Andersen, 2000).

CHAPTER IV.

RESULTS

The purpose of the study was to investigate the extent to which the theory of the niche could be applied to media buying patterns in competing lifestyle consumer magazine sub-classifications. This was determined by the ability to develop levels of niche breadth and niche overlap for the magazines within the competing magazine sub-classifications. This chapter presents the descriptive statistics and the results of hypothesis testing.

Descriptive Statistics

The sample in this study included 4,440 advertisements ranging from one to five pages long, from various product categories identified within the two magazine sub-classifications from 2001 to 2004. The advertisements were weighted according to page size, which resulted in a total of 5,253 cases. The largest number of advertising pages appeared in *Real Simple* at 1,539. *Redbook* closely followed with 1,457 advertising pages. *Ladies' Home Journal* produced 1,377 advertising pages from the various product categories and *More* produced 880 advertising pages.

The majority of advertisements were full-page advertisements at 3,640 followed by two-page spreads at 1,547. The number of advertising pages continually increased over the four year period totaling 1,062 in 2001 and peaking at 1,549 advertising pages in 2004.

Within all four magazines, cosmetics and beauty products was the product category most frequently represented, accounting for 21.8% of all advertisements. Food products also dominated accounting for 20.2% of the products advertised. Pharmaceuticals, household products, and apparel and accessories were also advertised quite frequently, accounting for 13.1%, 9.0%, and 6.7% respectively. Advertisements for alcohol, products for the opposite

sex, and feminine hygiene products had the least frequency at 0.5%, 0.6%, and 0.8% respectively. The distributions of product categories and ad pages within the competing magazines can be found in Table 4.

Table 4. Product category distributions and advertising page counts for competing consumer magazines (2001-2004).

Product Category	<i>More</i>	<i>Real Simple</i>	<i>Redbook</i>	<i>Ladies' Home Journal</i>	Total
Apparel and Accessories	58	153	76	37	354
Electronics	1	97	16	16	130
Cosmetics and Beauty Products	244	227	477	197	1145
Pharmaceuticals	181	64	196	249	690
Household Products	37	138	98	200	473
Furnishings	20	123	6	53	202
Entertainment	37	74	53	52	216
Financial Services	14	50	15	6	85
Products for the Opposite Sex	3	6	18	5	32
Food	156	274	273	360	1063
Cigarettes	6	0	24	31	61
Alcohol	3	18	4	0	25
Automobiles	20	201	51	36	308
Feminine Hygiene	17	2	11	10	40
Mixed	32	35	57	42	166
Other	51	47	82	83	263
Total	880	1539	1457	1377	5253

The magazines were then divided into two sub-classifications depending on the audience they attracted. As *More* and *Real Simple* attracted an affluent female audience, they were placed in the affluent female readership sub-classification. As *Redbook* and *Ladies'*

Home Journal attracted a more general female audience, they were placed in the general female readership sub-classification.

Once placed in these sub-classifications, a comparison was made of the advertisements that fell within these product categories. These comparisons are included in Table 5. It became apparent that the various magazine sub-classifications pulled their advertising resources from differing product categories.

Table 5. Within product category distributions for competing consumer magazine sub-classifications (2001-2004).

Product Category	Consumer magazines with an affluent female readership	Consumer magazines with a general female readership
Apparel and Accessories	0.681	0.319
Electronics	0.754	0.246
Cosmetics and Beauty Products	0.411	0.589
Pharmaceuticals	0.355	0.645
Household Products	0.370	0.630
Furnishings	0.708	0.292
Entertainment	0.514	0.486
Financial Services	0.753	0.247
Products for the Opposite Sex	0.281	0.719
Food	0.405	0.595
Cigarettes	0.098	0.902
Alcohol	0.840	0.160
Automobiles	0.718	0.282
Feminine Hygiene	0.475	0.596
Mixed	0.404	0.596
Other	0.373	0.627

Those magazines that attracted the affluent female audience accounted for the majority of advertisements that could be considered higher end. These magazines had the majority of advertisements for apparel and accessories that included diamond jewelry, Coach brand bags, and Banana Republic brand clothing at 68.1%. Whereas magazines that attracted

a more generalized female audience accounted for the majority of cosmetics and beauty product advertisements that included makeup, hair products, and perfumes at 58.9%.

The magazines that attracted the affluent audience had the majority of advertisements featuring home furnishings that included home appliances, furniture, and carpeting at 70.8%. On the opposite end of the scale, the general readership magazines dominated in household products such as cleaning supplies and cookware at 63.0%. Additionally, the affluent magazines dominated in financial services, alcohol, and automobile advertisements at 75.3%, 84.0%, and 71.8% respectively. The magazines attracting the general female audience pulled the majority of advertisements for pharmaceuticals and cigarettes at 64.5% and 90.2% respectively. These data suggested a difference in the proportions of the product categories utilized within the two competing magazine sub-classifications.

In order to test a difference between these proportions in each magazine sub-classification, a Chi-square test of independence was performed. The test indicated that the difference between proportions of product categories in affluent female readership and general female readership magazines was statistically significant ($\chi^2_{15} = 409.807$, $p < 0.05$) at the alpha 0.05 level.

Therefore, the assumption that magazines attracting the affluent female audience and magazines attracting a general female audience differed in the proportions of product categories advertised within their pages was supported. Thus, one could suggest that the product categories advertised within magazines were associated with the readership for these consumer magazine sub-classifications.

Hypothesis Testing

As this study argued that niche theory could be used to explain the access and usage of resources by a sub-population, it was necessary to apply the formulae used within the studies of populations to determine the levels of niche breadth and niche overlap within sub-populations.

H₁: Magazines that target a more specific audience will have fewer advertising product categories represented within their magazine than a magazine with a more general audience.

The level of niche breadth referred to the number and variety of resources a magazine sub-classification relied on to ensure their survival. Niche breadth ranged from a low of one to the upper limit of resource categories available. In this study, the number of advertising resource categories available was 16. A niche breadth approaching one indicated few advertising resource categories were used and labeled the magazine as a specialist. A larger niche breadth approaching 16 indicated the magazine was a generalist.

The calculated niche breadth for *More* equaled 6.069 as this magazine relied on all 16 advertising product categories to ensure its survival. *Real Simple* allocated its advertising resources from all 16 categories resulting in a niche breadth of 9.105. *Redbook* and *Ladies' Home Journal* while relying on all 16 advertising product categories resulted in lower niche breadths of 5.711 and 6.739 respectively. These levels of niche breadth can be compared in Table 6.

Table 6. Niche breadth of individual consumer magazine titles (2001-2004).

<i>More</i>	<i>Real Simple</i>	<i>Redbook</i>	<i>Ladies' Home Journal</i>
6.069	9.105	5.711	6.739

To provide a more thorough comparison, these magazines were again placed within the sub-classifications according to the audience they attracted. The magazines that attracted

an affluent female audience resulted in a niche breadth of 8.775. Whereas, the magazines that attracted a general female audience had a niche breadth of 6.594. The levels of niche breadth and resource utilization patterns are identified in Table 7.

Table 7. Niche breadth and resource utilization patterns for competing consumer magazine sub-classifications (2001-2004).

Product Category	Consumer magazines with an affluent female readership	Consumer magazines with a general female readership
Apparel and Accessories	0.100	0.040
Electronics	0.041	0.011
Cosmetics and Beauty Products	0.195	0.238
Pharmaceuticals	0.101	0.157
Household Products	0.072	0.105
Furnishings	0.059	0.021
Entertainment	0.046	0.037
Financial Services	0.026	0.007
Products for the Opposite Sex	0.004	0.008
Food	0.178	0.223
Cigarettes	0.002	0.019
Alcohol	0.009	0.001
Automobiles	0.091	0.031
Feminine Hygiene	0.008	0.007
Mixed	0.028	0.035
Other	0.041	0.058
Niche Breadth	8.775	6.594

While it is apparent that both magazine categories pulled from all 16 advertising product categories, a differing level of niche breadth existed. These varying levels of niche breadth were a result of the proportions that each magazine sub-classification pulled from each advertising product category. Those magazines competing for a general female readership pulled the majority of its resources from two product categories (cosmetics and beauty products and food), which accounted for almost half of its advertising resource usage.

Those magazines with an affluent female readership experienced a more dispersed advertising usage proportion resulting in a higher level of niche breadth.

H₁ suggested that a magazine targeting a more generalized audience would result in a higher niche breadth than a magazine attracting a more specific audience. Therefore, H₁ was not supported.

RQ₃: Do generalists attract a broader range of advertisers than specialists?

Directionally, as indicated from the differing levels of niche breadth it appeared that the magazine category drawing on a more specific audience had a wider advertising niche breadth. This study contradicted the assumptions of niche breadth within the theory of the niche and in fact suggested that a magazine attracting a specialized audience attracted a broader range of advertising product categories.

H₂: Magazines competing for an identical audience will experience more niche overlap than magazines competing for a dissimilar audience.

The level of niche overlap was an inverse measure where a number approaching zero indicated a greater level of niche overlap and a larger number approaching one signified a greater distance between the competing magazine's resource usage and a lower level of niche overlap.

The calculated niche overlap for the magazines that compete for the affluent female audience, *More* and *Real Simple*, equaled 0.066. The niche overlap computed for the magazines competing for the general female readership, *Redbook* and *Ladies' Home Journal* was 0.043. The six levels of calculated niche overlap are provided in Table 8.

Table 8. Niche overlap levels^a for competing consumer magazines (2001-2004).

Magazine title	<i>More</i>	<i>Real Simple</i>	<i>Redbook</i>
<i>Real Simple</i>	0.069		
<i>Redbook</i>	0.010	0.066	
<i>Ladies' Home Journal</i>	0.041	0.055	0.052

^aNiche overlap is the calculated distance between competing magazines' resource usage resulting in an inverse ranging from a low of zero indicating direct competition and a high of one, indicating no overlap exists.

According to the theory of the niche, the highest level of niche overlap would exist when competing media made use of the same advertising resources, targeted the same market, and made use of the same editorial content. Therefore, the hypothesis was established stating that magazines competing for the same audience would experience a higher level of niche overlap than magazines competing for a dissimilar audience. It was assumed that magazines targeting a similar audience would also attract similar advertisers.

These data, indicated all four magazines experienced relatively high levels of niche overlap. *More* and *Redbook* targeted different female demographics and yet experienced the highest level of niche overlap at 0.010. *Real Simple*, also attracting the affluent female demographic, experienced the highest level of niche overlap with *Ladies' Home Journal*, a magazine that attracted the general female population, at 0.055.

Additionally, a niche overlap analysis was conducted after the magazines were placed into the sub-classifications according to the audience they attracted. The calculated niche overlap for the magazine sub-classification competing for the affluent female audience with the magazine sub-classification competing for the general female audience was 0.019. This level indicated a high overlap was experienced by these magazine sub-classifications when competing for their advertising resources.

The hypothesis that those magazines competing for a similar audience would experience higher levels of niche overlap than those competing for a dissimilar audience were not supported by this study. Therefore, H_2 was not supported.

RQ4: To what extent do competing magazines experience niche overlap?

The results of this calculation from the niche overlap formula suggested that all four magazines experienced high levels of niche overlap, regardless of the similarities or dissimilarities in the audience they attracted. Therefore, one can conclude that competing magazines experience high levels of advertising niche overlap.

H₃: Competitive displacement will take place between competing magazines.

The theory of the niche argued that when a new medium was launched into the marketplace, the medium would experience a high level of niche overlap with its competitors. Competitive displacement suggested that those competing media experiencing high levels of niche overlap would, over time, alter their levels of niche breadth in order to decrease the levels of niche overlap.

The levels of niche breadth were calculated for magazines attracting the affluent female demographic and magazines with a general female readership as they fluctuated from 2001 to 2004. The levels of niche breadth calculated for all four years are available in Figure 9.

The magazines with an affluent female readership increased their niche breadth from 8.607 in 2001 to 8.914 in 2004. Those magazines attracting the general female audience decreased their niche breadth from 6.780 in 2001 to 6.420 in 2004.

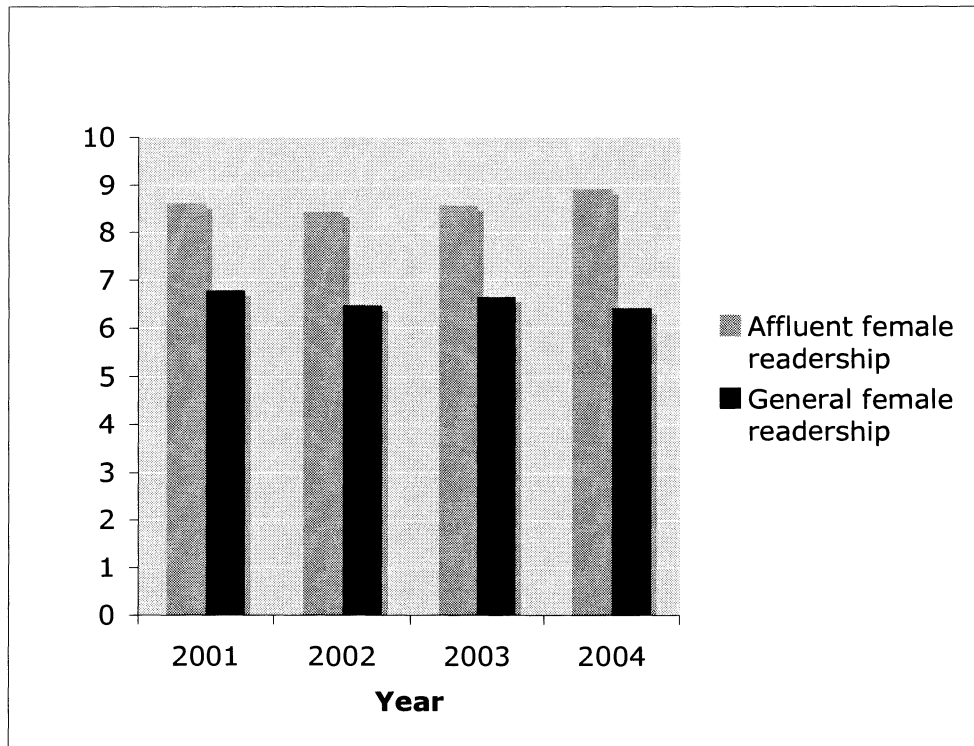


Figure 9. Calculated levels of niche breadth for competing consumer magazine sub-classifications (2001-2004).

Magazines that attracted the affluent female audience experienced a 3.57% increase in niche breadth over the four-year time period. Magazines with the general female readership experienced a decrease in niche breadth of 5.31%. Although the change was not drastic, these data indicated that competitive displacement did take effect and the competing magazine sub-classifications altered their levels of niche breadth over the four years.

Additionally, an adjustment in advertising page counts of the competing magazine sub-classifications provided evidence of an alteration of niches between the competing magazine sub-classifications. The page counts for each magazine sub-classification are available in Table 10.

Table 10. Advertising page counts for competing consumer magazine sub-classifications by year 2001-2004.

Year	Consumer magazines with an affluent female readership	Consumer magazines with a general female readership
2001	409	625
2002	496	615
2003	660	763
2004	778	711

Magazines attracting an affluent female audience experienced a 47.43% increase in advertising pages from 409 advertising pages in 2001 to 778 advertising pages in 2004. Those magazines attracting a general female audience experienced a 12.1% increase in advertising pages from 625 advertising pages in 2001 to 711 advertising pages in 2004. Those consumer magazines with a general female readership did, however, experience a 1.6% decrease in advertising pages from 2001 to 2002 and a 7.31% decrease between 2003 and 2004. These changes in advertising page counts provided evidence of alteration of advertising resource usage patterns as well.

The adjustments in advertising resource usage by both magazine sub-classifications were consistent with the theory of the niche. As a result of the variation in niche breadth levels and the alteration in advertising page counts, H₃ was supported.

H₄: The level of niche overlap that exists between the competing magazine sub-classifications will decrease over time.

As discussed within the theory of the niche, competing media cannot coexist with high levels of niche overlap. Over time, competing magazine sub-classifications would alter their niche breadth levels to reduce the levels of niche overlap. Therefore, as a result of the alteration of niche breadth levels, a reduction in niche overlap would be evident. For this study, the levels of niche overlap were calculated between magazines with an affluent female readership and magazines attracting the general female population over a four-year time span

to determine the fluctuations in niche overlap between the competing magazine sub-classifications. The levels of niche overlap over the four years are available in Figure 11.

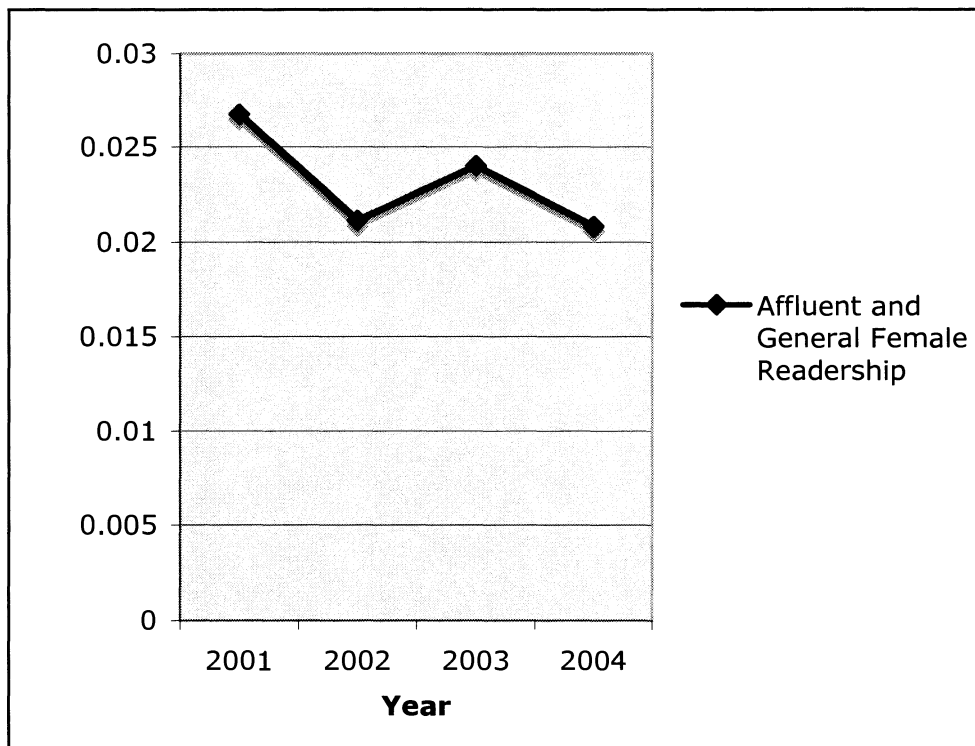


Figure 11. Calculated levels of niche overlap for competing consumer magazine sub-classifications (2001-2004).

The competing magazine sub-classifications experienced the highest level of niche overlap in 2001 at 0.0267. The lowest level of niche overlap was experienced in 2004 with an overlap level of 0.0208.

The alterations in niche breadth that consequently lowered the competing magazines' levels of niche overlap were consistent with the theory of the niche.

These data indicated that as a result of competitive displacement, a reduction in niche overlap occurred over the four years. Therefore, H_4 was supported.

RQ₅: To what extent does competitive displacement take place between competing magazine sub-classifications?

These data suggested that competitive displacement did take place between these competing magazine sub-classifications. Over time, the levels of niche breadth and advertising pages fluctuated within the competing magazine sub-classifications. As a result of this fluctuation, the high levels of niche overlap that existed between the competing magazine sub-classifications decreased over time.

RQ₁: To what extent can the theory of the niche be applied to magazine sub-classifications?

The theory of the niche has evolved from ecology to media organizations over the past 80 years. The theory has been used to explain the resource use patterns of a vast array of species, but it has been argued that in mass media terms, it was only to be applied to populations of competing media. This study argued that as the theory of the niche was applied to competing species to explain the competition and coexistence of a population, it could also be applied to competing magazines to explain the competition between competing magazine sub-classifications.

This study suggested that a few of the concepts within the theory of the niche could be determined at the sub-population level of competing magazine sub-classifications while other concepts were not supported. These data suggested that competing media would experience competitive displacement as a result of high levels of niche overlap. Therefore, over the course of time, competing magazines would alter their niche breadth levels to adjust to such high levels of niche overlap. As a result of competitive displacement, this study also suggested that the alteration of niches thus reduced the levels of niche overlap experienced by the competing magazine sub-classifications over a period of four years.

However, there were also concepts within the theory of the niche that this study was not able to support at the sub-population level. This study suggested that the levels of niche breadth calculated were contradictory to the theory of the niche. This study indicated that the magazine sub-classification with a more specific audience pulled its advertising resources from a broader range of advertising product categories than a magazine with a more general female readership. Additionally, one could hypothesize that those magazines that attract a similar audience would experience higher levels of niche overlap. This study showed the opposite to be the case as magazines competing for a dissimilar audience actually experienced the highest levels of niche overlap. These findings suggest that the possibility of adapting the theory of the niche to understand competing media sub-classifications should not be excluded without further study.

RQ₂: To what extent can we use the theory of the niche to understand media buying behavior?

According to Reid and King (2000), a media buyer's placement decision was often reliant on cost, audience delivery, communication effectiveness, and value-added opportunities. For the purposes of this study, only one of these key elements was investigated: audience delivery. While the audience makeup of the four magazines used for this study was apparent, the cost of advertising, effectiveness of advertising, and possibilities for value-added opportunities were not addressed.

Without first seeking out these additional criteria that persuade a media buyer's decision making, one is unable to understand the media buying process. Therefore, the theory of the niche cannot be used alone to determine media buying behavior.

In short, some of the findings from this study were inconsistent with the theory of the niche. The hypothesis that magazines targeting a more specific audience such as an affluent population would have a lower niche breadth was not supported by this study. In fact, those magazines with a more specific audience, according to the niche breadth formula, experienced higher levels of niche breadth. The hypothesis that magazines competing for a similar audience would experience higher levels of niche overlap than with magazines competing for a dissimilar audience was not supported by this study. In fact, those magazines competing for a dissimilar audience experienced higher levels of niche overlap.

However, there were also findings from this study that were consistent with the theory of the niche. The hypothesis that competitive displacement would take place between competing media was supported by this study. Additionally, as a result of competitive displacement, the hypothesis that over time levels of niche overlap would decrease was supported by the data.

CHAPTER V.

DISCUSSION AND CONCLUSION

The purpose of this study was to determine the extent to which the theory of the niche could be applied to explain media buying in magazine sub-classifications competing for the same advertising resources. The concepts within the theory of the niche were calculated providing interesting insight into the adaptability of the theory.

Findings

The underlying question for this study was to what extent the theory of the niche could be used to explain the competition and coexistence of competing media sub-classifications. The data collected exhibited some inconsistencies with the theory of the niche.

The theory of the niche predicted that media populations targeting a very specific audience would rely on a limited number of resources in order to survive. The media were then placed into the categories of generalist and specialist depending on their ability to pull from a range of resources.

A magazine with a specific audience such as an affluent female population would be reliant on fewer advertising resources to survive than a magazine with a more general readership. According to the calculations from the theory of the niche, *Redbook*, a magazine attracting the general female population, proved to be the most specialized with a niche breadth of 5.711. While *Real Simple*, a magazine attracting a more specific audience proved to be the most generalist with a niche breadth of 9.105.

When calculated according to magazine sub-classification, those upscale magazines attracting a more specific audience of affluent females had the widest advertising niche

breadth at 8.775. The magazine sub-classification with a general female readership had a niche breadth of 6.594 indicating this magazine sub-classification was more specific with the advertising resource categories it drew on.

However, niche theory did argue that when a medium was first introduced into the marketplace it often began as a generalist regardless of its readership and over time developed its niche and became a specialist. This is consistent with the findings from *Real Simple*. As *Real Simple* was first launched in December 2000, one could argue that it is still trying to find its niche and over time will become a specialist as well.

Within the theory of the niche, when competing media were in direct competition with one another: fighting for the same audience, producing similar content, and focusing on similar interests, they would experience higher levels of niche overlap. The study again proved the opposite to be the case. *More* and *Redbook*, two magazines competing for dissimilar audiences, experienced the highest level of niche overlap. The second highest level of niche overlap existed between *More* and *Ladies' Home Journal*, indicating that although these magazines attracted a different audience, they were in direct competition with one another.

Pianka (1974) coined a new term within the theory of the niche: diffuse competition. He concluded that competing species are reliant on a number of resources in order to survive and they experience competition with a number of competitors. He determined that if competing species experienced high levels of niche overlap with one resource such as food, they would rarely overlap with other resources such as habitat.

While this study strictly looked at the advertising resource usage patterns of competing magazine sub-classifications, it is certain that they compete for other resources as

well. This study determined that these competing magazine sub-classifications experienced high levels of niche overlap with advertiser spending, but it is uncertain the levels of niche overlap experienced for consumer spending or consumer time allocation. Without these additional levels of niche overlap, we are unable to determine if these high levels of niche overlap are indicators of extreme competition between the competing magazine sub-classifications.

Additionally, Pianka (1974) suggested that a community that experienced high levels of niche overlap would be able to support more species. This idea suggests that species will only be able to coexist at tolerable levels of niche overlap. If competing species are able to survive and coexist at their upper limits of niche overlap, this allows for more species to be able to survive in the environment.

The high levels of niche overlap experienced by these competing magazine sub-classifications indicate that the environment of women's magazines is able to support a lot of competition. As advertiser spending, consumer spending, and consumer time allocation can be allocated to numerous women's magazine titles, some of which have survived in the marketplace for over a hundred years, suggests that this environment is able to support more species.

These calculated levels of niche breadth and niche overlap may be inconsistent with the theory of the niche for numerous reasons. As this study collected data from magazines published during a four-year time frame, this limited period of time may not have allowed the effects of competition to take effect. Therefore the results of the calculated levels of niche breadth and niche overlap may not reflect the effects of such competition between magazine sub-classifications. Additionally, too few magazines may have been used to represent the

competing magazine sub-classifications. When using only four magazines, the individual differences within each magazine may take effect and alter the calculated levels of niche breadth and overlap.

According to the theory of the niche, an outcome of direct competition as was experienced by these competing magazine sub-classifications is competitive displacement. When competing media are in direct competition with one another over time, they will alter their niches to decrease the levels of niche overlap. The data from this study suggested support for the concept of competitive displacement. The calculated levels of niche breadth for those magazines with an affluent female audience increased over time while those with a general female readership decreased. The ending result was a decrease in niche overlap between the competing magazine sub-classifications over the four-year period.

Furthermore, an additional question remained, about the extent to which media buying behavior could be explained by the theory of the niche. The study provided insight into the media buying behavior in lifestyle consumer magazine sub-classifications. The results of this study indicated that media buyers were not only targeting the affluent female audience with magazine advertisements for higher end merchandise in both *More* and *Real Simple*, but they provided them with advertisements from all 16 product categories. The advertisements in these magazines ranged from toothpaste and facial cleansers to high-end Coach brand bags and Mercedes automobiles.

The advertisements in magazines attracting a more general female audience represented all 16 product categories as well. However, a similar range of products advertised was not evident within these magazines.

A crosstabulation of products advertised and the audience sub-classification represented by each magazine provided some interesting results. It was apparent that those magazines with an affluent female readership dominated in the product categories that one might consider higher end while those magazines with a more general female readership pulled from what one might consider lower end categories such as cosmetics and beauty products and food.

The affluent magazines had the majority of advertisements for apparel and accessories including the pricy Coach brand bags and diamond watches. The general female magazines had the majority of cosmetics ads. The affluent had home furnishings while the general had household products. The affluent had alcohol advertisements while the general placed cigarette ads. The affluent had automobile advertisements while the general had pharmaceuticals.

However, when looking at the data as a proportion of the advertising within each magazine, it was apparent that the majority of advertisements regardless of readership were from cosmetics and beauty products and advertisements for food. In relationship to the other product categories represented within these magazines automobiles only accounted for 5.9%, electronics accounted for 2.5%, and home furnishings only accounted for 3.8% of the total advertising pages. Women, regardless of income, have 80% of the decision making power over which of these products will be purchased for their family (Cuneo & Petrecca, 1997). Women of affluence have considerably more purchasing power over these items with 94% influence over home furnishings purchases and 60% control over automobile purchases (Arora & Saad, 2005).

Were media buyers not taking advantage of the purchasing power women have by not placing advertisements for these products in magazines targeting women? The results of this

study might have indicated the answer is yes, but additionally, one must take into account the decision making process that led to the media buyers' behaviors.

Media buyers' decision-making was reliant on many key factors that must be taken into account. Their placement decisions were dependent on cost, audience delivery, communication effectiveness, and value-added opportunities (Reid & King, 2000). It is possible that magazines that targeted the female audiences regardless of income were more expensive than television, radio, or newspaper advertising. Possibly the target audience of these magazines did not fit the target audience of the product the media buyer was looking to place. Additionally, other outside factors such as discounts on advertising placements or the choice to use non-traditional methods to target this audience might have explained why these product categories were not placed within the magazines selected for this study.

Limitations

While the findings from this study proved interesting, the limitations to this study design must be considered. The data for this study were collected from only four competing magazines. Additionally only two magazines were selected to represent the magazines with an affluent female readership and the magazines with a general female readership. With the limited number of cases, individual differences between the magazines may have influenced the results. A future study using numerous magazines representing both sub-classifications would result in a more representative sample with thousands of cases allowing for a more thorough analysis of such magazine sub-classifications.

Additionally, this study was limited to only magazines published from 2001-2004. To truly study the outcomes of competitive displacement and the alteration of niche breadths

a longitudinal study spanning more years could provide a more thorough analysis of the concepts discussed within the theory of the niche.

A third limitation involves the magazines selected for this study. Magazines were selected according to their classification in Standard Rate and Data Service as women's magazines, their median annual household income, and their ability to target an age range consistent with the other magazines. Including a more comprehensive sample of women's magazines from differing median annual household incomes and various targeted age ranges could provide different results.

Another important limitation is the distinction between the audiences of the magazines selected for this study. As both magazine sub-classifications targeted women, focusing on the primary topics related to home, family, and life as they relate to a woman, there might not be significant evidence to differentiate between these two sub-classifications. While the median annual household incomes were different, advertisers might see women in general as a target audience rather than differentiating these audiences based on their income. A more distinct difference in audiences such as men's magazines versus women's magazines might provide a more accurate representation of a magazine sub-classification's coexistence within the marketplace.

Additionally, as the differentiating factor from this study between the competing magazine sub-classifications was expendable income, an emphasis on the prices of products advertised might have harbored different results. While the coding process strictly labeled a diamond ring as an accessory, a pair of sandals was provided the same label. A coding scheme that allowed for price ranges in the various product categories may provide a more

thorough analysis of the products actually advertised within the pages of these competing magazine sub-classifications.

Suggestions for Future Research

This study brought attention to several facets of the theory of the niche that have been left unexplored. As this study provided the framework for the extent to which the theory of the niche could be applied to competing media sub-classifications, it points to several suggestions for future research.

Rather than basing the extent to which the theory of the niche could be used to explain competition between competing sub-classifications on a study of only four magazines, a more comprehensive study is suggested. A study that determines the niche breadth and overlap of dozens of competing magazines within a sub-classification would provide a more thorough insight into the power of niche theory at this level.

Additionally, a longitudinal study extending beyond four years is suggested to provide insight into the levels of niche breadth and niche overlap for competing media sub-classifications as they change over time. The theory of the niche is often used to explain how competing media adapt to their changing environment over time; therefore a more lengthy longitudinal study would provide further knowledge into the adaptation process (Dimmick & Rothenbuhler, 1984, Dimmick, Chen, & Li, 2004).

Another aspect deserving of exploration involves coding beyond each product category and introducing a value to the products advertised. Magazines targeting women are reliant on advertisements for cosmetics, clothing, and accessories. Vast ranges of these products were placed within the pages of these competing magazine sub-classifications. However, for the purposes of this study, a Mercedes was given the same weight as a

Hyundai. A diamond watch was given the same weight as a pair of shoes. A study determining the extent to which competing magazine sub-classifications rely on the various price levels of products advertised could provide a more descriptive level of niche breadth and overlap.

To determine the effects of competition and coexistence within the media marketplace, a more thorough analysis of competing magazine sub-classifications is suggested. Levels of niche breadth and niche overlap could be computed for men's consumer lifestyle magazines and women's consumer lifestyle magazines. A more thorough analysis of the competing magazine sub-classifications could provide a more thorough insight into the effects of competition according to the theory of the niche.

Conclusion

This study provided direction as to the extent to which the theory of the niche could be used to explain coexistence within competing magazine sub-classifications. These data suggested that some concepts within the theory of the niche could not be supported at the categorical level. For example, niche breadth was contradicted by the findings from this study. Additionally, niche overlap was not supported by the data from this study. However, the concept of competitive displacement was evident within the findings from this study.

While these concepts were not supported by the outcomes of hypothesis testing from this study, these outcomes might in fact reinforce the theory of the niche. The theory of the niche suggests that when a new species whether it an animal or media species is launched into the marketplace it is a generalist and experiences fierce competition with those existing species.

Just as Gause (1934) suggested that various species of terns adapt to the introduction of a new species, when a new magazine is first launched into the marketplace, it would experience high levels of niche overlap with its competitors. At this introduction it might pull its resources from a majority of areas to ensure its continued survival. However, over time, as each tern adapted its eating pattern, the competing magazines would also adapt their resource utilization pattern. This adaptation would appear as changing levels in niche breadth from more of a generalist to a specialist and would result in a lowering of niche overlap levels with the magazine's competitors.

As past studies in the theory of the niche and competition suggest, the adaptation process is a lengthy process that will become apparent over time. Thus far, no studies exist stating a timeline by which the adaptation process takes place, however, it is understood that it does not take place overnight. The outcomes of competition may be evident in the number of new magazines that are launched every year and then discontinued. Within a marketplace of fierce competition, each new magazine that is launched into the marketplace will pull its resources from as many avenues as possible in order to survive. However, over time, it will adapt its niche to ensure its coexistence with the existing magazines in the marketplace.

Magazines such as *Redbook* and *Ladies' Home Journal* are testament to the competition that takes place in the marketplace. Having overcome competition for more than 100 years, these magazines continue to differentiate themselves to maintain their position in the marketplace. When these magazines were first launched into the marketplace it is likely that they survived on as many resources as possible appearing more as a generalist than they do today. However, competition has most likely had an effect over the past 100 years,

resulting in a magazine that appears more as a specialist regardless of the audience it is attracting.

One thing to keep in mind is that magazines are specialists by nature. Magazines once published as generalist media targeting the masses. However, with the invention of radio and later television, magazines have altered their niches to become a more specialized medium. As magazines have adapted over the course of time, new products have been launched to target most any demographic and lifestyle. A magazine that attracts a general female audience will still remain a specialist by nature.

The findings of this study, while not entirely consistent with the theory of the niche, provide a framework for the understanding of media buying changes and competition between competing magazine sub-classifications over time. The findings also indicate that more research into competing magazine sub-classifications could better determine the extent to which the theory of the niche could explain competition and coexistence on the sub-population level with media sub-classifications.

APPENDIX A.

CODING INSTRUCTIONS

Variable Number	Variable Name	Variable Definition	Values and Codes
1	CASE	The advertisement number.	String nominal variable
2	TITLE	The name of the magazine in which the advertisement appeared.	1- <i>More</i> 2- <i>Real Simple</i> 3- <i>Redbook</i> 4- <i>Ladies' Home Journal</i>
3	DATE	The published date of each magazine. For example, a magazine published March 2002, is to be coded 0302.	mmyy
4	ADSIZE	The size of the ad published.	0- Other 1- Full-page 2- Two page Spread 3- Gatefold
5	PLACE	The placement of the advertisement within the magazine. 2 nd cover is the inside front cover, 3 rd cover is the inside back cover, 4 th cover is the back cover, and TOC is the page opposite the table of contents.	0- Other 1- 2 nd Cover 2- 3 rd Cover 3- 4 th Cover 4- TOC
6	PRODUCT	The product category that is represented in the advertisement. A more thorough definition is provided. ^a	1- apparel and accessories 2- electronics 3- cosmetics and beauty products 4- pharmaceuticals 5- household products 6- furnishings 7- entertainment 8- financial services

-
- 9- products for the opposite sex
 - 10- food
 - 11- cigarettes
 - 12- alcohol
 - 13- vehicles
 - 14- feminine hygiene
 - 15- mixed
 - 16- other
-

^a *Apparel and Accessories*- includes any clothing items including but not limited to footwear and jewelry.

Electronics- includes any electronic equipment including but not limited to computer hardware, cameras, and accessories. Major home appliances are not included.

Cosmetics and Beauty Products- includes all facial and hair products but does not include any prescription products.

Pharmaceuticals- includes any medications including but not limited to prescription medication and over the counter medication.

Household products- includes all cleaning supplies and everyday household products. Including but not limited to small appliances such as vacuums and blenders. Also includes such products as paint and cookware.

Furnishings- includes all furniture, decoration, and remodeling materials including but not limited to major home appliances, carpeting, and cabinetry.

Entertainment- includes but is not limited to all books, movie promotions, and travel.

Financial Services- includes but is not limited to any advertisements for credit cards, home mortgages, or retirement funds.

Products for the Opposite Sex- includes products that are only targeted toward men. If advertisement includes products for both sexes, see “mixed” category.

Food- includes any restaurant or advertisements for food products consumed by humans.

Cigarettes- includes any tobacco or smokeless tobacco products.

Alcohol- includes any advertisements for beer or other alcoholic products.

Vehicles- includes any advertisements for automobiles.

Feminine Hygiene- includes any products for feminine hygiene.

Mixed- includes any advertisements where products could be categorized into one or more of the preceding categories.

Other- includes any advertisements for products that do not fit into any of the preceding categories. These may include but are not limited to promotional advertisements for the magazine, ads for not-for-profit organizations and charities, and advertisements for pet products.

7	YEAR	The year the magazine was published.	1- 2001 2- 2002 3- 2003 4- 2004
8	CATEGORY	The sub-classification the magazine fell into according to the audience it attracted.	1- Affluent Female Readership 2- General Female Readership

APPENDIX B.

CODING SHEET

Variable Number	Variable Name	Code
1	CASE	
2	TITLE	
3	DATE	
4	ADSIZE	
5	PLACE	
6	PRODUCT	
7	YEAR	
8	CATEGORY	

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