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RURAL AND ETHNIC YOUNG CONSUMERS' PERCEPTIONS OF BUNDLED CELLULAR TELEPHONE FEATURES

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ABSTRACT

Useable questionnaires were completed and returned by 351 (174 rural and 177 HBCU) consumers at two Midwestern universities. ANOVA tests revealed young consumers' perceptions of the importance of cellular telephone features were significantly different between rural and HBCU (Historic Black Colleges and Universities) young consumers, males and females, and among age groups ($p< .01$; $p< .001$). Furthermore, regression analysis revealed among ten features young consumers reported available on the phones they owned, demographic variables were significantly predictive ($p< .001$) of perceptions of importance of bundled features. Recommendations were proposed that could help marketers develop strategic marketing mixes of phone features targeted to young consumers, rural or HBCU.

INTRODUCTION

Executives seeking marketing strategies to retain or gain market share in the highly competitive cellular telephone business need to understand young consumers' perceptions of the importance of bundled features on the cellular telephones (phones) they sell. One approach to seek a market advantage is to segment the market to identify segments for which the product may be preferred. For example, a marketer seeking to expand cell phone business among rural and ethnic young consumers might wish to explore the environments where these populations congregate naturally: small-town universities, in particular, Historic Black Colleges and Universities (HBCU) for high concentrations of young ethnic consumer populations. The following questions might be raised: Are demographic variables in any way predictive of the bundled features young consumers perceived important? Does the combination of cellular telephone features make a difference to young consumers in rural or HBCU markets? Can pre-existing phone features present on the phones young consumers already own be used to predict their perceptions of the importance of bundled phone features? This study was conducted at two Midwestern universities, with limitations, in order to answer these and related questions.

A Few Limitations

This paper is a market segmentation study for the cell phone industry. There were limitations. The independent variables (cell phone features and demographic characteristics) cannot be construed as having a causal effect on the dependent variables (perceptions of the importance of cell phone features); meaning, cell phone features are not causative influencers on perceptions of the importance of features. Populations are assumed normally distributed. Only two universities were selected for the study, thus, generalizing results to any aspired population is cautioned against. There are nearly 100 cell phone features available on a number of brands and only ten features were analyzed in this study. These features were identified by a focus group of college students; therefore, a set of ten different features might generate different results if this study were replicated in the future. Another consideration not evaluated was the impact of intensity of competition prevailing in each market area. Despite this study's limitations, young consumers' use of cell phones has been explosive warranting empirical investigation.

The Cell Phone Industry

The explosive growth in the use of cellular telephones is well documented (Anderson and Jonsson, 2006; Joseph and Prakash, 2006). Eighty percent of Americans subscribe to a wireless service; ninety-nine percent of the U.S. population has access to at least one mobile carrier (Albanesius, 2008). McCasland (2005) believes young consumers aged between 18 and 22 are often the architects of change in the US culture. Cellular telephones have changed the US culture, and they have become a ubiquitous commodity. Thus, cellular telephone marketers must continue to change their strategic foci from routine product differentiation strategies (Reiner, Natter, and Spectrum, 2007).

Globally, cellular telephone use is also pervasive (Chintagunta, and Desiraju, 2005; Joseph and Prakash, 2006; Landale, 2006; Miller, 2006). Nokia predicted that by 2010, world-wide usage of mobile phones will reach three billion users (Associated Press, 2005). Cellular telephones have developed beyond basic voice communication. Wireless carriers routinely offer additional features such as instant messaging, video, camera and music players. The CW network has partnered with Sprint to launch a mobile series spin-off from its drama, Smallville, with the aim of reaching their young core audience (Shields, 2007).

Cellular phones have always been used for communication, but they are used for online social networking as well. One of the most popular uses of the computer by college students, other than for class assignments, is accessing MySpace (with over 110 million users) and/or Facebook (with 70 million users). AT&T, Sprint Nextel, and Verizon Wireless have started a service that will allow users to post messages on Facebook's home pages or search for other users' phone numbers and e-mail addresses from a cellular telephone. MySpace has a pact with Hello, a wireless joint venture between SK Telecom and Earthlink, that will allow users to send photos and update their blogs or profiles by cellular telephone (Knowledge@Wharton, 2006). Sprint Nextel internet-accessible phones now have access to MySpace Mobile (MSM), the "first free direct access" to MSM through a U.S. wireless carrier, providing a rich set of features now available on a mobile devise (Kansas City Business Journal, 2008).

In addition to accessing the Internet, watching TV, and sending text messages, cellular phone users can also use their phones for mobile banking. Bank of America allows its customers to access locations of ATM and banking centers using their mobile phone browsers and can receive e-alerts as either an e-mail or text message. Free mobile banking service became available in 2007. Its online banking customers with mobile internet access can use their cellular telephones and smart phones to pay bills, transfer money and check account balances. Currently, more the 85% of cellular telephone subscribers can access mobile Internet (Bank of America, 2007).

In fact, the cellular telephone may one day replace the wallet. Japan is a forerunner in this area. In Japan, E-cash is accepted in stores and restaurants, allowing shoppers to carry nothing but their cellular telephones, which transmit infrared signals. Value is added to phones at automated docking stations where paper money is inserted and credit for E-cash is added to the phones (Failoa, 2005). Japan's top mobile phone operator (NTTDoCoMo) and McDonald's Japan have announced an agreement to jointly promote e-marketing based on e-wallet services through an upcoming joint venture which will include mobile-phone credit cards (Cellular News, 2007). The rapid pace of strategy changes among cell phone competitors is evidenced in the literature.

LITERATURE REVIEW

At the beginning of the twenty-first century, researchers were just beginning to focus on the importance that wireless and 3G technologies would play in business and marketing. Wireless and radio technologies were predicted to be at the heart of many business activities (Manning and Cosier, 2001). Access and usage prices were found to have different relative effects on demand and retention (Danaher, 2002).

By 2005 researchers began to focus on the application of wireless technology. The difference between "pushing" information onto consumers through wireless media devices such as cellular telephones and "pulling" information from consumers was examined (Hosoe, 2005). This paper introduced an alternative use of cellular telephones-the capturing of scenes of ongoing consumption moments by using a Web-based database system, which could lead to a better understanding of consumer behavior. Inspired by a unique data collecting process termed as the Experience Sampling Method, the study developed a system for recording its informants' consumption as "data in progress." Text and image data are recorded with internet accessible cellular telephones, wirelessly transmitted to a database, and used for real-time analysis by an observer group.

One study in 2005 examined the relevance of mobile phone technology in marketing to young consumers aged between 18 and 22; these are the millennials who are heavy mobile phone users and often the architects of change in US culture (McCasland, 2005).

A study of mass customization strategies (MC) by Sigala in 2006 revealed that MC strategies that are customer centered are vital, as users of customized mobile phone services perceive both "give" and "get" customer value dimensions. As MC does not come for free, to persuade customers to get involved and invest time and effort in value chain operations for designing customized services, companies need to identify and provide enhanced customer values. Research findings have great implications in the new service development processes and marketing - communication strategies of mass customizers. Findings help practitioners increase the adoption and use of mass customized mobile phone services by providing insight on how to develop MC strategies from a customer-centric perspective and conduct a customer value-based market segmentation for enhancing marketing effectiveness and MC customer adoption.

Another study (Shim, Ahn, and Shim, 2006) presented an overview of digital multimedia broadcasting (DMB) and explored the users' perception on DMB cellular phone or "cellevision", video-on-the-go services that deliver television to cellular telephones. The authors concluded that the millennial generation will have a major impact on the DMB market due to their mindset and lifestyle.

Other applications of cellular phones were examined. Next to television sets and computer monitors, today's mobile telephones offer a "third screen" that delivers information, entertainment, communication, and even transactional services to an increasingly mobile society (Sylvia and Chan-Olmsted, 2006).

After receiving institutional permission to conduct this study, social science methodology and traditional multivariate statistics were used to reject or not reject three statistical null hypotheses.

HYPOTHESES

This study investigated if demographic variables or if telephone features included on phones students already owned were predictive of young consumers' perceptions of bundled features. In addition, this study set out to determine if there were any significant differences in students' perceptions of bundled features across demographic variables (rural vis-à-vis HBCU, gender, grade level, cellular telephone brand, major, and age). The formal hypotheses were stated as follows:

Hypothesis $_1$: Young consumers' demographic characteristics are not predictive of their perceptions of the importance of bundled cellular telephone features.

Hypothesis $_2$: The ten telephone features included on phones young consumers already own are not predictive of their perceptions of the importance of bundled cellular telephone features.

Hypothesis $_3$: There is no statistical difference among the means of young consumers' demographic variables (rural vis-à-vis HBCU, gender, business or non-business major, grade level, age, monthly billing, or minutes use per month) and their perceptions of the importance of bundles of cellular telephone features.

Methods common in the social science literature were used to analyze the data. The descriptive statistics were compiled and some descriptive variables were further analyzed with a non-parametric test. Chi-Square is used traditionally to help the researcher determine the likelihood of the occurrence of an event; a classic textbook example is a researcher wanting to know the weapon of choice for women who commit murder. It might be helpful to cell phone marketers if they could somehow predict the likelihood of male or female or rural or HBCU young consumers' likelihood of owning a particular brand of cell phone. Furthermore, the three null hypotheses were tested using multivariate statistics.

Purpose behind Using Multiple-Regression and Factor Analysis

Darlington (1968) provides perhaps the most comprehensive overview and justification for using multiple-regression analysis in psychological research. When the researcher cannot administer a treatment to the independent variable or groups of independent variables regression is typically used as statistical control substituted for procedural control. The purpose behind the use of multiple-regression in this study is the statistical control of all the possible ways in which young consumers who own cellular telephone features differ from those who do not in ways specifically related to young consumers' perceived importance of features they own. Demographic variables and cell phone features are possible correlates to the dependent variable (perception of the importance of cell phone features) and thus employed as independent variables. The idea is to control confounding variables, or for alternative explanations by variables directly correlated to the dependent variable. In this case, multiple-regression is a robust technique.

Many construe Likert-type data to be ordinal data because it is difficult (if not impossible) to determine the equality of gradation (1 = not important to 3 = very important) in perception or attitude measures; however, Likert-type data are often used in factor analysis and in multiple-regression analysis. Kachigan (1991) believes at a minimum Likert data is “quasi-interval” scale data. Psychologists tend to use Likert-type measures as if they were interval level data, and this is a common practice in psychological research. Furthermore, researchers often need to reduce the number of variables they analyze.

Some personality surveys might contain 100 continuous response items, an impractical number of items to manage. Factor analysis is perfectly suited for data reduction purposes because the derived factors explain most of the variance; for example, researchers might be able to reduce 100 continuous response items on a perception survey to perhaps four or five factors that explain 70 percent of the variance. This common practice is reinforced by Ferrando (1999) who compared Likert scaling using continuous, censored, and graded response models and found no significant different effects on criterion-related validity, including a multiple linear factor analysis model; in addition, more complex models in that study did not improve predictive validity of the models.

Therefore, the data collected for this study were analyzed with methodology consistent in the literature to address the aforementioned three null hypotheses.

METHODOLOGY

Survey and Sample

A convenience sample of millennial users was surveyed from a total population of 2,072. The survey, in which young consumers were asked to rate various features on cellular telephones and report demographic information, was conducted at a rural Midwestern university from a population of 872 business students; there were 174 students selected from the rural university. The survey was also conducted at an HBCU (Historic Black Colleges and Universities) university located in the Midwest from a population of 1,200 business students. There were 177 students selected from the HBCU. The classroom sample selected from a population of 2,072 resulted in 351 useable surveys. Brand of cellular telephone ownership, monthly usage, gender, HBCU vis-à-vis rural, age, major, grade level, and monthly billing options were compared (using ANOVA tests and regression analyses) against millennial users’ ratings of the importance of various features to determine if significant differences existed. Ten items were measured using a Likert-type scale (0 = not important to 3 = very important) to assess young consumers’ perceptions of the importance of selected cellular telephone features. These selected telephone features were further analyzed relating to the presence of these features on their existing cell phones.

Descriptive Statistics

There were 351 completed useable questionnaires. The statistical analyses presented in this study were based on those 351 observations. The frequency and percent of brands of cellular telephones owned by young consumers, their billing habits, and monthly minutes used, and the features they reported available to them on the phones they owned are presented in Tables 1, 2, and 3 below:

Table 1: Cellular Telephone Ownership by Brand

Telephone Brand	Frequency	Percent
Other Brands	153	45.4
Motorola	118	35.0
Nokia	57	16.9
AT&T	7	2.1
Panasonic	2	0.6
Totals	337	100%

Table 2: Descriptive Statistics for Gender & Campus on Monthly Minutes/Billing with Means

Demographic	Monthly Billing	Monthly Minutes	Monthly Billing Mean	Monthly Minutes Mean
Rural	$8,892	49,157	$54	294
HBCU	$12,776	58,595	$76	337
Total	$21,668	107,752	$65	316
Male	$10,831	52,791	$64	305
Female	$10,458	52,359	$67	325
Total	$21,289	105,150	$65	316

One hundred seventy-seven males and 166 females (reporting gender) completed the questionnaire. Among the age groups, 95 respondents were age 20, 193 respondents were age 21 years old, 27 respondents were age 24 years old, and 29 respondents were age 26 years old. Eighty-four percent of the respondents reporting age (288/344) in this study were within the range McCasland (2005) labels “millennial users”: young consumers aged between 18 and 22.

Table 3: Rural & HBCU Telephone Features Frequency Reported by Percent						
Feature Name	N	With Feature	Rural Frequency	%	HBCU Frequency	%
Game	337	233	96	41.2	137	58.8
Free minutes	336	305	146	47.9	159	52.1
Instant messaging	336	264	117	44.3	147	55.7
Warranty	334	274	141	51.5	133	48.5
Hands free	330	174	65	37.4	109	62.6
Earpiece	331	155	45	29.0	110	71.0
Internet connection	336	220	92	41.8	128	58.2
Intercom availability	326	135	32	23.7	103	76.3
Digital camera	333	129	24	18.6	105	81.4
Email access	334	158	42	26.6	116	73.4
*Denotes 10 pre-existing features students indicated they had available to them on the 337 phones they owned						

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There were 273 business majors and 71 non-business majors. There were 56 freshmen, 75 sophomores, 131 juniors, 56 seniors, and 23 graduate students. A Chi-Square test was run on the nominal variables to test for significant relative frequencies between rural and HBCU student across brand of cellular telephone ownership; furthermore, gender and brand of cellular telephone ownership was tested using the Chi-Square. No significant difference existed between males and females and brand of cell phones they owned with a critical value of 3.623 being smaller than the 13.277 critical value found in the Chi-Squares table.

Table 4: Chi-Square Test of Male Female & Rural HBCU vis-à-vis Brand Ownership***					
Demographics	Others	AT&T	Motorola	Nokia	Panasonic
Male	73(77.7)	4(3.1)	60(60.1)	32(29.0)	2(1.0)
Female	77(72.3)	2(2.9)	56(55.9)	24(27.0)	0(1.0)
Rural	53(74.9)	2(3.4)	70(57.8)***	38(27.9)	2(1.0)
HBCU	100(78.1)***	5(3.6)	48(60.2)	19(29.1)	0(1.0)
***Denotes p< .001; parentheses ( ) denotes expected count.					

On the other hand, the Chi-Square test suggested rural and HBCU young consumers differed significantly in their choice of cellular telephone brand, with a critical value of 28.025 being larger than the 13.277 critical value found in the Chi-Square Table, with df = 4 and p= .000. Motorola was significantly different in its relative frequency between rural and HBCU users. Rural users clearly favored the Motorola brand as compared to HBCU cell phone owners. Chi-Square findings are presented in Table 4. The implication of this difference will be discussed in a later section.

RELIABILITY TEST

The overall scale reliability for this study using a Chronbach's (1984) alpha is 0.76, which exceeds the Nunnally (1978) criteria of 0.70 for an acceptable alpha. Devellis (1991) says an alpha "between .70 and .80" is respectable (1991: 85). The reliability did not improve if any item were deleted; therefore, the entire ten item scale was left intact for data analysis. A factor analysis was conducted after testing and accepting the instrument's respectable alpha reliability.

FACTOR ANALYSIS

Three hundred thirty students' responses to the items were subjected to an un-rotated principal component analysis, with a scree plot suggesting four factor be derived (in SPSS 15.0). Four factors were suggested by the scree plot. Those four factors explain 67.23% of variance after rotation (Factor 1 = 26.00%, Factor 2 = 19.77%, Factor 3 = 10.78%, and Factor 4 = 10.68%, respectively). Principal Component Analysis was used with Varimax Rotation to extract the four factors, as shown in Table 5. The four factors were produced with 5 iterations.

A variable was said to load on a factor if it had a component loading of .50 or higher on that factor and less than .50 on any other factors (Devellis, 1991; Hatcher, 1994). The derived factors were indicative of the utility of features available on the phones millennial users owned; thus, each of the derived factors represents a bundle of features pertaining to a user's perceptions. Factors 1, 2, 3, and 4 were subsequently labeled according to consumers' perceptions of the importance for bundled features and those features' obvious utilities: 1) E-Communications, 2) Safety, 3) Game Value, and 4) Free Minutes. To ascertain if there were any significant differences in students' perceptions among the demographic variables (grade level, declared major, age and gender) data were further analyzed using traditional multivariate statistical methods to test the null hypotheses.

Table 5: Principal Component Factor Analysis of Cellular Phone Features*

	Component Loadings (Cellular Features)			
Features	Factor 1: E-Communication	Factor 2: Safety	Factor 3: Game Value	Factor 4: Free Minutes
Email importance	.847	.055	-.017	-.073
Intercom importance	.799	.223	-.013	-.095
Digital camera importance	.709	.134	.125	.100
Instant messaging importance	.667	.062	-.075	.173

Table 5: Principal Component Factor Analysis of Cellular Phone Features*				
	Component Loadings (Cellular Features)			
Features	Factor 1: E-Communication	Factor 2: Safety	Factor 3: Game Value	Factor 4: Free Minutes
Hands free importance	.072	.879	-.061	.031
Ear piece importance	.157	.852	-.008	-.113
Internet importance	.457	.519	.204	.097
Warranty importance	.144	.228	-.770	.256
Game importance	.192	.281	.646	.276
Free minutes importance	.038	-.059	-.026	.921
*Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization; a Rotation converged in 5 iterations.				

RESULTS

Stepwise multiple-regression analyses of demographic variables on all four factors (as criterion/dependent variable one at a time) were run, since cumulatively they account for 67 percent of the variance explained: 1) brand, 2) campus, 3) major, 4) grade level, 5) gender, 6) monthly billing, 7) age, and 8) minutes used per month were used (dummy codes were necessary) as predictor/independent variables on tests. In addition, predictor variables were checked for multicollinearity; in SPSS 15.0 a Collinearity Diagnostic was run on the data and no independent variable had a condition index above 6.0 and no two pre-existing cell phone features shared variance proportions above .50. A condition index of 15 indicates possible collinearity problems and an index over 30 suggests serious collinearity problems (Belsley, Kuh, and Welsch, 1980). Therefore, multicollinearity was not a problem for the data in this study in any of the four regression models because no condition index exceeded 15. The sample size of 351 for this study was considered to be adequate (Knofczynski and Mundfrom, 2008).

Table 6a: Stepwise Multiple-regression Models – Factors 1, 2, 3, & 4*						
Samples: N=283	Stepwise Multiple-regression on Demographics					
Demographic Variables	Adjusted R^2	R Square Change	Sig. F Change	t statistics	Beta	Sig.
F1: E-Communication						
Rural/HBCU	.140	.143	.000***	5.577	.327	.000***
Gender	.174	.031	.001**	-3.457	-.185	.001**
Billing	.198	.024	.004**	2.829	.166	.005**
Grade Level	.199	.012	.041*	-2.051	-.110	.041*

Table 6a: Stepwise Multiple-regression Models – Factors 1, 2, 3, & 4*						
Samples: N=283	Stepwise Multiple-regression on Demographics					
Demographic Variables	Adjusted R^2	R Square Change	Sig. F Change	t statistics	Beta	Sig.
F2: Safety						
Rural/HBCU	.090	.094	.000***	5.336	.302	.000***
Gender	.100	.013	.044*	2.024	.114	.044*
F3: Game Value						
Brand	.015	.018	.022*	2.299	.136	.022*
* Denotes p<.05; **denotes p< .01; and ***denotes p<.001; Factor 4 was non-significant.						

Therefore, Hypothesis 1 was rejected for factor 1; the school, gender, billing, and grade level variables were predictive of young consumers' perceptions of the importance of E-Communications cellular telephone features. Results are shown in Table 6a. Hypothesis 1 could not be rejected for factor 4 because none of the eight demographic variables were predictive of that factor. The results will be discussed later.

On the survey instrument, students were asked to indicate if a feature were available on the cellular telephone they owned (0= No, I do not own this feature and 1 = Yes, I do own this feature). Thus, a dummy code pre-existed in the data allowing ten variables to be tested in a regression model against all four bundled phone features (E-Communication, Safety, Game Value, and Free Minutes). Those pre-existing features were: 1) game, 2) free minutes, 3) instant messaging, 4) warranty, 5) hands-free device, 6) earpiece, 7) internet access, 8) intercom, 9) digital camera, 10) email access.

Table 6b: Stepwise Multiple-regression Models – on Four Factors on Ten Features*						
Samples: N=290	Stepwise Multiple-regression on Cell Phone Features					
Demographic Variables	Adjusted R^2	R. Square Change	Sig. F Change	t statistics	Beta	Sig.
F1: E-Communication						
Email	.187	.190	.001**	3.279	.215	.001**
Digital Camera	.253	.068	.000***	4.894	.275	.000***
Internet	.262	.012	.033*	2.035	.121	.043*
Instant Messaging	.270	.010	.045*	2.013	.110	.045*
F2: Safety						
Earpiece	.168	.171	.000***	4.593	.281	.000***
Hands Free	.205	.040	.000**	2.772	.182	.006**
Intercom	.223	.013	.032*	2.156	.127	.032*
F3: Game Value						
Warranty	.079	.082	.000***	-4.949	-.279	.000***
Game	.102	.027	.004**	2.923	.163	.004**

Table 6b: Stepwise Multiple-regression Models – on Four Factors on Ten Features*						
Samples: N=290	Stepwise Multiple-regression on Cell Phone Features					
Demographic Variables	Adjusted R^2	R. Square Change	Sig. F Change	t statistics	Beta	Sig.
F4: Free Minutes						
Free Minutes	.102	.105	.000***	5.810	.324	.000***
* Denotes p<.05; **denotes p< .01; and ***denotes p<.001.						

A stepwise regression analysis on factors 1, 2, 3, and 4 (as criterion/dependent variable one at a time) was run since cumulatively the four factors account for 67 percent of the variance explained. The ten pre-existing phone features were used as predictor/independent variables in these tests. The stepwise regression revealed owning a phone with an available feature was significantly predictive of students' perceptions of the importance of that feature. Thus, we reject hypothesis 2.

At least one of the ten dummy coded pre-existing phone features was predictive of at least one of the four factors (E-Communication, Safety, Game Value, and Free Minutes) in the stepwise regression models. Stepwise regression results (R Square Change and Significant F Change) can be seen in Table 6b. It is obvious that owning a feature is significantly predictive of the perceived importance of that same feature. In addition, cell phone owners reporting the game feature were: Others 98, AT&T 6, Motorola 79, Nokia 46, and Panasonic 2; cell phone owners reporting owning a warranty were: Others 127, AT&T 3, Motorola 95, Nokia 47, and Panasonic 1. It is no wonder the rural young consumer favored the Motorola brand.

Although multiple-regression analysis is a very useful tool in helping researchers determine the predictive nature of variables (Darlington, 1968), a need still existed to determine the significant difference between and among means for groups being compared. Therefore, One-Way ANOVA tests were run on the four derived factors and each of the independent variables consumers reported in the survey. Results are presented in Table 7.

Hypothesis 3 was rejected because there were statistically significant differences among the means of young consumers' demographic variables (rural vis-à-vis HBCU, gender, and age) and their perceptions of the importance of bundled phone features. Hypothesis 3 could not be rejected for major, class rank, and cell phone brand ownership.

Hypothesis 3 was tested using One-Way ANOVA, and a significant difference between means for rural and HBCU consumers and their perceptions of the importance of phone features was revealed; therefore, we rejected null hypothesis 3. A significant difference was found to exist between the means of rural and HBCU with a p=.000. The mean for rural and HBCU consumers on factor 1 (E-Com) was -.34 and .36 respectively. Rural consumers cared less about email, internet, and digital cameras on their phones than did HBCU consumers. A significant difference was found to exist between the means of rural and HBCU with a p=.000 on factor 2 (Safety). The mean for rural on factor 2 was -.29 and .31 respectively. Rural consumers and HBCU consumers had an inverse perception of the importance of safety features and rural users seem less concerned about hands free, earpiece, as cell phone features. This difference between groups could be due to availability and variety of phones, number of tickets received for speeding, etc.

Table 7: One-Way ANOVA Tests for Independent Variables on Four Factors					
Source	Sum of Squares	df	Mean Square	F	Sig.
Rural/HBCU Factor 1 **E-Communication**	Between 37.398 Within 267.602 Total 305.000	1 304 305	37.398 .880	42.485	.000***
Rural/HBCU Factor 2 **Safety**	Between 27.453 Within 277.547 Total 305.000	1 304 305	27.453 .913	30.069	.000***
Gender Factor 1 **E-Communication**	Between 7.739 Within 294.341 Total 302.080	1 297 298	7.739 .991	7.809	.006**
Gender Factor 2 **Safety**	Between 5.192 Within 295,501 Total 300.692	1 297 298	5.192 .995	5.218	.023*
Age Factor 1 **E-Communication**	Between 11.553 Within 287.969 Total 299.522	3 297 300	3.851 .970	3.972	.008**
* Denotes p<.05; **denotes p< .01; and ***denotes p<.001					

Male and female consumers differed significantly (p= .006 and .023 respectively) on factor 1 (E-Communication) and factor 2 (safety) with factor means of .15 and -.17 and -.14 ad .13 respectively. Males and females had inverse perceptions of the importance of E-Communications and safety features. Women had a higher perception of the importance of cell phones with email, internet, and digital camera features than men. However, on safety women had a lower perception of cell phones with earpiece and hands free than men.

Among the means for age groups, a significant difference of .008 exists on factors 1. On E-Communications, a Tukey's post-hoc test revealed 20 and 21 year-olds differed with 26 year-olds on Safety with means of .15, -.02 and -.64 respectively. Twenty-six year-olds had lower perception of the importance of E-Communications (Factor 1); perhaps they have less time to engage in phone activities requiring such features.

DISCUSSION

Cellular telephone features were analyzed using the traditional multivariate techniques with a significance level of .05. The selected telephone features pre-existing on phones young consumers owned were examined regarding their ability to be used as predictors of perceptions of the importance of these types of features. Student phones and how the students evaluated the feature in terms of importance of features was measured with a Likert-type scale (0= not important to 3=very important).

It was revealed that location was a significant factor in choosing the brand of cell-phone. Rural students tended to choose the “Motorola” brand as compared to the HBCU students. Data were not available to discern weather this was a result of “availability” or “preference”.

The analysis of the data revealed an opportunity to “bundle” cell-phone features as marketing strategy to differentiate product in the marketplace. The bundle identified and their components were:

Table 8: Bundle Components

E-COM	
	E-mail Capability
	Internet Capability
	Digital Camera
	Instant Messaging Capacity
SAFETY	
	Hands Free Operation
	Earpiece
	Intercom Capacity
GAME VALUE	
	Game Capability
	Warranty Availability
FREE MINUTES	
	Free Minutes

CONCLUSION AND RECOMMENDATIONS

The market for cellular telephones is saturated; nearly nine of ten university students reported cellular telephone ownership. As cellular telephone providers compete in the market place, it is logical they will attempt to differentiate their products based on "product features." This study focused on university students at rural and HBCU universities.

Mass customization strategies that are consumer centered are vital since users of customized mobile phone services perceive both "give" and "get" customer value dimensions. As mass customization does not come free, to persuade customers to get involved and invest time and effort in value chain operations for designing customized services, companies need to identify and provide enhanced customer values (Sigala, 2006). This study was directed toward cellular telephone users to identify and isolate their cellular telephone ownership, use and evaluation of selected cellular telephone features. The study revealed many segmentation factors on which the cellular telephone market might be segregated to better serve the saturated market. A summary of the findings that may help in identifying combinations of segmentation factors is presented in table 9.

Table 9: Strategic Basis for Market Segmentation	
1.	HBCU students evaluated the E-COM bundle higher than did RURAL students
2.	HBCU students evaluated the SAFETY bundle higher than did RURAL students
3.	FEMALE students evaluated the E-COM bundle higher did MALE students
4.	MALE students evaluated the SAFETY bundle higher than did FEMALE students
5.	The students aged 20/21 evaluated the E-COM bundle higher than did OLDER students

These findings will allow marketers of cellular telephones to review their marketing strategy as related to the method and basis for market segmentation they use. There is opportunity to segment based on gender in marketing cellular telephone features since males tended to evaluate telephone features higher than females.

Segmentation based on age should be fruitful. Targeting younger buyers by emphasizing the importance of cellular telephone features, especially those relating to the E-Commerce bundles should be successful. It was also noted that there was a significant difference in the attitudes and needs of the "rural vs. HBCU" students. The rural students placed a lower value on features such as e-mail, internet and digital cameras. This may be a result of the availability of "wide band" in rural areas or it may be differences in communication and social needs. There may be an opportunity to combine bundles to further segment the market for rural to HBCU. Younger females may be a target for E-Commerce bundle.

A major finding of this study was the students who had specific features on their cellular telephones tended to rate that features higher than those who did not have the feature. A marketing implication of this finding is marketers should design programs that allow buyers to experience each product feature for a short time as a "trial" with the expectation that the buyer would evaluate the feature higher after the "trial" and would be more likely to purchase. Since the earpiece was a predictor of the "safety" factor there appear to be many opportunities to market cellular telephones with the safety feature and differentiate their offering based on the safety feature. Marketers could differentiate the feature based on ease of use, appearance, size etc. to gain a differential advantage.

The domestic market for cellular telephones is generally considered to be approaching saturation which means competitors in the market can no longer expect growth by marketing to non-users. The normal response to marketing in saturated markets is to add value to the product by "line extension", i.e., adding new features to the existing product or "product development", replacing the old product with one which includes these new features. Either approach requires an appreciation of the value placed on each feature by consumers. Of course the cellular telephone market is in constant change similar to other electronic products, thus, marketers should constantly review buyers' attitudes, opinions and values regarding changing cellular telephone features.

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DOES A MARKET ORIENTATION STRATEGY EXIST TOWARD BUSINESS SCHOOL STUDENTS? A VIEW FROM THREE LEVELS OF ACADEMIC ADMINISTRATORS

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ABSTRACT

A market orientation strategy is a strategy based upon the acceptance and adoption of the marketing concept. The market-oriented organization continually monitors customer information, competitor information, and marketplace information to design and provide superior value to its customers. Theory and empirical research suggest that higher levels of market orientation result in a greater ability of the organization to reach its objectives. This paper extends the current research on the use of the market orientation strategy in higher education by reporting and analyzing market orientation levels from three separate administrative levels with responsibilities associated with business schools. Comparisons of the various scores are made against a benchmark established for commercial businesses and then compared by administrative group against one another. University Academic Vice-Presidents, Business School Deans, and Marketing Department Chairs were surveyed by way of a national mail survey. All administrators were from colleges or universities holding membership in AACSB-International. 102 Vice-Presidents, 141 Business School Deans, and 94 Marketing Department Chairs responded. The paper presents details of the research process, findings, statistical inferences, and discusses the implications of the research for schools of business and academic marketing departments.

INTRODUCTION AND DEFINITIONS

Successful organizations seek to attain and maintain high levels of performance; but can a particular organizational strategy or culture lead to improved organizational performance? If so, can such a strategy or culture be described and then be measured quantitatively? And, if measurements can be made will comparisons in measurements between organizations be advantageous in helping organizations improve their performance?

This paper investigates these questions, measures a specific component of organizational strategy and compares three managerial levels of educational organizations. The organizational strategy measured is market orientation. The quantitative measurement is accomplished by way of a scaled instrument used in a national survey. The comparisons described in this research include benchmarked levels between commercial businesses (for profit entities) and various organizational levels of schools of business administration (non-profit entities).

In marketing literature, numerous similar sounding terms are often encountered. These terms are not synonymous and should not be used interchangeably. To help differentiate and explain terms, the following three descriptions and definitions are provided:

> *The marketing concept is a philosophy that advocates that a successful organization begins with identifying customer needs and wants, decides which needs to meet, and involves all employees in the process of satisfying customers.*
>
> *Marketing orientation implies that the marketing function is the most important function within the organization and that all other functional areas are driven by the demands of the marketing department.*
>
> *Market orientation refers to an organizational culture in which everyone in the organization is committed to the customer and adapts in a timely manner to meeting the changing needs of the customer. Market orientation blends a company culture dedicated to providing superior value with successfully achieving a customer focus, acquiring competitor intelligence, and maintaining interfunctional coordination. It is viewed as the implementation of the marketing concept.*

DISCUSSION AND LITERATURE REVIEW

The *Baldrige Education Criteria for Performance Excellence*, developed by the Baldrige National Quality Program (BNQP 2005), rest on the assumption that universities can take steps to achieve “performance excellence”. The document specifies certain marketing-related activities, and emphasizes the need to identify and plan strategies with respect to various segments of students, stakeholders and other markets. The Baldrige criteria are designed to be used for self-assessment, awarding Baldrige prizes, and providing feedback to educational institutions applying for them, but have other important purposes as well. They can be used by any university business school, for example, regardless of whether or not it is an award applicant, to “improve organizational performance practices, capabilities, and results,” to “facilitate . . . sharing of best practices,” and to assist in “understanding and managing performance . . . guiding organizational planning and opportunities for learning” (BNQP 2005).

Excellence of performance in higher education is self-evidently important. In the business discipline, it is assessed and assured by the qualification standards of the bodies awarding formal accreditation to business schools (Karathanos and Karathanos 1996). In the U.S.A., these are mainly AACSB International (the Association to Advance Collegiate Schools of Business, known until 1997 as the American Assembly of Collegiate Schools of Business) and ACBSP (the Association of Collegiate Business Schools and Programs), address performance evaluation and improvement. Performance is ranked more informally in the U.S.A. by the annual guide published by *U.S. News and World Report* and by the *Peterson's* web-based educational information resource, both directed at prospective students, their parents and their advisers.

The scope of marketing was successfully broadened decades ago to include universities and other non-business organizations (Kotler and Levy 1969a, 1969b). Many other marketing academics have since discussed and demonstrated the benefits of applying marketing to services in general (Lovelock 1983; Swenson 1998) and higher education in particular (Hayes 1989; Miller *et al*. 1990). University business school administrations and other stakeholders should be interested in strategic marketing applications and any other actions that could have a significant impact upon performance levels. Nevertheless, the 'senior leaders' invoked in the Baldrige criteria may in principle accept the importance of quality, performance and continuous improvement, yet in practice resist the notion that academic institutions could or should consider students as customers.

The study reported here, part of a stream of continuing research, and is a further effort to encourage the application of strategic marketing theory and practice within higher education. We know, from previous empirical research (Hammond *et al.* 2006) that the behaviours and actions indicative of a high level of market orientation generally lead to higher levels of performance within university business schools. The research further indicates that emphasis by higher education leaders can positively impact market orientation levels. We also know that market orientation levels reported for private business schools are generally higher than those reported for public business schools (Webster *et al.* 2005).

The marketing concept advocates that all activities of a firm should be directed toward satisfying the customer. The market orientation construct has been developed, defined and measured to operationalize the implementation of the marketing concept. Narver & Slater (1990) and Kohli & Jaworski (1993) concluded that market orientation is the type of business culture and climate that can be created within an organization that will most effectively lead to the behaviors and actions necessary to achieve a sustainable competitive advantage. The degree that the marketing concept has been implemented is manifested in the behaviors and actions of the organization. This degree is the level of market orientation. Or simply, the methods and strategies utilized by a firm to succeed.

Narver and Slater (1990) describe a firm that is market oriented as one whose culture is systematically and entirely committed to the continuous creation of superior value for its customers. Others characterize a market orientation culture as one in which a business focuses on customer wants and needs, continuously analyzes its competition, and coordinates all organizational activities toward customer satisfaction (Kotler 1980; Narver *et al.* 1992; Slater & Narver 1994; Siguaw *et al.*

1994). Theory suggests and empirical research has found that greater levels of market orientation within a business result in a greater ability of the organization to achieve its objectives (Barksdale & Darden 1971; Houston 1986; Kohli & Jaworski 1990; Narver & Slater 1990; Jaworski & Kohli 1993; Siguaw *et al.* 1994). Research to date however has only recently begun to address market orientation measurements in non-profit organizations such as universities (Webster *et al*. 2005; Hammond *et al.* 2006).

A high degree of market orientation indicates that individuals in the organization are committed to customer satisfaction and remain so over time by recognizing changes in customer needs and wants, and reacting and adapting in a satisfactory manner to those changes. The process is dynamic and subject to forces external to the organization such as its competitors and the general state of the economy, and it is a process that should be viewed on a continuum. In other words, it is not a culture that a business either has or does not have, but is rather a matter of degree. Slater & Narver (1994) note that market conditions and competitive threats are never static; and, a high degree of market orientation is not achieved overnight but rather over time given adequate commitment from the firm's management and time for a supportive culture to develop.

For decades the philosophy expressed by managers was a belief in the practical importance of a successful marketing function as an effective way to help the organization to achieve its objectives (Felton 1959; Levitt 1969; McNamara 1972). More recently, researchers have found that greater levels of market orientation result in a greater organizational ability to achieve its objectives (Houston 1986; Narver & Slater 1990; Jaworski & Kohli 1993; Kohli & Jaworski 1993; Siguaw *et al.* 1994). The measurement of market orientation in the business organization was pioneered by Narver & Slater (1990). Drawing from theoretical research, they operationalized the market orientation construct as consisting of three separate and equally important components: (1) customer orientation, (2) competitor orientation, and (3) interfunctional coordination. Narver & Slater (1990) reported market orientation scores for three separate types of businesses: commodity, specialty, and distribution. The commodity and distribution businesses produced and sold generic products designed for a wide range of customers. The specialty business firms produced and sold products that were individualized (relative to the commodity products) for specific customer orders. By adapting its generic or base product, the specialty products firm creates superior value and thereby provides more benefit to the customer. They created multiple item scales for the measurement of each of the components. The scales included antecedent variables, moderator variables, and consequence variables, e.g., performance. Finally, the scale measured overall market orientation by averaging the three components or dimensions of the measurement scale.

To date, empirical research on the market orientation culture has been primarily focused on the business enterprise with less emphasis on potential applications in non-profit organizations. Non-profit organizations such as churches, civic organizations, universities, and hospitals focus on customers or clientele wants and needs just as the business concern does. Given that successful businesses report higher levels of market orientation, we might expect a similar situation to be present in non-profit organizations as well. From a large group of potential non-profit organizations, we chose certain Schools of Business Administration to research because of their seeming similarities to business enterprises. Specifically, a school of business has a number of constituencies to serve, it must determine wants and needs of its clientele, it operates to provide value to its constituencies, it is influenced by external factors, and it is an organization with many interfunctional areas and departments. Although a school of business administration does not exist to create profit or shareholder wealth, it does seek to achieve organizational goals such as surviving as an organization, increasing its professional reputation, improving its facilities and faculty, and growing its enrollment and endowment. Additionally, business schools teach the principles, methods, and techniques used by businesses in their pursuit of success and business school deans and faculty often have a business background. These factors tend to suggest that business school leaders (academic vice-presidents, deans and department chairs) and business leaders (managers) may possess similar managerial mindsets, values, and temperaments as well as implementing somewhat similar leadership styles, methods and techniques.

Recalling that the philosophy of providing superior value to customers (relative to competitors) is the marketing concept, this philosophy should be applicable to universities as they too have customers, competitors, external influences, and seek to accomplish organizational goals. Although the primary objective for the business enterprise is profitability, Slater & Narver (1994) argue that in the non-profit organization, survival is analogous to profit in a business enterprise. Specifically, to satisfy constituencies in the long run requires that revenues must be adequate to cover long-run expenses and therefore survive. Like the business enterprise, the non-profit entity has organizational objectives that is seeks to achieve.

As in the profit-seeking business, quality, performance, and continuous improvement are objectives of schools of business administration both in the short-term and the long-term. Progress in achieving such objectives is part of the evaluative process addressed by the Baldrige Education Pilot Criteria (Karathanos & Karathanos 1996) and the AACSB--International Standards. Also, *U.S. News and World Report* and *Peterson's College Guide* as well as other publications issue annual college guides that provide various measures of performance to assist students and parents in the college selection process. Consequently, the leaders of schools of business administration should be interested in an organizational culture that could positively impact the quality and performance of their schools. This research, which is part of a continuing stream of research focused on marketing theory and practice found in higher education, collects, analyzes and reports on the market orientation culture within schools of business administration that are members of AACSB-International.

Academic Vice-Presidents, Business School Deans, and Marketing Department chairs whose school hold membership in AACSB-International were selected for study because the accrediting organization holds to a commitment of continuous improvement in business education. Schools that are accredited by AACSB-International have undergone a series of reviews over time, have demonstrated success at achieving organizational goals, and therefore may exhibit an organizational culture with a bent toward market orientation, much like that of successful businesses.

RESEARCH QUESTIONS AND HYPOTHESIS

Although there are numerous customers or stakeholders that could be addressed in the university setting, we limited our examination to marketing majors and other business students. The objectives of the study were to answer the following research questions:

What are the mean levels of market orientation toward students (a customer group) of schools of business administration as reported by academic vice-presidents?

What are the mean levels of market orientation toward students (a customer group) of schools of business administration as reported by business school deans?

What are the mean levels of market orientation toward students (a customer group) of schools of business administration as reported by marketing department chairs?

How do the reported mean levels of market orientation of the academic vice-presidents, deans, and marketing chairs compare to the levels reported by business managers from previous research conducted on businesses in the private sector?

How to the mean levels of market orientation reported by the academic vice-presidents, deans, and marketing department chairs compare to each other as groups?

To answer research question one, the reported market orientation mean scores of the academic vice-presidents were collected and calculated from the survey responses for the four dimensions of market orientation (customer orientation, competitor orientation, internal coordination, and overall market orientation).

To answer research question two, the reported market orientation mean scores of the business school deans were collected and calculated from the survey responses for the four dimensions of market orientation (customer orientation, competitor orientation, internal coordination, and overall market orientation).

To answer research question three, the reported market orientation mean scores of the marketing department chairs were collected and calculated from the survey responses for the four dimensions of market orientation (customer orientation, competitor orientation, internal coordination, and overall market orientation).

To answer research question four, the mean market orientation scores of the academic vice-presidents, business school deans, and marketing department chairs were compared to the mean market orientation scores of specialty business managers as reported by Narver and Slater (1990). The general hypothesis was than there was no difference between the market orientation scores of the business mangers and the academic vice-presidents, deans and department chairs. This general hypothesis was tested by way of a series of t-tests that compared mean scores of the academic vice-presidents, deans, and marketing department chairs to those of the business managers. For each comparison, t-tests were conducted separately on the four components of market orientation.

To answer research question five, the mean market orientation scores of the academic vice-presidents, deans, and marketing department chairs were compared to each other using a series of t-tests to identify differences in mean scores between the various groups of administrators for each of the four dimensions of market orientation. Again, the general hypothesis was that there would be no statistical difference between the mean scores of the administrators.

METHODOLOGY

A cover letter, survey instrument, and business reply envelope were mailed separately to the academic vice-presidents, business school deans, and to the marketing chairs of schools of business holding membership in AACSB-International. After a follow-up letter, 102 useable responses were received from the academic vice-presidents, 141 responses from the deans and 94 responses from the marketing department chairs. As key informants, (Campbell 1995; Phillips 1981), the vice-presidents, deans, and department chairs were asked to complete the survey and return it in the business reply envelope.

The questions to measure the three subscales (competitor orientation, customer orientation, and organizational coordination) in the Narver and Slater original scale were modified somewhat to conform to the vocabulary and the types of stakeholders prevalent in academic institutions. For example, two of Narver and Slater's questions were:

Our objectives are driven by satisfaction of our customers.
We measure satisfaction of our customers systematically and frequently.

The questions were amended for the current research and were worded as follows:

Our objectives are driven by satisfaction of our students.
We measure satisfaction of our students systematically and frequently.

Churchill (1979) suggests that the appropriateness of scales borrowed from other studies needs to be addressed before survey research is accomplished. Therefore, all our scale items were pre-tested before mailed. We consulted with several academic vice-presidents, deans, and marketing department chairs. These consultations resulted in a research instrument and cover letter that more clearly defined the purposes of the research and the rewording of several questionnaire items.

Fifteen (15) questions were used in the collection of the data. Each of the questions were to be answered using a seven (7) point scale that was anchored with “not at all” (1) and “to an extreme extent” (7) so that the higher numbers represented a higher (or greater) perceived level of market orientation. The complete 15 question survey is shown in the appendix to the paper.

The scales were subjected to reliability analysis, exploratory factor analysis and confirmatory factor analysis prior to use (Wheaton, Muthen, Alwin, & Summers 1997; Bentler & Bonett 1980; Marsh & Hocevar 1985; Bentler 1990; Browne & Mels 1992; and Browne & Cudeck 1993). Results of these analyses indicated satisfactory reliabilities (ranges from .73 to .91), satisfactory item-to-total correlations (ranges from 0.3 to 0.8), exploratory factor loadings ranging from 0.33 to 0.89, and confirmatory factor loading ranging from 0.36 to 0.82. Additionally, the confirmatory factor analysis demonstrated generally acceptable fit. These test results included comparative fit index measures ranging from .784 to 1.000, a Tucker-Lewis index ranging from .702 to 1.000, and the CMIN/DF ranging from 2.05 to 2.56. The RMSEA low values at the 90% confidence interval fell below 0.10 for all scales.

Although the literature indicates (Berdie 1989) that the presence of nonresponse bias in mail surveys does not necessarily alter the survey findings, we nonetheless proceeded to test for nonresponse bias. We used Larson and Catton's (1959) proxy methodology wherein potential nonresponse bias between early and late respondents is examined. These tests indicated no statistically significant difference between the early and late responders.

Then, following the methodology of Narver and Slater, we combined the three subscales to form an overall, or composite, measure of market orientation. We then conducted separate t-tests for each of the four dimensions of market orientation to determine if a statistically significant difference existed between the various market orientation mean scores of the academic vice-presidents, deans, marketing department chairs, and the business managers.

In their 1990 research, Narver and Slater reported market orientation scores for three separate types of businesses: commodity, specialty, and distribution. We believe schools of business demonstrate more of the characteristics of specialty businesses than the characteristics of the commodity or distribution businesses. The commodity and distribution businesses in the Narver and Slater study produced and sold generic products designed for a wide range of customers. The specialty business firms produced and sold products that were individualized (relative to the commodity products) for specific customer orders. By adapting its generic or base product, the specialty products firm creates superior value and thereby provides more benefit to the customer. This type of firm is challenged to constantly monitor the competitive environment and to be vigilant for changes in the customer's requirements. Likewise AACSB-International schools of business seek to provide a product that is individualized through its programs of study or majors. The

AACSB-International schools would argue that a superior product (relative to non-member schools) is provided that would benefit its customers (or constituencies). We therefore used the market orientation scores for specialty business as reported by Narver and Slater (1990) for our comparisons.

RESULTS

Table 1 shows there are significant statistical differences in levels of market orientation between the business managers and the business school officials (the academic vice-presidents, deans, and marketing department chairs). The business managers reported market orientation mean scores that were higher in absolute terms than all of the school administrators in each of the four dimensions of market orientation. Of the scores, statistically significant differences at the 0.01 level were found between the business managers and the school administrators in 11 of the 12 comparisons. The only statistically insignificant difference between the business managers and the school administrators was in the dimension of interfunctional coordination between the business managers and the academic vice-presidents. Hence we know that there are indeed differences between business managers and business school administrators in the levels of market orientation.

Table 1: Means and t-test Results for Marketing Department Chairs, Business School Deans and Academic Vice Presidents versus Specialty Business Managers

Market Orientation Measurements (7 point scale)				
Market Orientation Construct:	Business	Academic		
	Managers	Marketing Chairs	Deans	VPs
	n=75	n=94	n=141	n=102
	M	M	M	M
Customer Orientation	5.05	4.75*	4.55*	4.77*
Competitor Orientation	4.71	3.46*	3.71*	4.17*
Interfunctional Coordination	4.53	3.98*	4.13*	4.44^
Overall Market Orientation	4.77	4.06*	4.13*	4.46*
*significant at .01 compared to Business Managers				
^ not statistically significant compared to Business Managers				

Table two shows there are significant statistical differences in levels of market orientation between the academic vice-presidents and the business school deans. The market orientation scores for each of the four dimensions of measurement are statistically higher for the vice-presidents that for the deans (at least at the 0.10 level).

Table 2: Means and t-test Results for Academic VPs and Business School Deans				
Customer Group: Students				
Market Orientation Measurements (7 point scale)				
Market Orientation Construct:	Academic VPs	Business Deans	t-value	Significance
	M	M		
Customer Orientation	4.77	4.55	1.56	<.10
Competitor Orientation	4.17	3.71	3.25	<.01
Interfunctional Coordination	4.44	4.13	2.30	<.05
Overall Market Orientation	4.46	4.13	2.33	<.05

Table three reports the market orientation scores toward students of the academic vice-presidents and business school marketing department chairs. Additionally, the table shows t-test results for differences in the mean scores between the two groups of administrators. In these comparisons, vice-presidents were found to have higher scores in all four dimensions and statistically different market orientation scores in three of the four components of market orientation.

Table 3: Means and t-test Results for Academic VPs and Marketing Departments Chairs				
Customer Group: Students				
Market Orientation Measurements (7 point scale)				
Market Orientation Construct:	Academic VPs	Marketing Chairs	t-value	Significance
	M	M		
Customer Orientation	4.77	4.75	0.14	ns
Competitor Orientation	4.17	3.46	4.98	<.01
Interfunctional Coordination	4.44	3.98	3.23	<.01
Overall Market Orientation	4.46	4.06	2.81	<.01

Table four reports the market orientation scores toward students of the business school deans and the marketing department chairs. The table shows that the mean scores are higher for deans than marketing department chairs in three of the four dimensions of market orientation. However, in only two of the four dimensions were the mean scores found to be of statistical significance.

Table 4: Means and t-test Results for Business School Deans and Marketing Departments Chairs				
Customer Group: Students				
Market Orientation Measurements (7 point scale)				
Market Orientation Construct	Business Deans	Marketing Chairs	t-value	Significance
		M	M	
Customer Orientation	4.55	4.75	1.43	<.10
Competitor Orientation	3.71	3.46	1.79	<.05
Interfunctional Coordination	4.13	3.98	1.08	ns
Overall Market Orientation	4.13	4.06	0.50	ns

A synopsis of the tables show that business managers report higher levels of market orientation toward customers than the educational leaders report toward students. This may be an indication that higher education administrators either do not view students as customers, or that the implementation of the market concept has not been embraced within business school administration, or both. It is particularly interesting to note that the higher up the administrator is within the higher education hierarchy, the higher the levels of reported market orientation toward students. This certainly indicates that the implementation or the perceived level of importance of the marketing concept differs across the various levels of higher education administration. For a strategy to be successful, the marketing theory suggests that a strategy must be implemented at all levels of the organization. This seems to be lacking in the case of business school administration.

IMPLICATIONS

These findings demonstrate that businesses perceive a greater importance and have made greater progress in the implementation of the marketing concept vis-à-vis university schools of business as perceived by their academic vice-presidents, deans, and marketing department chairs. If, as previous research has found, organizations can improve their effectiveness by increasing levels of market orientation, university schools of business would seem to have ample opportunity to improve.

As the higher education administrators reported lower levels of market orientation in their organization than did their business counterparts, a significant opportunity would seem to exist for schools that will put more effort into their market orientation. As students of the university may be viewed as the most visible of the numerous markets served, market orientation efforts focused at students would seem to have the potential for the fastest and highest payoff. Examples of such payoffs might include:

An increase in enrollment within the business school
An increase in the hit rate (increase in percent of applicants that actually enroll)
An increase in the number of marketing majors and other business majors
An increase in the retention rate of marketing and other current business majors
An increase in future giving by alumni
An improvement in rankings by outside organizations

In view of Narver and Slater (1990) and Kohli and Jaworski (1993) findings that enhanced levels of market orientation will improve the competitive advantage of organizations, business schools appear to be organizations ripe to take advantage of the market orientation concept. Focus on creating market orientation culture should serve both schools and their various stakeholders in more effectively achieving the school mission.

Our conclusions are tempered by the finding of Noble, Sinha, & Kumar (2002) that there appears to be no single strategic orientation that leads to superior performance in every case and as previously stated, building a market orientation culture within an organization is not a quick fix but rather a continuous process.

FUTURE RESEARCH

The research we report suggests several needs for additional research. For example, research should be undertaken to investigate if higher levels of market orientation toward students actually, rather than theoretically as reported here, leads to or is at least correlated with higher levels of organizational performance. Also, research should be undertaken to examine the impact or influence that variables such as size of a school, school affiliation (AACSB, ACBSP, or neither), admission standards, placement efforts, or recruiting efforts have on market orientation. Additionally, research on other stakeholders associated with schools of business would be useful. Such research would further our understanding of the market orientation construct and its application to higher education. Finally, we believe research in organizational culture including that of market orientation should be conducted in other non-profit organizations. Of particular interest would be an expansion of this line of research into other areas of higher education, into governmental agencies that provide services to the public, and into the non-profit side of the healthcare industry.

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APPENDIX

Survey Questions Sent to Marketing Department Chairs, Business School Deans, and Academic Vice-Presidents of AACSB Schools of Business Administration

1. Our objectives are driven by satisfaction of our students.
2. We measure satisfaction of our students systematically and frequently.
3. Those responsible for recruiting students regularly share information within our business school/institution concerning competitor's strategies.
4. Our market strategies (such as recruiting and retention) are driven by our understanding of the possibilities for creating value for our students.
5. We respond rapidly to competitive actions that threaten us.
6. We constantly monitor our level of commitment and orientation to students.
7. University administration regularly discusses competitors' strengths and strategies.
8. All levels of administration understand how the entire institution can contribute to creating value for students.
9. We give close attention to service of students after enrollment.
10. Our strategy for competitive advantage is based on our understanding of our students needs.
11. We encourage other staff and faculty outside of recruiting/administration to meet with our prospective students and their parents.
12. All of our departments are responsive to and integrated in serving students.
13. Information on recruiting successes and failures are communicated across functions in the business school/institution.
14. We share information and coordinate resource use with other units in the institution.
15. We target potential students where we have, or can develop a competitive advantage.

Each question answered on a 7 point scale: 1=Not At All, 7=to An Extreme Extent. Questions 1, 2, 4, 6, 9, and 10 relate to the Customer Orientation construct/dimension, Questions 3, 5, 7, 11, and 15 relate to the Competitor Orientation, Questions 8, 12, 13, and 14 relate to Organizational Coordination. The Overall Marketing Orientation score is computed by averaging the mean scores of the other three sets of questions.

THE DETERMINANTS OF MOVIE RENTAL REVENUE EARNINGS

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ABSTRACT

This paper examines the determinants of movie rental revenue in the United States. The sample consists of 214 films released during 2006. Regression results indicate the primary determinants of video movie revenue are domestic box office, time to video, academy award nominations, sequels, children's movies, and domestic release exposure. Specific results include the observation that domestic box office revenue serves as a complement to movie rental revenue and time to video is inversely related to video revenue as motion picture companies take advantage of marketing economies of scale. Branding associated with an academy award nomination is worth over a million dollars in rental revenue and sequels are worth six million less than alternative releases. Children's movies are worth ten million dollars less in rental revenue than other releases, as parents appear to buy over renting children's movies. Critical acclaim, foreign box office performance, and budget are determinants that have a positive but statistically insignificant impact on movie rental revenue.

INTRODUCTION

The average budget of making a motion picture for release in the United States has risen to almost fifty million dollars per movie. This rising cost has resulted in motion picture studios seeking multiple sources of revenue including domestic box office, foreign box office, product placement, merchandising, video sales, and video rental revenue. A single movie can be the difference between millions of dollars of profits or losses for a studio in a given year (Simonoff & Sparrow, 2000). The purpose of this research is to analyze the motion picture industry with a focus on the determinants of video rental revenue. This manuscript is divided into four sections. First, a survey of the related literature is discussed. The second section provides the model specification. The third section puts forth an empirical evaluation of the determinants of video revenue for 214 films released during the year 2006. The final section offers concluding remarks.

SURVEY OF THE LITERATURE

The literature on the determinants of video rental revenue is in its infancy but expected to be highly correlated with the determinants of box office revenue. Many researchers have developed models that explore the potential determinants of motion picture box office performance. Litman (1983) was the first to develop a multiple regression model in an attempt to predict the financial success of films. The original independent variables in the landmark work include movie genre (science fiction, drama, action-adventure, comedy, and musical), Motion Picture Association of America rating (G, PG, R and X), superstar in the cast, production costs, release company (major or independent), Academy Awards (nominations and winning in a major category), and release date (Christmas, Memorial Day, summer). Litman's model provides evidence that the independent variables for production costs, critics' ratings, science fiction genre, major distributor, Christmas release, Academy Award nomination, and winning an Academy Award are all significant determinants of the success of a theatrical movie. Litman and Kohl (1989), Litman and Ahn (1998), and Terry, Butler, and De'Armond (2004) have replicated and expanded the initial work of Litman. None of the extensions of Litman's work has focused on video revenue financial performance.

One area of interest has been the role of the critic (Weiman, 1991). The majority of studies find that critics play a significant role on the success or failure of a film. Eliashberg and Shugan (1997) divide the critic into two roles, the influencer and the predictor. The influencer is a role where the critic will influence the box office results of a movie based on his or her review of the movie. Eliashberg and Shugan's results suggest that critics do have the ability to manipulate box office revenues based on their review of a movie. The predictor is a role where the critic, based on the review, predicts the success of a movie but the review will not necessarily have an impact on how well the movie performs at the box office. Eliashberg and Shugan show that the predictor role is possible but does not have the same level of statistical evidence as the influencer role.

King (2007) explores the theoretical power and weakness of critics on the box office performance of movies. The substantial market power of critics is derived from the following: (1) Film reviews are widely available in newspapers, magazines, and websites. The ubiquitous availability of critical reviews in advance of a movie release creates positive or negative energy in the critical opening weeks; (2) Film critics regard themselves as advisors to their readers. They are often as explicit in their recommendations as Consumer Reports is about other consumer purchases; (3) Film critics are likely to be considered objective. There are too many critics and too many films for serious critical bias to develop. Those who are skeptical about the influence of film critics point to the following counter arguments: (1) It is possible that the effects of aggressive marketing at the time of a film's release might dominate critical evaluations in determining opening attendance; (2) Critics may raise issues that do not concern most audiences. They are more likely to notice and comment on technical issues, like cinematographic technique, than the average member of the audience; (3) Critics may write for a readership that has different tastes from the average cinemagoer. The most obvious potential reason for this is demographic. Cinema audiences are younger than the general population and less likely to pay attention to print reviews. Critics might therefore, be expected to aim their reviews at the older demographic audience and give relatively negative reviews to certain film genres. The empirical results put forth by King (2007) are mixed with respect to the impact of critics on box office earnings for the U.S. box office in 2003. He finds zero correlation between critical ratings for films and gross box office earnings when all releases are considered because of the affinity critics have for foreign movies and documentaries relative to the general public. For movies released on more than 1,000 screens, critical ratings have a positive impact on gross earnings.

Reinstein and Snyder (2000) focus on the critics Siskel and Ebert and how their reviews impact box office success. The authors report that the correlation between good movie reviews and high demand might be false due to unknown quality measurements. In order to circumvent the proposed false correlation Reinstein and Snyder apply a “differences in differences” approach that yields a conclusion that positive reviews have a surprisingly large and positive impact on box office revenue. Reinstein and Snyder also report that their results show that the power to influence consumer demand does not necessarily lie in the entire critic population, but may lie in the hands of a few critics.

Wallace, Seigerman, and Holbrook (1993) employ a sample of 1,687 movies released from 1956 through 1988 to investigate the relationships between movies box office success and critic ratings. They find a poorly rated movie will actually lose money for every positive review it receives while a highly rated movie will continue to gain money for every positive review it receives. Wallace, Seigerman, and Holbrook (1993, p. 11) interpret these findings by saying that “it appears that a bad movie has something to gain by being as trashy as possible. … [For] a good movie, it apparently pays to strive for even greater excellence.” Ravid (1999) has also looked at movie reviews as a source of projecting higher revenues. He concludes that the more reviews a film receive, positive or negative, the higher revenues it will obtain.

Although much research has supported the critic as a positive indicator of box office success, others have shown that the critic plays a much less important role. Levene (1992) surveyed students at the University of Pennsylvania and concludes from her 208 useable surveys that positive critic reviews ranked tenth, behind plot, subject, and word-of-mouth on a list of factors that influence the decision to watch a film. Levene’s study reveals that theatre trailers and television advertising were the two most important determinants. Faber and O’Guinn (1984) conclude that film advertising, word-of-mouth and critics’ reviews are not important compared to the effect that movie previews and movie excerpts have on the movie going public. Wyatt and Badger (1984) find that negative or positive reviews have little effect on the interest of an individual to see a movie over a mixed review or seeing no review. Further research by Wyatt and Badger (1987) conclude that positive reviews and reviews that contain no evaluative adjectives, which they called non-reviews, are deemed more interesting than a review that was negative or mixed. More recently, Wyatt and

Badger (1990) report that reviews containing high information content about a movie raise more interest in a film than a positive review.

Research has shown a seasonal pattern in movie releases and box office performance. Litman (1983) reports that the most important time for a movie release is during the Christmas season. Sochay (1994) counters this with evidence that the summer months are the optimal time of year to release a motion picture. Sochay, referencing Litman (1983), explains his conflicting results are due to competition during the peak times. Sochay adds that the successful season will shift from the summer to Christmas in different years due to film distributors avoiding strong competition. Radas and Shugan (1998) developed a model that captures the seasonality of the motion picture industry and apply it to the release of thirty-one movies. The authors find that the length of a movie release on average is not longer during the peak season but peak season movies typically perform better at the box office. Einav (2001) investigates seasonality in underlying demand for movies and seasonal variation in the quality of movies. He finds that peak periods are in the summer months and the Christmas season because distributors think that is when the public wants to see movies and when the best movies are released. He comments that distributors could make more money by releasing "higher quality" movies during non-peak times because the movie quality will build the audience and there will be less competition than at peak times.

Film ratings passed down from the Motion Picture Association of America (MPAA) may also influence box office performance. Many film companies fight for a better rating, often re-shooting or re-editing scenes multiple times in order to get their preferred ratings, most often being PG or PG-13 because these ratings exclude virtually no one from seeing the movie. Sawhney and Eliashberg (1996) develop a model where the customer's decision-making process on whether to see a movie can be broken into a two-step approach, time-to-decide and time-to-act. The results of their study show that movies with an MPAA rating of restricted (rated R) perform worse at the box office than movies without a restricted rating. The analysis shows that restricted rated movies have a higher time-to-act but have longer time-to-decide periods than family movies. Terry, Butler, and De'Armond (2004) verify the negative impact of the restricted rating on box office performance, providing evidence of a penalty in excess of $10 million. Ravid (1999) provides evidence from a linear regression model that G and PG rated films have a positive impact on the financial success of a film. Litman (1983) on the other hand, finds that film ratings are not a significant predictor of financial success. Austin (1984) and Austin and Gordon (1987) look at film ratings in an attempt to find a correlation between ratings and movie attendance but find no significant relationship.

Anast (1967) was the first to look at how film genre relates to movie attendance. His results show that action-adventure films produce a negative correlation with film attendance while films containing violence and eroticism had a positive correlation. Litman (1983) shows that the only significant movie genre is science fiction. Sawnhey and Eliashberg (1996) use their two-step approach and find that the drama genre has a slower time-to-act parameter while action movies result in a faster time-to-decide than other movie genres. Neelamegham and Chinatagunta (1999) employ a Bayesian model to predict movie attendance domestically and internationally. They find that across countries the thriller genre is the most popular, while romance genre was the least popular.

Awards are important to every industry but few industries experience financial compensation from an award more than the motion picture industry. Litman (1983) shows that an Academy Award nomination in the categories of best actor, best actress, and best picture is worth \$7.34 million, while winning a major category Academy Award is worth over \$16 million to a motion picture. Smith and Smith (1986) point out that the power of the Academy Award explanatory variable in models explaining patterns in movie rentals will change over time as the effects of different Academy Awards could cause both positive and negative financial results to a movie in different time periods. Nelson, Donihue, Waldman, and Wheaton (2001) estimate that an Academy Award nomination in a major category could add as much as \$4.8 million to box office revenue, while a victory can add up to \$12 million. The authors find strong evidence toward the industry practice of delaying film releases until late in the year as it improves the chances of receiving nominations and monetary rewards. Dodds and Holbrook (1988) look at the impact of an Academy Award after the nominations have been announced and after the award ceremony. The authors find that a nomination for best actor is worth about \$6.5 million, best actress is worth \$7 million and best picture is worth \$7.9 million. After the award ceremony the best actor award is worth \$8.3 million, best picture is worth \$27 million, and best actress award is not statistically significant. Simonoff and Sparrow (2000) find that for a movie opening on less than ten screens an Academy Award nomination will increase the movies expected gross close to 250% more than it would have grossed if it had not received the nomination. For movies opening on more than ten screens, an Academy Award nomination will increase the movies gross by nearly 30%.

DATA AND MODEL

Predicting the financial performance of feature films is widely regarded as a difficult endeavor. Each film has a dual nature, in that it is both an artistic statement and a commercial product (Sochay, 1994). Many studies have attempted to estimate the determinants of box office performance by employing empirical models to a limited number of high profile features. The approach of this study provides a unique focus on the determinants of video movie rental revenue. The sample includes 214 motion pictures with for the year 2006.

The primary source of data for this study is the Rotten Tomatoes website (rottentomatoes.com). The website is a unique rating system that summarizes positive or negative reviews of accredited film critics into an easy to use total percentage that is aggregated for each motion picture. In addition to providing a system of aggregate reviews, the website also contains information pertaining to revenue, release date, movie rating, genre, and number of screens featuring a film each week of release. WorldwideBoxoffice.com, Movies.com, Oscars.org, boxofficemojo.com, imdb.com, and the-numbers.com are additional sources of data and information.

The empirical model employed to investigate the determinants of box office performance for this study is specified below as:

$$(1)\ VREVENUE_i = B_0 + B_1DBOXOFFICE_i + B_2FBOXOFFICE_i + B_3CRITIC_i + B_4AANOM_i + B_5RESTRICTED_i + B_6CHILDREN_i + B_7SEQUEL_i + B_8TIME_i + B_9RELEASE_i + B_{10}BUDGET_i + u_{i,}$$

where VREVENUE is domestic video rental and pay-per-view revenue, DBOXOFFICE is domestic box office earnings, FBOXOFFICE is foreign box office earnings, CRITIC is the percent approval rating for a film by an agglomeration of film critics, AANOM is the number of Academy Award nominations a film receives, RESTRICTED is a categorical variable for movies with a restricted rating (Rated R), CHILDREN is a categorical variable for movies in the genre of children's movie, SEQUEL is a categorical variable for movies that are derived from a previously released film, TIME is the number of weeks from domestic box office release to video release, RELEASE is the number of theaters showing the film during the week of wide release, and BUDGET controls for the estimated production and promotion costs for each movie. Several alternative model specifications were considered including control variables for independent films, presence of an established star actor or director, holiday release, and new release competition. Inclusion of these variables into the model affected the standard errors of the coefficients but not the value of the remaining coefficients or they suffer from excessive multicollinearity with variables included in the model. For these reasons, they are not included in the final model.

Descriptive statistics for the model variables are presented in Table 1. The average rental revenue in the sample is \$23.69 million, with a maximum of \$67.27 million (*Pirates of the Caribbean: Dead Man's Chest*). The average domestic box office earnings are \$42.36 million, with six movies earning more than \$200 million (*Pirates of the Caribbean: Dead Man's Chest*, *Night at the Museum*, *Cars*, *X-Men: The Last Stand*, *The DaVinci Code*, and *Superman Returns*). Average foreign box of earnings in the sample are \$45.98 lead by *Pirates of the Caribbean: Dead Man's Chest*, *The Da Vinci Code*, and *Casino Royale*. Average critical rating of the movies in the research cohort is approximately 45 percent positive with a standard deviation of 28 percent. The maximum number of Academy Award nominations is eight by *Dreamgirls*. Thirty percent of the movies in the sample have a restricted rating, 18 percent target children, and nine percent are sequels. The average time from domestic box office to video release is approximately 4.5 weeks. The average release for movies in the sample reached 2,040 theaters during the week of wide release, with *Pirates of the Caribbean: Dead Man's Chest*, *Superman Returns*, *Mission Impossible III*, and *Over the Hedge* opening on over 4,000 theatres. The budget for movies in the research sample varies from a low of \$100,000 (*Facing the Giants*) to a high of \$270 million (*Superman Returns*).

Table 1: Summary Statistics: Domestic DVD Revenue (2006)				
Variable	Mean	Maximum	Minimum	Standard Dev.
VREVENUE	23.697	67.270	0.500	15.252
DBOXOFFICE	42.365	423.271	0.845	54.486
FBOXOFFICE	45.985	642.630	0	84.361
CRITIC	0.454	0.97	0.01	0.279
AANOM	0.449	8	0	1.265
RESTRICTED	0.301	1	0	0.361
CHILDREN	0.168	1	0	0.375
SEQUEL	0.089	1	0	0.285
TIME	4.477	13.0	2.0	1.439
RELEASE	2,040	4,133	42	1,180
BUDGET	47.298	270.000	0.100	47.298
n = 214				

DETERMINANTS OF VIDEO REVENUE

The estimated empirical relationship between the explanatory variables and movie video revenue is presented in Table 2. Two model specifications are put forth based on incomplete data for the BUDGET variable. The first is the full model, which includes all 214 movies in the sample. The second specification only includes the 120 movies that have BUDGET information available. The full and reduced model specifications are extremely consistent. Both models explain approximately 60 percent of the variance in movie video revenue. None of the independent variables have a correlation higher than 0.68 (DBOXOFFICE and FBOXOFFICE have the highest correlation), suggesting that excessive multicollinearity is not a problem with the analysis. Five out of the ten independent variables are statistically significant in both specifications.

The first two variables in the model are domestic box office (DBOXOFFICE) and foreign box office (FBOXOFFICE). The results indicate that domestic box office has a positive and statistically significant impact on domestic movie rental revenue but the foreign box office is not statistically significant. The results imply that the domestic box office serves as a complement to movie video revenue instead of a substitute, with every $10 million in domestic box office yielding approximately $1 million in video revenue. Movies that perform well at the domestic box office may serve as a signal that a movie is good as an implicit form of word of mouth. In fact, only the movie Failure to Launch ($55.65 million video rental revenue, $88.7 million domestic box office, $39.7 million foreign box office) was a top five video revenue earner without being a ten domestic box office performer. *Pirates of the Caribbean: Dead Man's Chest*, *Night at the Museum*, and *The Da Vinci Code* are all top five performers in both the domestic box office and movie video revenue. A second possible explanation for the complementary relationship between the domestic box office and the home video market is that popular movies become a shared experience. A person that enjoys a movie at the box office may have a propensity to share the experience on video with relatives or friends when visiting during the holidays or via explicit word of mouth. The small coefficient on the foreign box office variable (0.006., t-statistic of 0.46) is somewhat surprising. Foreign box office smashes like *Pirates of the Caribbean: Dead Man's Chest* ($62.3 million in video rental revenue, $642.9 million foreign box office) and *Casino Royale* ($43.4 million in video rental revenue, $456.2 million foreign box office) have a large domestic video following but they appear to be more of an exception than a rule. In general, performance in the foreign market does not appear to be significantly correlated with the domestic video rental market.

Table 2: Determinants of Domestic DVD Revenue (2006)

Variable	Full Model Coefficient (t-statistic)	Reduced Model Coefficient (t-statistic)
Intercept	6.916 (2.18)*	9.046 (2.05)*
DBOXOFFICE	0.103 (3.06)*	0.124 (3.79)*
FBOXOFFICE	0.006 (0.46)	0.004 (0.24)
CRITIC	1.862 (0.88)	3.806 (1.16)
AANOM	1.303 (2.29)*	1.369 (1.99)*
RESTRICTED	0.671 (0.43)	0.670 (0.31)
CHILDREN	-10.031 (-5.25)*	-10.450 (-4.36)*
SEQUEL	-6.062 (-2.43)*	-6.315 (-2.28)*
TIME	-0.491 (-1.08)	-0.369 (-0.43)
RELEASE	0.007 (8.09)*	0.005 (3.47)*
BUDGET	.002 (0.18)	
Adjusted R-Square	0.644	0.588
F-Value	43.81	18.34*
N	214	120
Note: *p<.05		

Critic is the percent approval rating for a film by a leading group of movie critics (CRITIC). Conventional wisdom suggests that critical reviews are extremely important to the popularity of movies, especially in the early stages of a release. Good reviews are expected to stir curiosity and identify quality, while poor reviews are expected to limit the interest of the influential early adopters. More practically speaking, the advertising agency will select favorable excerpts from reviews and incorporate them in its media campaign to give the impression of critical acclaim (Litman, 1983). Empirical evidence supports the positive and significant impact critics have on the box office as a box office predictor or influencer (Litman & Kohl, 1989; Eliashberg & Shugan, 1997; Reinstein & Snyder, 2000; Terry, Butler & De'Armond, 2004; and King, 2007). This study is the first to investigate the impact of critical reviews on movie video rental revenue. Surprisingly, the Table 2 results indicate that the CRITIC variable is positive but not statistically significant in both model specifications. A theoretical explanation for the results is that critics provide a signal in the early stages of a box office release but are insignificant by the time a film enters the video market. It is also possible that the year 2006 is simply an anomaly year for the movie industry. The movies, *Half Nelson*, *Brick*, *Dave Chappelle's Block Party*, *Catch a Fire*, and *The Proposition* all received critical ratings above 85 percent approval but each produced less than $5 million each in video revenue. Alternatively, the movies, *The Da Vinci Code*, *Click*, *The Break-Up*, *The Pink Panther*, *The Benchwarmers*, *Date Movie*, *The Hills Have Eyes*, *Underworld: Evolution*, and *Firewall* are movies with critical approval ratings below 35 percent but earning more than $45 million in video rental revenue. Most of the movies with poor critical reviews but high video revenue are catered to a youthful audience, providing evidence for the King (2007) argument that movie audiences are younger than the general population and less likely to pay attention to movie reviews, especially print reviews.

The independent variable AANOM measures the impact of a major industry award nomination (Academy Awards) on movie video revenue. The positive and statistically significant coefficient associated with the variable implies that an Academy Award nomination accentuates interest in the rental market for movies and has a positive impact on video revenue. Thirty-nine of the films in the research sample received one or more academy award nominations in 2006 sample year. Noteworthy nominees include *Dreamgirls* (8 nominations, $30.4 million in video rental revenue), *Babel* (7 nominations, $39.6 million in video rental revenue), *The Queen* (6 nominations, $35.0 million in video rental revenue), *Blood Diamond* (5 nominations, $45.0 million in video rental revenue), and *Little Miss Sunshine* (4 nominations, $46.3 million in video rental revenue). It is widely believed that films that receive an Oscar nomination possess what Rosen (1981) describes as the elusive quality of box office appeal, the ability to attract an audience and generate a large volume of transactions. An Oscar nomination serves as a signaling device, indicating which films are viewed by industry experts as being worthy of recognition. The Academy Award nomination also serves as an indirect source of marketing. The empirical results imply that an Academy Awards are worth approximately $1.3 million dollars per nomination in the video rental market. The result is consistent with the propensity for movie releases with award nominations to mention this fact on the jacket of the video rental box.

Another element considered to factor into the financial performance of a film is the rating assigned by the Motion Picture Association of America. The motion picture industry established the code as a means of giving advance information to parents and others about the theme and treatment of films. This voluntary code was adopted to prevent stringent forms of governmental controls. There are four possible ratings given to films in the research sample—G (general audiences), PG (parental guidance suggested), PG-13 (possibly unsuitable for children less than 13 years of age), and R (restricted; children not admitted unless accompanied by an adult). The conventional wisdom is that family product sells, while an adult theme or treatment has a limited customer base because of age restrictions preventing access to the lucrative teenage market. The restricted rating is often negative in previous research related to box office revenue but the coefficient is positive in this study of the video market. The result implies that people are more willing to watch restricted content at home versus the movie theatre, although this result is limited by the fact that the RESTRICTED variable is not a statistically significant determinant of video rental revenue.

The most surprising empirical results are the negative and statistically significant coefficients on the CHILDREN and SEQUEL variables. One possible explanation for the surprising result is the idea that movies for children and sequels are purchased in lieu of renting. People with small children can testify to buying some movies for multiple viewings instead of renting. The empirical model in this paper does not control for video sales because of a lack of data availability for 2006 releases, which might lead to a problem with the model specification. In fact, all five movies in the data set with more than $100 million in sales revenue fit the sequel or children's movie genre (*Pirates of the Caribbean: Dead Man's Chest, X-Men: The Last Stand , Ice Age: The Meltdown, Over the Hedge*, and *Cars*). A second explanation is that revenue for some movies, especially sequels, is absorbed at the box office. The motion picture industry produces the sequel because of the built-in audience for a sequel to a popular film. Movies like *Rocky Balboa, Big Momma's House II, The Grudge II, Clerks II, Basic Instinct II*, and *Santa Clause 3* might have a built in audience of loyal fans interested in the evolving story line but a shrinking interest by the time the movie enters the video market. A third explanation is that there are too many sequels and movies for children in the market resulting in the number of video losers being greater than the number of video winners. For example, *Barnyard, Flushed Away, Curious George, Nanny McPhee, Flicka, The Ant Bully, Hoot, Miss Potter, Santa Clause III, Phat Girlz*, and *Zoom* are movies in the children's genre with video revenue under $20 million.

The variable TIME measures the number of weeks separating domestic box office from video release. The recent trend in the movie industry is a narrowing box office to video window. The average time from box office to video release for the 2006 data sample is 4.47 weeks, with a minimum of 2 weeks for the movie *Doogal* ($7.4 million in box office revenue, $23.5 million in video revenue). The empirical results indicate that time from box office to video release has a negative impact on video revenue but is not statistically significant. The negative coefficient is influenced by the economies of scale associated with the marketing of a new film. Much of the box office revenue of a new release is earned within the first few weeks. Movie distributors often find it advantageous to move to the video market quickly in order to capture original marketing effects from the box office efforts in the video market.

The last two variables in the empirical model are RELEASE and BUDGET. Previous research shows a close correlation between financial success of a film and the number of screens on which the movie is shown during its initial launch (Einav, 2001). The opening weekend of a movie release typically accounts for over twenty-five percent of the total domestic box office gross revenue for a film (Simonoff & Sparrow, 2000). The positive and statistically significant coefficient on the RELEASE variable indicates that movies with a wide release perform better in the video market. The result can be explained by the observation that a wide release will lead to domestic box office success, which is an impetus to success in the video market. In addition, movies with a release on many screens garner branding recognition that is a precursor to success in the video market. The BUDGET variable is positive but not statistically significant in the model. Big budget movies with high profile movie stars, brand name directors, expensive special effects, and large advertising budgets might have an advantage drawing crowds at the box office but appear to have a limited impact on the small screen of the video market. Some big budget movies like the remake of *All the King's Men* ($55 million budget, $7.2 million box office, $12.8 million in video revenue) struggle in video market while lower budget films like *The Last King of Scotland* ($6 million budget, $17.6 million box office, $31.8 million in video revenue) find great success.

CONCLUSION

The video rental market is an important source of supplementary income to the movie industry as a means of extending profits or minimizing losses. This study examines the determinants of video rental revenue for the year 2006. Regression results indicate the primary determinants of video movie rental revenue are domestic box office performance, academy award nominations, sequels, movies in the children genre, and the number of theaters showing the film during the opening week of wide release. One of the more interesting applications of the results is the observation that an Academy Award nomination is worth an additional $1.3 million in the video market. The coefficient associated with critical review is positive but not statistically significant implying that critical acclaim that is not directly associated with an academy award has a limited impact on video rental revenue. The most surprising results are the negative and statistically significant coefficients on movie sequels and children's movies. Holding other factors constant, sequels and children's movies earn $6 to $10 million less than other movies. One avenue for future research is to include a variable in the model that controls for video sales. Sales information is increasingly available for movies released in 2008 but not widely available in the year 2006.

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INFORMATION SEARCH AND PURCHASE CHANNEL CHOICE ACROSS IN-HOME SHOPPING RETAIL FORMATS

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ABSTRACT

In the current multi-channel circumstances, in-home shopping channels (TV, catalogs, and the Internet) have been receiving more attention from academicians and practitioners. This study examines the relationship between information-search and purchase-channel choice behavior across in-home shopping channels. Specifically, we investigate whether an information-search channel is also selected as a purchase channel (channel lock-in) and whether purchase-channel choice is influenced by other information-search channels (cross-channel synergy).

We collected the channel-choice (information-search and purchase) data over one month period from a survey of 346 randomly selected housewives. Based on a multivariate probit (MVP) analysis, we discovered that as the channel is selected for information search, the possibility that the channel is chosen for purchase will increase and the synergy between information search and purchase across channels does not exist. In addition, we found that, in terms of purchase channels, TV is a substitute for catalogs and the Internet. Our research has implications for helping firms managing multiple channels to coordinate and integrate across channels and to build multi-channel customer relationships.

INTRODUCTION

The proliferation of diverse retail formats, such as the Internet, direct marketing, home shopping networks, call centers, and catalogs, has created a challenge for firms to manage their multi-channels effectively (Neslin et al., 2006). To address this challenge, marketing researchers have studied customer behavior in the multi-channel context (e.g., Fox, Montgomery & Lodish, 2004; Gupta, Su & Walter, 2004; Mathwick, Malhorta & Rigdon, 2002).

The main focus of this research is to investigate the relationship between information search and purchase channel choice across in-home shopping channels are defined as shopping channels by which consumers shop at home, such as TV shopping, catalogs, and the Internet. As consumers look for shopping convenience and time-saving shopping, the importance of these channels has increased for many retailing firms. While there has been much research related to in-home shopping, most previous research has mainly focused on the characteristics and choice of individual in-home shopping channels. With regard to the recent multi-channel research, marketing researchers have been interested in the relationship between the Internet and stores (Gulati & Garino, 2000; Teering & Huizingh, 2005).

Our study considers two types of factors simultaneously: channel selection across in-home shopping channels and consumer behaviors (information search and purchase behavior). Practically, this study may help the retailing firms with multi-channels to clarify the targeting of customers and the role of each channel. In addition, with this study we believe the firms can gain an understanding of how to integrate and coordinate their own channels, offer channel-specific customer services, and build effective customer relationships.

The remainder of this paper is organized as follows. The next section discusses why multi-channel retail firms should identify customers' channel choices in each buying process. By introducing the research shopping phenomenon, we suggest that channel lock-in and cross-channel synergy effects across in-home shopping channels should be examined. Section 3 describes the data for our empirical study and Section 4 describes the econometric model used to analyze our data. We adopt the multivariate probit (MVP) model that is appropriate for analyzing multiple dummy dependent variables with inter-correlation. Section 5 presents the estimation results, and Section 6 summarizes the results of the study and describes the practical implications for multi-channel retail firms. Finally, we discuss the limitations of our model, suggest future research directions, and conclude.

THE RELATIONSHIP BETWEEN INFORMATION SEARCH AND PURCHASE CHANNEL CHOICE

Multi-channel retailing firms can acquire and retain customers by identifying their customers' channel choice patterns. Based on a two-step approach of consumer product purchase, consumers first research product information and then purchase products. Accordingly, because customer's channel choice happens at each step, individual customers could have one of two types of channel sets—the same channels or different channels. As consumers get accustomed to using multiple channels, research shopping has become a common phenomenon and has received attention by marketing researchers and practitioners (Verhoef, Neslin & Vroomen, 2007). Research shopping study shows that the most popular pattern among research shopping customers is information search by the Internet and product purchase by stores (43%) (See Table 1) (DoubleClick, 2004).

While it is well known that the Internet has similar characteristics with other in-home shopping channels (TV and catalogs), customer choice across these channels are relatively less studied. Several questions are of interest. What in-home channel does each customer select for information search and for purchase? Does each customer search for information through one channel and purchase at different channels? If different, what type of research shopping is most common? For answering these questions, we need to identify the relative influences between channel lock-in and cross-channel synergy across in-home shopping channels (Verhoef, Neslin & Vrooman, 2007). This study considers these effects in the context of the relationship between information search and product purchase.

Table 1. Research Shopping

Information Search Channel	Product Purchase Channel	Ratio of Customers
Catalog	Internet	11%
Catalog	Store	19%
Internet	Catalog	6%
Internet	Store	43%
Store	Catalog	5%
Store	Internet	16%

Channel lock-in between information search and product purchase means that a consumer who searches for product information through channel A (e.g., the Internet) buys a product through channel A. This is, irrespective of product features and channel characteristics, the phenomenon that consumers use the same channel for both information search and purchase. This is also a theoretical justification for the inertia shopping or one-stop shopping, whereby it is more convenient and time-efficient for customers to do all their shopping at one location (Messinger & Narasimhan, 1997).

Cross-channel synergy in this study means that a consumer who searches for product information through channel A (e.g., TV) buys a product at channel B (e.g., the Internet). This is because the customer realizes that he or she will be better able to take advantage of the services provided on channel B after having been previously educated and informed through channel A. Cross-channel synergy is also referred to as complementarities of channels (Teering & Huizingh, 2005).

We examine the causal relationship between the degree of searching for product information and purchase channel choice across three types of in-home shopping channels (TV, catalogs, and the Internet). Note the terms "lock-in" and "cross-channel synergy" are defined with positive valence. However, the valence may turn out to be negative—e.g., higher information search at channel A may be translated into lower purchase channel choice probability at channel A or channel B. This may be characterized as negative channel lock-in or negative cross-channel synergy.

Channel Lock-in

High channel lock-in may deter research shopping because searching and purchasing become highly correlated. However, if a given channel has a low level of lock-in—that is, higher search is not clearly related to high purchase probability—the result may be research shopping. Verhoef et al. (2007) suggest that the Internet is the channel with the lowest level of lock-in and the brick-and-mortar store is the channel with the highest level of lock-in. However, in comparison with other in-home shopping channels—i.e., TV and catalogs—we suppose that the Internet may have relatively high level of lock-in.

Cross-channel Synergy

Cross-channel synergy may drive research shopping because searching at one channel and purchasing at another channel may provide economic benefits and psychologically favorable feelings. For instance, searching on the Internet and purchasing at a store may provide consumers with a better deal in terms of price (Morton, Zettelmeyer & Russo, 2001; Bakos, 1997), as well as with a feeling of being "smart shoppers" (Balasubramanian, Raghunathan & Mahajan, 2005; Chandon, Wansink & Laurent, 2000). However, in comparison with other in-home shopping channels such as TV and catalogs we suppose that the Internet may have relatively low cross-channel synergy.

DATA

We surveyed 387 Korean housewife-customers for the information search and purchase channel choice behavior for the three in-home channels (TV, catalogs, and the Internet). Panel lists by a Korean marketing research company were used as the sampling frame, which was the list of the customers who had purchased the products through one of the three in-home channels over the past month. We used an allocation sampling approach, in which each respondent was allocated according to region and age. We eliminated some customers' data because information search and purchase behavioral and/or demographic variables were missing. Finally, we analyzed the data for the remaining 342 customers.

Table 2 shows the list of search and purchase behavioral and demographic variables used in our econometric model, along with their summary statistics. The dependent variable of our model is CHOICE, which measures the dummy of each channel choice for purchasing a product. Because it is possible for each respondent to use all channels for purchasing, multiple-response questions were applied. In research studies such as Noble, Griffith and Weinberger (2005), consumers are not directed to respond in relation to a specific product but rather at a general level. Our sample indicates that $CHOICE_{TV}$ is 227 customers (66%), $CHOICE_{CT}$ is 115 customers (34%), and $CHOICE_{NT}$ is 126 customers (37%).

Table 2. Summary Statistics			
Variable Names	Descriptions	Mean	Std. Dev.
$CHOICE_{TV}$	0 if TV not used for purchasing, 1 if used	0.66	0.47
$CHOICE_{CT}$	0 if catalog not used for purchasing, 1 if used	0.34	0.47
$CHOICE_{NT}$	0 if Internet not used for purchasing, 1 if used	0.37	0.48
$SEARCH_{TV}$	Information search on TV (7-point scale)	3.94	1.32
$SEARCH_{CT}$	Information search using catalog (7-point scale)	3.87	1.43
$SEARCH_{NT}$	Information search on Internet (7-point scale)	3.64	1.59
$USAGE_{TV}$	0 if TV not used for purchasing (3 months), 1 if used	0.63	0.49
$USAGE_{CT}$	0 if catalog not used for purchasing (3 months), 1 if used	0.33	0.47
$USAGE_{NT}$	0 if Internet not used for purchasing (3 months), 1 if used	0.40	0.49
REGION	1 if customer lives in a city, 0 otherwise	0.80	0.40
AGE	Age of customer at the time of data collection	38.42	8.90
FAMILY	Number of family members	3.83	1.18
INCOME	1 if monthly family income is over $4,000; 0 otherwise	0.25	0.43
JOB	1 if customer has an occupation, 0 otherwise	0.42	0.49
EDU	1 if customer has a university degree or higher, 0 otherwise	0.43	0.50

The variable SEARCH is measured by asking respondents to evaluate the degree of product information search for each channel on a seven-point scale. Specifically, we asked all respondents to answer the question: "How many times during the last month did you search for information about a product/service through each channel (never searched vs. very frequently searched)?" This measurement method considers discrete searching interludes on each channel, not different channels in one search interlude (Noble et al., 2005). Our sample indicates that, when evaluated with their means, $SEARCH_{TV}$ (M = 3.94) is first, followed by $SEARCH_{NT}$ (M = 3.87) and $SEARCH_{CT}$ (M = 3.64).

The independent variable USAGE is conceptualized as the customer's past experience for purchasing on each channel. We consider this variable for the purpose of identifying the effect of past channel experience on recent channel choice. Actually, it is thought that this effect is another form of customer channel lock-in (e.g., Murray & Häubl, 2007). It may be interesting and insightful to identify and test channel lock-in between time intervals as well as between information search and purchase. We asked all respondents to answer, "During the last three months (except last month), have you ever experienced purchasing for a product/service through each channel?" This variable is coded as 1 if customers have experienced each channel and 0 if they have not. Our sample indicates that 63% of customers have experienced purchasing through TV, 33% catalog, and 40% Internet.

Six demographic variables were used in our analysis: REGION, AGE, FAMILY, INCOME, JOB, and EDU. The variable REGION is the city residence indicator variable, which coded as 1 if the customer lives in a city and 0 if the customer does not. 80% of our sampled customers live in a city. The variable AGE measures the age of the customer at the time of data collection. With a mean of 38.4, ages of our sampled customers ranged from 23 to 65 years old. The variable FAMILY measures the number of family members of the customer and has a mean of 3.83. The variable INCOME measures the monthly family income and is coded as 1 if it is over $4,000 and 0 if it is below $4,000. Our sample indicates that about one fourth of customers earn above $4,000 in monthly family income. The JOB variable is the customer occupation indicator variable, which was coded as 1 if the customer has an occupation (full-time or part-time job) and 0 if she does not. The variable EDU is the customer education indicator variable, which was coded as 1 if the customer has a university degree or higher and 0 if she does not. Our sample indicates that 42% of the customers have occupations and 43% of the customers have university degrees or higher.

ANALYSIS

The dependent variable (CHOICE) of our econometric model is not individual-level data during shopping incidence but rather aggregate-level data during a month, representing whether the customers chose each channel for purchasing during the past month. Accordingly, because the customer can choose more than one channel for purchasing and there is correlation between each channel choice, purchase channel choice is modeled as an MVP (Manchanda, Ansary & Gupta, 1999). In order to understand the channel choice behavior of 342 customers in greater detail, we look at sets of their channel choice in Table 3, which indicates that 71% (n = 243) of customers chose one channel, 21% (n = 72) two channels, and 8% (n = 27) three channels.

Table 3. In-home Shopping Channel Choice

	Joint Probability	Marginal Probability		
		TV	Catalog	Internet
TV only	0.42(143)	0.42(143)		
Catalog only	0.11(39)		0.11(39)	
Internet only	0.18(61)			0.18(61)
TV and catalog	0.10(34)	0.10(34)	0.10(34)	
TV and Internet	0.07(23)	0.07(23)		0.07(23)
Catalog and Internet	0.04(15)		0.04(15)	0.04(15)
TV, catalog, and Internet	0.08(27)	0.08(27)	0.08(27)	0.08(27)
Total	1.00(342)	0.66(227)	0.34(115)	0.37(126)

Note: The number in parenthesis is the number of customers.

Formally, we define Y_{ij}^* as the latent variable reflecting consumer *i*'s overall utility toward choosing channel *j* for purchasing. The effect of the independent variables on the dependent variable can be written as:

$$Y_{ij}^{\,*} = \alpha_{0j} + \alpha_{1j} SEARCH_{ij} + \Sigma\, \alpha_{2j} SEARCH_{ij} + \alpha_{3j} USAGE_{ij}$$
$$+ \Sigma\, \alpha_{4j} USAGE_{ij} + \alpha_{5j} X_i + \epsilon_{ij}\,, j \neq j' \qquad (1)$$

where *j, j'* = TV, catalog, and Internet; $SEARCH_{ij}$ = consumer *i*'s information search of channel *j*; $USAGE_{ij}$ = consumer *i*'s past experience of channel *j*; and X_i = consumer *i*'s demographic characteristics.

Equation (1) is for one channel, *j*. There are three sets of equations, one for each channel, and the parameters are specific to each channel. In particular, α_{1j}s and α_{2j}s reflect the channel lock-in and cross-channel synergy, respectively, between information search and purchasing. Becasuse we consider three channels, two α_{2j}s are produced for each channel. Formally, we define $CHOICE_{ij}$ as 1 if consumer *i* chooses channel *j* for purchasing, and 0 otherwise. The MVP is then:

$$CHOICE_{ij} = 1 \text{ if } Y_{ij}^{\,*} > 0 \qquad (2)$$

$$CHOICE_{ij} = 0 \text{ if } Y_{ij}^{\,*} \leq 0\,.$$

We assume that ϵ_{ij} (j = TV, catalog, Internet) in equation (1) jointly follows a trivariate normal distribution with mean zero and covariate matrix . That is, (ϵ_{TV}, ϵ_{CT}, ϵ_{NT}) ~ $MVN(0, \Sigma)$, where

$$\Sigma = \begin{vmatrix} 1 & \rho_{TV,\,CT} & \rho_{TV,\,CT} \\ \rho_{TV,\,CT} & 1 & \rho_{TV,\,CT} \\ \rho_{TV,\,CT} & \rho_{TV,\,CT} & 1 \end{vmatrix} \qquad (3)$$

Note that we have assumed that Var(ϵ_j) = 1 because the magnitude of the variance for the disturbance term cannot be identified for each probit equation (Green, 2003).

Most previous studies of in-home shopping channels have used single-equation techniques, implicitly assuming that ϵ_j independetely follows univariate normal distributions, with $\rho_{jj'} = 0$ (*j,j'* = TV, catalog, Internet; $j \neq j'$). Given the potential complementarity/substitutibility among these channels and the fact that the individuals in a sample are the same across equations, it is highly likely that the error terms of these equaitons will be correlated. The more general specification given in equation (3) allows for the correlation of disturbances, which embody unobserved charactersitics for the same individual across decisions about different channels.

ESTIMATION RESULTS

The MVP model was estimated using maximum likelihood estimation techniques on the pooled 342 unit-record observations. Because the probabilities that enter the likelihood are functions of high dimensional multivariate normal distributions, they were simulated using the GHK algorithm (see Greene, 2003). The AGE variable was converted to a logarithm of real AGE (LN_AGE) for the purpose of increasing variability and correcting distribution. The results from the MVP model are presented in Table 4.

Table 4. Parameter Estimates for In-home Shopping Channel Choice

Variables	TV(1)		Catalog(2)		Internet(3)	
	β	*t-value*	β	*t-value*	β	*t-value*
Intercept	-5.14	-2.36**	2.48	1.42	-1.20	-0.72
$SEARCH_{TV}$	**0.22**	**2.15****	-0.01	-0.06	-0.02	-0.23
$SEARCH_{CA}$	-0.18	-1.62	**0.29**	**2.89*****	-0.01	-0.12
$SEARCH_{NT}$	-0.05	-0.50	-0.15	-1.57	**0.35**	**3.02*****
$USAGE_{TV}$	**1.83**	8.60***	-0.24	-1.15	-0.69	-3.51**
$USAGE_{CA}$	-0.33	-1.50	**1.55**	**8.12*****	0.11	0.56
$USAGE_{NT}$	-0.71	-2.87***	-0.11	-0.48	**1.29**	**7.13*****
REGION	0.01	0.06	-0.08	-0.30	-0.11	-0.43
LN_AG	1.42	2.32**	-0.76	-1.57	0.20	0.43
FAMILY	-0.10	-0.95	-0.07	-0.81	-0.00	-0.04
INCOME	-0.05	-0.21	0.34	1.70*	-0.08	-0.35
JOB	0.16	0.77	-0.40	-2.02**	-0.08	-0.41
EDU	0.59	2.23**	-0.41	-1.98**	0.16	0.79
	CORRELATION MATRIX					
TV		-0.51	-4.18***		-0.60	-5.12***
Catalog					0.12	1.03

Note: * p < 0.1, ** p < 0.05, *** p < 0.01.

First, note that the estimated coefficients for search on purchase (α_{1j}) for a given channel represent channel lock-in effects (see Eq. 1). There are three such coefficients, and they are strongly positive for all three channels. Verhoef et al. (2007) insist that the Internet has poor lock-in compared with stores and catalogs. Our study, however, shows that the Internet (α_{33} = 0.35, $p <$ 0.01) has a more dominant channel lock-in effect than TV (α_{11} = 0.22, $p < 0.05$) and catalogs (α_{22} = 0.29, $p < 0.01$). Given this finding, research shopping is less likely to occur for customers choosing in-home shopping channels for information search and purchase. In addition, this finding suggests that identifying the channel lock-in of certain channels depends upon which channels are being compared.

Second, cross-channel synergy effects (α_{2j}) are reflected by the coefficients between information search and purchase of different channels (i.e., TV search à Internet purchase). In our study, there are six such coefficients in Table 4, which are all negative but statistically insignificant

($-0.18 \leq \alpha_{jj'} \leq -0.01$, $p > 0.1$). Marginally significant ($p < 0.15$) coefficients are found for catalog search à TV purchase and for Internet search à catalog purchase. Verhoef et al. (2007) insist that there is strong cross-channel synergy from catalog search to Internet purchase, but our study does not support their finding. Therefore, there is no evidence for cross-channel synergies.

Third, channel lock-in (α_{3j}) and cross-channel synergies (α_{4j}) for purchase between past channel experience and current channel choice are reflected by the value of USAGE coefficients. The interpretation method is similar to that described above. Note that there is strong channel lock-in between time intervals, which suggests that if a customer experiences a channel for purchasing, he or she will be likely to use that channel for purchasing. TV ($\alpha_{4,11} = 1.83$, $p < 0.01$) is more prominent than catalog ($\alpha_{4,22} = 1.55$, $p < 0.01$) and Internet ($\alpha_{4,33} = 1.29$, $p < 0.01$) in this type of customer lock-in. Also, note that, among the six coefficients representing cross-channel synergy for purchasing between time intervals, two coefficients are statistically significant and negative—for past TV experience for purchase à current Internet purchase ($\alpha_{5,13} = -0.69$, $p < 0.01$) and for past Internet experience for purchasing à current TV purchase ($\alpha_{5.31} = -0.71$, $p < 0.01$).

It should be noted that the estimated correlation coefficients are produced in the MPV model. These coefficients are closely related to the complementarity/ substitutibility for purchasing among these channels. Among three pairs, two pairs are negative and statistically significant, with point estimates of -0.51 between TV and catalog and -0.60 between TV and Internet. These significant coefficients justify the more general specificaiton here in comparison with the restictive single-equation approach. A strong negative correlation suggests that the possibility of a customer choosing TV for purchasing is lower if he or she is known to be choosing a catalog or the Internet for purchasing. Accordingly, our study suggests that the TV channel for purchasing should be substitutible for the catalog or Intenet channels for purchasing.

Finally, examining the impact of demographic variables on each channel choice, we found that some impacts are statistically significant and that the impacts on each channel are somewhat different. Looking at the customer age effect, we can see that age is positively related to TV channel choice for purchasing ($\alpha_{6,11} = 1.42$, $p < 0.05$). The positive value for the INCOME coefficient ($\alpha_{6,42} = 0.34$, $p < 0.1$) indicates that wealthy customers tend to choose the catalog channel for purchasing. However, the negative value for the JOB coefficient ($\alpha_{6,52} = -0.40$, $p < 0.05$) indicates that customers with a vocation tend not to choose the catalog channel for purchasing. Note that the impact of EDU is totally different between TV ($\alpha_{6,61} = 0.59$, $p < 0.05$) and catalogs ($\alpha_{6,62} = -0.41$, $p < 0.01$), which indicates that as customers have more education they tend to choose the TV channel but not choose the catalog channel for purchasing.

CONCLUSIONS AND FUTURE RESEARCH

As customers use various channels for shopping (information search and purchase), single-channel retail firms are increasingly converted to multi-channel firms. Pure TV or Internet retailers, as well as pure brick-and-mortar store retailers, are interested in becoming multi-channel retailers through an investment decision to add channels or strategic alliances with firms holding different channels. In these circumstances, in-home shopping channels are getting attention from retail managers because they provide them with many advantages, including easiness of channel expansion, provision of customer information, and creation of an innovative retailer image, etc. The Forrester Research Survey (Yates, 2001) suggests that among 50 big retail firms approximately 48% do not have any customer information about cross-channel shoppers. Unlike stores, in-home shopping channels are likely to provide retail mangers not only with customer information for each channel about search and purchase but also with cross-channel customer information.

Our study focuses on the importance of in-home shopping channels and attempts to deepen our understanding of customer behavior across in-home shopping channels for multi-channel customer management. Specifically, we examine the effect of information search channel on purchase channel across TV, catalogs, and the Internet. Related prior research (Verhoef et al., 2007) mainly examines the relationship between the Internet and stores and suggests that Internet search à store purchase is a very common research shopping pattern (DoubleClick, 2004). Given that the Internet has an advantage with regard to information search and that stores have an advantage with respect to purchasing, this finding is thought to be unsurprising. However, there are relatively similar advantages and disadvantages in information search and purchase between TV, catalogs, and the Internet. We have (1) compared the channel lock-in effect with the cross-channel effect in the relationship between search and purchase using customer-level data, (2) suggested and empirically tested research methodology for multi-channel customer choice and the effect of independent variables, and (3) considered multiple behaviors (information search and purchase) and multi-channels simultaneously and have thus expanded multi-channel customer behavior research.

The core finding of our study can be summarized as follows. First, we find that all in-home shopping channels have considerable lock-in. Verhoef et al. (2007) suggest that, compared with stores, the Internet has little lock-in. However, compared with other in-home shopping channels, the Internet has considerable lock-in, which suggests that customers pursue the convenience of one-stop shopping. Second, we find that there is no cross-channel synergy between in-home channels. Unlike prior research (e.g., Verhoef et al., 2007), we do not find a research shopping pattern from catalog search to Internet purchase. Considering the two results mentioned above, we may conclude that channel lock-in and cross-channel effects depend upon the channels that are being compared. In addition, we find that consumers tend to choose in-home shopping channels for purchase that they have chosen in the past, and we find that there is a strong substitution relationship between TV and catalogs and between TV and the Internet in customers' purchase channel choice.

Our study has several practical implications in terms of multi-channel integration and customer management for retail firms with multiple channels. First, given that in-home shopping channels have considerable lock-in, managers need to recognize that each channel may have its own customers who prefer that specific channel. However, managers should also recognize that even if a customer chooses their Web site for information search, he or she may choose a competitor's Web site for purchase. This is called the "free riding" problem (Van Baal & Dach, 2005). Managers should identify the causes of this phenomenon and strive to make channel lock-in happen on their own channel.

Second, if a retail firm has multiple channels, managers may try to diminish channel lock-in and increase cross-channel synergies—i.e., encourage customers to make use of their various channels. It has been said that multi-channel customers have greater customer loyalty and thus contribute to firm profitability (Kushwaha & Shankar, 2005; Wallace, Giese & Johnson, 2004). In order to achieve multi-channel benefits, managers need to integrate and coordinate their channels. Specifically, based on an understanding of the multi-channel behavior patterns of customers, retail firms should endow each channel with its own role and link the channels effectively. This strategy will provide each customer with a seamless customer experience (Yellavali, Holt & Jandial, 2004) and give the retail firm higher customer retention and firm profitability.

Third, multi-channel retail firms need to recognize that there is a separation-integration strategy continuum for managing their own multiple channels and that they should choose the best level of integration for their firms (Gulati & Garino, 2000). There are many channel integration strategies across in-home shopping channels. Examples include TV shopping program guides on company Web sites, electronic catalogs, and links among the shopping basket on a company's Web site, Web site address introduction, and promotional campaigns by TV shopping presentations, catalogs, etc. Managers can decide upon the integration strategy level through understanding customers' information search and purchase behavior on each in-home shopping channel. Our research may allow managers to understand the importance of customer-level channel usage data and to identify approaches for developing effective multi-channel integration strategy.

We conclude our study by discussing its limitations and suggesting future research directions. First, we measured actual channel usage variables (SEARCH and CHOICE) based on experience during a previous month rather than focusing on each shopping incidence. Future research may apply our model using shopping-level channel-usage data. Second, our study does not include various types of cross-channel synergy effects such as those within the information-search level and from the purchase channel to the search channel. Future research may expand the results of our study. Third, our study does not examine the multi-channel issues of a single firm and the effects of product categories purchased. Future work may take these perspectives and gain more practical insight into multi-channel customer management.

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PREVENTING CONSUMER GRUDGES ACROSS THE AGE SPECTRUM: TIME IS OF THE ESSENCE

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ABSTRACT

When a service or product failure occurs, the frustrated consumer may choose to cope by holding a grudge: a negative attitude toward a firm, a planned and persistent avoidance of an offending business. Grudgeholding can include other actions such as complaining and negative word-of-mouth behavior. This study reviews existing literature related to consumer grudgeholding and through use of an extensive empirical study, examines the extent and expression of consumer grudgeholding across individuals, aged 18-82. Study results indicate that grudgeholding is prevalent among individuals of all ages; however, the impact of grudgeholding on the firm differs depending on the age of the offended customer. Older consumers differ from younger ones in their manifestation of the communication and feelings associated with the grudge. Implications and recommendations for managers are provided, as well as suggestions for future research.

INTRODUCTION

Is there such a thing as a long-standing grudge? Based on personal experiences, the authors can definitively say yes. Consider the following: In 1995, one of the authors' friends (who will be called Mike) became Treasurer of a local youth baseball program. As part of his responsibilities, he was charged with procuring uniforms and equipment for more than 600 youngsters. A day before the season opener, three children were added to league rosters. This meant that Mike had to stop by the local sporting goods store which supplied the organization with all uniforms and equipment.

After picking up the uniform pants needed to equip the new players, Mike patiently waited while the store manager was busily fielding phone calls and customer returns. Mike finally reached the front of the line only to have the store manager, frazzled by the amount of people he had to deal with that day, inform Mike that he would have to return to the store the next day if he wanted to charge the cost of the uniform pants to his league's account. He told the store manager that he would just go to a checkout line and pay cash for the uniform pants. At that point, the store manager yelled over to his three checkout people instructing them not to wait on Mike. Incredulous and angered by now, Mike asked the store manager why he would not be allowed to pay cash for the pants. The manager responded that it would create bookkeeping problems for him if Mike were to return the pants. Mike left the store in a rage vowing never to return and proceeded to open up a league account at a rival store that very same day.

What was the cost to the sporting goods store of their store manager "having a bad day" and taking it out on a customer? Mike is still the Treasurer of his neighborhood Little League and annually spends upwards of $15,000 on items that had previously been purchased at the first store. Furthermore, Mike succeeded in convincing several other local sports leagues to switch their business away from the store. Add in the lost sales from individuals such as Mike and his friends and it can be estimated that over $25,000 in annual purchases are being lost due to this one incident. Multiply this amount by 13 years worth of business and the price of the store manager's indiscretion can be set at upwards of $325,000…and still counting.

Events like the above are not isolated or unusual as they relate to the amount of revenue that could be lost by offending companies. Companies such as Harley Davidson figure the lifetime value of lost customers is more than $200,000, based on the accumulated product, service, and referral sales that go elsewhere (Mackinnon 2005). Depending on the restaurant format, it can be estimated that lifetime revenues lost from "forever-gone" customers and their dining friends can range from $12,000 for a Taco Bell customer (Kotler 2001) to over $100,000 for an upscale restaurant. In the grocery industry, it is estimated a lost customer can cost the offending grocer up to $50,000 in non-retrievable revenues over a ten year period (Javaigi, Whipple, Ghosh & Young 2005). Remember, even a daily average purchase of $3 at a coffee shop can add up to $5,000 per lost customer over a 5 year period. Consumers are more empowered than ever to express their displeasure toward businesses by holding grudges, withholding their patronage from offending organizations, and then making "grudge purchases" from rival firms, on behalf of his Little League.

The current research has four main objectives. The first objective is to revisit the current knowledge on consumer grudgeholding against businesses. The second objective is to examine using empirical data the causes of consumer grudgeholding, the variety of responses enacted by the grudgeholders against their targeted organizations, and the impact of these responses. The third objective is to determine whether differences between age groups exist as it relates to the above-mentioned variables and their impact on the firm. Finally, the fourth objective is to provide recommendations to organizations as to how they can avoid or minimize the impact of consumer grudgeholding and direction for future research.

LITERATURE REVIEW

There's an old adage that holding a grudge is like drinking from a poison cup and waiting for your enemy to die. In the case of the above example, this might be an overstatement but the fact is, consumers hold grudges against offending retailers, companies, and service providers and hold on to these grudges, continuing to drink from the proverbial poison cup despite what might otherwise be called rational consumer decision-making behavior. Whether or not that first sporting goods store ever dies, figuratively, literally, or somewhere in between, Mike offers an example of how customers will go to great lengths to avoid doing business with a person or organization that they feel has done them wrong. Furthermore, the outcome that leads to grudgeholding can be compounded by the offended customer's subsequent negative word-of-mouth behavior against the firm (Aron, Judson, Aurand, Domagalski, & Gordon 2007) and ineffective or otherwise dysfunctional complaint management by the offending firm (Bolfing 1980; Homburg & Furst 2005), just as was demonstrated in the above story.

It has been established that consumers hold grudges against the organizations that mistreat them (Hunt & Hunt, 1990; Aron, 2001; Aron, Judson, Aurand, & Gordon 2006). Consumer grudgeholding is not a limited phenomenon. When a customer develops an intention to withhold patronage from the offending business, the customer is demonstrating consumer grudgeholding: a negative attitude toward a firm, a planned and persistent avoidance of an offending business, along with possible other actions that can include complaining and negative word-of-mouth behavior. This sort of passive-aggressive or retaliatory activity can be seen as a way to cope with a customer's real or perceived grievance against the firm.

A typical response of dissatisfied consumers, whether classified as grudgeholders or not, is called voice or complaining behavior (Hirschman 1971; Kowalski 1996). Hirschman (1971) provided the seminal framework for the understanding of consumers' reactions to dissatisfaction. He labeled this response to dissatisfaction as *voice*, the consumer telling employees, managers, or anyone who is willing to listen about the encountered situation. Sargeant and West (2001) expanded the consideration of voice to include three more specific avenues for complaining behavior. *Vocal* describes when consumers express their displeasure directly to the company. *Private* describes negative word-of-mouth behavior and *third party* describes occasions when the consumer seeks help from an outside entity, such as lawyer, regulatory agency, or the Better Business Bureau.

Hirschman also described what he called *exit* behavior (Hirschman 1971). Exit behavior is, on one hand, fairly straightforward: the consumer leaves the store of or the relationship with the offending business. Exit can also be more subtle, especially if constrained by a monopoly or quasi-monopolistic company (such as Microsoft or a utility) or contractual obligations (such as with a cellular phone service provider). Under these circumstances the grudgeholding customer might simply reduce the relationship with a firm, and stop or drastically reduce purchasing activity with the organization until finally able to withdraw from the relationship.

The different uses of voice and exit behavior can be illustrated by examples from the financial services and airlines sectors. Hogarth, Hilgert, and Kolodinsky (2004) found that 55% of the respondents in their study acted upon their displeasure by either canceling their credit card from a specific financial institution, thereby reducing their relationship, or by completely severing their relationship with that firm. Research by Panther and Farquhar (2004) showed that 30% of the dissatisfied financial services customers also exited and switched to a different service provider. Colgate and Hedge (2001) saw almost one quarter of a bank's customers leave within three months of their dissatisfactory encounter. Bunker and Bradley (2007), in a study of the airlines industry, found that a large percentage of individuals who developed a grudge against a particular airline intended to never fly that specific carrier again. Furthermore and as testimony to the endurance that defines grudgeholding behavior, another survey found that half of the dissatisfied customers polled would not return to a business that made them wait too long for service (Woodward 2006).

Voice, exit, and the kind of response described in the opening story are not the only approaches to expressing one's disappointment, anger, or dissatisfaction against a firm. Retaliation represents a more aggressive response (Huefner & Hunt 2000). In fact retaliation, once limited to negative word-of-mouth behavior among friends, family members, coworkers, and fellow consumers has been supplemented by consumer vigilantism (Ives, 2004; McGregor, 2008). This sort of response can include activity on the Internet. Whether through discussion boards, blogs, elaborate anti-brand web sites (Aron & Muniz 2002) or anti-brand advertisements (Ives, 2004; Muniz & Schau 2007), dozens to hundreds of thousands of consumers can be warned online against the risk imposed by a brand or company. For example, http://www.allstateinsurancesucks.com represents an individual company complaint site while http://www.ripoffreport.com/ provides grudgeholders an avenue to air their frustrations at a multitude of companies.

From the firm's perspective, grudgeholding may be easy to ignore. A manager with a perspective that is too broad might not notice as leaving customers are replaced by new customers who have yet to face a suboptimal experience. Yet every dissatisfied customer that bears a grudge represents a relationship and a revenue stream that is lost, about to be lost, or at least reduced. These customers might be tempted to switch to a rival firm and are likely to tell friends, family members, and other customers (Aron et al. 2007). The distressing product- and service-related experiences potentially leading to long-standing grudges are not isolated events. Results of a recent survey reveal that nearly half of all Americans (46%) state that they have walked out of a business in the past year after encountering poor service (McNulty 2004). Indeed, telecommunications companies spend hundred of millions of dollars to bring in new wireless customers while unhappy existing customers, often bearing grudges, exit out the back door (Snyder 2004). Results of a recent study by a major consulting company found that 80 percent of senior managers believed their companies were doing an excellent job of serving their customers. Conversely, only eight percent of their customers agreed (Brooks 2006). Other consumer research has found that more than 50 percent of Canadian shoppers won't even walk into a store if they have heard something bad about it from a friend or family member (Verde Group 2005). In sum, customers may not tell businesses they are mad at them and, worse yet, their friends simply won't shop at the business because they know someone who once did is bearing a grudge (Weir 2006).

Past research has examined the use of voice, exit, and the retaliatory responses described above; yet, there exists little research concerning how responses are influenced by the age of the consumer (e.g., Francis and Davis, 1990; Moschis, 1992; Otto, Parry, Payne, Huefner, & Hunt 2004). Previous research has examined grudgeholding among different age-groups such as college students and young adults (e.g., Hunt, Hunt, & Hunt, 1988; Huefner & Hunt 2000), adults in their late twenties and early thirties (Aron et al. 2006), and adults aged forty and older (Aron et al. 2007). Missing from the existing research is a bridge across the age gaps that might add insight to the consumer grudgeholding response, insight that might benefit companies that seek to avoid or remedy such an outcome.

When considering consumer grudgeholding, the influence of age might be manifest in a number of ways. By simply having lived longer lives, older consumers should be expected to have more experience with products, services, and the various expectations and complications that accompany the consumption experience. Along those lines, and older and more experienced consumer would have been exposed to a wider array of positive and negative outcomes, and therefore have more experience in coping with these events. After such an event, the more mature consumer would then experience a variety of supportive, conflicting, and counterexperiential marketing communications (Aron, 2007) to inform and perhaps strengthen or weaken their held positions.

General difference in coping patterns between age cohorts were described by Folkman, Lazarus, Pimley, and Novacek (1987). Folkman, et al. found significant differences in terms of how the respondents cope with stressful situations. Members of the younger group (between 35 and 45 years of age at the time of the study, born approximately between the early 1940s and 1950s) would rely on more confrontational patterns, planned problem solving, and social support. In contrast the older cohort (between 65 and 75 years of age, born approximately between the early 1910s and 1920s) relied on distancing behaviors, greater acceptance of responsibility for their situation, and positive reappraisals (Folkman et al. 1987; Lazarus 1999). This provides evidence that whereas younger consumers would engage in problem solving and interactive responses to stressful situation, older consumers would opt to handle their issues internally, by redefining or avoiding the situation. While research on the influence of age on consumer grudgeholding is limited, this existing research in related areas offers motivation for the current study.

METHODOLOGY

The current study took place in suburban communities located near a large city in the Midwestern United States. A total of 2,142 surveys were distributed, and 1,964 were returned for an effective response rate of 92%. The high response rate was attributable to the survey being personally distributed on or near a college campus. Of the 1,964 surveys returned, 910 of the respondents met the criteria for inclusion in the study: aged 18 or older, at least some college experience, and currently or formerly bearing a grudge of six months or longer against a store, company, or organization. Due to the manner in which the data was collected, (in person) a non-response bias is not a major concern of this study.

Potential study participants were screened on two factors. The first factor was age, as it was desired that only those participants, aged 18 and older, participate in the study due to their ability to make purchases from their own earnings. Respondents were then asked if they were currently in or had ever attended college. For the sake of consistency among the sample of respondents, only those stating that they had attended college for any amount of time were included in the sample. An existing survey (Aron et al. 2006) was then administered to gain insight on the consumer grudgeholding response, including the purchase leading to a grudge, the use of voice and exit responses, and consideration of future relationships with the organizations that provoked the consumer grudgeholding in the first place.

All individuals received the same survey regarding their grudgeholding attitudes and behaviors, based on the following definition:

> "[Grudgeholding is] *A strong, lasting feeling of hostility or dislike of a company or organization that you feel has treated you badly.*"

Respondents were asked to recall "a purchase experience involving a company or an organization against which you have held, or currently hold, a grudge," based on an experience that occurred six months ago or longer. The timeframe was included to avoid experiences that were so recent that they would not meet the definitional criteria of "a lasting feeling of hostility or dislike…." All respondents were asked their age and gender, and were then asked if they currently held or have ever held a grudge against an organization. As mentioned above, surveys filled out by respondents that claimed to hold no grudge were not used for purposes of further analysis. Those answering "yes" (910 individuals) were then asked to reveal the name of the offending company or organization, the item that was purchased, and the cost of the purchase, selected from a list of price ranges. They were then instructed to indicate their voice responses, including post-experience word-of-mouth behavior. The voice responses in the questionnaire include communication to parties inside the offending organization and outside the organization (e.g., friends and family). Then, respondents were asked if any member of the offending organization had tried to rectify the situation by offering any kind of refund or reparation.

Respondents then were asked if they still held this grudge, and to share their current feelings toward the offending organization on a seven point scale, ranging from "Much Better Than When It Happened" to "Much Worse Than When It Happened"

Repurchase intentions in the aftermath of the grudge were assessed by the following question, measured on a seven point scale: "How much do you agree or disagree with the following statement? *'I will shop or purchase from this store, company or organization again.'"* Responses can range from "Strongly Agree" to "Strongly Disagree." Respondents were then asked "Had you purchased from the company before the grudge-causing event," and the responses were "Yes," "No, but my family/friends had," and "No." Finally, the survey concluded with the open-ended question, "How do you currently feel about the whole incident? Are you generally pleased with the way the company or organization handled it? What would you suggest the company or organization do now in order to correct the situation?" These questions were asked to gather additional insight regarding the grudgeholding incident.

FINDINGS

To learn how responses of grudgeholders may change with age, usable data was collected from 910 individuals ranging in age from 18 to 82, all of whom stated that at some point they held a grudge against a store, company, or organization. Of those who participated in the study, 56.8% are male and 43.2% are female. The median age of the respondents is 26 with 65% of the respondents under the age of 35 and 35% 35 or older. Study participants were asked a series of open and closed-ended questions, as well as questions based upon Likert-type scales in order to capture their opinions regarding their grudges. Once collected, the data was edited, coded, and entered into SPSS 15.0 for analysis in order to produce the following findings. Respondents were placed into age groups with ten-year ranges in order to enhance analysis.

As is evident in Table 1, less expensive products or services (such as a clothing item or poor service at a restaurant) are largely responsible for the formation of grudges with younger consumers. Probably due to financial limitations of younger consumers, participants 25 years old or younger were more apt to have grudges surrounding products or services costing $25 or less. Over one-third of respondents under the age of 25 hold a grudge centering on a product or service costing $25 or less. This could also have to do with the fact that individuals of this age are prone to dine out more frequently and make more spontaneous purchases of lower cost items. However, respondents over the age of 25 are more apt to hold grudges involving products or services costing over $2,000 (such as an automobile or a vacation package) than any other single price category examined in the study. This is most likely due to the fact that the older consumers are in the life stage where significant and expensive purchases can be made.

Table 1: A Comparison Between Products or Service Responsible for a Grudg e and the Age of the Respondent

.Age Group	$1-$25	$26-$50	$51-$100	$101-$200	$201-$500	$501-$1000	$1001-$2000	Over $2,000	Total
18-25	147	66	63	48	44	18	20	24	430
	-34.20%	-15.30%	-14.70%	-11.20%	-10.20%	-4.20%	-4.70%	-5.60%	-100%
26-35	27	29	20	15	18	14	13	30	167
	-16.20%	-17.40%	-12.00%	-9.00%	-10.80%	-8.40%	-7.80%	-18.00%	-100%
36-45	20	14	11	22	20	8	10	40	145
	-13.80%	-9.70%	-7.60%	-15.20%	-13.80%	-5.50%	-6.90%	-27.60%	-100%
.46-55	13	12	11	4	10	10	6	29	95
	-13.70%	-12.60%	-11.60%	-4.20%	-10.50%	-10.50%	-6.30%	-30.50%	-100%
56-65	1	1	0	2	1	0	4	8	17
	-5.90%	-5.90%	0.00%	-11.80%	-5.90%	0.00%	-23.50%	-47.10%	-100%
66 +	3	3	5	4	6	2	1	6	30
	-10.00%	-10.00%	-16.70%	-13.30%	-20.00%	-6.70%	-3.30%	-20.00%	-100%
Total	211	125	110	95	99	52	54	137	884
	-23.90%	-14.10%	-12.40%	-10.70%	-11.20%	-5.90%	-6.10%	-15.50%	-100%

*Pearson Chi-Square (2-sided) –0.000

Grudgeholders are quick to voice their concerns with employees of the store, company, or organization with over 70% of these consumers voicing a complaint about the incident. Older grudgeholders are more apt to do so than are younger ones. As Table 2 illustrates, as consumers age, they are more likely to share their concerns with store, company, or organization employees. Members of the 36-45 year old purchasing group are particularly inclined to voice their opinions to store, company, or organization employees, and this inclination is relatively consistent as the consumer moves beyond his/her late thirties and early forties. In the survey results, many older consumers commented about how they raised their voices in anger at what they perceived to be the injustice perpetrated against them. Others mentioned that they viewed it as their duty to speak loudly and often at offending personnel so as to alert other shoppers around them that an injustice against consumers had transpired

Table 2: Do Grudgeholders Tell Others about the Incident? By Age of Respondent					
Did Grudgeholder tell anyone at the store, company, or organization?					
Age Group	Yes	Pct.	No	Pct.	Total
18-25	268	61.30%	169	38.70%	437 (100%)
26-35	131	77.50%	38	22.50%	169 (100%)
36-45	128	84.20%	24	15.80%	152 (100%)
46-55	84	82.40%	18	17.60%	102 (100%)
56-65	15	83.30%	3	16.70%	18 (100%)
66 +	27	84.40%	5	15.60%	32 (100 %)
Total	653	71.80%	257	28.20%	910 (100%)
*Pearson Chi-Square (2-sided) – 0.000					

This study indicates that nearly 95% of all grudgeholders tell someone who does not work at the store, company, or organization about their grudgeholding incident and older grudgeholders tell more people than do younger grudgeholders. Table 3 illustrates the importance of the key buying age group of 36-45, of which nearly 30% tell more than 13 people about their grudgeholding experience. As older grudgeholders have had the opportunity to meet more people through either work or social situations, they may be even more likely to tell 13 or more acquaintances outside of the store, company, or organization about their negative consumer experiences. Indeed, several respondents to the survey noted that they make it a point to tell at least 2-3 people weekly about how they were taken advantage of and harmed by the offending business. Add to this amazing revelation the fact that in several of the cases, the grudge has been held for many years. When the authors' friend, Mike, who was described in the opening story, was asked how many individuals he had told his story to, he paused, smiled, and replied, "Easily, over a thousand!"

Table 3: How Many People Did Grudgeholder Tell By Age of Respondent							
Age Group	1	4-Feb	7-May	10-Aug	13-Nov	Over 13	Total
18-25	11 (2.8%)	141	115	61	7	63	398
	2.8%	-35.40%	-28.90%	-15.30%	-1.80%	-15.80%	-100%
26-35	3	38	40	24	4	35	144
	-2.10%	-26.40%	-27.80%	-16.70%	-2.80%	-24.30%	-100%
36-45	0	41	26	25	3	40	135
	0.00%	-30.40%	-19.30%	-18.50%	-2.20%	-29.60%	-100%

Table 3: How Many People Did Grudgeholder Tell By Age of Respondent							
Age Group	1	4-Feb	7-May	10-Aug	13-Nov	Over 13	Total
46-55	6	21	21	16	5	25	94
	-6.40%	-22.30%	-22.30%	-17.00%	-5.30%	-26.60%	-100%
56-65	0	4	2	0	0	8	14
	0.00%	-28.60%	-14.30%	0.00%	0.00%	-57.10%	-100%
66 +	1	9	3	5	0	9	27
	-3.70%	-33.30%	-11.10%	-18.50%	0.00%	-33.30%	-100%
Total	21	254	207	131	19	180	812
	-2.60%	-31.30%	-25.50%	-16.10%	-2.30%	-22.20%	-100%
*Pearson Chi-Square (2-sided) – 0.001							

In spite of the importance of acquiring and maintaining satisfied customers, relatively few firms (about one-third) take any corrective action to address incidents responsible for the formation of grudges. Table 4 identifies the kinds of corrective action that is provided, by age group. The vast majority (over 95%) of firms gives extra attention to grudgeholders. Actions such as engaging the customer in dialog, referring the customer to superiors, providing follow-up phone calls, are commonly employed. Surprisingly, very few firms (approximately 13%-14%) take the conscious step to apologize to the grudgeholder, regardless of the age group. Many of the respondents commented that all would have been forgiven if they had received a simple apology. Instead, failure to utter the simple words, “I’m sorry” has led to countless dollars of lost revenues to the offending parties. Grudgeholders in the 46-55 year old range do fare slightly better than their grudgeholding peers when it comes to having their product repaired or replaced (11%-12% in the 46-55 year old compared to less than 7% in the other age groups), but the offering of store credit or store refunds is implemented less than 7% of the time regardless of the age group.

Table 4: How do Companies Response to a Grudgeholding Incident? By Age of Respondent						
Age Group	Gave a Refund	Offered a Credit	Repaired the Product	Replaced the Product	Apologized	Gave Extra Attention
18-25	29	20	10	31	59	416
	6.70%	4.60%	2.30%	7.10%	13.60%	95.60%
26-35	11	9	6	4	24	167
	6.50%	5.30%	3.50%	2.40%	14.10%	98.20%

Table 4: How do Companies Response to a Grudgeholding Incident? By Age of Respondent						
Age Group	Gave a Refund	Offered a Credit	Repaired the Product	Replaced the Product	Apologized	Gave Extra Attention
36-45	5	8	5	6	18	140
	3.40%	5.50%	3.40%	4.10%	12.40%	96.60%
46-55	2	1	11	10	11	85
	2.30%	1.10%	12.50%	11.40%	12.50%	96.60%
56-65	0	1	0	1	0	17
	0.00%	5.90%	0.00%	5.90%	0.00%	100%
66 +	1	3	2	2	7	25
	3.30%	10.00%	6.70%	6.70%	23.30%	83.30%
Total	48	43	34	54	119	850
	5.40%	4.90%	3.80%	6.10%	13.40%	96.00%
Pearson Chi-Square	0.000*	0.448	0.001*	0.069	0.365	0.007*
*Pearson Chi-Square < 0.05						

Regardless of age, grudgeholders are relatively neutral regarding the negative experience that they encountered. With a mean score of approximately 4 (3.93) on a 1-7 Likert-type scale, grudgeholders do not feel much better, or worse, than they did when the negative incident occurred. However, younger grudgeholders are more likely to shop, or purchase from the offending store, company or organization again than are older grudgeholders. As Table 5 illustrates, especially among those 36 years of age or older, current feelings toward the store, company, or organization do not necessarily translate into shopping intentions. Time does not appear to heal all wounds, and older grudgeholders are more apt to translate their negative feelings toward the store, company, or organization into what could be considered a personal boycott of the store.

One grudgeholder, in her early fifties, told the story of how she has deliberately avoided shopping at a grocery store for the last twenty-two year period despite the fact that it is located less than one block from her home. Instead, she drives over four miles to shop at the next nearest store. The reason for her long-standing grudge? A bagger at the offending store forgot to place all the bags in her cart. When the aggrieved shopper returned to claim her missing bag, it was nowhere to be found. Instead of replacing the misplaced items or providing her with a refund for the items, the store manager claimed it was not the store's fault; the next customer must have received the groceries and that the upset shopper herself held responsibility for ensuring her groceries made it to her cart. In other words, a $10 bag of groceries has probably cost this business more than $50,000 in lost revenues. Younger grudgeholders, while holding similar feelings regarding the store, company, or organization as their older counterparts, are more willing to return to these stores as customers. As one respondent put it, “While I am still highly irritated at this store, it only hurts me more to have to drive 10 extra minutes to shop at a more expensive place.”

Table 5: Current Feelings and Repeat Shopping Intentions of Grudgeholder By Age of Respondent

Age Group	Current Feelings of Grudgeholder	Std. Deviation	Shopping Intentions	Std. Deviation
18-25	3.93*	1.332	2.81**	1.738
26-35	3.74	1.358	2.48	1.716
36-45	3.88	1.406	4.5	2.408
46-55	3.92	1.505	5.16	2.226
56-65	3.67	1.435	5.41	1.97
66 +	4.64	1.912	4.94	1.95
Total	3.93	1.407	3.41	2.175

* Mean Score: 1 -7 Likert-type Scale, 1 = Much Better than When it Happened; 7 = Much Worse than When it Happened. ANOVA – P = 0.186

** Mean Score: 1 – 7 Likert-type Scale, 1 = Strongly Agree; 7 = Strongly Disagree with the statement “I will shop or purchase from this store, company or organization again.” ANOVA – P = 0.000

In summary, and as might be expected, the less expensive products are responsible for the formation of grudges among younger consumers. Products or services valued at more than $2,000 are commonly the source of grudges for consumers in their thirties and older. Grudgeholders, regardless of their age, are quick to tell people at the respective store, company, or organization about their concerns, with customers in the key 36-45 year old age group particularly likely to seek assistance.

Older grudgeholders are more apt to tell more friends, relatives, and acquaintances about their grudgeholding experience, thereby increasing the impact of the negative experience among older, more financially secure customers.

MANAGERIAL IMPLICATIONS

As shown by the above findings, relatively few firms appear willing to take significant corrective action to address the concerns of grudgeholders. While nearly all firms do give extra attention to the grudgeholder, regardless of their age, very few stores, companies or organizations take steps as simple as apologizing to the grudgeholders. Actions such as giving refunds, offering credit, repairing or replacing the product are rare, regardless of the age of the grudgeholder.

There is little difference among grudgeholders with regard to their current feelings toward the offending organization; most (on average) claim relatively little change from their original negative feelings. An important exception can be found among the older consumers, ages 66 and older, who claim to feel substantially worse than when the incident first occurred. This would seem to suggest that firms should provide more personal attention to elderly purchasers of their products. In terms of repurchase intentions, the youngest of the consumers, ages 35 and younger, seem much more willing to leave history in the past and resume their relationships with the company or organization responsible for the grudge. Companies could provide these consumers with immediate promotional incentives hoping capitalize upon their consumers' willingness to the organization a second chance. Older grudgeholders are far less inclined to do business again with the offending organization, so it is imperative that firms serve these customers well the first time.

It appears that firms must be conscious of any customers who come to them with issues that could conceivably be responsible for the formation of a grudge. Toward this end, employees at all levels and in all capacities should be trained in the art of listening so feelings of unhappy customers do not go unaddressed. Special attention should be given to older customers who appear more willing to tell others about their grudgeholding experiences, and less willing to forgive the store, company, or organization to the point where they return to shop again.

DISCUSSION

The objective of this study was to examine the extent and expression of consumer grudgeholding for individuals aged 18-82. Across the age spectrum, the vast majority of respondents (over 95%) acknowledged receiving extra attention when service failure occurred even though problems may not have been resolved to their satisfaction. It is interesting to note that recent studies have challenged the notion of the service recovery paradox in which a corporate apology during service recovery is thought to serve as an antecedent to enhanced brand image (Andreassen 2001; Ok, Back and Shanklin 2005). Similarly, the findings from this study clearly do not support the paradox as none of the intervention initiatives investigated (including the apology) proved to significantly alter grudgeholders' feelings and/or intentions to repurchase. Given that this study asked respondents to reflect on a service or product failure that occurred more than six months ago, a possible explanation may be that the offending organization did not resolve the customer complaint in a timely manner and negative feelings were allowed to escalate. When service failure occurs and a service recovery strategy must be implemented, *time is of the essence*.

Customers indicate that quick problem resolution is very important to them. Based on research from the banking industry in Chicago, three of the top ten attributes customers consider in evaluating bank services focused on the combination of problem resolution and prompt responses:

(#4) Being contacted promptly when a problem is resolved…
(#6) Being told how long it will take to resolve a problem…
(#10) Being given progress reports if a problem can't be solved immediately.
(Berry and Parasuraman 1991, p. 39)

If prompt recovery does not occur and a grudge against the offending firm has had an opportunity to manifest, there is little that can be done to win the customer back (Aron et al. 2006). On the other hand, information released by the Technical Assistance Program indicates that 82% of unhappy customers who choose to complain will buy again after a major complaint *if the complaint is resolved quickly*. (Ziethaml, Bitner & Gremler 2006) While preventing service or product failure is paramount, anticipating possible service failure and developing proactive measures of recovery is a judicious managerial strategy. Equipping employees with the knowledge and resources to respond quickly to customer complaints through proactive measures is far superior to simply relying on less effective reactive measures to salvage the relationship.

Additional aspects of the findings support the need for speedy recovery time. While the majority of younger respondents hold grudges surrounding a lower priced item ($1-$25), conversely, the majority of older respondents hold grudges surrounding the purchase of a higher priced item (over $2,000). While older consumers are more established in their careers and have a greater level of discretionary income, the findings suggest that they also tend to be less forgiving to the offending organization than younger consumers. While 15.8% of grudgeholders in the 18-25 age range tell over 13 people about their negative experience, the percentage increases to 24.3% in the 26-35 age range and to 57.1% in the 55-65 age range. As consumers age, they may develop a much broader network of friends and acquaintances while simultaneously becoming increasingly influential on the consumer decisions of others. The older consumer may have many contacts with whom to launch an effective negative word-or-mouth campaign. These considerations, combined with larger monetary purchases, indicate that the overall value of a consumer to an organization rises significantly as the consumer ages. Thus, it is in the best interest of an organization to provide customized attention to the older consumer population and incorporate consumer feedback in an effort to deter consumer grudgeholding behavior. Proactive initiatives to stop complaining behavior within this important segment such as follow-up telephone calls and/or e-mails, toll-free telephone lines, comment cards, and web site feedback forms must be considered by service marketing managers.

Another aspect of the findings that underscores the importance of a quick recovery is the presence of younger consumers and with whom they are likely to share their dissatisfaction. While approximately 95% of all grudgeholders tell someone who does not work at the store, company, or organization about their negative experience, younger consumers are clearly less likely to tell an employee of the store, company, or organization. Only 61.3% of those within the 18-25 age range tell an employee while the percentage rises to 84.4% within the 66+ range. Younger consumers do not hesitate to communicate their experiences to friends, family, and acquaintances, but they communicate less frequently with those at the organization that could potentially rectify the situation. Perhaps this occurs because younger people in the 18-25 age range communicate in a much different manner than do older consumers. Whereas older consumers would be inclined to approach the employee face-to-face or via a letter or email or phone call, the younger group might find those approaches prohibitively uncomfortable or inconvenient. Modes of communication such as text messaging and interacting on social networking systems such as Facebook and MySpace are growing in popularity among younger consumers. Rather than wait for younger consumers to contact employees through traditional modes of communication, organizations with business communication acumen will make it easy for the younger, technologically advanced consumers to convey company complaints. Companies such as banks and packaging/shipping firms have enabled customers to solve their own problems using account or tracking information made available online.

In order to deliver quick problem resolution, employee responses to customer complaints cannot be left to chance (Berry and Parasuraman 1991, p. 47) Recovery training must be an integral element of every offering and firms must effectively resolve customer complaints by (1) preparing employees for recovery, (2) empowering employees, (3) facilitating employees, and (4) rewarding employees (Berry and Parasuraman 1991). In addition, employees must not be punished for attempting to resolve problems according to the firm's guidelines. Employees of Ritz-Carlton are authorized to allocate $2,000 a year to customers in order to resolve service failures (Ziethaml, Bitner & Gremler 2006). In addition, Ritz-Carlton employees are instructed to 'own' the problem until it is resolved. Likewise, Kootenai Medical Center, for example, mirrored this strategy and authorized 1,000 of its hospital workers to spend up to $1,000 a year to resolve customer complaints and enhance patients' stays (Welch 1997). These investments in employee empowerment are expected to result in quick problem resolution and pay large dividends in future customer satisfaction and brand loyalty, as well as employee morale.

Communicating with customers and knowing what they anticipate or expect will help firms to avoid disappointing them. When a customer complaint or service/product failure is followed by a weak (or slow) recovery, the organization ends up failing its customers twice which leads to a 'double deviation' according to Mary Jo Bitner and her colleagues (Berry and Parasuraman 1991). Such a deviation is likely to result in a consumer grudge against the offending firm, which is exactly what investments in recovery training, employee empowerment, and technological customer services are intended to prevent.

STUDY LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

The above study, while furthering research related to grudgeholding, has several limitations. First, a large number of the respondents (437 out of 910) fell in the 18-25 age range. Future studies could focus on the older segments to a greater degree and seek to understand what appears to be a less forgiving nature toward offending companies. A second limitation of the study relates to the education and geographic location of the population studied. All participants were college educated and living near one major metropolitan area. Future studies could include individuals of varying demographic backgrounds located in diverse geographical areas. Of interest also would be comparisons of grudgeholding behavior among individuals living in countries outside the United States. Another consideration for future research is to closely analyze the timeliness needed to resolve a problem from the consumer's perspective. A final avenue for future research would focus upon grudgeholding in the business-to-business arena.

Future research opportunities in the area of grudgeholding remain plentiful. As companies seek to significantly enhance customer relationships, findings from studies such as this will become more even more valuable.

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ETHICS IN ADVERTISING: DIFFERENCES IN INDUSTRY VALUES AND STUDENT PERCEPTIONS

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ABSTRACT

In business, unethical activities not only create a negative view of the corporation but also affect corporate profitability, co-worker relationships, and employee job performance and satisfaction. As future executives and employees, the ethical views held by college students will impact advertising corporate culture. In this study, ethical perceptions and the perceived likelihood to engage in 20 unethical activities were examined from both the advertising professional and student perspectives. The relationship of gender and length of employment in advertising were also examined. Results of the study indicate that advertising professionals agree more strongly than students that ethical behavior is important in advertising. Further, students were more likely to engage in unethical advertising activities than agency personnel. It was also determined that female students held stronger ethical views than did male students. For agency personnel, the longer males were employed in advertising agencies the more important they perceived ethical behavior and the less likely they were to engage in unethical activities. This study provides insights for firms and researchers interested in assessing the ethical views of advertising professionals and students and in designing mentoring and training programs for future advertising employees.

Key Words: Advertising ethics; Ethics of advertising professionals; Ethics of students; Gender and advertising ethics; Length of employment and advertising ethics

INTRODUCTION

College students represent the employees and executives of tomorrow. Therefore it is likely the ethical perceptions and standards students bring to their new jobs will largely influence their behaviors as advertisers. Knowledge of their ethical perceptions, as students, should provide insights into what eventually could be their behaviors in the world of business. Based on this assumption, the purpose of this research is to empirically compare the ethical perceptions of college advertising students with the ethical perceptions of advertising executives to determine the base point from which future employers will have to work.

This type of research is important because the public's ethical perceptions of business people in general, and marketers in particular, are generally quite low. Studies have found that business executives were rated among the lowest ranked professional categories in terms of their images (Lantos, 1999; Luther et al., 1997; Wulfson, 1998). Furthermore, *Sales and Marketing Management* (2005) reports the results of a survey showing only 17% of Americans trust business leaders of major corporations. The negative consequences of unethical business activities, with regard to their impact on investors and customers, have been discussed by many scholars and business practitioners (Lantos, 1999; Schwepker, 1999; Trease et al., 1994).

Most research has discovered that firms which are perceived as being unethical are less profitable, have negative customer attitudes to overcome, etc. The same holds true with regard to the effect of unethical perceptions of corporate behavior on the corporation's investors (Lantos, 1999; Trease et al., 1994). As investors lose confidence in business, they become less likely to invest their savings in those businesses, which in turn increases the cost of capital to the business, resulting in financial challenges. While many firms have huge public relations departments and advertising budgets charged with elevating businesses' public image, many discover their investments are either wasted or too small to rectify ethical lapses their firms have experienced. Thus, unethical behaviors have been shown to have numerous deleterious outcomes for businesses as they relate to their customers and investors (Lantos, 1999; Mantel, 2005; Schwepker, 1999).

Businesses should care what their employees think because employee perceptions can influence employee behaviors. While one could argue that a business or businesses in general should behave ethically to establish goodwill with their customers and with investors, the argument could be advanced that ethical business behavior may also create positive outcomes with regard to the firm's employees (*Sales and Marketing Management*, 2006).

According to research, an individual's general attitudes may lead one to reject certain careers due to their perceptions of the roles they will play (Sparkes and Johlke, 1996) or face cognitive dissonance in their roles, leading to dissatisfaction (McFarland, 2003). Hunt and Chonko (1987) conclude that an employee's ethical problems with his/her employer negatively affect his/her relationships with co-workers and performance. A current assessment of the attitudes of marketing students are important, as universities have made efforts to emphasize the importance of ethics. Nearly every course offered in the marketing curriculum contains an "ethics module." Has this module affected the ethical perceptions of marketing students? Do marketing students believe that "good ethics is good business?" How do these marketing students' perceptions relate to the perceptions of advertising practitioners? Do perceptions vary based on gender? Experience? These questions are addressed in this research.

RELATED RESEARCH

Business ethics are critical factors from a manager's perspective. The critical nature of ethics is not solely based on the societal implications of ethical behavior, but ethical concerns are also based on their economic and business implications. This argument leads to the conclusion that the ethical behaviors of a business are critical managerial problems and management should have a leading role in promoting ethical behaviors (Chonko et al, 2002; Hunt and Chonko, 1987). Studies of ethical behavior in organizations have tended to focus on employee characteristics as determinants of ethical behavior. The variables assessed have included gender, age, education, work experience, etc. Much of the research in this particular area has provided inconsistent findings with regard to whether a particular demographic subcategory of individuals is particularly prone to behaving either more or less ethically. For example, one study found no differences in respondent beliefs about specific ethical situations and the age, experience, or job tenure of the respondents (Dubinsky and Levy, 1985). Another research effort uncovered no relationship between education, gender, experience and ethical perceptions. In this research effort, only age was significantly related to ethical perceptions (Dubinsky et al., 1992). The discovery of age as a possible influence of ethical behavior was supported in a separate study finding business executives responded more ethically to a survey than did students. In this particular study, gender was found to have no significant impact on ethical behavioral intentions (Harris and Sutton, 1995). Other research has continued to indicate that no significant differences exist between ethical perceptions and geographical locale, academic discipline or class, work experience (DuPont and Craig, 1996), or gender (Jones and Kavanagh, 1996; Singhapakdi and Vitell, 1990).

Jones and Kavanaugh (1996) contend that ethical intentions will be lower when the perceived quality of the work experience is low. This suggests that a relationship might exist between the person's job satisfaction and their perceptions of the ethical behaviors of the business. Similarly, an individual's attitude toward his/her employer's ethics should have a significant influence on his/her job satisfaction. Such an argument would logically contend that if one works for an employer that is perceived as unethical, then that person's job satisfaction levels would likely be low, as he/she might feel guilty or ashamed to be working for a firm that has low ethical standards. In support of this position, Hunt and Chonko (1987) conclude that an employee's ethical problems with his/her employer negatively affected relationships with co-workers and performance.

Valentine and Barnett (2003), suggest that a relationship exists between employee perceptions of their employer's ethical values and their organizational commitment. They contend that employees prefer ethical companies for which to work. Jones and Kavanagh (1996) contend the behavior of both an employee's managers and peers can be directed in a way to improve ethical behavior. Given these arguments, researchers have concluded that firms should focus more on using ethical character as a criterion in the hiring process (Lantos, 1999; Schwepker, 1999).

RESEARCH HYPOTHESES

Given that the behaviors of advertising employees are critical to the success of the firm, six hypotheses were developed to examine the ethical perceptions of current and future advertising employees. To determine if experienced advertising professionals differ in their perceptions from students who will soon become advertising professionals, the first two hypotheses compare agency personnel and student ethical perceptions and their perceived likelihood of engaging in unethical advertising behaviors. Because it is generally held that females and males have differing views concerning ethical behavior (Galbraith and Stephenson, 1993), the third and fourth hypotheses examine the effect of gender on agency personnel and student ethical perceptions and the perceived likelihood to engage in unethical advertising behaviors. The remaining two hypotheses were constructed to examine whether the ethical perceptions of male and female advertising agency employees remain stable over the course of their careers. More specifically, hypotheses five and six examine whether for agency personnel length of employment in advertising is related to ethical perceptions and their perceived likelihood of engaging in unethical advertising behaviors.

The six hypotheses concerning agency personnel and student perceptions are:

H1: Advertising professionals' ethical perceptions differ from those of students.

H2: Advertising professionals' perceived likelihood to engage in unethical advertising behaviors differs from that of students.

H3: For advertising professionals and students, gender affects ethical perceptions.

H4: For advertising professionals and students, gender affects the perceived likelihood to engage in unethical advertising behaviors.

H5: Gender and length of employment in advertising are related to the ethical perceptions of advertising professionals.

H6: Gender and length of employment in advertising are related to advertising professionals' perceived likelihood to engage in unethical advertising behaviors.

METHODOLOGY

The first step in the research process involved specifying a study sample that included both current and future advertising professionals. Forty employees at several large advertising agencies were selected for inclusion in the study and comprised the sample of current advertising professionals. Employees from both the account and creative sides of the agencies as well as managers and non-managers were included in the sample. The advertising employees ranged in age from less than 25 to over 45 years of age with most being over 30 years of age. A majority of the agency professionals had worked in advertising for more than 6 years; 30 percent of the professionals surveyed had more than 14 years of experience working in advertising. More than 60 percent of the advertising professionals had worked at their current agency no more than 5 years. Nearly all of the professionals had at least 4 years of college; 60 percent of the agency participants were female.

As noted by McCuddy and Perry (1996), given that students are potential employees, their "ethical propensities" can increase the knowledge of factors that influence future ethical behavior. As future advertising employees, 191 students enrolled in upper-division advertising courses at an AACSB accredited university in the Midwest were selected for inclusion in the study. In the business marketing curricula, the advertising students had been presented considerable information regarding the role of an advertising professional as well as ethical issues and behavior in advertising. In the student sample, 74 percent of the participants were business majors with the remaining students majoring in communications, art and design, and English. All participants were nearing the end of their college curricula. Seventy-four percent of the students were seniors, 25 percent were juniors, and the remaining students were post-graduates. Sixty percent of the respondents were female, and 80 percent of the subjects had no previous employment in advertising.

The second step in the research process involved development of the survey instrument. Many previous researchers in the area of ethics advocate the use of scenarios (Dubinsky et al., 1992; DuPont and Craig, 1996; Harris and Sutton, 1995; Jones and Kavanagh, 1996). In this type of research, respondents are presented with scenarios containing either an ethical or an unethical situation (Chonko et al., 1996). According to Jones and Kavanagh (1996, p. 515), "If unethical behavior in organizations is of rational choice, we could assume that intentions are indicative of actual behavior." Therefore, four questions assessing respondent perceptions of ethics in advertising were developed and pretested. Respondents were asked to indicate on a five-point Likert scale (1=strongly agree, 2=agree, 3=uncertain, 4=disagree, 5=strongly disagree) their agreement with four ethical concepts in the field of advertising: 1) the importance of ethical behavior, 2) whether success depends on ethical behavior, 3) the likelihood of encountering ethical dilemmas, and 4) whether they would only feel comfortable working in a corporate environment where corporate and personnel ethics are congruent.

Additionally, 20 situations were developed that could pose ethical dilemmas in an advertising context. The situations were developed based on literature indicating that some of the primary ethical issues facing advertisers relate to advertising accuracy, treating agency clients fairly, treating the employee agency fairly, and working fairly with the competition (Hunt and Chonko, 1987; Triese et al., 1994). Each of the situations included in the questionnaire were pretested for relevance and clarity with a separate group of students and with various advertising executives. The 20 situations are presented in the appendix. Respondents were asked to indicate on a seven-point Likert scale (1=very unlikely to 7=very likely) their likelihood to engage in each of the advertising situations.

Using analysis of variance, means for the current and future advertising professionals were compared for each of the four ethics questions and for each of the 20 situational questions. Analysis of variance also was used to assess the effect of gender on the responses to each of the ethical and situational questions for both the agency employees and students. Additionally for both the male and female agency personnel, correlation analysis was used to evaluate the relationship between length of employment in advertising and the responses to each of the ethical and situational questions.

RESULTS AND DISCUSSION

Ethical Perceptions of Advertising Professionals and Students

Advertising agency personnel and students held similar views on three of the four ethical questions - they would only feel comfortable working in a corporate environment where corporate ethics matched their own personal ethics, success in advertising depends on ethical behavior, and both disagree that ethical dilemmas are rarely encountered in advertising. However, advertising agency personnel agreed more strongly than did the students that ethical behavior is important in advertising. (See Table 1.) Perhaps students' exposure to ads has lead them to feel that ethical behavior is not always practiced in advertising. However when in a position to actually create ads, advertising professionals may have a better understanding of the importance of ethical behavior in advertising.

Table 1: Agency Personnel and Student Ethical Perception Means

	Mean*		
Ethical Perception	Agency Personnel (n=40)	Students (n=191)	Significance Level
Ethical Behavior is Important in Advertising	1.3	1.6	.0219
Would Only Feel Comfortable Working in a Corporate Environment where the Corporate Ethics Matched Own Personal Ethics	1.9	2.1	NS
Success in Advertising Depends on Ethical Behavior	2.3	2.6	NS
Ethical Dilemmas are Rarely Encountered in Advertising	4.3	4.4	NS

*1=Strongly Agree, 5=Strongly Disagree, NS=not significant

Perceived Likelihood to Engage in Unethical Advertising Behaviors of Advertising Professionals and Students

For the 20 advertising situations, agency personnel were unlikely to participate in 13 of the 20 unethical advertising activities (means $\leq$ 3.0) whereas students were unlikely to participate in only 9 of the 20 activities. (See Table 2.) For 10 of the 20 advertising situations, the perceived likelihood to engage in the activity differed between agency personnel and students. Students were more likely to make burger in an ad appear larger than it actually is, book a more expensive airline ticket to obtain frequent flyer miles, use confidential information to gain a competitive advantage, reverse a trend line graph to give positive impression, keep an expensive vendor gift, disclose a client's ad expense, accept freelance work from a client that competes with one of the agency's clients, charge an expensive dinner with friends to the corporate expense account, not hire a person due to their lack of social drinking, and for an advertisement pose an employee as disabled when they are not.

In contrast, copy corporate computer software for use at home was an activity in which both agency personnel and students were likely to engage. Further, both groups were uncertain whether they would alter a dog food product to expedite production of the advertisement. On the other hand, both agency personnel and students indicated that they were very unlikely to ignore a client over billing mistake, not hire a person due to their lack of social drinking, and pose an employee as disabled when they are not in an advertisement. However unlike students, agency personnel indicated that they would be unlikely to engage in two additional activities -- accept freelance work from a client that competes with one of the agency's clients and charge an expensive dinner with friends to the corporate expense account.

Table 2: Agency Personnel and Students' Perceived Likelihood to Engage in Unethical Advertising Behaviors

	Mean*		
Advertising Behavior	Agency Personnel (n=40)	Students (n=191)	Significance Level
Copy Computer Software	5.7	5.4	NS
Steak in Dog Food Bowl	4.2	4.7	NS
Fantasy Football League	3.7	3.4	NS
Barely Readable Disclaimer	3.6	3.4	NS
Burger Appears Larger	3.6	4.1	.0914
Discard Focus Group Results	3.2	3.4	NS

Table 2: Agency Personnel and Students' Perceived Likelihood to Engage in Unethical Advertising Behaviors			
	Mean*		
Advertising Behavior	Agency Personnel (n=40)	Students (n=191)	Significance Level
Book More Expensive Airline Ticket to Obtain Frequent Flyer Miles	3.0	4.2	.0002
Billing High Estimate Amount	2.9	3.1	NS
Use Confidential Information to Gain a Competitive Advantage	2.7	3.5	.012
Disclose Client's Failure to Pay	2.6	2.8	NS
Estimates/Budgeting	2.5	2.7	NS
De-emphasize Warning Label	2.3	2.3	NS
Reverse Trend Line Graph to Give Positive Impression	2.2	3.0	.0091
Keep Expensive Vendor Gift	2.1	3.9	<.0001
Disclose Client's Ad Expense	2.0	3.0	.0001
Freelance Work	1.7	3.7	<.0001
Dinner with Friends Charged to Expense Account	1.6	2.4	.0013
Client Over Billing	1.5	1.7	NS
Social Drinking	1.4	1.8	.0523
Pose Employee as Disabled	1.3	1.7	.0588
*1=Very Unlikely, 7=Very Likely, NS=Not significant			

Effect of Gender on Ethical Perceptions of Advertising Professionals and Students

For agency personnel, there were no significant differences in responses between male and female participants. However, this was not the case with students. (See Table 3.) In comparison to females, males did not agree as strongly that ethical behavior is important in advertising. Similarly in contrast to females, males felt that success in advertising is not as dependent on ethical behavior and that a work environment where corporate ethics matched their own was less important. These findings support earlier research that females tend to have stronger views concerning ethical situations than do males.

Table 3: Student Ethical Perception Means by Gender			
	Student Mean*		
Ethical Perception	Male (n=76)	Female (n=115)	Significance Level
Ethical Behavior is Important in Advertising	1.8	1.4	.004
Would Only Feel Comfortable Working in a Corporate Environment where the Corporate Ethics Matched Own Personal Ethics	2.3	1.9	.0060
Success in Advertising Depends on Ethical Behavior	2.9	2.4	.0060
Ethical Dilemmas are Rarely Encountered in Advertising	4.4	4.4	NS
*1=Strongly Agree, 5=Strongly Disagree, NS=Not significant			

Effect of Gender on the Perceived Likelihood to Engage in Unethical Advertising Behaviors for Advertising Professionals and Students

For the 20 ethical situations, there were no significant differences in responses between male and female advertising agency participants. However significant differences were found between male and female student responses. The means for males were consistently higher than those for females. Further for 14 of the 20 situations, the means for males were significantly higher than those for females. This indicates that males were more likely to engage in unethical behaviors than were females. Once again, these findings are consistent with earlier research concerning the ethical views of females versus males.

Table 4: Students' Perceived Likelihood to Engage in Unethical Advertising Behaviors by Gender			
	Student Mean*		
Advertising Behavior	Male (n=76)	Female (n=115)	Significance Level
Copy Computer Software	5.8	5.1	.0017
Steak in Dog Food Bowl	5.3	4.3	.0001
Fantasy Football League	4.1	2.9	<.0001
Barely Readable Disclaimer	3.8	3.1	.0052
Burger Appears Larger	4.4	4.0	.0691
Discard Focus Group Results	3.6	3.2	NS
Book More Expensive Airline Ticket to Obtain Frequent Flyer Miles	4.3	4.1	NS
Billing High Estimate Amount	3.9	2.7	<.0001

Table 4: Students' Perceived Likelihood to Engage in Unethical Advertising Behaviors by Gender			
	Student Mean*		
Advertising Behavior	Male (n=76)	Female (n=115)	Significance Level
Use Confidential Information to Gain a Competitive Advantage	3.7	3.4	NS
Disclose Client's Failure to Pay	3.1	2.6	.0464
Estimates/Budgeting	3.1	2.4	.0010
De-emphasize Warning Label	2.3	2.3	NS
Reverse Trend Line Graph to Give Positive Impression	3.1	2.9	NS
Keep Expensive Vendor Gift	4.3	3.6	.0188
Disclose Client's Ad Expense	3.4	2.8	.0129
Freelance Work	4.1	3.5	.0451
Dinner with Friends Charged to Expense Account	2.9	2.1	.0002
Client Over Billing	1.9	1.6	.0700
Social Drinking	2.3	1.4	<.0001
Pose Employee as Disabled	1.9	1.6	NS
*1=Very Unlikely, 7=Very Likely, NS=Not significant			

Relationship of Gender and Length of Employment in Advertising to the Advertising Professionals' Ethical Perceptions

For male agency personnel there was a highly significant, inverse correlation ($r=-.77$; $p<.0005$) between length of time employed in advertising and the importance of ethical behavior. The longer males were employed in advertising agencies, the more important they perceived ethical behavior in advertising. However, no such relationship was observed for female agency personnel. For female agency personnel, the perception of the importance of ethical behavior did not vary with length of employment. These findings suggest that for females ethical perceptions may be less likely to change over time. However as males mature and gain work experience, they may be more likely to modify their ethical perceptions.

Relationship of Gender and Length of Employment in Advertising to Advertising Professionals' Perceived Likelihood to Engage in Unethical Advertising Behaviors

For male agency personnel there were significant, inverse relationships between length of time employed in advertising and the likelihood to engage in six of the 20 ethical situations. (See

Table 5.) The longer males were employed in advertising agencies, the less likely they felt that they would engage in unethical advertising behaviors. However, no such relationships were observed for female agency personnel. For female agency personnel, the likelihood to engage in unethical advertising behaviors did not vary with length of employment. These findings indicate that in contrast to males, females perceived likelihood to engage in unethical advertising behaviors may remain stable over time. However for males the situation may be more dynamic with work experience influencing the likelihood to engage in unethical advertising behaviors.

Table 5: Correlation between Length of Employment and Perceived Likelihood to Engage in Unethical Advertising Behavior for Male Agency Personnel

	Male Agency Personnel (n=16)	
Advertising Behavior	Correlation	Significance Level
Copy Computer Software	-.44	.0880
Fantasy Football League	-.59	.0153
Burger Appears Larger	-.53	.0441
Reverse Trend Line Graph to Give Positive Impression	-.57	.0197
Keep Expensive Vendor Gift	-.70	.0025
Client Over Billing	-.53	.0350

CONCLUSIONS AND RECOMMENDATIONS

This study examined the ethical perceptions and the perceived likelihood to engage in unethical activities for both advertising professionals and students. Results of the study indicate that advertising professionals agreed more strongly than did students that ethical behavior is important in advertising. Further, students were more likely to engage in unethical advertising activities than agency personnel. These results indicate the need for agency personnel to design mentoring and training programs for future advertising employees. These programs and accompanying monitoring systems should be designed to enable employees to develop their ethical standards. Clearly, university curriculum efforts have been pressured to include issues in ethics for several years now. Consequently, one must question if ethics in advertising has focused enough on specific ethical activities that face advertising agencies. In this context, advertising textbooks often discuss the importance of ethics in advertising however; many do not devote coverage of actual ethical dilemmas and practices encountered by practitioners on a daily basis. In addition, it is possible that professors avoid discussions concerning what is “right and wrong” behavior in advertising as well. Future research should extend this study in an attempt to help educators, students, and advertising personnel by determining what practices are considered ethical and unethical, common and uncommon, as well as positive and negative consequences of these behaviors. No doubt, as time, technology and media culture change, so will the ethics that guide the advertising industry.

Unlike some previous studies, gender and work experience were significantly related to ethical views. For students, females appear to have higher ethical standards than males. Additionally, it appears that the higher ethical standards of females carry over into the workplace and remain stable over time. However, male students appear to have a more relaxed view of ethical standards and to be willing to take more risks. However once employed in an advertising agency, males appear to rethink and reformulate their ethical standards. The longer the length of employment in advertising, the more conservative the male employees become. In terms of ethics, employment experience tends to affect males in a positive manner. Based on these findings, it may be suggested that agencies and universities do more to integrate males and females on project teams and assignments. Such integration may elevate the ethical standards and behaviors of the male team members. Further, students should be exposed to more advertising practitioners during their studies. This exposure should include modules focusing on the significance of ethics in the practice of advertising.

As future business executives and employees, the ethical views held by college students will impact corporate culture. It is important for current advertising professionals to understand the ethical views of their newest colleagues and how those views may differ from their own. The need for agency professionals to mentor new employees is underscored by the potential dynamic nature of ethical perceptions and behaviors. Unethical activities not only create a negative view of business but also affect corporate profitability, co-worker relationships, job performance, and job satisfaction. With the low public perception of marketers, it is increasingly important for our future advertising professionals to be trained in and to understand the importance of ethical behavior in the advertising profession. This study provides insights for firms and researchers interested in assessing the ethical views of advertising professionals and students and in designing ethics training programs for future advertising employees.

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Appendix A: Advertising Ethical Dilemmas

You are producing a television ad for a gourmet dog food manufacturer. Several hours have been spent trying to get the star, a Labrador retriever, to eat the dog food. Since the production is costing $12,000 per hour, you place a steak in the bottom of the dog food bowl. Although the dog never eats one bite of the dog food, the camera angle makes it appear that the dog is devouring the gourmet dog food.

You are producing a television ad for a weight loss company. In order to be legal, the ad must contain the disclaimer, "These results are not typical." You meet the legal obligation by displaying the disclaimer so quickly and in type so small that it is barely readable.

In the ad that you are producing, your client, a fast food restaurant chain, wants their burger to appear much larger than it actually is. You use a camera lens and retouching to make the background objects look smaller.

Your client has requested an estimate for next year's advertising budget. You estimate that account service will be 40% of the budget. Your client will likely object to such a large allocation to account service. Knowing that your client will probably never question budgeted printing costs, you shift 10% of the estimated account service cost to printing.

In reviewing your account billing, you notice that you have accidentally over billed one of your clients by a substantial amount. However, you have already received payment from the client. You ignore the mistake.

You are employed by an ad agency but also do freelance work on weekends. Another agency wants you to design an ad for one of their clients. While the agency is not a direct competitor of your employer, the ad is for a client that directly competes with one of your agency's clients. You accept the freelance work.

As an art director for an advertising agency, you often take work home. Your home computer has the same software but not all of the fonts that you use at the agency. You copy all of the agency's fonts and install them on your home computer.

You interview a person for an account executive position with your agency. At dinner, the person indicates that they do not drink alcoholic beverages. Even though the person is well suited for the position, you decide that the person is not the one for the job because they will not be able to drink socially with clients.

At the ad agency where you work, you participate in a fantasy football league. During work hours, you and your coworkers spend a significant amount of time making your picks, and corresponding via e-mail with update scores, standings, offers for trades, and sarcastic congratulations to the week's winner.

Focus group results are to be included in a marketing brochure for a client's product. The first set of focus group results is disappointing. You discard the first set and include in the brochure a second set of results that are more favorable to the client's product.

You provide clients with low, middle, and high estimates of the cost of each advertising project. The middle estimate amount is the actual cost incurred for one project for a particularly difficult client. However, because of the extra headaches created by the client, you bill the client for the high estimate amount.

As a media sales representative, you tell a client that his major competitor will be running ads in your magazine. To close the sale, you tell the client the amount his competitor will be spending on the ads.

You designed an expensive ad campaign for a client, but the client failed to pay the bill. Even though your agency has a client confidentiality rule, at lunch you tell several of your friends at other advertising agencies about the client's failure to pay.

Your friend works for a competing ad agency. Unknown to your friend, both ad agencies, yours and your friend's, are competing for the same account. Over dinner, your friend discusses plans to win the account. You use the information to gain a competitive advantage.

You are in charge of deciding which new computers to purchase for your ad agency. You tell one of the computer sales representatives that the decision is between his company and one other and that you will make your decision in two weeks. The next day a new computer arrives at your home as a gift from the sales rep. You keep the computer.

You are out-of-town visiting a client. You have a free evening, so you decide to have dinner with a couple of old college friends. The dinner turns out to be quite expensive. You pick up the check and charge it to your agency's expense account.

You are to travel out-of-town to visit a client. Although you can obtain a less expensive fare on another airline, you choose to book the ticket with the airline on which you are collecting frequent flyer miles.

You are preparing a brochure that must include a 5-year profile of a client's sales figures. Sales have steadily declined over the 5-year period. You design a line graph such that the year with the lowest sales is displayed first and the year with the highest sales occurs last. Thus the data line rises from left to right and gives a positive impression of the company's sales.

You are designing a recruiting brochure for a company. In the brochure, you decide to include a photograph of the company's employees and facilities. The company has no disabled employees, so you ask one of the employees to sit in a wheelchair for one of the photographs.

You are designing a package for a client whose product must display a warning label concerning a potentially harmful side effect. To de-emphasize the warning, you print it in a pastel color that readily blends with the rest of the package design.

HERITAGE PRIDE AND ADVERTISING EFFECTIVENESS: THE MEXICAN CASE

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ABSTRACT

Heritage Pride is the sense of worth and dignity that people feel for what was inherited as members of a community. Heritage Pride has two sub domains: National Heritage Pride (NHP) and Cultural Heritage Pride (CHP). But how does Heritage Pride evolve when people move to another country?

This paper has three purposes. First, to define the concept of Heritage Pride and to create a valid and reliable measurement instrument. Second, to identify if there are differences between Mexican nationals that live in the USA and Mexican nationals that live in Mexico in the way Heritage Pride is perceived. Finally, to compare advertising effectiveness between these two groups, when Mexican national and/or cultural elements are present in TV ads. The distinction between cultural and national elements in this paper is a big contribution to the body of knowledge in advertising effectiveness.

Results show that indeed there are differences in the way Cultural Heritage Pride is perceived. Moreover, ads containing Mexican cultural elements are more effective for Mexicans living in the USA. Findings give evidence that cultural elements in TV ads have significant effects on people that live away from their home country.

INTRODUCTION

Heritage Pride is defined as a mild positive emotion of worth and dignity for those elements that people inherit as members of a community. Heritage Pride has two sub-domains: 1) Cultural Heritage Pride (CHP) is the feeling for those elements that represent a culture and that may go beyond the geographical constrains of a country (i.e. language, music, religion, or traditions); and 2) National Heritage Pride (NHP) is the feeling for those elements that represent a country and that are inside the geographical boundaries of a country (i.e. the national flag, the national hymn, historic monuments, or natural places). Even when a flag from one country travels around the world, it represents a well defined geographical country.

Immigration is a social phenomenon that is affecting the US population. Immigrants come mainly from Asia and Latin America (Lee & Bean, 2007). According to the US Census, Hispanic population in 2006 was more than 43 million and those having Mexican origin composed almost 64%. Indeed, Hispanic is the largest minority in the US with a growth rate of more than 24% and it is expected that by 2050 the Hispanic population will reach more than 100 million (MacDonald, 2006).

This study has three purposes. The first purpose is to define and create the instrument to measure Heritage Pride. By following the well known Churchill's (1979) paradigm of scale development, this study assures a valid and reliable measurement instrument.

The second purpose of the paper is to investigate the way Heritage Pride changes in immigrants to the US. By using Mexican students, this study assures sample homogeneity. Besides, the education system is a mechanism for social mobility (Crosnoe et al, 2004). Moreover, the justification to study Mexican immigrants is based on the close geographical distance, but at the same time, there is a large cultural distance between the two countries. Similarly, as stated by Garcia & Yang (2006), the US and Mexico represent an important geographical region to study international advertising practices.

And finally the third purpose of this study is to compare advertising effectiveness when cultural and/or national elements are presented in TV advertising. Advertising effectiveness is measured by comparing attitude toward the ad (Neese & Taylor, 1994), attitude toward the product (Holbrook & Batra, 1987; Perachio & Meyers-Levy, 1997), and purchase intention.

The contribution of this paper is not only to meet these purposes, but to go beyond cultural values in advertising literature (e.g. Roberts & Hart, 1997; Ueltschy, 2002; Gregory & Munch, 1997) and investigate the change of feelings in immigrants. It may be that what Stroebe et al (2002) defines as homesickness may change immigrant feelings and that might affect TV advertising effectiveness, thus affecting advertising effectiveness when aroused.

The rest of the paper is organized in the following way. First, the literature review is presented along with the development of the hypotheses. This is followed by the scale development and validation section. Then the methodology section is presented where sample selection, ad selection and experiment design are discussed. This is followed by the result section where the results of the hypotheses are discussed. Finally the conclusion section is presented where discussion, limitations, and future research is suggested.

LITERATURE REVIEW

Heritage Pride

In order to define Heritage Pride, we need to define two separate elements: heritage and pride. Heritage is considered all the tangibles and intangibles that pass from generation to generation by succession (Webster dictionary). UNESCO defines heritage as our legacy from the past, what we live today, and what we pass on to future generations. It also considers heritage as all the cultural and natural elements around the world considered to be of outstanding value to humanity. These elements are a source of life and inspiration (http://www.unesco.org). This study includes only the community level heritage. That heritage includes cultural elements such as the language, religion, traditions, and so on. It also includes civic or national elements as part of this community heritage, such as the country's flag, national monuments, and national natural resources.

In order to preserve, protect, discover, and diffuse heritage, countries such as Canada, China, Egypt, Japan, as well as others, have organizations and laws to protect heritage (Edson, 2004). Furthermore, UNESCO adopted in 1972 an international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage (http://www.unesco.org). In this way, laws protect heritage in most countries.

On the other hand, pride is defined as respect for one's own dignity and worth. Pride is also a pleasure or satisfaction over something done, achieved, or owned (Webster dictionary). This definition implies a positive feeling toward a valuable possession.

According to Davidson (1976), Hume's definition of pride is "that agreeable impression, which arises in the mind, when the view either of our virtue, beauty, riches, or power make us satisfied with ourselves" (p. 750). Even more, pride always causes the idea of self to appear.

Hume (1739) considers pride to have two parts, the quality that is appreciated and the subject in which that quality is placed. Davidson (1976) goes further in claming that there should be also a belief that the quality is indeed owned by the subject.

Another definition of pride is given by Isenberg (1949): From the psychological standpoint, pride is pleasure taken in the possession of some quality that one considers valuable. According to him, pride has three parts: there is (1) a specific quality which (2) is approved, valued or desirable, and (3) is judged to belong to oneself.

The previous discussion leads to the idea the pride is usually related to pleasure, or at least to a positive attitude. Even more, the attitude of approval or thinking well of something, is needed to account for pride (Davidson, 1976). Hume identifies pride with "a certain satisfaction in ourselves, on account of some accomplishments or possession, which we enjoy" (p.753).

Heritage pride is thus defined as the extent to which a person may feel a mild positive emotion of respect and worth, elicited by the presence of community heritage in the form of cultural or national elements. It is important to notice that heritage implies a sense of belonging toward the inherited. There are two key elements in the definition of heritage pride, the sense of identification or belonging, and the sense of value about that belonging. Belonging is essential because no one can feel pride for something that the person does not possess; indeed belonging is one of the most important social values to explain identity (Gouveia et al, 2002). And in the same way, unless the person considers that the possession has some value or worth, then pride cannot be elicited.

Heritage Pride is composed of two parts: the national part and the cultural part. Previous research does not distinguish these elements as different, however this study proposes that they are distinct and should be treated separately. Values are context and culture specific, then it is assumed that what is valuable for one culture or community, may not be appreciated for a different group. All these are reasons to distinguish between these two elements (National Heritage Pride and Cultural Heritage Pride) of Heritage Pride.

There are other constructs related to Heritage Pride. Nationalism, patriotism and internalization may be considered as related with the construct defined in this study. However, the definitions given by Balabanis et al (2001) stress the differences among all these constructs. Patriotism refers to a strong sense of attachment and loyalty to one's country, without the corresponding hostility toward other nations. Nationalism views that one's country is superior and should be dominant, implying the denigration of other nations. And finally, internationalism focuses on one's concern about the welfare of other nations and reflects empathy for the people of other nations. This infers that Heritage Pride is a feeling elicited by specific elements considered to be community heritage, and the other constructs are better described as ideologies.

In conclusion, there is no consensus about Heritage Pride and the elements that form it. What seems to be clear is the sense of identity toward the national or cultural elements that are present when this type of emotion is felt. And these elements generate heritage pride that may be intensified by what is defined by Stroebe et al (2002) as homesickness. People that live away from their home country tend to change their behavioral patterns and lifestyles (Roberts & Hart, 1997), but their feelings may change as well. By missing family and friends, people tend to have deeper feelings. This leads to the next hypotheses:

H1a: National Heritage Pride (NHP) is greater for Mexicans that live in the USA than for Mexicans that live in Mexico

H1b: Cultural Heritage Pride (CHP) is greater for Mexicans that live in the USA than for Mexicans that live in Mexico.

Advertising Effectiveness

Even when cultural and national stimuli have been used in advertising for a while, there is no formal study that measures their effectiveness, especially by measuring Heritage Pride. So the contribution of this study is to have a better knowledge of the usage of these stimuli to know how to use them and to be more effective in advertising.

Self-identification as a group member gives a sense of belonging to a group and contributes to a positive self-concept (Phinney, 1990). When advertising elicits this sense of belonging and value, then Heritage Pride is elicited. As a positive feeling, the evaluation toward the ad and other ad effectiveness measures (i.e. attitude toward the product and purchase intention) are influenced positively.

By involving the role of emotions in advertising, Holbrook & Batra (1987) find the importance of emotions as mediators of responses to advertising. The responses are measured using attitude toward the ad and attitude toward the brand. They suggest pride as an emotional index that generates pleasure and is related with superiority and worth, such that positive emotions impact advertising effectiveness positively.

The use of cultural symbols has been researched as well. Holland & Gentry (1997) propose the Theory of Intercultural Accommodation to explain the effect of the usage of cultural symbols in advertising. That theory posits that there are both cognitive and affective responses to cultural symbols in advertising. The cognitive can either be positive, if the recipient perceives the cultural symbol as handled with respect, or negative, if the recipient sees it as manipulative. The other type of response is affective, and people who identify more strongly with the ethnic group of the ad actor have a stronger affective response and the ad is evaluated more highly.

In previous studies, there is no formal distinction between cultural and national elements in advertising. This study proposes that these elements must be treated and considered separately. Evidence suggests that positive feelings influence advertising effectiveness, thus leading to the following hypotheses:

H2a: Advertising effectiveness is greater for Mexicans living in the USA than for Mexicans living in Mexico when **cultural elements** are presented in TV ads.

H2b: Advertising effectiveness is greater for Mexicans living in the USA than for Mexicans living in Mexico when **national elements** are presented in TV ads.

H2c: Advertising effectiveness is greater for Mexicans living in the USA than for Mexicans living in Mexico when a **combination of national and cultural elements** is presented in TV ads.

SCALE DEVELOPMENT AND VALIDATION

Instrument Development

Two sources of analysis were used to cover all the domains of which heritage pride is composed. First, a focus group was gathered to identify all the ways that heritage pride can be elicited. The focus group consisted of students from a consumer behavior class. The use of qualitative research was the best tool to start the identification of the domains of Heritage Pride. The second source of information was all relevant literature about patriotism, nationalism, national pride, cultural pride, and so on. These two steps are the first that are usually made in cases where there is no concrete evidence and new insights need to be found (Churchill & Iacobucci, 2005).

In order to develop and evaluate a measurement for Heritage Pride, Churchill's (1979) well known paradigm for scale development is followed. If the generation of the items, the purification of the scale and its validation is properly applied, the resulting scale assures validity and reliability.

Item Generation and Scale Purification

From literature and qualitative data, an original pool of 46 items measuring national and cultural heritage pride was generated. An original questionnaire was developed and applied to a total of 159 students in a south Texas university during normal class time. Other demographic data is included such as age, gender, and ethnicity.

The same set of items was also translated and back-translated into Spanish in order to use the questionnaire in Mexico. The Spanish questionnaire was applied to 110 students of a university in north Mexico during normal class time.

Factor analysis was used to eliminate all the items with low loadings (<.5) or with multiple loadings (Hair et al, 1998). Varimax rotation was selected to have a clearer view of the loadings (George & Mallery, 2003). At the end of this stage a total of 16 items composed the scale. These items were 9 for National Heritage Pride and 7 for Cultural Heritage Pride. In the two samples, the factor loadings have similar behaviors. The factor loadings for the final items of the scale for each one of the samples are reported in table 1.

Table 1: Factor Analysis Loadings for Scale Development and Purification.

			Sample from USA	Sample from Mexico
National HP	Government	Item 1	.695	.739
		Item 2	.882	.825
		Item 3	.844	.765
	Patriotic	Item 1	.802	.714
		Item 2	.805	.713
	Places	Item 1	.790	.763
		Item 2	.707	.743
	Sports	Item 1	.732	.557
		Item 2	.631	.611
Cultural HP	History	Item 1	.614	.824
		Item 2	.640	.800
		Item 3	.587	.792

Table 1: Factor Analysis Loadings for Scale Development and Purification.				
			Sample from USA	Sample from Mexico
	Religion	Item 1	.708	.823
		Item 2	.868	.828
	Traditions	Item 1	.760	.590
		Item 2	.696	.696
Percentage of variance explained			68.09%	65.54%
Extraction Method: Principal Component Rotation Method: Varimax with Kaiser Normalization				

Scale Validation

As suggested by Churchill (1979), further validation of the final scale was made. Two more samples were gathered from 2 different settings: American and Mexican samples. The American sample consists of 136 students from universities in Louisiana and Virginia. The Mexican sample consists of 144 students from a university in Monterrey, Mexico. To validate the scale, Confirmatory Factor Analysis (CFA) was used. Using AMOS as the statistical tool, an overall excellent fit of the scale (model) was obtained in the two samples. As suggested by Arbuckle & Wothke (1995), model fitness was measured by Normed Fit Index (NFI), Comparative Fit Index (CFI), and Root Mean Square of Approximation (RMSRA). NFI and CFI values should be greater than 0.9 as suggested by Hair et al (1998); in the validation of the 2 samples values greater than 0.90 were obtained. The other variable that measures the fitness of the model is RMSRA. This variable should be less than 0.1 (Arbuckle & Wothke (1995); for our validation, the 2 samples got values less than 0.1. Table 2 reports these values for the samples in the validation phase.

Table 2: Results for Goodness of Fit of the Scale.			
	NFI	CFI	RMSRA
American sample	.950	.978	.064
Mexican sample	.923	.955	.082

The other measurement to verify reliability is Cronbach's alpha. As suggested by Hair et al (1998), the acceptable lower limit is 0.7, although it may decrease to 0.6 for exploratory research. For this study, values greater than 0.7 were obtained in the majority of the cases, except for a few situations and those values did not go below 0.6. This suggests that reliabilities for this study are acceptable. Table 3 contains the reliabilities of the samples for each sub-domain of the scale.

Table 3: Reliabilities of the Final Scale.			
	Sub-domain	Sample from Mexico	Sample from the USA
National HP	Government	.6612	.6785
	Patriotic	.8099	.7523
	Places	.6601	.7239
	Sports	.6187	.8549
Cultural HP	History	.6065	.6018
	Religion	.7813	.8563
	Traditions	.6855	.8337

The final scale consists of 16 items, nine items for the National Heritage Pride subscale and 7 items for the Cultural Heritage Pride subscale. Table 4 presents the final scale to measure Heritage Pride.

Table 4: Final Heritage Pride Scale		
National Heritage Pride	Government	About Mexico as a country: 1. I am proud of its armed forces 2. I am proud of its public safety 3. I am proud of its government
	Patriotic	4. I am proud of its national anthem 5. I am proud of its flag
	Places	6. I am proud of its historical monuments 7. I am proud of its natural places
	Sports	8. I am proud of its traditional sports 9. I am proud of its Olympic teams and the national sport teams
Cultural Heritage Pride	History	1. I am greatly interested in Mexican history 2. Knowing Mexican history teaches me the value and understanding of the members of my community and also myself better 3. I am proud of Mexican history
	Religion	4. My spiritual beliefs are the foundation of my whole approach to life 5. I am often aware of the presence of God in my life
	Traditions	6. I respect the traditions from Mexico 7. Mexican traditions serve a special purpose in my life

In summary, by having the purification, validation, and confirmation of fitness of the scale, the validity and reliability of the instrument that measures Heritage Pride is assured.

METHODOLOGY

Dependent Variables

This section describes the variables used to measure advertising effectiveness in this study.

Attitude toward the Ad

Attitude toward the Ad is defined as the predisposition to respond in a favorable or unfavorable manner toward the advertisement after being exposed to it. This construct is operationalized by using a scale used in previous research studies. This study took the scale from the research made by Neese & Taylor (1994) using a 7-point Likert scale from strongly agree to strongly disagree, including items such as offensive, useful, and convincing.

Attitude toward the Product/Service

Attitude toward the Product/Service is defined as a predisposition to respond in a favorable or unfavorable manner toward the product after being exposed to an advertising stimulus. To operationalize this construct this study combined two already used scales in marketing literature made for this purpose. The combined scale consists of a series of 7-point bipolar scale with items selected from two sources. One is from Holbrook & Batra (1987) that include items such as good/bad and positive/negative. The other source is from Peracchio & Meyers-Levy (1997) that includes items such as boring/exciting and exceptional/mediocre.

Purchase Intention

Purchase Intention is defined as the actual intention of the subject to purchase the product. The measurement is done by asking a single question in the questionnaire, “If you could, would you buy this product?” with a 7-point Likert scale (Not at all – Definitely).

Experiment Design

A total of nine TV ads were used for the experiment. These ads were selected by a panel of experts in advertising. The selection criteria was to choose those ads among a total of 77 that reflect cultural and or/national elements from different regions. For this study only the ads that reflect Mexican elements were considered.

The samples consisted of Mexican college students. One sample is from Mexican students studying in Mexico, and the other is from Mexican students studying in the USA. By selecting college students, this study assures homogeneity of the two samples. Only those students that identify themselves as Mexican nationals were considered for this study. The subjects were approached during normal class time. They were exposed to each of the nine ads. After each ad the subjects were instructed to fill in the corresponding part of the questionnaire of the three variables used to measure ad effectiveness (i.e. attitude toward the ad, attitude toward the product, and purchase intention). When all the ads were completed, they were instructed to fill the part of the questionnaire that measure Heritage Pride, beside some demographic data.

The two samples were exposed to the same ads and in the same order. The ads and the questionnaires were in English; this could be done because the students selected were bilingual. The three commercials that contains Mexican elements, contain either cultural elements (e.g. music and traditional food), or national elements (e.g. archeological zones and beaches), or a combination of both (e.g. Mexican flag and mariachi music).

RESULTS

A total of 186 usable questionnaires were gathered. Of those, 144 were from Mexico and 42 from the USA. To determine if there are differences between the two samples, T-Tests using SPSS were employed.

This study did not find any evidence that there are differences in the way National Heritage Pride is perceived by the two samples, such that H1a is not supported. However, there is a strong difference ($p<.000$) in the way Cultural Heritage Pride is perceived between the two groups, supporting H1b. These results suggest that living away from home do not affect the feelings about the country (i.e. National Heritage Pride), however, the feelings about the culture (i.e. Cultural Heritage Pride) is intensified. People really miss their traditions, food, language, religious practices, and so on.

The second set of hypotheses deal with advertising effectiveness. This study found that there are differences in advertising effectiveness between the two groups only when cultural elements (alone) are present in TV ads. When national elements are present in the ads, even in combination with cultural elements, there are no significant differences between the two sample about advertising effectiveness, such that H2a is supported, but H2b and H2c are not supported. This suggests that when targeting immigrants living away from their home country, the most viable way to increase advertising effectiveness is by using cultural elements only. Table 5 gives a summary of the results.

Table 5: Summary of the Results					
Hypothesis	Variable	USA	Mexico	Sig. level	Conclusion
H1a	National HP	-	-	n.s.	Not supported
H1b	Cultural HP	4.30	3.82	.000	Supported
H2a	Ad effectiveness Cultural elements	5.11	4.18	.000	Supported
H2b	Ad effectiveness National elements	-	-	n.s.	Not supported
H2c	Ad effectiveness National and Cultural elements	-	-	n.s.	Not supported

CONCLUSIONS

The purpose of this study was to investigate the role of cultural and/or national elements in ad effectiveness. Even though when only two hypotheses were supported by the data, the insights on these results shed light on the proper way to handle cultural elements in advertising. These results suggest that cultural elements strongly affect the way TV ads are evaluated. Contrary to the expectations, national elements did not contribute to differences in the way advertising is evaluated by Mexican immigrants. Even more, when cultural elements were presented together with national elements, it seems that they did not contribute to advertising effectiveness in our Mexican sample from the US, and only when cultural elements were presented alone in the ad is this difference in ad effectiveness found.

Results suggest that there are changes in the way Cultural Heritage Pride is perceived when people are away from their home country. However, National Heritage Pride seems not to be affected. This is further supported by the significant ad effectiveness differences when cultural elements are present in the ads. This may be caused by the sample selection. Students may consider their condition as temporal, and with the goal to get a college degree. This may be the cause that National Heritage Pride is no significantly different between the two samples. So no real change of feelings about the home country is detected.

There are some limitations of this study. The sample selected consisted only of college students so the results cannot be generalized. However the justification for this sample was to have homogeneous samples in age and occupation minimizing the effect of other factors on the results.

Another limitation is the selected ads, since the selection was made from a pool of commercials that already existed. Even though this simulates a real world scenario, there was no way to control product categories, or the way national and/or cultural elements were presented.

These caveats suggest the way future research should be done. By integrating subjects other than college students (e.g. people that plan to stay in the USA), and by creating TV ads where cultural and national elements can be manipulated, future studies may generate more conclusive results. In the same way, using subjects from other nationalities may increase the body of knowledge in this new and important aspect of international business.

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A PATH ANALYSIS STUDY OF THE RELATIONSHIPS AMONG CONSUMER SATISFACTION, LOYALTY, AND MARKET SHARE IN RETAIL SERVICES

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ABSTRACT

This study investigates, using path analyses methodology, the relationships among customer satisfaction, customer loyalty, and market share in a sample of users of four retailer-types: health clubs, convenience stores, medical clinics, and fast-food burger outlets. The authors show that customer satisfaction exhibits a significant and negative relationship to buyer loyalty. Also buyer loyalty is shown to exhibit a significant and positive relationship with market share. However, satisfaction is found to have no direct effects on market share. Additionally, satisfaction has no indirect effect on share through the mediation effects of buyer loyalty. Finally, the covariate, type of retail store, is found to be related to satisfaction and loyalty, but not to market share. Thus, the levels of consumer satisfaction and loyalty differ across retail categories.

INTRODUCTION

An accurate description of the basic consumer model, along with the relative influence of that model on firm performance, has interested marketing theorists for decades. The basic premises in marketing are straightforward: (a) better value for the buyer should lead to consumption and satisfaction, (b) a satisfied buyer will eventually and for various reasons become a repeat purchaser and/or loyal buyer, (c) this buyer loyalty and satisfaction should result in improved marketing performance for a variety of reasons, and (d) the improved marketing performance should lead to better overall firm performance (Leverin & Liljander 2006, Story & Hess 2006, Cooil et al 2007).

However, these general premises do not hold for every industry or under every condition. There are multitudes of examples that better mousetraps do not always result in higher sales or share, usually as the result of poor marketing, poor relative value, or a variety of macro-firm factors. Plus, satisfaction does not always lead to improved firm performance even when it does lead to improved market shares (Pleshko & Cronin 1997). Satisfaction is also not always enough to ensure customer loyalty, even though satisfaction leads to loyalty in many instances (Mitchell & Kiral 1998, Reichheld & Sasser 1990). Buyer loyalty generally does lead to improved marketing performance, but not in all investigations (Ehrenberg & Goodhardt 2002, Knox & Denison 2000). Therefore, the specific conditions for which the marketing premises hold are still under investigation.

The purpose of this study is to partially investigate the premises mentioned above. In particular, the interrelationships among consumer satisfaction, consumer loyalty, and market share are studied in four types of retailers: fast-food burgers, convenience stores, health clubs, and medical clinics. This study will initially address the literature related to the primary constructs under study. This will be followed by a discussion of the data collection and measurement, analyses, results and discussion, as well as any limitations of the study.

CUSTOMER SATISFACTION

Customer satisfaction and retention are generally considered among the most important long term objectives of firms (Cooil et al 2007). The marketing concept suggests that a satisfied buyer will likely return to purchase again, or at least, consider purchasing again (Keith 1960, Leavitt 1960). According to Reichheld and Sasser (1990) repeat customers cost less to serve than new buyers, benefiting a firm’s cost structure. Additionally, maximizing customer retention rates and minimizing customer defections are primary strategic objectives for most firms, as evidenced by companies' emphasis on customer relationship management (Ching et al 2004, Verhoef 2003). Thus, previously satisfied buyers may help firms both reduce marketing costs and develop more stable levels of sales when a large number of satisfied buyers are retained to purchase again in the future.

There are several definitions of customer satisfaction in the marketing literature. It is generally accepted that satisfaction is a psychological state that a consumer experiences after consumption (Oliver 1980). Additionally, the basic conceptualizations focus on either or both of two aspects: (i) of the buyers' initial expectations in relation to the product and (ii) the buyers' perceptions of the product performance in relation to these expectations (Turan 2002, Churchill & Suprenant 1982, Oliver 1980). The general idea is that a potential buyer has specific expectations about a product before purchasing: such as, health club 'A' will provide superior customer service and maybe excellent facilities. If, after using health club "A", the buyer feels that these salient criteria are met, then he/she will be satisfied, and vice versa. The measurement of satisfaction generally focuses on the product performance aspect rather than expectations. As such, it may be suggested that a buyer's 'fulfillment response', as derived from the performance of features or benefits of the product, is the vital aspect in defining satisfaction (Turan 2002).

BUYER LOYALTY

The investigation of brand loyalty has had a long and rich tradition in the field of marketing. From early research until today, a variety of conceptualizations of the buyer loyalty concept have been developed. Purchase possibility, purchase frequency, awareness, and trust or commitment over the long-term have all been proposed as a means to measure or view brand loyalty (Story & Hess 2006, Oliver 1999, Twedt 1967, Brody & Cunningham 1968, Farley 1964). The modern conceptualization is from Dick and Basu(1994) who argue that brand loyalty should not be regarded as mere repurchase behavior, but rather as a combination of purchase behavior and attitudes. Accordingly, true brand loyalty requires repeat purchase behavior in addition to a significant psychological attachment to the brand which is consumed. Based on this two-dimensional approach, true brand loyalty is now widely defined as an individual having both a favorable attitude towards and consistent purchase pattern towards a brand over time and research has shown this to be the case (Kerin et al 2006, Pleshko & Heiens 1997; 1996).

It is accepted that maintaining and increasing loyalty is a primary responsibility for any marketing manager. Customer retention programs may lead to positive increases in buyer loyalty, but with no guarantees (Story & Hess 2006). Plus, today's loyal buyers might not be so loyal in the future since loyalty is transient (Oliver 1980). Regardless, across industries, it is a firm's ability to manage both the penetration levels and the repeat purchases of its buying market which dictates the extent of customer base retention now and in the future (McDowell & Dick 2001, Lehmann & Winner 1997).

RELATIONSHIP BETWEEN CUSTOMER SATISFACTION AND BUYER LOYALTY

A good indicator of buyers' commitment towards specific retail brands should be the loyalty of customers (Cooil et al 2007, Rosenberg & Czepial 1983). Since the formalization of the marketing concept, the idea that satisfied buyers will (hopefully) return for future purchases and eventually become loyal buyers has been the basis for marketing thought. Loyalty and satisfaction can make customers more forgiving of disappointing situations associated with a certain brand name or with a store (Shankar et al 2003). In fact, this relationship between satisfaction and loyalty has been shown to be the case throughout much of the literature. Many studies have focused on the positive relationship between customer satisfaction and loyalty, with researchers considering satisfaction as one of the primary antecedent of loyalty, especially in retail businesses (Dong 2003, Bloemer & Ruyter 1998, Oliver 1997, Bitner 1990).

However, despite the expectations of both common sense and empirical research, there is a growing school of thought which suggests that satisfaction is not a reliable predictor of buyer loyalty (Story & Hess 2006, Reichheld 2003). In this perspective, it is possible to be a satisfied buyer but not a loyal buyer. The primary point of emphasis is this: loyal customers are always satisfied but satisfied customers are not always loyal. If we consider that satisfaction is an attitude, then this follows the attitude-behavior definition of loyalty presented previously discussed (Dick and Basu 1994). Thus, the important questions relate to: (i) the direction of the relationship, and (ii) the conditions under which this relationship exists. The current study accepts general marketing thought, in that a positive relationship should be evident. Hence, the following hypothesis:

H1: There is a positive relationship between customer satisfaction and buyer loyalty in the Retail Business.

MARKET SHARE AND ITS RELATIONSHIPS WITH CUSTOMER SATISFACTION AND BUYER LOYALTY

It should be logical that both satisfaction and loyalty are positively related to market share. Increases in satisfaction hopefully lead to repeat purchases and positive word-of-mouth between buyers. Increases in loyalty should also lead to positive word-of-mouth, increasing purchase volume, and also to lower marketing retention costs (Zeithaml 2000, Tellis 1988, Rosenberg & Czepial 1983). Those firms which continually and properly reinvest these potential higher profits should develop an advantage leading to higher market shares (Day & Wensley 1988). The advantages garnered from loyalty are especially relevant in mature markets as increases in share become more expensive. Improvements in the loyalty base are one viable means of increasing and maintaining share (Ghounaris & Stathakopoulos 2004).

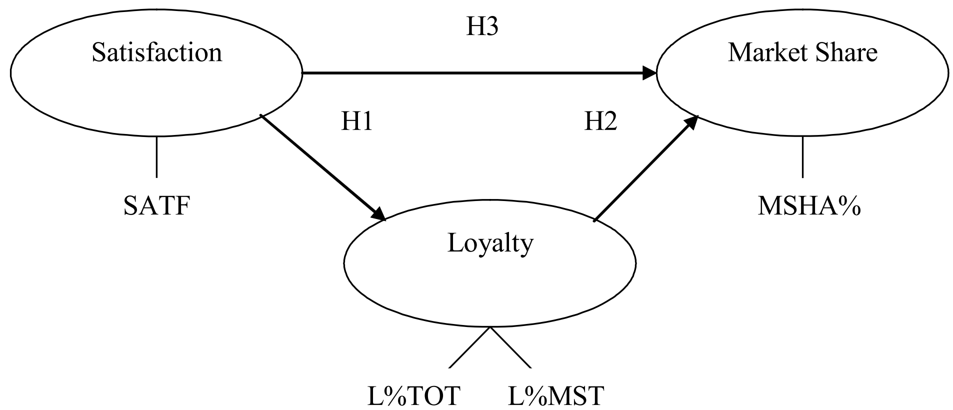
Previous empirical research and conceptualizations link loyalty to either market share or the profitability of the firm (Leverin & Liljander 2006, Ehrenberg & Goodhardt 2002, Fader & Schmittlein 1993, Colombo & Morrison 1989, Raj 1985, Robinson 1979). These studies generally have found a positive relationship whereby brands with large market shares usually have the most brand loyal buyers (and vice versa). One explanation is that, over time as buyers switch between brands, a percentage of those who switch remain buyers of the new brand. And since the larger firms gain more of the switchers then these larger firms gain share over time (and vice versa). Another explanation is that buyers might use brand popularity (high market share) as a surrogate for quality, resulting in higher purchases from new buyers (Caminal & Vives 1996). Hence, the following hypothesis:

H2: Buyer loyalty is positively related to market share in the Retail Business.

All retail and/or service businesses rely heavily on their customers being happy and satisfied in order to provide repeat purchases and continued patronage. Firms which do not continually satisfy their buyers run the risk of customer-base reductions, resulting in smaller sales and market shares over time (Tellervision 2006). The link between customer satisfaction and performance can be established through many factors, including cost reduction derived from repeat purchases or positive word of mouth leading to increased penetration (Cooil 2007, Zeithaml 2000, Reichheld 1990). The following hypothesis summarizes the expected satisfaction-share relationship. See Figure 1 for the general model to be tested.

H3: Customer satisfaction is positively related to market share in the Retail Business. .

Figure 1: Model of Satisfaction-Loyalty-Market Share



DATA COLLECTION

The data for the current study is gathered from a buyer group in a large university town in the southeastern USA. The sampling frame is comprised of undergraduate business students, a group of consumers who are frequent users of each of the four types of retail businesses under study: health clubs, convenience stores, medical clinics, and fast food burger outlets. Information is accepted only from consumers who buy from the specific type of retail outlet: non-users are excluded. The data are from self-administered questionnaires. Twelve classes are randomly selected for inclusion in the study from the business school offering at the university. Each class is assigned to one specific retailer type: three classes to each retailer type. This process results in the following number of usable respondents: health clubs: 79, convenience stores: 89, fast-food hamburger outlets: 96, and medical clinics: 69.

Many stores (retailer bands such as Wendy's) in each category are included in the study. The retailers are identified by speaking with the buyers and looking through the yellow pages to locate outlets within the city limits. An 'others' category is included to catch those retailers not specifically listed on the questionnaire. The retailer types themselves are selected for two reasons. First, it was necessary to find a type of business that was used by the target group under study. Second, it was important to select a variety of retailers in order to test the model, as we would expect to find differences based on retailer-types (Chaudhuri & Hollbrook 2001, Murphy and Enis 1986).

For health clubs there are sixteen original clubs included on the questionnaire. Eleven of these clubs are eliminated after data collection due to small numbers of users or small market shares. It seems that the student market is focused on only a few health clubs in the vicinity of the university. This resulted in five health clubs for inclusion in the analyses: club#2, club#9, club#3, club#10, and club#13, all with market shares above five percent.

For convenience stores there are twelve original outlets in the vicinity of the market that are included on the questionnaire. Only four of these stores are eliminated after data collection due to small numbers of users or small market shares. This resulted in eight convenience stores for inclusion in the analyses: store#8, store#10, store#4, store#6, store#3, store#5, store#2, and store#9, all with market shares above five percent.

For medical clinics there are twelve clinics in the general area that are included on the questionnaire. Six of these clinics are eliminated after data collection due to either a small number of users or a small market share. This resulted in six medical clinics that are included in the analysis. In order of market share from lowest to highest, the clinics are: clinic#1, clinic#4, clinic#6, clinic#8, clinic#2, and clinic#7. All six of the clinics have market shares above three percent.

Six fast food hamburger outlets are included in the study. Each of the six brands has a major presence in the town with multiple locations. Most of the outlets are part of national franchises, with only two being regional. All six outlets are kept for the analyses and all six have market shares above five percent.

MEASUREMENT

The study includes one indicator of market share, two indicators of buyer loyalty, and one indicator of consumer satisfaction. The measures are identical for each of the retail types: summated/aggregate percentages for both loyalty and market share and sample averages for satisfaction. The general statistics of the indicators are shown in Table1, for each of the relevant constructs in each retail type. The variables are described below.

Table 1: General Statistics: Aggregate Derived Indicators by Store Type

Store Type	Store #	MSHA%	L%TOT	L%MST	SATF
Health Clubs	HC2	5.6	100.0	3.7	24.0
	HC9	9.4	85.8	7.4	22.2
	HC3	11.4	69.5	7.4	19.1
	HC10	12.2	74.5	9.9	22.0
	HC13	48.0	89.1	40.7	18.7

Table 1: General Statistics: Aggregate Derived Indicators by Store Type					
Store Type	Store #	MSHA%	L%TOT	L%MST	SATF
Convenience Stores	CS8	6.6	27.0	5.7	20.9
	CS10	7.1	32.4	8.0	18.8
	CS4	7.5	29.5	10.3	22.7
	CS6	8.7	29.1	10.3	20.4
	CS3	9.0	35.0	12.6	20.3
	CS5	9.5	23.6	6.9	18.0
	CS2	12.0	20.8	9.2	19.1
	CS9	19.1	33.5	16.1	18.7
Medical Clinics	MC4	3.6	46.8	3.0	24.7
	MC1	3.6	58.3	4.5	22.6
	MC6	4.4	47.0	3.0	24.0
	MC8	16.6	54.4	17.9	21.9
	MC2	17.4	56.4	22.4	24.1
	MC7	42.2	66.0	46.3	19.2
Fast-Food Burger Outlets	FF3	4.7	18.7	2.2	18.3
	FF2	10.1	25.5	6.5	22.8
	FF6	13.1	28.0	16.1	19.8
	FF1	18.3	27.9	21.5	21.2
	FF5	18.7	29.8	16.1	21.2
	FF4	34.8	41.6	37.6	19.9

Market-Share (MSHA) is defined as the visits (uses) for a retail store divided by the total visits (uses) for all stores in that category. It is calculated for each brand in each retail type. The respondents are asked how many 'times' they visit each retailer per month. These 'times' are summed for each store and overall within each store type. Thus, MSHA(A) = (times for store A)/(summation of times for stores A, B, C… N).

Loyalty-%-of-total-use (L%TOT) is defined as the percentage of total times (uses) the respondent uses each store if they are users of that store. It is calculated for each respondent for each store used. Then an aggregate sample percentage is calculated. Thus, for respondent X who uses stores A and B: L%TOT(X,A) = timesA/(timesA + timesB + …+ timesN) and L%TOT(X,B) = timesB/(timesA + timesB + …+ timesN), L%TOT(X,C) =0, and etc.

Loyalty-Most-used-% (L%MST) is defined as the percentage that each store is used as primary store in the category. Respondents indicate the number of 'times' they use each store. The store is the most used for a respondent when the largest number of visits is indicated. Thus, for respondent X, if timesA > timesB, timesC…, timesN, then storeA is assigned to respondent X as most used store. The indicator is the summation for each store of those respondents most using each store divided by the total respondents in that retailer-type.

The study also includes one indicator of *consumer satisfaction* (SATF), which is comprised of four measurement items. Each of the four questions is measured using consumer ratings on a scale from very satisfied [7] to very dissatisfied [1]. The four satisfaction items are factor analyzed using principal axis analysis for each type of retailer. In each of the four retail consumer groups the four items exhibited a single dimension. The overall indicator of SATF is constructed by summing the four items into an overall score. Across the sample SATF has a possible range from four to twenty-eight. For health clubs, SATF has a mean of 20.45, a standard deviation of 4.6, and a coefficient alpha of 0.917. For medical clinics, SATF has a mean of 21.43, a standard deviation of 5.4, and a coefficient alpha of 0.949. For convenience stores, SATF has a mean of 19.18, a standard deviation of 4.5, and a coefficient alpha of 0.834. For burger outlets, SATF has a mean of 20.65, a standard deviation of 4.1, and a coefficient alpha of 0.887.

ANALYSIS/RESULTS

The number of observations (the stores in each type of retailer) is minimally sufficient to allow the necessary observations per variable, usually a minimum of eight to ten per variable (c.f. Stevens 1986). The analysis proceeds in two stages: (i) comparative regressions and (ii) path analysis tests. This will allow the computation of a X^2 statistic to determine if each of the relevant paths shown in Figure 1 should be included or removed from the model.

First, regressions are run for each of the dependent variables with all predictors included. This is referred to as the fully-recursive analysis. This is Ha for our purposes for each path. Then the variable/path of interest is removed and a regression is again run. This is Ho for our purposes. The explained variance from the two regressions is compared to arrive at the explained variance (R^2) for the path of interest. This procedure is repeated for each path in the model plus two paths involving the covariate, retailer-type. For each path, the regression equations are shown in Equations one through six below. The findings of this comparative regression are summarized in Table 2 below.

For path H3: satisfaction-market share

Equation 1a Ho: MSHA% = TYPE + L%TOT + L%MST + error
Equation 1b Ha: MSHA% = TYPE + SATF + L%TOT + L%MST + error

For path H1: satisfaction-loyalty

Equation 2a	Ho:	SATF = TYPE + error
Equation 2b	Ha:	SATF = TYPE + L%MST + error
Equation 2c	Ho:	SATF = TYPE + error
Equation 2d	Ha:	SATF = TYPE + L%TOT + error

For path H2: loyalty-market share

Equation 3a	Ho:	MSHA% = TYPE + SATF + error
Equation 3b	Ha:	MSHA% = TYPE + SATF + L%TOT + L%MST + error

For path: type-market share

Equation 4a	Ho:	MSHA% = SATF + L%TOT + L%MST + error
Equation 4b	Ha:	MSHA% = TYPE + SATF + L%TOT + L%MST + error

For path: type-loyalty

Equation 5a	Ho:	TYPE = SATF + error
Equation 5b	Ha:	TYPE = SATF + L%TOT + L%MST + error.
Equation 5c	Ho:	TYPE = SATF + error
Equation 5e	Ha:	TYPE = SATF + L%TOT + L%MST + error.

For path: type-satisfaction

Equation 6	Ho:	SATF = TYPE + error

Next, the current study uses the path analysis methodology to test the overall relationships among the identified research constructs. Path analysis is a relevant technique for testing causal models (e.g. Pedhazur 1982). The technique allows the researcher to determine if the hypothesized model is represented in the data; in other words, whether the causal model is consistent with the variable intercorrelations (Pedhazur 1982). As previously explained, the hypothesized model to be tested is identified in Figure 1

Table 2: Path Analysis Statistics								
Path Analysis	Path Eliminated	R^2 Path	Sign	R^2_o	R^2_a	W	'p'	Conclusion
I	H2: Loy-MSh	.636	+	.011968	.640356	24.25441	<.001	keep H2 path
II	H1: Sat-Loy	.149	-	.463000	. 543013	3.872236	<.050	keep H1 path
III	H3: Sat-MSh	.004	-	.638912	.640356	0.096169	<.800	discard H3 path
IV	Type-MSh	.008	n/a	.637456	.640356	0.192772	<.700	discard Typ-MSh
V	Type-Loy	.463	n/a	.149000	.543013	14.92217	<.001	keep Typ-Loy
VI	Type-Sat	.249	n/a	n/a	n/a	n/a	<.029	keep Typ-Sat
VII	Loy as mediator	.095	n/a	.546493	.589576	2.395668	<.150	no mediation
Notes: (a) for all tests, N=25 and d=1; (b) Path VI is derived from Anova; (c) R^2 Path for Path II and Path V is derived by dividing total R^2 by two due to two loyalty indicators								

To test a model using path analysis, our hypothesized model is compared with a fully-recursive model using Equation seven identified below (Pedhazur 1982, p. 619). The calculated test statistic, 'W', is distributed as a chi-square, with 'd' degrees of freedom. If the null hypothesis is rejected, then support is provided for the hypothesized model. This means that if a null hypothesis is rejected, then the tested path cannot be excluded from the model. On the other hand, if Ho is not rejected, then no evidence is found to include the tested path in the model. The results of the path analyses tests are also shown in Table 2 and the actual calculations are shown in the Appendix.

Equation 7: $W = -(n-d)[\ln(1-R^2a)/(1-R^2o)]$

Where

$W = X^2$ statistic

d = d.f. = model paths hypothesized to be zero

ln = natural log

$R^2a = 1-[(1-r^2i)(1-r^2ii)(1-r^2iii)(etc.)]$ for fully recursive model

$R^2o = 1-[(1-r^2i)(1-r^2ii)(etc.)]$ for model with path excluded

First to test proposition H1, that consumer satisfaction is related to buyer loyalty. It is noted in Table 2 that these constructs exhibit a significant common variance with an R^2=.149 (p<.050). Thus, the satisfaction-loyalty path cannot be excluded from the model. Also, Table 2 reveals that the relationship is negative in direction: as satisfaction increases, then loyalty decreases.

Next to test the proposition H2, that buyer loyalty is related to market share. It is noted in Table 2 that these constructs exhibit a significant common variance with an R^2=.636 (p<.001). Thus, the loyalty-market share path cannot be excluded from the model. Also, Table 2 reveals that the relationship is positive in direction: as loyalty increases, then market share increases.

Next to test the proposition H3, that consumer satisfaction is related to market share. It is noted in Table 2 that these constructs do not exhibit a significant common variance with an R^2=.004 (p<.800). Thus, the satisfaction-market share path should be excluded from the model.

Next to determine if the covariate, industry type, has an influence on market share. It is noted in Table 2 that these constructs do not exhibit a significant common variance with an R^2=.008 (p<.700). Thus, the retailer type-market share path should be excluded from the model. It appears that market share does not differ across these service categories.

Next to determine if the covariate, industry type, has an influence on buyer loyalty. The regression for this path has two dependent variables. Thus, the explained variance is the total of two comparative regressions divided by two. It is noted in Table 2 that these constructs exhibit a significant common variance with an R^2=.463 (p<.001). Thus, the satisfaction-loyalty path cannot be excluded from the model. It appears that buyer loyalty differs across categories.

Next to determine if the covariate, industry type, has an influence on consumer satisfaction. This path is tested using simple Anova, as there are no paths to eliminate for path analysis testing. It is noted in Tables 2 that these constructs exhibit a significant common variance with an R^2=.249 (p<030.). Thus, the retailer type-satisfaction path cannot be excluded as a covariate in the model. It appears that consumer satisfaction differs across categories.

DISCUSSION/IMPLICATIONS

The purpose of the study was to determine if the general model presented in Figure 1 is valid in the four retailer-types under investigation in this preliminary study. The results indicate that this generally accepted theoretical model is not as broad-ranging as might be expected, as one of the three proposed relationships is not supported. Additionally, the covariate retailer-type (category) is shown to have a significant impact on two of the three constructs in the model.

The findings do confirm the proposed relationship between loyalty and market share. This is congruent with many other studies across industries (Reinartz & Kumar 2002). Thus, as expected, increased buyer loyalty leads to increases in market share.

The authors also find a significant relationship between satisfaction and loyalty. But, the direction is not as expected, with increases in satisfaction associated with decreases in loyalty. It could be that, with these types of services, repetitive usage of the same brand (loyalty) may lead to lower levels of satisfaction through boredom. Or possibly, the initial euphoria with a brand (satisfaction) only decreases through time and repetitive usage or loyalty.

The absence of a relationship between satisfaction and market share is puzzling but not unexpected. Situational or socio-cultural influences might lead a satisfied buyer to purchase other brands on a regular basis. In university settings, for example, emphasis is placed on reference groups as well as social status. It may be possible that a buyer is pressured by friends to use a specific retailer because everyone else in the group shows patronage there. Or, it may be that one retailer has a much better reputation leading the buyer to switch even though there is satisfaction with a lower status retailer. Or, the prevalence of multiple retail services offering satisfying purchase experiences may overcome this expected relationship.

The lack of a direct effect of satisfaction with market share does not mean that satisfaction has no influence on market share. It could be that loyalty and satisfaction interact, thus indicating satisfaction might be a moderator. We cannot test this idea in the current study. An alternative may be that loyalty acts as a mediator between satisfaction and market share. To recall, the main effect of loyalty on market share is 63.6%, with 9.48% (.636*.149) of that effect being from loyalty acting as a mediator between satisfaction and market share. However, this 9.48% is not a significant amount in the current study. Path analysis seven in Table 2 and the appendix reveals that we should eliminate the loyalty-as-mediator path ($p<.15$). Therefore, satisfaction simply does not have either a significant main effect or a significant indirect effect on market share in this study.

The covariate, retailer-type or category, is shown to be related to both consumer satisfaction and buyer loyalty, but not market share. The market shares would most likely vary across categories if the categories exhibited differing levels of concentration. This is likely not the case in these services retailers seemingly in long-term stable markets. However, it is not surprising that both satisfaction and loyalty differ across categories. As each type of retailer seems to be distinct from the others regarding many factors related to both loyalty and satisfaction (such as level of service, skills required to compete, tangibility, etc), it is not surprising that the categories differ on these two important constructs.

LIMITATIONS AND FUTURE CONSIDERATIONS

The readers must wonder if the current findings are indicative of general tendencies or simply a characteristic of this limited student-based study of four retailer-types in a single university town. Larger studies with more respondents taken over time are probably needed to truly identify the scope of the outlined model in services retailing. Future research might include both different target respondents as well as different retailer-types. Additionally, future efforts might address these issues in cross-national studies to determine where and under what conditions the satisfaction-loyalty-share model applies globally. Finally, the question of life cycle issues might also be relevant for this area of study: is the model supported at various stages of the industry life cycle.

An unanswered question is whether there is an interaction between satisfaction and loyalty in their effects on market share. The number of observations in this study was too small to include interactions in the regression analyses and, therefore, moderating effects could not be determined. A problem in this study is the relatively small number of major competitors in a category. This limitation would have to be addresses in order to obtain a large enough aggregate sample size of stores or brands in order to test this possibility.

Also, the question of measures may also be relevant. The use of other performance measures, such as profitability, as well as alternative indicators of each construct may add variety to the findings. Specifically, one of these measures is the share of wallet which represents the total spending of customers in any particular category (Cooil et al 2007). Share of wallet is effectively the share of a buyer's spendable income and may be a more logical proxy for share than those used in this study. Also, different types of loyalty might be included (true, spurious, latent, cognitive, affective, conative, and action) in order to capture a better explanation of the relationship among loyalty, customer satisfaction and market share (Oliver 1999, Dick & Basu 1994).

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APPENDIX

$W = -(n\text{-}d)[\ln(1\text{-}R^2a)/(1\text{-}R^2o)]$

Where

$W = X^2$ statistic

d = d.f. = model paths hypothesized to be zero

ln = natural log

$R^2a = 1\text{-}[(1\text{-}r^2i)(1\text{-}r^2ii)(1\text{-}r^2iii)]$ for all paths included in full model: i, ii, iii

$R^2o = 1\text{-}[(1\text{-}r^2i)(1\text{-}r^2ii)]$ for i and ii included in model less path(s)

PATH ANALYSIS #1: loyalty – market share

R^2Loy-MSh: .636

N=25: number of observations

d.f.=d=1 : hypothesized paths which equal zero

$R^2o = 1 - [(1 -.004)(1 -.008)] = 1 - [(.996)(.992)] = 1- .988032 = .011968$

$R^2a = 1 – [(1-.636)(1-.004)(1-.008)] = 1- [(.364)(.996)(.992)] = 1- .359644 = .640356$

$W = - (25-1)[\ln (1-.011968) / (1-.640356)] = -24(-1.0106) = 24.25443$

'p' = <.001

Conclusion: must reject proposed model – thus, loyalty is a significant predictor of market share and the path should be included in the model

PATH ANALYSIS #2: satisfaction - loyalty

R^2Sat-Loy: .298/2 = .149

N=25: number of observations

d.f.=d=1 : hypothesized paths which equal zero

$R^2o = 1 - [(1 -.463)] = 1 - .537 = .463000$

$R^2a = 1 – [(1-.149)(1-.463)] = 1- [(.851)(.537)] = 1 - .456987 = .543013$

$W = - (25-1)[\ln (1-.543013) / (1-.463000)] = -24(-.16134) = 3.872236$

'p' = <.05

Conclusion: must reject proposed model – thus, satisfaction is a significant predictor of loyalty and the path should be included in the model

PATH ANALYSIS #3: satisfaction – market share

R^2Sat-MSh: .004

N=25: number of observations

d.f.=d=1 : hypothesized paths which equal zero

$R^2o = 1 - [(1 -.636)(1 -.008)] = 1 - [(.364)(.992)] = 1- .361088 = .638912$

$R^2a = 1 – [(1-.636)(1-.004)(1-.008)] = 1- [(.364)(.996)(.992)] = 1- .359644 = .640356$

$W = - (25-1)[\ln (1-.640356) / (1-.638912)] = -24(-.00401) = .096169$

'p' = <.800

Conclusion: cannot reject proposed model – thus, satisfaction is not a significant predictor of market share and the path should be excluded from the model

PATH ANALYSIS #4: type – market share

R^2Type-MSh: .008

N=25: number of observations

d.f.=d=1 : hypothesized paths which equal zero

$R^2o = 1 - [(1 -.636)(1 -.004)] = 1 - [(.364)(.996)] = 1- .362544 = .637456$

$R^2a = 1 – [(1-.636)(1-.004)(1-.008)] = 1- [(.364)(.996)(.992)] = 1- .359644 = .640356$

$W = - (25-1)[\ln (1-.640356) / (1-.637456)] = -24(-.00803) = .192772$

'p' = <.70

Conclusion: cannot reject proposed model – thus, retail store type is not a significant predictor of market share and the path should be excluded from the model

PATH ANALYSIS #5: type - loyalty

R^2Type-Loy: .926/2 = .463

N=25: number of observations

d.f.=d=1 : hypothesized paths which equal zero

$R^2o = 1 - [(1 -.149)] = 1 - [(.851)] = .149000$

$R^2a = 1 – [(1-.149)(1-.463)] = 1- [(.851)(.537)] = 1 - .456987 = .543013$

$W = - (25-1)[\ln (1-.543013) / (1-.149000)] = -24(-.62176) = 14.92217$

'p' = <.001

Conclusion: must reject proposed model – thus, retail store type is a significant predictor of loyalty and the path should be included in the model

PATH ANALYSIS #6: type - satisfaction

R^2Type-Sat: .249

N=25: number of observations

d.f.=d=1 : hypothesized paths which equal zero

'p' = <.03

Note: this path R^2 is found through an Anova, not comparative regressions

Conclusion: must reject proposed model – thus, retail store type is a significant predictor of satisfaction and the path should be included in the model

PATH ANALYSIS #7: loyalty as mediator between satisfaction and share

R^2Loy-MSh: . .636-(.636*.149) = .541

R^2Sat-MSh through Loy: .095

R^2Sat-MSh: .004

N=25: number of observations

d.f.=d=1 : hypothesized paths which equal zero

$R^2o = 1 - [(1 -.541)(1 -.004)(1 -.008)] = 1 - [(.459)(.996)(.992)] = 1- .453507 = .546493$

$R^2a = 1 – [(1-.541)(1-.095)(1-.004)(1-.008)] = 1- [(.459)(.905)(.996)(.992)] = 1- .410424 = .589576$

$W = - (25-1)[\ln (1-.589576) / (1-.546493)] = -24(-.09982) = 2.395668$

'p' = <.15

Conclusion: cannot reject proposed model – thus, loyalty does not act as a significant mediator between satisfaction and market share.