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Mustang Journal of Business and Ethics
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All articles that appear in this volume of the *Mustang Journal of Business and Ethics* have been recommended for publication by the Reviewers/Advisory Editors, using a double, blind peer review process. I express a personal thanks to the Reviewers/Advisory Editors for all their hard work and dedication to the Journal. Without their work, the publication of this Journal would be impossible.

I wish to express my sincere thanks and appreciation for all the support, encouragement, assistance and advice throughout this year. I would like to further express appreciation to Will Mawer of Southeastern Oklahoma State University, for his efforts in coordinating the entire process. The publishing of this journal is an intense educational experience which I continue to enjoy.

Congratulations to all our authors. I extend a hearty invitation to submit your manuscripts for future issues of *Mustang Journals*.

To further the objectives of Mustang Journals, Inc., all comments, critiques, or criticisms would be greatly appreciated.

Again, thanks to all the authors for allowing me the opportunity to serve you as editor-in-chief of the Journal.

**Brad Reid**  
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Paper: Are Routine Retiring CEOs More Closely Monitored in their Last Year?
AN EMPIRICAL ANALYSIS OF ETHICAL AND PROFESSIONAL ISSUES IN DENTAL ADVERTISING: A COMPARATIVE CROSS-SECTIONAL STUDY

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ABSTRACT

Advertising by dentists is a relatively recent phenomenon. Historically, most professions prohibited licensed members from engaging in speech activities that proposed a commercial transaction—advertising. However, the history of a dentist’s legal right to advertise is not the main focus of this article. A brief review of the past, present, and possible future of such rights might assist readers in understanding the revolutionary constitutional and commercial speech changes that have occurred over the past three decades. A dentist’s legal right to advertise has developed as part of the evolutionary interpretation of the First Amendment of the U.S. Constitution. This study investigates current opinions about dental advertising and compares them to the attitudes expressed 10 years ago. It replicates a survey done in 2004 using the same questionnaire and population to compare responses longitudinally. The study indicates some changes in consumers’ opinions of dentists’ advertising. The intent was to discover information that would be useful to dentists in planning marketing strategies and improving the quality of their advertising. The study seems to confirm the belief of many marketing professionals that advertising and marketing clearly have a place in the future of health care services.

KEYWORDS
Health care professionals, professional codes of ethics, ethical integrity, favorable image, deception in advertising, opinion leaders.

INTRODUCTION

General Overview

For the health professions, marketing has traditionally been a controversial issue, and the notion of using advertising to promote a professional’s practice is relatively new. However, according to Rizzo and Zeckhauser, advertising by health care professionals has increased dramatically during the past decade, and this trend seems likely to continue (Rizzo and Zeckhauser, 1992; Moser, 2008). Many professionals find themselves ill equipped to handle the dynamics of a changing environment, especially without some form of ongoing marketing plan. Most professional societies and associations have prohibited the marketing of their services (Lee, 2002). These health care professionals believe advertising would have an adverse effect on the
image of the profession in general and have no impact on competitive price reduction (Allen, Wright, and Raho, 1985; Duffus, 1990). Also, a 1985 study conducted by Wright, Raho, and Berkowitz concluded that advertising and marketing are controversial topics among health care professionals. The study further notes that the perception of the evils of advertising is no longer prevalent. Dentistry is increasingly recognizing itself as a business.

According to the study, the fear that advertising would lead to fraud and hucksterism has not materialized. The chance of false advertising is becoming remote in a modern society in which such practice would not be tolerated by consumers, other dentists, or other health care professionals (Wright, Raho, and Berkowitz, 1989; DeCresenzo, 2002). However, in a study conducted by Stevens, McConkey, and Loudon in 1990 of dentists in a southern metropolitan area, strong sentiments against their advertising were noted. The results indicated dentists were concerned advertising would impair public confidence in the profession, not be credible, not help a patient make more informed decisions, and not help patients choose the most competent dentist for a specific problem (Stevens, McConkey, and Loudon, 1990).

It was common for professional codes of ethics to proscribe direct client or patient solicitation of any kind. In 1977, the U.S. Supreme Court struck down many of the bans against advertising in the ruling Bates v. the State of Arizona, holding they effectively reduced competition by depriving organizations and individuals of the right to inform potential clients and patients about their services (Bates, 1977). Since the Bates ruling, professionals have increased their advertising, and many have developed comprehensive advertising campaigns (Kotler and Clarke, 1987). Consumers can experience advertising by professionals through a variety of media including television, radio, newspapers, billboards, telephone, direct mail, professional magazines, and popular magazines (Gadish, 2008).

The American Dental Association changed its code of ethics in 1979 to remove restrictions on advertising by either the ADA itself or any of its constituent (regional) bodies (“ADA Agrees to Lift Restriction on Advertising by Dentists” 1979). There have been numerous articles in professional/trade journals questioning the professional or ethical integrity of dental advertising (Shavell, 1985; Barry, 1988; Plunkett, 1999; Johns Hopkins, 2013).

Alfred F. Dougherty, Jr., deputy director of the FTC’s Bureau of Competition, said the trade commission complaint against the AMA was not designed to force doctors or health care professionals to advertise if they choose not to. The commission desired only to change the AMA’s code of ethics to permit enough advertising to give patients “a decisional basis for selecting one health care professional as opposed to another” (Nicholson, 1976).

**PURPOSE OF THE STUDY**

During the past several years, dentists have become highly competitive in marketing their services to the public. It has become common to see dentists advertising their services via a number of media. The purpose of this study is to investigate current opinions about dentists’ advertising and to compare them to attitudes expressed 10 years ago. This study was designed to determine (a) consumers’ attitudes toward advertising by dentists, (b) whether city of residence, occupation, age, race, marital status, number of children in household, total family household income, education, and gender of an individual accounted for any significant differences in attitudes regarding dentists who advertise. The study investigates possible changes in attitudes of individuals toward dentists’ advertising over a 10-year period. It replicates a survey done in 2004 and uses the same questionnaire and population to compare responses longitudinally.
BACKGROUND AND GENERAL RESEARCH QUESTIONS

During the past 30 years, practices of health care professionals have undergone many changes: that increased level of advertising usage can be attributed in part to sweeping changes in judicial interpretation of (1) commercial free speech (Virginia State Board of Pharmacy v. Virginia Citizens’ Consumer Council 1976; Bates v. State Bar of Arizona 1977) and (2) restraint of trade by professional organizations (Goldfarb v. Virginia State Bar Association 1975).

Consumers are becoming more involved in their own health care, seeking the type of drugs or pharmaceutical products that best meet their needs, and are willing to take more responsibility for obtaining adequate information for treatments than in the past (Berndt, Bui, Reiley, and Urban, 1995; Swinder and Wang, 1996; Rutsohn and Ibrahim, 2000; Handlin, Mosca, Forgione, and Pitta, 2003). Another change is the frequent use of advertising. Today it is fairly common in most parts of the country for people to see one of the many thousands of dentists’ advertisements shown on television every day, receive a spam e-mail advertisement from a dentist, view one of the many hundreds of yellow-page dentists’ ads while using the telephone book, or even see some of the hundreds of highway billboards promoting a dentist’s, hospital’s, or physician’s services that are permitted in some areas of the nation (Fischer, 1986; Fisher and Coleman, 1992; Carabello, 2003). A marketing budget has become critical for most medical practices. Many health care and dental professionals now use marketing consulting firms or have their own internal marketing/advertising committees (Sahl, 2003; Gadish, 2009).

According to a study by Sanchez, yellow-page advertisements have been one of the most popular forms of health care and dental professional advertising. This study revealed that yellow-page advertising is a $9.5 billion a year industry, ranking behind only newspapers, television, and direct mail (Schchez, 1988).

While the attitude of health care professionals toward advertising is mixed and the attitude of most state regulators has generally been negative, the attitude of consumers has historically been fairly positive (Yasny, 1988; Hekmat and Heischmidt, 1996). Research has shown that dentists’ attitudes toward advertising have become significantly more positive in recent years. Such advertising therefore is expected to increase as dentists attempt to prevent erosion of market share and seek new markets for growth within their practices (Sanchez, 1988). A study conducted by Leventhal (1995) concluded that opposition to health care professional advertising appears to center on ethical issues, whereas arguments favoring advertising focus on information needs, economic and competitive issues, and the right to advertise (Leventhal, 1995; IFPMA, 2014). The results of studies conducted by Moncrief and Bush (1988) and Pickett, Grove, and Ratcliff (1992) revealed that consumers felt advertising by dentists and other health care professionals was somewhat helpful in making a decision about health care providers (Moncrief and Bush, 1988; Pickett, Grove, and Ratcliff, 1992).

The main concern of practicing health care professionals, whether advertising by dentists attracts patients, has been the focus of several academic studies (Wayne and Weller, 1994; Bernstein and Gauthier, 1999; Lubalin and Harris-Kojetic, 1999; Wang and Swinder, 1996). The answer has been a definite “yes.” These studies show most health care professionals who advertise will likely see an increase in the number of middle- to lower-income patients. Dentists who advertise discover quickly that advertising is usually very expensive but works if done properly and ethically. One study found the return on dollars invested by professionals in advertising was four to six times the cost (Freedman, 2001).
The above discussion shows that professional advertising usually works, produces an increase in patient flow, yields a good return on dentists’ advertising dollars, and is protected by the First Amendment. It shows that historically consumers have not always had a positive view of dentists who advertise but believe dentists’ advertisements provide useful information.

This study includes items that explore opinions regarding the informational function of, importance of price in, deception in, future of, and appropriate media for dentists’ advertising. Specifically, the study examines attitudes concerning whether dentists’ advertising would (1) provide useful information to the public, (2) increase the costs of dentists’ services, (3) improve the quality of dentists’ services in the future, (4) help consumers make more intelligent choices between dentists, (5) tend to lower the credibility and dignity of their services, and (6) make the public more aware of the qualifications of dentists.

**METHODOLOGY**

**Data Collection**

Much of the initial planning of this study was based on Hite’s study at the University of Arkansas (Hite, 1982). Acknowledgement is given to Hite’s research instrument as well as to the instrument of Miller and Waller (1979), which served as bases for the questionnaire in the current study. Also, acknowledgment is given to the organization and writing style of Hite’s study, which served as a model for this paper. This study includes items that explore opinions regarding the information function of advertising dentists’ services, the importance of price in advertising dentists’ services, deception in advertising dentists’ services, the future of dentists’ advertising, and the age, income and gender of the consumer. Specifically, this study examines (1) the attitudes of the public about dentists’ advertising---(whether it would provide useful information to the public, increase the costs of dentists’ services in the future, improve the quality of dentists’ services in the future, help the public make more intelligent choices between dentists, tend to lower the credibility and dignity of their services, and make the public more aware of the qualifications of dentists and (2) the impact of demographic characteristics on the public’s attitudes toward dentists’ advertising. Since the attitude statements used were identical to those used in the 2004 study, direct comparisons are feasible.

**Research Method**

The researchers drew a random sample of 4,000 individuals from the 10 metropolitan statistical areas (MSAs) in Tennessee. Appropriate numbers from each (MSA) were drawn according to the ratio of each MSA’s population to the total population of all 10 urban areas. The research instrument was mailed to these individuals, and 424 usable questionnaires were received and analyzed. The 2004 sample included 404 individuals from the same 10 MSAs. This sample of 404 respondents represents a subset of the United States, more specifically a subset of the residents of the state of Tennessee.

The survey instrument consisted of 19 statements designed to measure how favorably individuals perceived advertising by dentists. The respondents were asked Likert-type questions regarding their strength of agreement on a scale ranging from “strongly agree” to “strongly disagree.” Demographic characteristics of the respondents included city of residence, occupation, age, sex, race, marital status, number of children in household, total family household income, and education.
STATISTICAL TESTS AND FINDINGS

The data obtained from the 404 respondents in 2004 and the 424 respondents in 2014 via the research instrument were analyzed by tabulating the frequency percentages for each item on the questionnaire. Cross-tabulations were calculated between the demographic factors of age, education, income, marital status, occupation, and sex and the 19 attitudinal statements. Chi-square tests were performed to detect any significant differences between the cross-tabulations. The level of significance for all statistical tests was set at 0.05. In general, chi-square analysis is employed when researchers want to determine whether there is an association between two or more populations or variables on some characteristic being studied. The significance level is the point at which a relationship is significant. This value lies between 0.0 and 1.0. Values closer to zero have greater significance. Therefore a smaller level of significance (i.e., 0.05) means a conclusion is correct between 95 and 99% of the time. Chi-square probability of 0.05 is commonly used by social scientists doing business research (Lind, Marchal, and Wathen, 2005).

Consumers’ Attitudes toward Advertising of Dentists’ Services

The percentages given in Table 1 illustrate the distribution of consumers’ responses to the questionnaire’s five statements regarding attitudes toward dentists with respect to advertising. With regard to respondents’ image of dentists (statement 9), there were no significant attitude differences between the individuals in 2004 and 2014. Also, attitude differences were not found between the 2004 and 2014 respondents with respect to statement 10 that their opinion of dentists would be lowered as a result of advertising. The percentages of 2004 and 2014 respondents were rather mixed with regard to statement 4 that it is proper for dentists to advertise.
TABLE 1  Frequency Percentages of Public’s Responses to Attitude Statements About the Image of Dentist’s Advertising

<table>
<thead>
<tr>
<th>Questionnaire Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. It is proper for dentists to advertise.</td>
<td>7.9</td>
<td>44.6</td>
<td>17.1</td>
<td>20.0</td>
<td>10.4</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>12.7</td>
<td>58.5</td>
<td>19.6</td>
<td>7.8</td>
<td>.9</td>
</tr>
<tr>
<td>9. I presently have a high image of dentists.</td>
<td>6.7</td>
<td>58.0</td>
<td>14.7</td>
<td>16.0</td>
<td>4.5</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>9.9</td>
<td>56.6</td>
<td>21.7</td>
<td>8.5</td>
<td>2.8</td>
</tr>
<tr>
<td>10. In general, my image of dentists would be lower as a result of advertising.</td>
<td>6.9</td>
<td>28.2</td>
<td>18.1</td>
<td>39.6</td>
<td>7.2</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>3.8</td>
<td>20.0</td>
<td>23.6</td>
<td>45.3</td>
<td>6.8</td>
</tr>
<tr>
<td>15. Advertising by dentists would tend to lower the credibility and dignity of their services.</td>
<td>6.4</td>
<td>28.7</td>
<td>12.9</td>
<td>40.3</td>
<td>11.6</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>4.7</td>
<td>17.7</td>
<td>21.9</td>
<td>47.9</td>
<td>7.1</td>
</tr>
<tr>
<td>19. I would use the services (if needed) of dentists who advertise.</td>
<td>6.2</td>
<td>54.7</td>
<td>19.8</td>
<td>15.1</td>
<td>4.2</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>9.0</td>
<td>61.1</td>
<td>22.4</td>
<td>6.4</td>
<td>.5</td>
</tr>
</tbody>
</table>

Both groups disagreed with statement 15 that advertising would lower the credibility and dignity of dentists’ services. Finally, when asked in statement 19 whether they would use the services of dentists who advertise, the 2004 respondents expressed agreement. The 2014 respondents also agreed, while only a small percent said they would not use these services. These results, as those of other studies, suggest that many respondents may initially have a positive attitude toward advertising by dentists.

**Information Function of Advertising Dentists’ Services**

The percentages given in Table 2 illustrate the importance of information in dentists’ advertising and show opinions are somewhat mixed in this area. There was total agreement between the 2004 and 2014 respondents with respect to statement 1 that the public would be provided useful information through advertising by dentists. Also, there was total agreement between the 2004 and 2014 respondents with respect to statement 5 that dentists’ advertising would be a useful means of informing potential clients about services and specialties.
### TABLE 2 Frequency Percentages of the Public’s Responses to Attitude Statements About the Informational Aspect of Dentists’ Advertising

<table>
<thead>
<tr>
<th>Questionnaire statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The public would be provided useful information through advertising by dentists.</td>
<td>11.5</td>
<td>39.9</td>
<td>14.5</td>
<td>23.7</td>
<td>10.5</td>
</tr>
<tr>
<td>2004</td>
<td>12.5</td>
<td>63.2</td>
<td>15.3</td>
<td>8.0</td>
<td>.5</td>
</tr>
<tr>
<td>2014</td>
<td>12.5</td>
<td>63.2</td>
<td>15.3</td>
<td>8.0</td>
<td>.5</td>
</tr>
</tbody>
</table>

5. Advertising by dentists would be a useful means of informing potential clients about services and specialties.

<table>
<thead>
<tr>
<th>Questionnaire statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>12.1</td>
<td>51.0</td>
<td>8.9</td>
<td>21.0</td>
<td>6.9</td>
</tr>
<tr>
<td>2014</td>
<td>21.2</td>
<td>57.8</td>
<td>13.2</td>
<td>6.8</td>
<td>.5</td>
</tr>
</tbody>
</table>

11. Advertising would help the public make more intelligent choices among dentists.

<table>
<thead>
<tr>
<th>Questionnaire statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>6.4</td>
<td>35.9</td>
<td>14.9</td>
<td>34.4</td>
<td>8.4</td>
</tr>
<tr>
<td>2014</td>
<td>10.4</td>
<td>55.0</td>
<td>20.0</td>
<td>12.7</td>
<td>1.2</td>
</tr>
</tbody>
</table>

16. Advertising makes the public more aware of the qualifications of dentists.

<table>
<thead>
<tr>
<th>Questionnaire statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>5.9</td>
<td>37.1</td>
<td>12.9</td>
<td>36.4</td>
<td>7.7</td>
</tr>
<tr>
<td>2014</td>
<td>11.6</td>
<td>55.4</td>
<td>14.9</td>
<td>15.8</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Attitude differences were found between the 2004 and 2014 respondents with respect to statement 16 that advertising makes the public more aware of the qualifications of dentists. The 2004 respondents disagreed with this statement, while the 2014 respondents agreed. Regarding statement 11, the 2004 sample disagreed while the 2014 sample agreed that advertising would help the public make more intelligent choices between dentists. These results indicate members of the public view dentists’ advertising as reliable sources of information but still not more reliable than word of mouth.

### Importance of Price in Advertising Dentists’ Services

The percentages given in Table 3 illustrate the importance of price in dentists’ advertising. Opinions are somewhat mixed in this area. In response to statement 7 that it is good to deal with dentists that offer the lowest prices for routine services, both the 2004 and 2014 samples disagreed. However, the 2004 sample strongly agreed and the 2014 sample agreed with statement 18 that it is better to deal with a reputable dentist than the dentist who offers the lowest price.

With regard to the effect of advertising on price, the 2004 and 2014 respondents disagreed with statement 13 that when dentists advertise prices are lowered due to more competition. Both the 2004 and 2014 respondents believed prices were actually increased rather than lowered because of the costs of advertising (statement 2). It would appear both groups felt the primary benefit of dentists’ advertising is not communicating price but providing information regarding dentists’ services. Both groups also indicated the reputation, image, and qualifications of the dentist are more important than specific price information. Studies by Clow, Fischer, and
O’Bryan (1995) and Crane (1996), reported that the more reputable a dentist is, the more willing the consumer is to pay a higher price for his/her services (Clow, Fischer, and O’Bryan, 1995; Crane, 1996).

**TABLE 3** Frequency Percentages of the Public’s Responses to Attitude Statements About the Importance of Price in Advertising Dentists’ Services

<table>
<thead>
<tr>
<th>Questionnaire Statement</th>
<th>Percentage of attitude responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>2. When dentists advertise, the costs are passed on to their clients through higher prices.</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>28.5</td>
</tr>
<tr>
<td>2014</td>
<td>10.4</td>
</tr>
<tr>
<td>7. It is good to deal with dentists who offer the lowest prices for routine services.</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>6.0</td>
</tr>
<tr>
<td>2014</td>
<td>6.8</td>
</tr>
<tr>
<td>13. When dentists advertise, prices are lowered due to more competition.</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>4.2</td>
</tr>
<tr>
<td>2014</td>
<td>5.0</td>
</tr>
<tr>
<td>18. It is better to deal with reputable dentists than with one who offers the lowest price.</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>25.8</td>
</tr>
<tr>
<td>2014</td>
<td>17.2</td>
</tr>
</tbody>
</table>

**Deception in Advertising Dentists’ Services**

The percentages given in Table 4 illustrate the distribution of consumer responses to statements in the questionnaire concerning deception in advertising dentists’ services. In response to statement 6 that advertising by dentists would be more deceptive than other forms of advertising, both the 2004 and 2014 samples expressed disagreement. Again, opinions were rather mixed for both groups regarding statement 12. Both the 2004 and 2014 respondents did not agree they would be suspicious of dentists who advertise. Finally, the 2004 respondents disagreed and the 2014 respondents agreed with statement 17 that advertising by dentists would benefit only quacks and incompetents. Both groups strongly agreed with statement 8 that people can rely more on what friends tell them about dentists than on advertising, although a recent study of 4,531 adult consumers found that 57 percent who receive health care information do so through the Internet, compared to 53 percent who receive information from friends and family (McKillen, 2002). The results indicate that in general consumers do not view dentists’ advertising as more deceptive than other forms of advertising.
### TABLE 4  Frequency Percentages of the Public’s Responses to Attitude Statements About Deception in Dentists’ Advertising

<table>
<thead>
<tr>
<th>Questionnaire Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Advertising by dentists would be more deceptive than other forms of advertising.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>2.3</td>
<td>20.1</td>
<td>25.1</td>
<td>45.1</td>
<td>7.5</td>
</tr>
<tr>
<td>2014</td>
<td>5.2</td>
<td>19.8</td>
<td>27.6</td>
<td>40.8</td>
<td>6.1</td>
</tr>
<tr>
<td>8. You generally can rely more on what a friend tells you about dentists than on advertising.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>16.9</td>
<td>58.2</td>
<td>8.5</td>
<td>13.4</td>
<td>3.0</td>
</tr>
<tr>
<td>2014</td>
<td>24.3</td>
<td>38.0</td>
<td>17.9</td>
<td>18.2</td>
<td>1.2</td>
</tr>
<tr>
<td>12. I would be suspicious of dentists who advertise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>6.2</td>
<td>26.1</td>
<td>11.7</td>
<td>45.7</td>
<td>9.4</td>
</tr>
<tr>
<td>2014</td>
<td>3.3</td>
<td>14.9</td>
<td>18.6</td>
<td>50.9</td>
<td>11.6</td>
</tr>
<tr>
<td>17. Advertising by dentists would benefit the uninformed citizenry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>3.0</td>
<td>18.7</td>
<td>17.4</td>
<td>45.3</td>
<td>15.7</td>
</tr>
<tr>
<td>2014</td>
<td>11.1</td>
<td>54.0</td>
<td>21.2</td>
<td>11.3</td>
<td>1.7</td>
</tr>
</tbody>
</table>

#### The Future of Dentists’ Advertising

The percentages given in Table 5 illustrate the public’s responses to statements in the questionnaire concerning the public’s attitude toward the future of dentists’ advertising. When asked whether they would like to see more advertising by dentists, the 2004 respondents replied *no*, while the 2014 respondents replied *yes* (statement 14). In addition, the 2004 group thought advertising would not improve the quality of dentists’ services in the future, while the 2014 group agreed that it would (statement 3).
**TABLE 5** Frequency Percentages of the Public’s Responses to Attitude Statements About Future Aspects of Dentists’ Advertising

<table>
<thead>
<tr>
<th>Questionnaire Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Advertising will improve the quality of dentists’ service in the future.</td>
<td>6.7</td>
<td>18.6</td>
<td>17.6</td>
<td>40.7</td>
<td>16.4</td>
</tr>
<tr>
<td>2004</td>
<td>8.3</td>
<td>40.6</td>
<td>19.6</td>
<td>27.6</td>
<td>3.3</td>
</tr>
<tr>
<td>14. I would like to see more advertising by dentists.</td>
<td>4.7</td>
<td>29.8</td>
<td>19.1</td>
<td>31.0</td>
<td>15.4</td>
</tr>
<tr>
<td>2004</td>
<td>5.4</td>
<td>30.9</td>
<td>40.6</td>
<td>17.5</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**IMPACT OF DEMOGRAPHIC CHARACTERISTICS ON THE PUBLIC’S ATTITUDES**

Significant differences in the public’s attitudes were found with regard to age, education, income, and race of the consumer. Since the cross-tabulations of city of residence, occupation, sex, marital status, and number of children in household were not significant for any of the 19 statements, it appears the perceptions/attitudes within these demographics about dentists’ advertising are similar to the answers for all respondents. Findings follow for cross-tabulations for age, education, and occupation for all statements for which significant differences (.05 level) in attitudes were found.

**Age of Respondents and Advertising by Dentists**

The sample was divided by age into two groups: respondents under 46 years of age and respondents 46 and older. Table 6 shows the significant differences between the attitudes of the 2004 and 2014 respondents with regard to advertising by dentists. As Table 6 indicates, no significant differences were found in overall opinion between the 2004 and 2014 respondents for the 19 statements. The results do not show a difference in overall opinion of the respondents on any of the 19 attitude questions for the 2004 and 2014 groups. A difference was found, however, in the level of agreement or disagreement on certain statements.
<table>
<thead>
<tr>
<th>Statement and age</th>
<th>Percentage of attitude responses</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree or Strongly agree (%)</td>
<td>Undecided (%)</td>
</tr>
<tr>
<td>3. Advertising will improve the quality of dentists’ services in the future.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 Younger</td>
<td>160 (55.2)</td>
<td>57 (19.7)</td>
</tr>
<tr>
<td>2014 Older</td>
<td>46 (35.1)</td>
<td>26 (19.8)</td>
</tr>
<tr>
<td>4. It is proper for dentists to advertise.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 Younger</td>
<td>122 (59.2)</td>
<td>29 (14.1)</td>
</tr>
<tr>
<td>2004 Older</td>
<td>89 (45.6)</td>
<td>39 (20.0)</td>
</tr>
<tr>
<td>2014 Younger</td>
<td>213 (73.4)</td>
<td>48 (16.8)</td>
</tr>
<tr>
<td>2014 Older</td>
<td>88 (67.2)</td>
<td>36 (26.7)</td>
</tr>
<tr>
<td>6. Advertising by dentists would be more deceptive than other forms of advertising.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 Younger</td>
<td>88 (30.3)</td>
<td>83 (26.6)</td>
</tr>
<tr>
<td>2014 Older</td>
<td>18 (13.7)</td>
<td>33 (25.2)</td>
</tr>
<tr>
<td>7. It is good to deal with dentists who offer the lowest prices for routine services.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 Younger</td>
<td>116 (40.0)</td>
<td>73 (25.2)</td>
</tr>
<tr>
<td>2014 Older</td>
<td>32 (24.2)</td>
<td>36 (27.5)</td>
</tr>
<tr>
<td>11. Advertising would help the public make more intelligent choices between dentists.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 Younger</td>
<td>203 (70.2)</td>
<td>52 (18.0)</td>
</tr>
<tr>
<td>2014 Older</td>
<td>73 (55.7)</td>
<td>33 (25.2)</td>
</tr>
<tr>
<td>14. I would like to see more advertising by dentists.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 Younger</td>
<td>118 (40.1)</td>
<td>117 (40.5)</td>
</tr>
<tr>
<td>2014 Older</td>
<td>37 (28.2)</td>
<td>55 (42.0)</td>
</tr>
<tr>
<td>17. Advertising by dentists would benefit only quacks and incompetents.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 Younger</td>
<td>30 (14.6)</td>
<td>41 (20.0)</td>
</tr>
<tr>
<td>2004 Older</td>
<td>55 (28.4)</td>
<td>29 (14.9)</td>
</tr>
</tbody>
</table>

* Parentheses indicate row percentages.

Younger 2014 respondents agreed with statement 3 that advertising will improve the quality of dentists’ service in the future, while the older group disagreed. Younger 2004 and 2014 respondents also found dentists’ advertising more acceptable in statement 4 than did older respondents. A study by Yavas and Riecken in 2001 reported that attitudes toward professional advertising are not consistent or homogeneous across consumers and the health care segment. It was also reported that younger consumers hold more positive attitudes than their older counterparts toward advertising by health care professionals (Yavas and Riechen, 2001). A larger percentage of the older 2014 group disagreed more strongly than the younger respondents.
with statement 6 that advertising by dentists would be more deceptive than other forms of advertising.

Older respondents also disagreed with statement 7 that it is good to deal with dentists who offer the lowest prices for routine services, while the younger respondents agreed. Both 2014 age groups agreed that advertising would help the public make more intelligent choices between dentists (statement 11). Younger respondents, however, agreed more strongly than did older respondents with this statement. Younger 2014 respondents also agreed with statement 14 that they would like to see more advertising by dentists, while the older 2014 respondents disagreed with this statement. Younger 2004 respondents disagreed more strongly than did older respondents with statement 17 that dentists’ advertising would benefit only quacks and incompetents.

**Income of Respondents and Advertising by Dentists**

The 2004 and 2014 respondents were divided into three groups based on the level of annual household income: families earning $30,000 or less, families earning $30,001 to $60,000, and families earning more than $60,000.

As shown in Table 7, three areas existed in which there was disagreement among the 2004 groups in their overall opinion. More of the 2004 low-income group agreed with statement 3 that advertising would improve the quality of dentists’ service in the future, while more of the middle- and high-income groups disagreed. More of the middle- and high-income groups also disagreed with statement 14 that they would like to see more advertising by dentists. Finally, in response to statement 11 that advertising would help consumers make more intelligent choices between dentists, more of the low-income group agreed, while more of the middle-income disagreed, and opinions were mixed in the high-income group.
TABLE 7 Differences in the Public’s Attitudes Toward Advertising by Dentists Based on Income

<table>
<thead>
<tr>
<th>Statement and income</th>
<th>Percentage of attitude responses</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree or disagree (%)</td>
<td>Significance</td>
</tr>
<tr>
<td></td>
<td>Strongly agree (%)</td>
<td>Disagree or strongly disagree (%)</td>
</tr>
<tr>
<td>3. Advertising will improve the quality of dentists’ services in the future.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 Low</td>
<td>25 (40.3)*</td>
<td>13 (21.0)</td>
</tr>
<tr>
<td>2004 Middle</td>
<td>51 (21.9)</td>
<td>41 (17.6)</td>
</tr>
<tr>
<td>2004 High</td>
<td>25 (24.8)</td>
<td>13 (12.9)</td>
</tr>
<tr>
<td>11. Advertising would help the public make more intelligent choices between dentists.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 Low</td>
<td>31 (50.0)</td>
<td>14 (22.6)</td>
</tr>
<tr>
<td>2004 Middle</td>
<td>94 (42.2)</td>
<td>28 (12.0)</td>
</tr>
<tr>
<td>2004 High</td>
<td>43 (42.6)</td>
<td>16 (15.8)</td>
</tr>
<tr>
<td>14. I would like to see more advertising by dentists.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 Low</td>
<td>30 (48.4)</td>
<td>12 (19.4)</td>
</tr>
<tr>
<td>2004 Middle</td>
<td>70 (30.0)</td>
<td>47 (20.2)</td>
</tr>
<tr>
<td>2004 High</td>
<td>39 (38.6)</td>
<td>13 (12.9)</td>
</tr>
</tbody>
</table>

* Parentheses indicate row percentages

Children of Consumers and Advertising by Dentists

The sample of 424 respondents was divided into two groups based on the number of children in the family: families with no children and families with children. As shown in Table 8, six areas existed in which there was disagreement among the groups in their overall opinion. Both 2014 groups agreed with statement 5 that advertising by dentists would be a useful means of informing potential clients about services and specialties. Both 2014 groups disagreed with statement 6 that advertising by dentists would be more deceptive than other forms of advertising. More of the no-children group agreed with statement 14 that they would like to see more advertising by dentists than the with-children group. In response to statement 15 that advertising by dentists would tend to lower the credibility and dignity of their services, more of the with-children group disagreed with this statement than the no-children group.
<table>
<thead>
<tr>
<th>Statement and children</th>
<th>Percentage of attitude responses</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree or</td>
<td>Disagree or</td>
</tr>
<tr>
<td></td>
<td>Strongly agree (%)</td>
<td>Undecided (%)</td>
</tr>
<tr>
<td>5. Advertising by dentists would be a useful means of informing potential clients about services and specialties.</td>
<td>168 (74.0)*</td>
<td>39 (17.2)</td>
</tr>
<tr>
<td>2014 No Children</td>
<td>167 (85.6)</td>
<td>17 (08.7)</td>
</tr>
<tr>
<td>2014 With Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Advertising by dentists would be more deceptive than other forms of advertising.</td>
<td>69 (30.4)</td>
<td>65 (28.6)</td>
</tr>
<tr>
<td>2014 No Children</td>
<td>37 (19.0)</td>
<td>52 (26.7)</td>
</tr>
<tr>
<td>2014 With Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I would like to see more advertising by dentists.</td>
<td>90 (39.8)</td>
<td>79 (35.0)</td>
</tr>
<tr>
<td>2014 No Children</td>
<td>64 (32.8)</td>
<td>93 (47.7)</td>
</tr>
<tr>
<td>2014 With Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Advertising by dentists would tend to lower the credibility and dignity of their services.</td>
<td>62 (27.4)</td>
<td>55 (24.3)</td>
</tr>
<tr>
<td>2014 No Children</td>
<td>33 (16.9)</td>
<td>38 (19.5)</td>
</tr>
<tr>
<td>2014 With Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Advertising makes the public more aware of the qualifications of dentists.</td>
<td>141 (62.4)</td>
<td>41 (18.1)</td>
</tr>
<tr>
<td>2014 No Children</td>
<td>143 (73.3)</td>
<td>22 (11.3)</td>
</tr>
<tr>
<td>2014 With Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I would use the services (if needed) of dentists who advertise.</td>
<td>149 (65.9)</td>
<td>54 (23.9)</td>
</tr>
<tr>
<td>2014 No Children</td>
<td>148 (75.9)</td>
<td>41 (21.0)</td>
</tr>
<tr>
<td>2014 With Children</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Parentheses indicate row percentages.

Both groups agreed with statement 16 that advertising makes the public more aware of the qualification of dentists. Both groups also agreed with statement 19 that they would use the services (if needed) of dentists who advertise.

**Marital Status of Consumers and Advertising by Dentists**

The sample of 424 respondents was divided into two groups based on their marital status: single and married/once married. As shown in Table 9, there were three areas in which there was disagreement among the 2014 groups in their overall opinion. In response to statement 6 that advertising by dentists would be more deceptive than other forms of advertising, both groups disagreed.
TABLE 9 Differences in Consumers’ Attitudes Toward Advertising by Dentists Based on Marital Status

<table>
<thead>
<tr>
<th>Statement and marital status</th>
<th>Agree or Strongly agree (%)</th>
<th>Undecided (%)</th>
<th>Disagree or Strongly disagree (%)</th>
<th>Overall chi square probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Advertising by dentists would be more deceptive than other forms of advertising.</td>
<td>2014 - Single: 65 (31.9)*</td>
<td>59 (28.9)</td>
<td>80 (39.2)</td>
<td>0.0018</td>
</tr>
<tr>
<td></td>
<td>Married/Once Married: 41 (18.8)</td>
<td>58 (26.6)</td>
<td>119 (54.6)</td>
<td></td>
</tr>
<tr>
<td>7. It is good to deal with dentists who offer the lowest prices for routine services.</td>
<td>2014 - Single: 84 (41.2)</td>
<td>54 (26.5)</td>
<td>66 (32.4)</td>
<td>0.0164</td>
</tr>
<tr>
<td></td>
<td>Married/Once Married: 65 (29.8)</td>
<td>55 (25.2)</td>
<td>98 (45.0)</td>
<td></td>
</tr>
<tr>
<td>15. Advertising by dentists would tend to lower the credibility and dignity of their services.</td>
<td>2014 - Single: 55 (27.1)</td>
<td>50 (24.6)</td>
<td>98 (48.3)</td>
<td>0.0162</td>
</tr>
<tr>
<td></td>
<td>Married/Once Married: 40 (18.3)</td>
<td>43 (19.72)</td>
<td>135 (61.9)</td>
<td></td>
</tr>
</tbody>
</table>

* Parentheses indicate row percentages.

More of the married/once married group disagreed and more of single group agreed with statement 7 that it is good to deal with dentists who offer the lowest prices for routine services. When asked in statement 15 if advertising by dentists would tend to lower the credibility and dignity of their services, both the married/once married and single groups disagreed.

Education of Respondents and Advertising by Dentists

The 2004 and 2014 respondents were divided into two groups based on the level of education: higher (those with a college degree) and lower (those with less than a college degree). As shown in Table 10, three areas existed in which there was disagreement of overall opinions between the two groups. In response to statement 11 that advertising would help consumers make more intelligent choices between dentists, more of the lower-education group agreed, while more of the higher-education group disagreed. More of the lower-education group also agreed and more of the higher-education group disagreed with statement 16 that advertising makes the public more aware of the qualifications of dentists. When asked in statement 14 if they would like to see more advertising by dentists, the higher-education group disagreed, while the opinions of those in the lower-education group were mixed. In many other areas there was a difference, not in the overall opinion, but in the level of agreement or disagreement. More of the lower-education group agreed with statement 1 that the public would be provided useful information through advertising by dentists. More of the lower-education group also agreed with statement 4 that it is proper for dentists to advertise. Both groups generally agreed with statement 5 that advertising by dentists would be a useful means of informing potential patients about services and specialties. Those in the lower-education group, however, agreed more strongly than those in the higher-education group.
When asked in statement 9 whether they presently have a high image of dentists, the higher-education group agreed more strongly than the lower-education group. In response to statement 18 that it is better to deal with reputable dentists than one who offers the lowest price, both the higher and lower-education groups strongly agreed.

**TABLE 10** Differences in the Public’s Attitudes Toward Advertising by Dentists Based on Education

<table>
<thead>
<tr>
<th>Statement and education</th>
<th>Percentage of attitude responses</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree or strongly agree (%)</td>
<td>Disagree or strongly disagree (%)</td>
</tr>
<tr>
<td>1. The public would be provided useful information through advertising by dentists.</td>
<td>2004 Lower 128 (58.4)* 27 (12.3) 64 (29.2)</td>
<td>0.0066</td>
</tr>
<tr>
<td></td>
<td>Higher 77 (44.5) 31 (17.1) 73 (40.3)</td>
<td></td>
</tr>
<tr>
<td>2. Advertising will improve the quality of dentists’ services in the future.</td>
<td>2004 Lower 69 (31.4) 35 (15.9) 116 (52.7)</td>
<td>0.0100</td>
</tr>
<tr>
<td></td>
<td>Higher 33 (18.1) 38 (19.2) 114 (62.6)</td>
<td></td>
</tr>
<tr>
<td>3. It is proper for dentists to advertise.</td>
<td>2004 Lower 128 (57.9) 27 (12.2) 66 (29.9)</td>
<td>0.0073</td>
</tr>
<tr>
<td></td>
<td>Higher 83 (45.6) 42 (23.1) 57 (31.2)</td>
<td></td>
</tr>
<tr>
<td>4. Advertising by dentists would be a useful means of informing potential clients about services and specialties.</td>
<td>2004 Lower 152 (68.8) 15 (06.8) 54 (24.4)</td>
<td>0.0252</td>
</tr>
<tr>
<td></td>
<td>Higher 102 (56.0) 21 (11.5) 59 (31.3)</td>
<td></td>
</tr>
<tr>
<td>5. I presently have a high image of dentists.</td>
<td>2004 Lower 129 (58.9) 35 (15.0) 55 (25.1)</td>
<td>0.0129</td>
</tr>
<tr>
<td></td>
<td>Higher 130 (72.2) 24 (13.3) 26 (14.4)</td>
<td></td>
</tr>
<tr>
<td>6. Advertising would help the public make more intelligent choices between dentists.</td>
<td>2004 Lower 106 (48.0) 31 (14.0) 85 (38.0)</td>
<td>0.0321</td>
</tr>
<tr>
<td></td>
<td>Higher 64 (35.2) 29 (15.9) 89 (48.9)</td>
<td></td>
</tr>
<tr>
<td>7. When dentists advertise, prices are lowered due to more competition.</td>
<td>2004 Lower 78 (35.5) 33 (15.0) 109 (48.5)</td>
<td>0.0300</td>
</tr>
<tr>
<td></td>
<td>Higher 45 (24.7) 41 (22.5) 98 (53.8)</td>
<td></td>
</tr>
<tr>
<td>8. I would like to see more advertising by dentists.</td>
<td>2004 Lower 88 (40.0) 40 (18.2) 92 (41.8)</td>
<td>0.0287</td>
</tr>
<tr>
<td></td>
<td>Higher 50 (27.5) 37 (20.3) 95 (52.2)</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 10  Continued

<table>
<thead>
<tr>
<th>Statement and education</th>
<th>Percentage of attitude responses</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree or Strongly agree (%)</td>
<td>Undecided (%)</td>
</tr>
<tr>
<td>16. Advertising makes the public more aware of the qualifications of dentists.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 Lower</td>
<td>111 (50.2)</td>
<td>28 (12.7)</td>
</tr>
<tr>
<td>Higher</td>
<td>62 (34.1)</td>
<td>24 (13.2)</td>
</tr>
<tr>
<td>18. It is better to deal with a reputable dentist than one who offers the lowest price.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004 Lower</td>
<td>180 (81.4)</td>
<td>19 (08.6)</td>
</tr>
<tr>
<td>Higher</td>
<td>166 (91.7)</td>
<td>07 (03.9)</td>
</tr>
</tbody>
</table>

* Parentheses indicate row percentages

On the negative side, both groups generally disagreed with statement 3 that advertising will improve the quality of dentists’ services in the future. More-educated consumers, however, disagreed more strongly than less-educated consumers. Those in the higher-education group also disagreed more strongly with statement 13 that when dentists advertise, prices are lowered due to more competition.

Race of Respondents and Advertising by Dentists

Table 11 shows the significant differences between the attitudes of the 2004 and 2014 respondents. The 2004 and 2014 samples were divided into two groups: white and non-white. As shown in Table 11, four areas of disagreement in overall opinion existed between the two 2014 groups. A large percentage of the 2014 non-whites and whites agreed with statement 3 that advertising will improve the quality of dentists’ services in the future. The whites disagreed with statement 6 that advertising by dentists would be more deceptive than other forms of advertising, while the non-whites agreed. Both 2014 racial groups disagreed with statement 10 that in general their image of dentists would be lower as a result of advertising, with the whites agreeing more strongly. A large percentage of the 2014 whites and non-whites agreed with statement 18 that it is better to deal with a reputable dentist than with the one who offers the lowest prices.
TABLE 11  Differences in the Public’s Attitudes Toward Advertising by Dentists Based on Race

<table>
<thead>
<tr>
<th>Statement and race</th>
<th>Percentage of attitude responses</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree or Strongly agree (%)</td>
<td>Disagree or strongly disagree (%)</td>
</tr>
<tr>
<td></td>
<td>Undecided (%)</td>
<td></td>
</tr>
<tr>
<td>3. Advertising will improve the quality of dentists’ services in the future.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 White</td>
<td>143 (44.8)*</td>
<td>62 (19.4)</td>
</tr>
<tr>
<td>Non-white</td>
<td>64 (62.1)</td>
<td>21 (20.4)</td>
</tr>
<tr>
<td>6. Advertising by dentists would be more deceptive than other forms of advertising.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 White</td>
<td>69 (21.6)</td>
<td>86 (27.0)</td>
</tr>
<tr>
<td>Non-white</td>
<td>37 (35.9)</td>
<td>31 (30.1)</td>
</tr>
<tr>
<td>10. In general, my image of dentists would be lower as a result of advertising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 White</td>
<td>72 (22.6)</td>
<td>67 (21.0)</td>
</tr>
<tr>
<td>Non-white</td>
<td>29 (28.2)</td>
<td>33 (32.0)</td>
</tr>
<tr>
<td>18. It is better to deal with reputable dentists than with the one who offers the lowest prices.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 White</td>
<td>231 (72.4)</td>
<td>56 (17.6)</td>
</tr>
<tr>
<td>Non-white</td>
<td>58 (56.9)</td>
<td>26 (25.5)</td>
</tr>
</tbody>
</table>

* Parentheses indicate row percentages

CONCLUSIONS

In the 10 years between the two studies, there has been little change in consumer attitudes toward dentists’ advertising, but the results of this study have a number of implications. First, both the 2004 and 2014 respondents agreed that the public looks for and favors advertising as a means of obtaining information about dentists’ services. Responses of the 2004 and 2014 respondents shown in Tables 1 and 2 suggest the public has a favorable attitude toward dentists who advertise, would like more information about dentists, and feels advertising by dentists could help them learn about dentists’ services and specialties. These and similar survey results can help dentists and other health care providers begin to satisfy the public’s health care needs and desires. It is interesting to note as indicated in Table 5 that a large percentage of the 2014 respondents were undecided when asked if they wanted to see more advertising by dentists. However, a large percentage of 2004 respondents did not want to see more advertising by dentists. Both the 2004 and 2014 groups agreed that more advertising is not what the majority of the public wants. The results in Table 2 indicate members of the public desire more information about the services of dentists and feel advertising by dentists could help them learn about services and specialties of particular dentists. In Table 3 the 2004 and the 2014 respondents make it clear the public values reputation over price. Advertising lower prices does not appear to be a good strategy. The results in Table 4 show that although the majority of the public does not consider dentists’ advertising deceptive, both the 2004 and 2014 respondents agreed that
members of the public trust their friends more than advertising. Dentists who are currently advertising should probably replace some of their advertising about prices with informational advertising.

Opinions based on age, income, children of consumers, marital status, education, and race regarding the use of advertising by dentists was rather mixed according to Tables 6–11. From the marketer’s viewpoint, the rapid change of attitudes based on changing demographic and socioeconomic factors dictates a greater need for understanding a dentist’s market. Both older and younger 2004 and 2014 respondents are in favor of dentists advertising their professional services; however, younger consumers show a stronger preference. Older consumers are more likely to identify with advertisements that show patients in roles like the ones the consumers occupy in real life. Managers of dentists’ offices and other health care practices that market services must closely monitor the changing attitudes of various age groups and be prepared to make whatever adjustments are necessary to keep pace with their expectations. Administrators must clearly define potential consumers and devise well-defined marketing strategies.

Table 7 results imply that the high-income group (the one with the most dollars to spend) is the least receptive to advertising.

As shown in Table 8 both the 2004 and 2014 children-of-consumers groups agreed with statement 5 that advertising by dentists would be a useful means of informing potential clients about services and specialties. Both groups strongly agreed advertising makes the public more aware of the qualifications of dentists.

The results in Table 9 indicate both the 2004 and 2014 marital groups disagreed that advertising by dentists would be more deceptive than other forms of advertising. Both groups also disagreed that advertising by dentists would tend to lower the credibility and dignity of their services.

As Table 10 indicates, both the less-educated and more-educated 2004 consumers favor advertising by dentists; however, those consumers without college degrees seem to be influenced more by such advertisements. More of the 2004 more-educated group disagreed that advertising will increase the quality of dentists’ services in the future. However, the more-educated group disagreed more strongly than the less-educated group that when dentists advertise, prices are lowered due to more competition. College-educated persons are likely to respond to advertising that depicts “prestigious” occupational categories, such as management and profession. Finally, opinions based on race regarding the use of advertising by dentists were mixed, according to Table 11. The results indicate the white respondents did not believe advertising by dentists would be more deceptive than other forms of advertising. The whites also felt stronger than the non-whites that it was better to deal with reputable dentists than with one that offers the lowest price.

This study seems to confirm the belief of many marketing professionals that advertising and marketing clearly have a place in the management and operation of dentistry and professional services. Health care service providers will find that consumers generally are receptive to the use of advertising as a means of communicating information about dentists’ services to consumers. The dentist who carefully researches the market and investigates attitudes and preferences of specific socioeconomic groups is likely to enjoy a competitive advantage over other dentists and health care organizations (Jimmieson and Griffin, 1998; Mummalaneni and Gopalakrishna, 1995).
REFERENCES


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Robert Stevens, PhD, is John Massey Endowed Chair and Professor of Business Administration in the Management and Marketing Department in the John Massey School of Business at Southeastern Oklahoma State University, Durant, Oklahoma. During his distinguished career, Dr. Stevens has taught at the University of Arkansas, the University of Southern Mississippi, Oral Roberts University, University of Louisiana Monroe and Hong Kong Shue Yan University. His repertoire of courses has included strategic management, marketing management, business research, statistics, and marketing research. He is the author or co-author of 32 books including books on strategic management, marketing management and marketing research and well over 250 articles and cases. He has published his research findings in a number of business journals and numerous professional conference proceedings. He is co-editor of the *Health Marketing Quarterly* and *Services Marketing Quarterly*, and serves on the editorial boards of two other professional journals. Dr. Stevens has acted as a marketing consultant to local, regional, and national organizations and has been the owner of two small businesses.
SUSTAINABILITY IN GOVERNMENT CONTRACTS: A MEASURE OF PERFORMANCE FROM THE CONTRACTOR PERSPECTIVE

Tamara P. Williams
Walden University, USA

ABSTRACT

Studies in Government contracting are relatively new manifestation to academic research. Expanding theories to practitioner challenges may offer new concepts and insights to potential solutions to these challenges. Through a review of relevant literature, the researcher sought to 1) identify an operational definition of sustainability in government contracting and 2) bridge gaps in information by exploring sustainability factors available for successful performance in government contracting. Findings provide noteworthy contributions of practices available to both businesses and contracting professionals designed to improve contracting performance and enhance business longevity for government contractors.

INTRODUCTION

The U.S. funds $450 billion annually through the discretionary budget for government contract spending (Friel, 2014). Since the early 1990’s, sustainability has become a business trend that changed demands placed on business. Emergence of new developments created gaps in information germane to leadership and successfully implementing sustainability measures in organizations (Metcalf & Benn, 2012). Deficiencies in information mean some business leaders may be unaware of successful sustainability strategies that increase longevity in government contracts. Consequently, these business leaders lack knowledge in sustainability for successful performance in government contracting. The researcher sought to 1) identify an operational definition of sustainability in government contracting and 2) bridge gaps in information by exploring sustainability factors available for successful performance in government contracting through a narrative literature review. Sustainability has not been clearly defined or consistently applied throughout business research (Carter & Rogers, 2008). Failure to apply sustainability concepts to government contracting, integrate relationships of concepts to contractor performance, and consistently define sustainability in business literature lead to two questions: 1) How can sustainability be defined and applied to government contracting? 2) Does a relationship exist between integrated sustainability concepts, government contracting, and contractor performance?

Sustainability for organizations employs critical areas that collectively create a systemic, strategic focus that helps foster sustainable growth for stakeholders and agencies. Procurement definitions vary in scope in relation to supply chain management, and terms are often industry specific. Sustainable procurement has traditionally primarily
focused on reducing cost (Giunipero, Hooker, & Denslow, 2012). Commonly defined as, the pursuit of sustainable development objectives through purchasing and supply chain processes, sustainable procurement lacks a universal definition (Walker, Miemczyk, Johnsen, & Spencer, 2012). In exploring sustainability in government contracting, the concepts used explained and described sustainability in supply chain management (Giunipero et al., 2012; Tate, Ellram, & Dooley, 2012). Regardless of the context applied, sustainability is the significant aspect of organizational development that enables the organization to promote lasting success.

Since 2012, suspension or debarment actions in US acquisitions have nearly doubled (Lasky, 2013). Positive performance ratings and contractor performance systems are critical for continued opportunities for firms, as the government contracting officers seek experienced and qualified business partners to achieve its objectives (Bradshaw & Chang, 2013). Creating performance measures has positive implications on the federal decision makers’ capacity to manage contracts successfully (Amirkhanyan, 2011). These factors make positive performance an imperative goal for government contractors because a requirement for increased accountability becomes created by performance measurement (Amirkhanyan, 2011). The information helps government officials determine whether a contractor receives future work (Bradshaw & Chang, 2013). Therefore, negative impacts on poor performance ratings may extend beyond the lost revenue from government contracting opportunities.

**PRINCIPAL AGENT THEORY**

Jensen and Meckling’s (1976), principal-agent theory serves as the conceptual framework to understand the impact of sustainability and government contractor performance. The theory derives from contract law and provides a context for shaping and managing contract interactions to expound the performances amid two actors in agreement (Awortwi, 2012). In its application, implications are broad but the focus is on the respective relational assignments (Steinle, Schiele, & Ernst, 2014). Supply chain management is one example where the theory cultivates appropriate application. Scholars have become interested in using principal-agent theory to understand how participants manage risks, align incentives, and forge relationships (Fayezi, O’Loughlin, & Zutshi, 2012). The principal-agent theory provides evidence to explain the relationship behavior between the principals and agents concerning managing contracts (Witesman & Fernandez, 2013).

**METHODS**

To discover implications, possibilities and manifestations of sustainability in government contracting narrative synthesis literature review is the data collection method employed. The review comprised of information from online databases to include ProQuest and all EBSCOhost databases. Keyword classifications identified terms sustainability, public procurement, principal-agent relationships, government contracting performance, sustainable leadership, and sustainable purchasing and supply management. The article began with a review of existing literature, furthering the conversation of the principal-agent relationship and continues with current concepts of
sustainability, sustainable procurement, and contractor performance. The article concludes with a discussion of findings that include recommendations for further research, implication for professional practice and a concluding statement.

**REVIEW OF LITERATURE**

**Contracting and Public Procurement**

Government contracts, public procurement, and federal contract describe government entities overarching premise for buying goods and services. These terms include supply chain management aspects under the procurement. Procurement definitions vary in scope in relation to supply chain management, and terms are often industry specific (Miemczyk, Johnsen, & Macquet, 2012). Enhancing supply chain perspectives produces innovative procurement techniques (Gianakis & McCue, 2012). Procurement and sourcing decisions typically concern internal buying processes. The processes relate primarily to direct suppliers (i.e., dyadic relationships) and include specification, vendor selection, contracting, ordering, expediting, and evaluation (Miemczyk et al., 2012). The literature review includes a discussion of procurement as a supply chain subsection to understand thoroughly how sustainability factors manifest in government contracting.

Contracting involves buying supplies and services from private contractors as an alternative to internally providing in-house services (Awortwi, 2012). Many terms used throughout the study are interchangeable expressions used to describe the phenomenon. For example, purchasing as well as supply activities within dyads involve trade-offs or transactions and long-term relationship development with other parties (Miemczyk et al., 2012). Contracting out occurs at all levels, throughout, the federal government is a routine practice (Lu, 2013). Theory and policy indicate that competition catalyzes enhanced efficiency in public contracting. Government contracting officials do not always procure supplies and service-based competition or governing policy (Joaquin & Greitens, 2012). Awarding government contracts is often non-competitive (Johnston & Girth, 2012). Decisions to procure supplies or services may reflect choices stemming from individual requests or urgent needs. Agency goals and policies, combined with contracting officials’ decision to acquire supplies or services, result in conflicting views. Therefore, to meet established contracting goals, public procurement officials base decisions on the need to use expedient measures (Snider, Kidalov, & Rendon, 2013). Using convenient measures often promotes these noncompetitive awards (Johnston & Girth, 2012). Scholars have questioned the constitutionality of relationships and outsourcing between the government and its largest contractors such as Lockheed Martin and Halliburton (K. N. Brown, 2011). Robust policies exist that require procurement professionals’ adherence when making business decisions about contracting out government goods and services. Most government outsourcing lacks systemized accountability, and as courts and scholars begin to understand relationship characteristics, practices will remain unchallenged (K. N. Brown, 2011).

Various collaborative efforts encompassing many elements ultimately influence decisions and outcome of contractual agreements. Government initiatives to enter contractual arrangements with companies whose goals align with theirs become significant. Conversely, due to business dynamics, nonprofit and for-profit organizations
have conflicting interests that may result in a different contractual relationship with the
government (Witesman & Fernandez, 2013). Government procurement lacks research
regarding sustainability related to organizational performance. Understanding
sustainability factors, while considering the contractual relationship between the
government and contractors within the principle-agent framework is the primary goal of
this study.

**Organizational perspective**

The literature reviewed included public contract performance from various
organizational aspects. These elements encompass universal meaning describing
contractual relationships germane to both the government and the contractor. Apart from
the many regulations that govern the public procurement process, an equally important
dynamic is the contracting decision makers who provide input into the contractual
relationship between the parties. As a sub category to procurement, purchasing functions
incorporate fundamental public procurement elements in organizations. To account for
the different management competencies dimension, business leaders should situate
procurement practice on an organizational level, as well as a national, context (McKevitt
et al., 2012). Significant research identified structured purchasing function and examined
how the organization's size influenced purchasing unit designs within a company (Glock
& Broens, 2013). Provider competition is difficult to achieve and costly to sustain, and
contracting decisions may not include contract management costs (Johnston & Girth,
2012). Insufficient administrative resources for efficient contracting threaten cost-
effective outsourcing (Johnston & Girth, 2012).

This section provided additional information and insight into sustainability and its
impact on government contracts performance. Derived information fills research
information gaps on government procurement and contributes to the body of knowledge.
Public procurement elements include management competencies, supply management,
organizational structure, and information technology (Gardenal, 2013; Gianakis &
McCue, 2012; Glock & Broens, 2013; McKevitt et al., 2012). Other significant elements
include administrative resources devoted to managing the market. Resources dedicated to
managing the market results in pitting market management objectives against contract
design, implementation, oversight, and accountability, which entails actual, often
overlooked expenditures (Johnston & Girth, 2012). In public procurement, resources
come in many forms. In addition to managing contracting markets, other organizational
aspects affect public procurement. For example, contract negotiations and final award
determinations include many factors, such as the considering the supplier’s cost structure
throughout the contract cycle (Dimitri, 2013). Additionally, management capacity may
serve as the weak link in determining efficient contracting processes (Joaquin & Greitens,
2012).

**Human capital and contracting officers**

Human capital is an essential element to organizations contracting processes.
Active and normative practices in public procurement have highlighted government
buyers management competencies and distinguished procurement professionals
according to their skills (McKevitt et al., 2012). German municipalities’ highlighted that
organizational size, measured by the number of inhabitants, employees, and purchasing
volume, influenced the structural variables in various ways (Glock & Broens, 2013).
Contracting officers are integral in make or buy decisions (e.g., McKevitt et al., 2012).
Government leaders settled for provider preference and relied more heavily on vigilant monitoring and evaluation activities (Joaquin & Greitens, 2012). A similar conclusion indicated that agency goals and policies present conflicting views that require alignment in an attempt to meet established contracting goals (Snider et al., 2013). This observation substantiated Joaquin and Greitens’s (2012) finding. Even though government decision making officials relied on oversight and monitoring, control became nearly nonexistent at various government levels (Joaquin & Greitens, 2012).

Studies included a typology of conditions that give rise to the human elements that can potentially create, enhance, inhibit, and sustain markets from which government procurement officials purchase goods and services. The information revealed the theories and governing policies behind public sector contracting needs for products and services. However, organizational factors that influence the contracting process outside the prevailing policies renders these principles inapplicability for practical application.

**Principal-Agent Theory**

The principal-agent theory originally derived from contract law and its application to formal contractual agreements and has applicability to a variety of management contexts (Witesman & Fernandez, 2013). Supply chain management is one example where the theory cultivates appropriate application. Scholars have become interested in using principal-agent theory to understand how participants manage risks, align incentives, and forge relationships (Fayezi, O’Loughlin, & Zutshi, 2012). Supply chain management has many aspects, and procurement is an essential element in system operation processes. The principal-agent theory serves as an appropriate construct for describing business leaders and managers’ behavior and performance on government contracts within this context. The theory is a framework for shaping and managing contract interactions to expound performance descriptions for two actors in an agreement (Awortwi, 2012). The principal chooses an agent because the principal lacks the expertise and resources to produce the service in-house and determines if contracting out the services costs is advantageous. Ultimately, the principal hires an agent, and the two parties agree to contract terms including compensation for work performed.

**Principal-agent theory in public contracting**

Researchers have applied the principal-agent theory to studies involving procurement to describe broad contractual relationship scopes (Awortwi, 2012; Etro & Cella, 2013; Tao & Jingjing, 2011). Studying behavioral choices under incentive contracts involves analyzing monitoring capacity levels to determine value and commission (Tao & Jingjing, 2011). The theory later became useful for examining local governments’ effectiveness in managing relationships with private contractors in Ghana (Awortwi, 2012). A competition analysis between research and development firms indicated how market competition relates to incentive contract choices for managers with hidden productivity (Etro & Cella, 2013). Although researchers have heavily applied the theory to procurement, public procurement is a relatively new research topic and a growing phenomenon. Therefore, the function the principal-agent theory has played to date is relatively unknown (Flynn & Davis, 2014). Recent literature on government contracts indicates that advantages exist to applying the principal-agent theory to government contracting and contractor performance. An example involved identifying a gap in research and presenting viable frameworks from which
to investigate public procurement studies (Flynn & Davis, 2014). Many scholars applied the principle-agent theory to government contracting and cited numerous advantages for doing so.

**Goal alignment**

Principal-agent theory elements focus on determining hidden productivity costs and encourage creative ways for principals to measure and compensate agents by minimizing those costs to the principal (Coletta, 2013). The agency theory provides insights for relationship engineering within supply chains, where social, political, legal, and behavioral dynamics dominate (Fayezi et al., 2012). Politics tends to dominate pre-award contract functions; however, within this arena, other dynamics affect performance and range goals facing agencies and contractors. Examining the factors affecting goal attainment in public sector performance contracts included a focus on Danish’s’ central government performance contracts. The findings indicated that a crucial factor in performance on government contracts is whether agencies control the formulating and meeting goals (Binderkrantz, Holm, & Korsager, 2011). Therefore, to improve contracting initiatives, a concentration should be on enabling government leaders to secure ambitious and relevant performance objectives (Binderkrantz et al., 2011).

Researchers have explored goal alignment through rigorous contract monitoring involving different performance aspects using numerous surveillance tools, for example, performance objectives and measures (Witko, 2011). Performance contracts present a solution to the goal complexity and goal ambiguity. Performance management examinations combining incentive analysis through performance contracts with executive contracts for agency heads revealed the systems to be ideal for focusing managerial attention on performance (Binderkrantz & Christensen, 2012). The dynamic presented the complex contractual relationship from the principal-agent theory perspective. Different national contexts or other public sector organization types may reach the same conclusions.

**Manage risks and advantages of applied theory**

The principal-agent theory has limitations and risks identified by authors researching the topic. For example, an overemphasis on economic drivers has become significant weaknesses in agency theory use (Heracleous & Lan, 2012). The underlying premises behind the principal-agent theory must remain intact when applying to diverse contexts, which require broadened conceptions of essential elements (Wiseman et al., 2012). Inductive approaches used to identify context-specific differences between principal-agent and governance structures have failed to produce principal-agent relations with applicability to varied institutional contexts (Wiseman et al., 2012).

**Forge relationships and behavior**

Applying the principal-agent theory to supply chain management revealed interdependency between the principals and the agents, who often swap roles within the relationship (Fayezi et al., 2012). Supply chain management theories comprise an appropriate comparison to public procurement research. Closely connected management-specific theories are suitable for use alongside established psychological and economic theories for studying organizations and markets (Flynn & Davis, 2014). Procurement has become a supply chain management subfield. The subcontext is necessary because principal-agency theory elements such as information sharing and incentivization serve to explanation relationships and behavior contract alignment (Fayezi et al., 2012). Principal-
agency research integrating universities as government organization support revealed adverse selection as cynical implications materializing early in relationships (Rasmussen & Gulbrandsen, 2012). Problems lied in finding appropriate agents for delegation (Rasmussen & Gulbrandsen, 2012). The authors applied the theory to a program that operated in a complex situation with multiple principals and agents. The requirement entailed government support programs to adhere to goals and rationales for programs funding sources and balance various stakeholders (Rasmussen & Gulbrandsen, 2012). Conforming stakeholders’ goals as a concept align with the premise (Fayezi et al. (2012). A corresponding principal-agent model for green supply chain management provided a framework based on the theory (Kai, Wei, & Meng-lin, 2014). The model was suitable for comparing and analyzing knowledge sharing characteristics between enterprises in green supply chains. The design allowed practitioners to explore features that affected various parameters and changed contract formation conditions. These parameters helped identify and build upon different characteristics established by the analysis and design, based on principal-agent theory (Kai et al., 2014). The valuable, usable framework was suitable to analyze different management systems using the model.

Procurement officials within public organizations find it difficult to develop long-term relationships with suppliers that allow optimization in pursuing their respective goals (Gianakis & McCue, 2012). Relational contracting relies upon a structured agreement, which means the relationship is more than between just two parties (Never & de Leon, 2014). Trust is crucial to ensuring all individuals will seek mutually beneficial solutions so the relationship will continue (Never & de Leon, 2014). While the literature indicates difficulties in forming relationships, the findings also indicated the importance of relational contracting for successful contractual performance and completion.

**Rival theories and opponents of the principal-agent theory**

Numerous theories stand out for their predominant use in public procurement research. However, two have become most prominent: the theory of auctions and competitive bidding and principal-agency theory (Flynn & Davis, 2014). Based on historical United States contracting regimes, relational contracting and the stewardship model have typified classical contract law (Van Slyke, 2007). The theories addressed significant discussion underlining contractual relationships highlighting the similarities shared. For example, primary factors underlining the principal steward relationship include goal congruence, mutual trust, and benefit (Witko, 2011). Within the principal-agent theory, researchers revealed that managers frequently contacted and communicated with their vendors despite having clear structured and formally written contracts (Lamothe & Lamothe, 2012b). The contact may allude to the prospects that actual contractual relationships may deviate from theories discussed.

Formal written agreements such as those drafted within the principal-agent theory context contain influencing factors such as service characteristics, market conditions, and vendor ownership (Lamothe & Lamothe, 2012b). These factors differ from more relational agreements that contain the influence from management style such as reputation, management capacity, and continuing relationships expectations (Lamothe & Lamothe, 2012b). When discussing sustainability, the factors and activities allowed by the principal-agent theory relationship may not permit flexibility. Primarily because characteristics limitations exist, those are historically required to maintain such a relationship.
Relevant work from the contractor perspective came from authors who explored public contracting for human services based on the impact on the contractor rather than the government (Never & de Leon, 2014). A focus on relational contracting by Never and de Leon (2014) involved viewing the event from the trust theoretical framework. Viewing the relationship expanded Van Slyke’s (2007) instrumental work in examining relationships between government agencies and contractors and contended that relationships between public bodies and entrepreneurs often more closely resemble principal-steward relationships. The descriptive findings indicated that government agencies were unreliable to human service nonprofit companies that enabled the nonprofits to adhere to predetermined contractual responsibilities (Never & de Leon, 2014). The contractor bore the burden to reduce their financial or human capital (Never & de Leon, 2014). Goal alignment and establishing rapport become important factors for satisfactory performance. The government’s standing and approval is a significant factor dictating the contractor's approach to leading and managing their organization to adjust performance to please the principal.

**Sustainability**

Researchers have argued favoring a positive relationship between sustainability and financial performance because sustainability efforts improve economic benefits by enhancing relevant organizational aspects (Lee & Pati, 2012). Information derived from the literature analysis indicated a deficiency in universally accepted sustainability standards or methodologies for measuring, assessing, and monitoring the company’s progress toward sustainability. Corporate interest in sustainability results from environmental and social scandals, government regulations, and greater consumer concern for ecological issues (Makipere & Yip, 2008). Sustainability is measurable in at least three ways: economic, environmental, and social. An analysis conducted by H. Walker, Miemczyk, Johnsen, and Spencer (2012) substantiated the findings and identified social or societal, ecological, and economic dynamics as primary sustainable procurement and supply chain aspects.

The literature on sustainability indicates inconsistencies in sustainability and performance, as outcome measurements surface from varying perspectives. One investigation to identify sustainability factors related to corporate performance included organizations whose leaders report corporate sustainability practices to examine their impact on financial performance (Ameer & Othman, 2012). Sampling 100 top global corporations confirmed that companies whose leaders place emphasis on sustainability practices had higher economic performance (Ameer & Othman, 2012). Economic performance as measured by return on assets, profit before taxation, and cash flow from operations was comparable to companies without such commitments in some activity sectors (Ameer & Othman, 2012). Another approach to examining corporate performance from an economic performance perspective showed limited focus on the service industry (Lee & Pati, 2012). Using the Pacific Sustainability Index to sample 196 companies from 12 industries ultimately exposed a direct relationship between the environmental, social sustainability factors and market performance. The authors primarily focused environmental and social elements, containing sub-classified aspects categorized as intent and reporting. For example environmental intent covered accountability, management, policy, and vision. Environmental reporting covered emissions to air, emission to water, energy, management, materials usage, recycling, waste, water. Social intents covered
accountability, management, policy, social demographic, and vision. Social Reporting covers the scores of human rights, management, qualitative social, and quantifiable social elements (Lee & Pati, 2012). A multi-industry empirical study centralized to purchasing managers identified trends, methodological challenges, and research gaps from sampled articles contained published throughout the Journal of Purchasing and Supply Management (H. Walker et al., 2012).

Engaging in processes of transforming corporate leaders to enhance contributions to larger sustainable development delivered sustainable value beyond financial growth (Kiron et al., 2013; Tideman et al., 2013). For some industries, Leadership in Energy and Environmental Design (LEED) certification programs facilitated this process. One empirical test assessed factors that influence US companies decisions on adopting LEED certification programs (Gauthier & Wooldridge, 2012). Publicly available information provided support for the argument that imagination drives LEED adoption among organizations (Gauthier & Wooldridge, 2012). Additionally, the work contributed to investigative literature that determines sustainable innovation adoption (Gauthier & Wooldridge, 2012). No matter how organizational leaders approach sustainable growth, the research showed high potential for implementing sustainable programs. Many company leaders proceed with incorporating sustainability initiatives because resources and capabilities reside internally; however, the ability to add value may be dependent upon supporting routines (Perego & Kolk, 2012). Unconventional methods are organizational leaders’ responsibility to determine the best course forward to achieve sustainable progress for a company’s future.

**Sustainable Procurement**

Sustainable procurement appears most frequently defined as the pursuit of sustainable development objectives through the purchasing and supply chain process (H. Walker et al., 2012). The most common definition is applicable, as no universal definition of sustainability or sustainable procurement exists. Sustainable procurement is a growing phenomenon. Concepts used to explain sustainable supply chain management will apply to explore sustainability factors facilitating successful performance in government contracting (Giunipero, Hooker, & Denslow, 2012; Tate, Ellram, & Dooley, 2012). Initiatives included avoiding cost overruns through contract management through contractor performance. The exploration of contractor performance may include minimizing cost overruns through leadership efforts.

Researchers explored performance objectives that included price supporting the sustainability of upstream supply chains (Ageron, Gunasekaran, & Spalanzani, 2012). Theoretical frameworks developed for sustainable supply management focused on suppliers and their firms’ involvement in formulating and managing a sustainable business. Giunipero et al. (2012) later substantiated the findings of Ageron et al. (2012). Management initiatives and government regulations primarily dictate purchasing and supply chain sustainability efforts (Giunipero et al., 2012). A hindrance to sustainability initiatives for many companies includes investments in sustainability during economic uncertainty (Giunipero et al., 2012).

Sustainability for organizations includes critical areas that collectively create a systemic, strategic focus that helps foster sustainable growth for stakeholders and agencies. It is unclear if business leaders pursue sustainability measures to benefit the group. For example, environmental purchasing and supplier management are early trends
for many organizations. Upon initial implementation, external pressure toward environmental responsibility pressures many organizations to pursue environmental sustainability (Tate et al., 2012). Executives acknowledge their naivete by reporting lacking consistency in selecting and implementing sustainability activities at the CEO level (Giunipero et al., 2012). Researchers have begun to contribute to the literature on sustainability from a nonfinancial perspective and to devise methods for measuring sustainable leadership (Lourenço, Callen, Branco, & Curto, 2014). Based on performance outcomes, sustainable leadership involves the interaction between environmental performance, social performance, and financial performance (Ameer & Othman, 2012). Senior leaders tend to capture sustainability policy and practices by adopting dedicated language and financial auditing processes (Perego & Kolk, 2012). That allows them to ensure they meet their own commercial and professional objectives through reporting (Boiral & Gendron, 2011; J. Smith et al., 2011). The questionable reporting alludes to a trend that organizational leaders will incorporate and report sustainable progress because for financial gain or to retain stakeholders’ trust.

**Performance Measurement and Outcomes in Public Contracting**

Government officials maintain past performance reports as a determining factors in vendor responsibility. Although compliance levels with reporting requirements have improved, the compliance rates with reporting vary considerably by organization (GAO, 2014). The principal-agent theory has a framework for monitoring various contract outcomes, which includes performance measurements. The concepts and methods, as mentioned previously in supply chain management and public procurement, retain transferability and applicability. A greater goal alignment between public and nonprofit organizations means that nonprofit organizations leaders can demonstrate high reliability in performing work for government entities, thereby resulting in a higher effectiveness level (Awortwi, 2012). Substantial factors discussed involving vendor performance impacts entangle the government’s close cooperation with its contractors, in addition to political connections (Lamothe & Lamothe, 2012a). The untraditional relationship between the government and the contractor aligns with the Awortwi (2012), who concluded that the most significantly perceived contractual performance indicators are contractor selection and contract monitoring.

Considering reflected activities and behaviors presented in the principal-agent relationship, universal, nondiscriminant performance measures exist (Witesman & Fernandez, 2013). An e-procurement model for public contracting authorities to quantify procurement performance benefits assisted the industry by measuring how e-procurement contributed to increasing organizational performance (Gardenal, 2013). Goal alignment is an important factor in measuring and predicting successful government contractor performance irrespective the size, company or contract type. Contracting performance is a byproduct resulting from trade-offs existing between different aspects contained within the contracting relationship (Awortwi, 2012). In exploring contracting effectiveness and government’s performance, performance management included a focus on correlations between various factors the authors selected to investigate (Chaturvedi & Gautam, 2013). The results framework document process rendered positive impacts on several key high-performing organizations indicators (Chaturvedi & Gautam, 2013). The findings showed that the initiative had the potential to contribute toward civil servants performance.
orientation. The efforts also helped government agency leaders push specific agendas for reforms and good governance.

Performance measuring from the government perspective, the rating official almost invariably relates to principal-agent theory concepts. Recent studies include discussions on performance within the principal-agent theory context (Awortwi, 2012). Some addressed performance specifically as it related to government contracting (Chaturvedi & Gautam, 2013) while others incorporated dynamics such as political connection impacts on vendor performance (Lamothe & Lamothe, 2012a). All researchers reviewed independently contributed to the body of knowledge in some form. When addressing elements focused on answering the central research question, however, authors failed to specifically addressed sustainability factors in government contractor performance within the principal-agent theory framework.

**Contract Performance Leadership Ramifications**

The government sets aside approximately 23% of all contracting dollars to small businesses. Poor performance ramifications are detrimental to small business participants. When performance suffers, immediate performance or a contractual agreement breach occurs (Jacobi & Weiss, 2013). In assessing default remedies for contract breaches, an economic determination motivates renegotiating the contract, or seeking default remedies (Jacobi & Weiss, 2013). The decision should encompass allowance for immediate performance or present a future payment value from court proceedings (Jacobi & Weiss, 2013).

**Performance rating implications**

Positive performance ratings and contractor performance systems are critical for continued opportunities for entrepreneurs, as contracting officers seek experienced and qualified business partners to achieve its objectives (Bradshaw & Chang, 2013). Creating performance measures has positive implications on the federal decision makers’ capacity to manage contracts successfully (Amirkhanyan, 2011). These factors make positive performance an imperative goal for government contractors because a requirement for increased accountability becomes created by performance measurement (Amirkhanyan, 2011). Multiple findings have shown that the government reporting system and processes for analyzing and reporting performance lack the capacity to provide effective results (Amirkhanyan, 2011; Bradshaw & Chang, 2013). Regardless of accuracy, the information helps government officials determine whether a contractor receives future work (Bradshaw & Chang, 2013). Notwithstanding the deficiency in performance reporting, performance reporting is public information once published. The records become public and are viewable by any interested party. Therefore, a negative impact on poor performance ratings may extend beyond the lost revenue from government contracting opportunities. As discussed previously, procurement officials consider past performance reviews in source selection processes.

**Adversarial relationships**

Building coalitions with the principal company facilitate positive attributes to success and align with the principal-agent theory theoretical framework. Sustainability in procurement supply chain processes includes creating value for multiple stakeholders and the principal (Latham, 2014). Communication and organizational structure predominantly influenced mutual relationships that relied heavily on perception (Grudinschi, Sintonen, & Hallikas, 2014). Collaboration and partnerships are essential to public service
procurement (Grudinschi et al., 2014). Both variables substantiated and extended the research conducted by Plane and Green (2012), who concluded that value for both buyers and suppliers emerges when maintaining a successful collaborative relationship.

While literature exists that helps emphasize the connection between the government and contractors exists, adverse relationship implications are unclear and undefined. Contradictory procurement approaches have not necessarily precluded collaborative relationship maturation (Plane & Green, 2012). Striving to create such a relationship may prove more valuable to both parties.

**Contractual ramifications**

Since 2012, suspension or debarment actions in US acquisitions have nearly doubled (Lasky, 2013). The ramifications for poor performance become critical and possibly detrimental to business leaders. Potential contract consequences include suspension or debarment, which are serious matters to small firms. Creating and implementing comprehensive values-based ethics and compliance program as recommended is the best way for government contractors to avoid suspensions and debarment (Lasky, 2013). Other statutory powers available to the government for implementation against underperforming contractors include terminations. Terminations for convenience under a traditional fixed-price contract allow the government to breach contract terms legally when it benefits the government (Korman, 2014). The legal breach subsequently entitles the contractor to recover certain costs (Korman, 2014). However, terminations for default become available for enforcement when a contractor defaults on a contractual agreement between the parties. In terminations for default, the contractor becomes liable for assessed claims for replacement products, price increases, and administrative costs (GAO, 1994). Small firm performance has been weaker throughout the recent economic recovery than during any other recovery since 1973 (Chow & Dunkelberg, 2011). The financial repercussions to terminations usually mean the difference between small business growth or death.

**DISCUSSION**

Themes revealed included leadership’s role in (a) building collaborative working relationships, (b) aligning goals with the principal (government) to create value for both parties, and (c) implementing actions to create long-term value and growth. The content within the themes selected included recent study reviews to address each critical research elements.

**Sustainability Defined and Applied to Government Contracting**

With the paucity of research on strategies for sustainability in government contracts, the articles selected, taken mutually offered theories and concepts to get closer to a single definition of sustainability in government contracting. Sustainability in government contracting is reflective of initiatives included avoiding cost overruns through contract management through contractor performance leading to reduced costs and value creation for multiple stakeholders and the principal (Giunipero et al., 2012; Latham, 2014). What was uncovered may be revered as concepts of how to further the discussion on sustainability in government contracting. Through the lens of principal-agent theory to government contractors achieve sustainability through manage risks, align incentives, and forge relationships (Fayezi, O’Loughlin, & Zutshi, 2012) to enhance
financial performance improve economic benefits, enhancing relevant organizational aspects and ultimately creating value for multiple stakeholders and the principal (Latham, 2014; Lee & Pati, 2012).

**Concepts of Sustainability, Government Contracting, and Contractor Performance**

Practitioners may strive for this value creation through trade-offs existing between different aspects contained within the contracting relationship effectiveness and its impact on improving government’s performance (Awortwi, 2012) thereby creating long-term successful performance. Elements identified fall within the categories of social, political, economic, ethical practices, and customer concern sustainability related requirements. The goal for government contractors becomes the ability to exhibit social, political, economic, ethical practices, and customer concern within the contexts of aligning goals, managing risks and forging relationships to build effective relationships. The formula may increase value to the government and sustainability in terms of contractor longevity through superior contractor performance.

**Limitations and Recommendations for Further Research**

The fact that service delivery among local United States governments may differ (Witesman & Fernandez, 2013) creates a limitation that findings may constrain generalizability. Government contracting is a vast field; therefore, results as applied to one industry may not be generalizable to all sectors. Available information may not include insight into applicability among the varying contract types that exist. Finally, limited information on variables critical to the study created limitations for a thorough qualitative discussion pertaining to current literature. A larger scale exploratory study of the specific contract types and sustainable practices that facilitate success may further assist business leaders that perform within specific industries. Sustainability implies long-term practices and measurements of performance. The current study omits consideration for any period for success measurement. Exploring actual successful practices over a significant period, a case study may capture a long-term perspective of the impact of sustainability on long-term strategic planning organizations. The foundation of the research arose from the gap in literature in the budding field of government contracts particularly sustainability in government contracts. Future research examining actual variables through a qualitative or mixed method correlation study identify then measuring sustainability factors and contract performance may address this limitation.

**CONCLUSIONS**

Government contracting positions as a significant contributor to achieving sustainable development and continues to gain positive initiatives towards this development in other countries (Melissen, & Reinders, 2012). History contributes to sustainable change by creating mechanisms for feedback available to employ variations of future organizational practices (Prywes, 2011). The information provided through this research provides practitioners with a view of successful practices to employ in future attempts First, leaders and managers should recognize available sustainable practices and distinguish how they differ from their current behaviors. Second, leaders and managers should assess the advantages and disadvantages of incorporating resources into daily business functions. Lastly, leaders and managers should develop a strategic plan for implementing any contemplated changes that includes training and education for
successful practical application. Literature on sustainability in government contracts, evaluated individually did not offer a clear solution to the central research question. However, when assessing correlated theories collectively a framework to extend the research through further inquiry emerges. Sustainability in the US government-contracting arena largely remains unclearly defined when discussing roles, definitions, and performance measurements. This study offers viable evidence to leaders and managers who serve as strategic decision makers within their organizations.

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THE PROBLEMATIC ETHICALITY OF LIBERTARIAN PATERNALISM AND NATURALISTIC INQUIRY

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ABSTRACT

Under libertarian paternalism, public policy makers should attempt to influence people’s behavior by subtle manipulation of choice environments rather than by laws and regulations. Even if you find libertarian paternalism ethically acceptable, some studies meant to support it are far from ethically neutral. Although seemingly well-intentioned, some naturalistic inquiry studies may produce insufficiently reliable results and strip unobtrusively observed people of their autonomy, privacy, and dignity unknowingly.

PRELIMINARIES: TWO DEFINITIONS

Libertarian paternalism—a term introduced by Thaler and Sunstein (2008) (henceforth T&S) to characterize social scientists’ efforts to tweak human behavior—assumes people operate in overly complex choice environments that discourage error-free decision-making. To overcome people’s cognitive deficits, choice architects —a suspect value-neutral moniker—“make the easiest choice the one that is the best for the decider…while providing others…if the decider is so inclined” (Smith 2010 at 294). Such behavioral tweaks, or ‘nudges’ in T&S’s vernacular, are “any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives” (T&S at 6). On this view, “small and apparently insignificant details can have major impacts on people’s behavior” (T&S at 3) and public policies that “go with the grain of people’s psychology may be more effective than the stick of coercive regulation and cheaper than the carrot of subsidy” (Wilkinson, 2013 at 341).

Observational research entails direct observation of phenomena in their natural setting. It differs from experimental research, which relies on a quasi-artificial environment to control for extraneous factors and the manipulation of at least one variable (for example, relating different ad executions for a brand to people’s reported purchase likelihood). Naturalistic inquiry is observational research in an everyday setting, such as a supermarket or restaurant. To minimize researcher-induced bias, observations are made covertly; hence, securing participant cooperation is unrequired operationally. Because behavior rather than self-reports are assessed, it cannot be used to study people’s decision-making processes, emotions, or preferences.
LIBERTARIAN PATERNALISM

Nudging differs from most marketing in that people generally are aware of being subjected to marketing tactics but are likely unaware of being subjected to nudging. T&S argue nudging, such as supermarkets spurring sales of impulse goods by stocking them at the ends of aisles and checkout counters, pervades marketing practice. As nudging already is accepted for commercial purposes, T&S believe it should be acceptable for public policy implementation.

Psychological research conducted since the 1970s shows people rely on imprecise heuristics (such as anchoring [lagged recalculation of probability estimates in response to new information] and availability [overestimating more memorable events as more likely to reoccur]) and evaluative biases (such as framing [context influences decision-making], inertia, loss aversion [avoiding loss outweighs achieving identical gain], myopia, and overconfidence) when making decisions (Ariely, 2008; Brafman and Brafman, 2008; Cialdini, 1993). Hence, public policy makers should not assume people formulate strictly rational decisions about their personal welfare based on probabilities, costs, and benefits. Under the tenets of libertarian paternalism, these policy makers should influence personal behavior via subtle manipulation rather than laws and regulations. In this vein, the United Kingdom’s government established a ‘Nudge Unit’ “to create policies that will enhance the public welfare by helping citizens make better choices” (Lovallo and Webb, 2011 at 68).

Nudging assumes choice architects can design decision environments to prompt choices in accord with people’s true preferences. No one would choose to die from lung cancer or diabetes, so people would never smoke or grow morbidly obese if they properly valued their future self. Nudging conforms to the New Year’s resolution criterion: people’s resolutions reflect their truly preferred behaviors. As no one resolves to smoke more, eat more unhealthful foods, get less exercise, and save less money, people desire to be nudged away from these behaviors. In contrast, people can be nudged to invest more wisely, consume more intelligently, use less energy, live healthier lives, litter less, improve urinal aim, vote, consume less alcohol, reduce roadway speeding, and donate organs upon death.

Ethical Shortcomings

Although T&S argue there is no need to respect people’s incoherent preferences, such as smoking cigarettes despite negative health implications, retaining people’s freedom to choose from a broad choice set is critical to T&S’s philosophy. For T&S, welfare gains from improved decision-making outweigh welfare costs from choice restrictions. Nonetheless, “the most serious obstacle to the nudge revolution is public acceptability. Although nudges are intended to be helpful and preserve freedom, many people feel there is something sinister about interventions designed to change their behavior without them necessarily realizing it” (Lawton 2013, at 36). Exploiting people’s predictable deviations from rationality is manipulative, which makes nudging non-libertarian despite T&S’s terminology (Wilkinson, 2013). 1

T&S argue the ‘publicity principle’—governments are prohibited from nudging polices they would be unwilling or unable to defend publicly—guarantees ethical public policy. Unfortunately, governments often are comfortable justifying policies unacceptable to the general public; for example, the U.S. ‘big bank bailouts’ of 2008. Furthermore, “what one political party

1 Autonomy violation and anti-paternalism arguments were avoided, as they have been made elsewhere. See, for example, Hausman and Welch (2010) and Yeung (2012).
might see as a well-intentioned nudge, for another could be perceived as a piece of manipulation on a par with supermarkets putting sweets at the checkout” (Pearson, 2008 at 57). Hence, the publicity principle is insufficient to guarantee universally acceptable nudging policies.

Successful libertarian paternalism assumes the unlikely duo of omniscient experts and beneficent policy makers.

Thaler and Sunstein repeatedly claim that their criterion is the well-being of the person being nudged, as judged by him …[T]hey want the choice architect…to work out what the individual would have chosen, had his decision-making not been subject to limitations of attention, information, cognitive ability or self-control, and then nudge him in that direction. But…[t]he concepts of full attention, perfect information, unimpaired cognitive ability and complete self-control do not have objective definitions; they are inescapably normative. Just about any intervention…can be justified…if the paternalist is allowed to define what counts as attention, information, cognitive ability and self-control (Sugden, 2009 at 370).

Even nutritionists, who focus on identifying healthful foods and eating habits rather than highly complex psychological domains, are quite fallible. Consider the last half century of studies on black coffee and eggs. These staples have gone from healthful (no calorie; excellent protein source) to poisonous (cause pancreatic cancer and heart attacks, respectively) and back to healthful (fights Alzheimer’s disease; nature’s perfect food). Such time-discrepant findings do not engender much faith in the ability of choice architects to nudge people into making better decisions.

Furthermore, libertarian paternalism ignores unintended consequences. “For example, there is some evidence that when foods are labeled as healthy or low fat, it is taken as license to consumer more” (Lawton, 2013 at 36).

Consider this personal anecdote. Mike’s mom learned during his childhood about the importance of restricting children’s diets to healthful foods. As a result, highly sugared foods were verboten in his home. The pantry was devoid of cakes, pies, candies, or soft drinks. The unexciting package of Nilla Wafers or oatmeal cookies was a rare treat. Carefully monitored frozen confection consumption was limited to small bowls of plain, lower fat, store branded vanilla, chocolate, or strawberry ice cream. Although she succeeded in reducing Mike’s sugar consumption as a child, she created a sugar deprivation so severe Mike spent much of his adulthood over-consuming sweets. Had she taken a more balanced approach—one that included a mix of healthful and ‘treat’ foods—Mike would not have compensated by overindulging in sweets as an adult. (Yes, one could argue more sweets as a child would have accustomed Mike’s palate to sweets. However, a psychological is favored to a biological explanation for Mike’s adult eating habits.)

The ethical issues related to one naturalistic inquiry study of the type libertarian paternalists conduct to optimize decision environment architectures is now discussed. Even if you remain convinced libertarian paternalism is ethical, some empirical studies meant to support it are far from ethically neutral.
NATURALISTIC INQUIRY

Whenever social scientists collect and analyze observational data provided by fellow human beings, ethical issues may arise. Such issues have been the major impetus for the institutional review boards (IRB)—“a committee established to review and….ensure that all human subject research be conducted in accordance with all federal, institutional, and ethical guidelines” (American Public University System, 2014)—now de rigueur at all universities.

Despite social scientists’ best efforts, their studies lack the physical sciences’ strong experimental controls. Why? Because research on and about human beings occurs in far more complex environments, controlling for extraneous factors is far more difficult. Hence, social scientists tolerate larger measurement error than generally acceptable to physical scientists. Yet, some naturalistic inquiry may exceed social science error tolerance, throwing reported results into excessive question.

Problematic Illustrative Study

Throughout human history, starvation has been a major problem. Recently, modern food science, with its mass production of inexpensive food, has triggered an obesity and concomitant health epidemic in the industrialized world. Especially in the U.S., with its premium on idealized beauty, weight reduction programs and tools of varying cost and complexity have grown into a major industry. This health crisis and concomitant commercial opportunity has led U.S. social scientists to investigate a broad range of problems.

Consider Wansink and Payne (2008) (henceforth W&P)—a study of consumption behavior among diners at Chinese buffets. W&P recruited and trained 22 observers, who they dispatched to 11 all-you-can-eat Chinese buffets across the U.S. The observers “sat in unobtrusive locations in the restaurants and recorded the behavior of randomly selected patrons on a coding sheet from the time they were seated at the restaurant until the time they left” (at 1957).

During two training sessions, the observers learned to estimate patrons’ age, height, and weight. They also learned to code patrons’ seating and serving behaviors (for example, seated at booth or table, distance from buffet table, face or back to buffet table, browsed buffet first or promptly served themselves, size of plate used), as prior studies suggested food acquisition effort relates inversely to quantity consumed. Eating behavior was coded for utensils used (chopsticks versus fork), napkin placement (lap versus ‘other’), average number of chews per mouthful, and plate waste. W&P posited patrons with a lower Body Mass Index (BMI; calculated from observers’ weight and height estimates) would use smaller utensils (chopsticks) and dine more conscientiously (place napkin in lap, chew more thoroughly). Their findings: lower BMI patrons tend to sit at a booth, browse the buffet prior to serving themselves, use chopsticks, place a napkin in their lap, and create more plate waste.

Prima facie, W&P’s study seems ethical. They followed institutional protocol, as their university’s IRB approved their study (at 1597). Although some IRB members may lack comprehensive qualitative methods training (Lichtman, 2014), it is reasonable to assume compliance with an IRB’s ethical assessment should suffice. Furthermore, it seems improbable this study could harm buffet patrons, who were functioning in a public space (Lichtman, 2014) and likely were unaware of being observed. However, such a cursory view ignores deeper ethical considerations.
Although one might initially dismiss the existence of a problematic researcher/subject relationship, doing so ignores W&P’s obligations to maintain each buffet patron’s autonomy. Once human beings are involved, regardless of measurement unobtrusiveness, their preferences toward serving as research subjects should be heeded, especially for sensitive research topics (such as gambling). There is good reason to believe many of W&P’s buffet patrons—especially those judged as obese by an observer—would have resented learning their privacy had been invaded and they had been classified in this manner. Of course, W&P might argue unobtrusive observation was vital to their study, as alerting patrons they were being observed was likely to alter their dining behaviors (for example, trying to appear less gluttonous by consuming less food).

Were observers’ reports sufficiently accurate to ensure trustworthy findings? Observers, regardless of their dedication and training, were assigned an overly complex task they could not perform well in ‘real time’. (Videorecording and subsequent multi-observer coding would introduce a different problem: video-recording people without their consent.) For example, observers estimated buffet patrons’ height, weight, and physiology. Although W&P contend trained people are more accurate than untrained people at such estimation, even the former’s estimates are subjective and error prone, especially once observational fatigue occurs.

Observers also recorded patrons’ mean chews per mouthful, which seems an excessively taxing and/or obtrusive task depending on the observer’s position relative to the patron. Absent a frontal or clear profile view, counting chews per mouthful accurately would be problematic. However, such relative observer-patron positioning and the gaze intensity required to count chews accurately make it unlikely patrons were unaware someone was observing them, likely altering patrons’ behavior. In essence, either the measurement was obstructed or the measurement act biased the behavior being assessed. Hence, it is unlikely either patrons’ BMI or chews per mouthful were assessed with sufficient accuracy.

Social scientists should use methods appropriate to their study. Controls and limitations should be considered. Seemingly, buffet patrons were not debriefed after dining; hence, whether they knew they were being observed and their response to that possible awareness—including altering their dining behavior—is unknown. By not debriefing buffet patrons, W&P’s observers failed to treat those patrons with sufficient dignity, may have upset patrons needlessly (as sensing one is being ‘watched’ can be unsettling), and failed to ensure W&P’s research protocol did not bias observed dining behaviors.

Deciding whether any study should be undertaken requires careful reflection. Research support is finite and often supplied by public entities. Given resource origin and scarcity, social scientists should be mindful of resource usage. They always should ask themselves, ‘Will this study contribute meaningfully to human knowledge?’ Would fellow researchers’ and laypeople’s response to the findings be ‘That was unexpected?’ If research findings neither expand the frontiers of knowledge nor improve practice, then they are fruitless. The unexpectedness of W&P’s findings may not exceed the costs associated with a research design that compromised buffet patron autonomy and privacy.

Applying the results also is a concern. W&P reported increased portion control via the use of smaller plates is key to reducing over-eating at buffets. Prima facie, reduced overeating is a ‘good’ result from a utilitarian perspective. However, following that suggestion means subtly manipulating consumers, once again compromising autonomy.
CONCLUSION

W&P executed a study meant to identify the most conducive decision architecture for nudging people into behaviors experts deem more personally and socially favorable. They tried to uncover the most effective environmental cues for encouraging people to behave more in their own and society’s best interest. Although many people believe such manipulation fosters good results and is therefore acceptable, a necessary corollary of freedom and human autonomy is ‘if you allow people to choose, they may and often will choose contrary to conventional or expert judgment’. Of course, the success of these cues largely depends on people’s ignorance of being manipulated. Yet, even if you find libertarian paternalism acceptable, some studies meant to support it are far from ethically neutral. Although seemingly well-intentioned, studies in the vein of W&P’s may produce insufficiently reliable results and strip unobtrusively observed people of their autonomy, privacy, and dignity unknowingly.

REFERENCES

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MATURITY, GENDER, PARENTHOOD AND ETHICAL ORIENTATION: A THREE CAMPUS SURVEY

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ABSTRACT

This research details a three campus survey of current American college students and their views on 20 specific ethical behaviors, replicating previous research. In the current project, we surveyed business students across three campuses in the United States (n=356) in fall, 2012. We found significant differences between students on their views of specific ethical behaviors based on several demographic factors, including gender, year in school, tobacco use, marital status, having children, being employed, and major. We found that many aspects of maturity, especially parenthood had significant impacts on their attitudes towards ethics. We conclude by discussing the implications for further research in this area.

INTRODUCTION

Ethics is in the public consciousness. Businesses, afraid of being the next Enron, emphasize ethical codes of conduct and ethical training. Schools now require ethics integrated into all business degrees. Whistle blowers are increasing. Controversies over business wrongdoings dominate the news. The public is fed a constant diet of ethical scandals in business as well as in politics, even in sports. The battle over right and wrong is still being waged. Will the next generation be any better?

This research details a three campus survey of current American college students and their views on 20 specific ethical behaviors, replicating previous research. In the current project, we surveyed business students across three campuses in the United States
(n=356) in fall, 2012. We found significant differences between students on their views of specific ethical behaviors based on several demographic factors, including gender, year in school, tobacco use, marital status, having children, being employed, and major. We found that many aspects of maturity, especially parenthood had significant impacts on the attitudes towards ethics. We conclude by discussing the implications for further research in this area.

LITERATURE REVIEW

Many ethics surveys have examined American business students. There are hundreds of studies of small and large samples that examined various demographic factors as they relate to ethics. The results have been mixed. However, certain patterns appeared consistently. Females are more ethical than males. Borowski & Urgas (1992) conducted a meta-analysis of 48 studies on gender and found females were consistently more ethical than males (for example, see Ludlum, Moskalionov, & Ramachandran, 2013; Barnett & Carson, 1989; Knotts, Lopez, & Mesak, 2000; Peterson, Rhoads, & Vaught, 2001; Chonko & Hunt, 1985; Kidwell, Stevens, & Bethke, 1987; Smith & Rogers, 2000; Ludlum & Moskalionov, 2004). Many previous studies on gender have found that females tend to be more ethical than male students (Peterson, Beltramini, and Kozmetsky, 1991; Whipple and Swords, 1992; Ferrell and Skinner, 1988; Barnett and Brown, 1994; Meising and Preble, 1985; Beltramini, Peterson and Kozmetsky, 1984; Laczniak and Inderrieden, 1987; Jones and Gautschi, 1988; Ruegger and King, 1992; Borkowski and Ugras, 1992; Arlow, 1991; Davis and Welton, 1991; Shepard and Hartenian, 1990). Luthar, DiBattista and Gautschi (1997) found that females tend to favor an ethical climate, where ethical behavior is rewarded. One explanation is that females are more involved with their moral referent group than males (Ryan and Ciavarella, 2002).

While gender is fairly consistent, a student’s choice of major yields mixed results. Do business programs encourage unethical views? The research is not decisive. Several early studies found no relationship between students’ major and their ethical beliefs (Laczniak and Inderrieden, 1987; McNichols and Zimmerer, 1985; Dubinsky and Ingram, 1984; and Goodman and Crawford, 1974). Business programs have not instilled ethical behaviors in their students (Roderick, Jelley, Cook, and Forcht, 1991; Bunn, Caudill, and Gropper, 1992; Kumar, Borycki, Nonis, and Yauger, 1991; Peters, 1989; Wolfe, 1993).

Curren and Harich (1996) found that a student’s discipline of study (either business of humanities) did not play a significant role in their ethical judgments. Similarly, Ludlum and Moskalionov (2004) found that business majors did not have significant differences from non-business majors on questions of ethics. Reiss and Mitra (1998) found that choice of major did little to influence workplace behaviors.

Even ethics courses have not seemed to matter. Some studies, (Cole and Smith, 1995; Ludlum and Moskalionov, 2004) found that completion of an ethics course did little to influence the beliefs of business students. The inconsistent findings may be caused by the varied types of ethical training in our colleges. Waples et al (2009) completed a meta-analysis of 25 business ethics instructional programs. They found that the specific instructional programs have little impacts on ethical perceptions, behaviors, or awareness.
However they did find some implications for criteria and content of instruction that have some effectiveness.

Ludlum, Moskalionov, Ramachandran, and Teeman (2013) surveyed American business students and asked whether Enron was typical of most businesses. Less than one fourth of students (21.38%) considered Enron to be typical of American businesses. Year in school was statistically significant as was age, being married, and having children. They also asked students if businesses needed more or less regulation. The majority preferred the same amount, while a third wanted more government regulation. Year in school, marriage, age, and having children all led to a desire for more regulation. They also asked two related questions about students’ desires to work for a company involved in ethical scandals. Overall, a strong majority indicated the Enron controversy did not change their views on the desire to work for a company accused of wrongdoing. Year in school, marriage, age, and having children all led to a decreased desire to work for a company accused of ethical wrongdoing.

Most studies have examined maturity as a single construct, age. The reasons are obvious. Age is objective, easy to quantify, readily available information, and there are no privacy concerns. Since we are dealing with college students, we should also eliminate indoctrination as a conflicting cause of change. Since students get older as they proceed through their college program, we wanted to see how much influence is attributed to getting older as opposed to becoming a more advanced student.

Maturity as we define it, is multi-level construct, composed of many factors including age, year in school, being employed, being married, having children, and others. These factors combine to form the maturity of the person. However, the individual factors are not necessarily related. A person can be older but single, married but not have children, be younger but employed and married, etc. These factors do not work sequentially.

Parenting as a demographic factor has been rarely examined for several reasons. First, age has been the dominant way of determining maturity. Second, most studies have examined college students, and only a small population of that group had children (traditionally none).

We feel that parenting was a special step in the maturity process. Parents understand the transformative change in life that happens when you have a child. Nothing else, including marriage, has a profound effect on the person and the responsibility of your own offspring.

These views echo some longstanding ideas in the social sciences. Namely the notion that behavior is not always governed by that which is readily obvious. Rather the behaviors are often governed by forces external to and outside the conscious awareness of the individual such that social pressures delivered via perceived authority figures can cause one to change his mind and compromise even the deepest held of ethical convictions (Asch, 1956; and Milgram, 1963). So, while major choice and individual course effects are minimized, the influential power of the individuals within those respective contexts can be great. When it comes to education’s influence on ethics social science research converges upon the idea that ethical behavior is more caught than taught. While research in this area has yet to reach firm conclusions the lynchpin appears to rest with consistency and
integration. That is to say that ethics courses alone have little effect in changing minds. However, when concepts from ethics are integrated into non-business coursework and support is bolstered by faculty a stronger ethical culture appears to emerge. This finding echoes earlier work by Damon (1997) which demonstrated that consistency in ethical messages leads to young people giving more credence to their validity.

DEVELOPMENT OF SURVEY

Instead of developing a model for ethical behavior, we chose to go in the other direction. We decided to probe ethics at the molecular level, the individual element of unethical behavior. However, most research still tends to focus on developing an all-encompassing evaluation of ethical behavior. We feel precisely because there are so many potentially unethical actions and various demographic groups, finding a single model which correctly describes each and every behavior for every possible sub-group is impossible.

What actions are viewed as unethical? Why? What are the cultural differences? As Mather (2007) stated, “Researchers must strive to integrate multiple levels of explanation for each research hypothesis.”

The current behaviors being analyzed were taken from Deshpande, Joseph and Maximov (2000). That research used 17 specific behaviors of questionable conduct. These questions were previously verified in many other projects including Ruch and Newstrom’s ethics scale. Deshpande, Joseph and Maximov (2000) only compared gender among business professionals in Russia. We wanted to examine more demographic factors in our sample.

We wanted to examine the seventeen behaviors from the previous research. We added three behaviors to the list. Two of which did not seem to incite ethical wrongness in the workplace, including eating snacks at your workstation, and falling asleep at church. These two questions would also be a safety check for ensuring students did not mark every behavior as “very unethical,” etc. We also added one question which certainly would imply unethical behavior for the workplace, falling asleep at work.

We came up with the following research hypotheses. For each, we started with the null hypothesis, that the demographic factor made no difference in the ethical views of students.

Gender - H1: Gender will not affect ethical views.
Indoctrination - H2: Year in school will not affect ethical views.
Major - H3: Choice of major will not affect ethical views
Maturity was broken down into four individual factors.
Age - H4a: Age will not affect ethical views.
Marriage - H4b: Marriage will not affect ethical views.
Employment - H4c: Employment will not affect ethical views.
Parenting - H4d: Having children will not affect ethical views.

Some of the authors have previously examined a similar group of American business students in 2009 (Ludlum, Moskalionov, Ramachandran, & Teeman, 2013) and
conducted similar projects with Russian students (Ludlum, Moskalionov, & Machiorlatti, 2008; Ludlum, Machiorlatti, & Moskalionov, 2009; and Ludlum, Moskalionov, Ramachandran, & Stephenson, 2014). A similar project was also completed with Chinese students (Ludlum & Ramachandran, 2009; and Ludlum, Moskalionov, & Ramachandran, 2009). We are now attempting to examine a more recent sample of American business students for comparison.

METHOD FOR THE SURVEY

We wanted to examine the ethical attitudes of students across several campuses. A convenience sample was taken from large business survey classes at three campuses in the U.S. in the fall of 2012. The schools were affiliated with the authors. Two colleges were in the southwest, and one was in New England. The three public colleges varied in size from under 6,000 to over 18,000 students.

Students were asked to complete the questionnaire during class time. The survey instrument was voluntary and anonymous. A total of 356 completed surveys resulted. No surveys were rejected because of incomplete answers. However, in some questions, there were fewer than 356 responses. Table 1 contains a list of the questions.

Most (86.5%) of the participants were business majors. The respondents were in the following academic years: freshman, 3%; sophomore, 7.7%; junior, 32.3%; senior, 47.2%; and 9.5% were in graduate school. Since most students were in the last years of the business program, most had completed the core business classes, including business ethics (35%).

When we examined students’ study habits, the results were troublesome. Seven out of ten students (70%) reported studying less than 12 hours per week. Fewer than 6% studied 24 or more hours per week, which is the amount typically recommended by faculty. In comparison, 40% of students spend more than 12 hours a week on the internet.

Females and males were fairly divided (55% male). The group consisted of traditional students. Only 4.8% were under age 20. Less than 7% were over age thirty. Only 13% of the respondents were married, but 11.6% had children. Tobacco use was reported by 17.2%. Most students worked while attending school (72.2%). We found that 71.6% of undergraduate college students had a credit card. Politically, the students were divided, 45% self-identified as conservative or very conservative, 37% as independent, and 18% as liberal or very liberal.

FINDINGS

Each student was asked to rank the behaviors on a five point scale with 5 being very unethical; 4 being unethical, 3 being neutral, 2 being ethical, and 1 being very ethical. The higher the numerical average, the more unethical the students considered the behaviors. The individual behaviors are organized in rank order (most unethical to least unethical) in the following table.
Table 1. Means in Rank Order

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean (n=121)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passing blame for your errors to an innocent co-worker.</td>
<td>4.233</td>
</tr>
<tr>
<td>Divulging confidential information.</td>
<td>4.221</td>
</tr>
<tr>
<td>Claiming credit for someone else’s work.</td>
<td>4.176</td>
</tr>
<tr>
<td>Falsifying time/quality/quantity reports.</td>
<td>4.151</td>
</tr>
<tr>
<td>Authorizing a subordinate to violate organization rules.</td>
<td>3.963</td>
</tr>
<tr>
<td>Padding (increasing) an expense account up more than 10%.</td>
<td>3.853</td>
</tr>
<tr>
<td>Pilfering (taking) organization materials and supplies.</td>
<td>3.806</td>
</tr>
<tr>
<td>Giving gifts/favors in exchange for preferential treatment.</td>
<td>3.771</td>
</tr>
<tr>
<td>Accepting gifts/favors in exchange for preferential treatment.</td>
<td>3.716</td>
</tr>
<tr>
<td>Padding (increasing) an expense account less than 10%.</td>
<td>3.702</td>
</tr>
<tr>
<td>Using organization services for personal use (making long distance</td>
<td>3.657</td>
</tr>
<tr>
<td>telephone calls).</td>
<td></td>
</tr>
<tr>
<td>Concealing one’s errors.</td>
<td>3.556</td>
</tr>
<tr>
<td>Taking extra personal time (arriving late for work, leaving early).</td>
<td>3.553</td>
</tr>
<tr>
<td>Doing personal business on organization time.</td>
<td>3.522</td>
</tr>
<tr>
<td>Falling asleep at work.</td>
<td>3.432</td>
</tr>
<tr>
<td>Not reporting others’ violations of organization policies and rules.</td>
<td>3.415</td>
</tr>
<tr>
<td>Taking longer than necessary to do a job.</td>
<td>3.398</td>
</tr>
<tr>
<td>Call in sick to take a day off work.</td>
<td>3.171</td>
</tr>
<tr>
<td>Falling asleep at church.</td>
<td>3.168</td>
</tr>
<tr>
<td>Eating snacks while at your work station.</td>
<td>2.547</td>
</tr>
</tbody>
</table>

These findings give an important view about the attitudes current college students have towards ethical behaviors. The students saw significant differences between the behaviors. Four behaviors were considered extremely unethical (>4.0). Ten behaviors were selected as moderately unethical (4.0-3.5). Five behaviors were viewed as only modestly unethical (3.5-3.0). One behavior (eating snacks) was not viewed as unethical (<3.0). The findings give an important ranking of wrongdoing among these behaviors. Not all bad actions are equal. Some actions were considered much more improper.

Table 1 shows the consolidated views of all students. However, not every student is the same. We found important differences in demographics. While many differences were found, we report only the statistically significant differences. Gender had a small and expected difference. Two questions had statistically significant results: using organizational supplies for a personal use ($\chi^2=10.173$, df = 4, $p=0.038$); and padding an expense account greater than 10% ($\chi^2=13.003$, df = 4, $p=0.011$). In both instances females were more ethical than males. As a result, we found modest support for hypothesis 1, that gender will affect ethical views.

Little evidence for indoctrination was found, as only two questions showed results for the respondents’ year in school. The statistically significant findings were for taking longer than necessary to complete a task ($\chi^2=45.340$, df = 24, $p=.005$) and concealing
one’s own errors ($x^2=35.472, df = 24, p=0.062$). Therefore, we found modest support for hypothesis 2, that indoctrination (year in school) will affect ethical views.

We found very little impact from major (business or non-business). Only one question showed a significant result, padding an expense account more than 10% ($x^2 = 9.912, df = 4, p = 0.042$), with business majors finding that action more objectionable than non-business majors. As a result, there was little evidence supporting hypothesis 3, that choice of major (business or non-business) would affect ethical views.

Maturity was broken down into four individual factors. First we examined age. Age was statistically significant for five of the questions; using organizational supplies for personal use ($x^2=130.912, df = 108, p=0.066$); padding expenses more than 10% ($x^2=168.870, df = 108, p = .000$); falling asleep at work ($x^2=133.042, df = 108, p = .051$); authorizing others to violate company policy ($x^2=168.385, df = 108, p = .000$); and taking more than allowed personal time ($x^2=130.447, df = 108, p=0.070$). Since five of the twenty questions were significant, we conclude there is some support for rejecting the null hypothesis, H4a: Age will not affect ethical views.

Marriage was the second factor of maturity we examined. Being married was a significant demographic variable in four of the ethical questions: padding an expense account more than 10% ($x^2=24.275, df = 8, p=.002$); concealing your own errors ($x^2=14.388, df = 8, p=.072$); falling asleep at work ($x^2=14.613, df = 8, p = .067$); and authorizing others to violate company policy ($x^2=26.144, df = 8, p = .001$). As a result, we found support for rejecting hypothesis 4b: Marriage will not affect ethical views.

Being employed was the third factor of maturity we examined. Statistically significant results were found on three of the questions: falsifying reports ($x^2=21.330, df = 8, p=.006$); authorizing others to violate company policies ($x^2=15.780, df = 8, p=.046$); and taking extra personal time ($x^2=18.435, df = 8, p=.018$). Interestingly, employment was also a significant factor for falling asleep at church ($x^2=13.469, df = 8, p=.097$), which we originally predicted would have little ethical concern from a business perspective. With three of the questions showing significant results, we have modest support for rejecting hypothesis 4c: Employment will not affect ethical views.

Parenting was the final aspect of maturity which we examined. Having kids had the biggest influence of any factor by far. Thirteen of the twenty questions were statistically significant for having children. The results of examining parenting are shown in table 2.
<table>
<thead>
<tr>
<th>Question</th>
<th>Chi-Squared</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claiming credit for someone else’s work.</td>
<td>36.816</td>
<td>20</td>
<td>0.012</td>
</tr>
<tr>
<td>Falsifying time/quality/quantity reports.</td>
<td>40.341</td>
<td>20</td>
<td>0.005</td>
</tr>
<tr>
<td>Authorizing a subordinate to violate organization rules.</td>
<td>32.332</td>
<td>20</td>
<td>0.040</td>
</tr>
<tr>
<td>Padding (increasing) an expense account up more than 10%.</td>
<td>45.175</td>
<td>20</td>
<td>0.001</td>
</tr>
<tr>
<td>Pilfering (taking) organization materials and supplies.</td>
<td>33.364</td>
<td>20</td>
<td>0.031</td>
</tr>
<tr>
<td>Giving gifts/favors in exchange for preferential treatment.</td>
<td>40.312</td>
<td>20</td>
<td>0.005</td>
</tr>
<tr>
<td>Accepting gifts/favors in exchange for preferential treatment.</td>
<td>35.468</td>
<td>20</td>
<td>0.018</td>
</tr>
<tr>
<td>Padding (increasing) an expense account less than 10%.</td>
<td>36.984</td>
<td>20</td>
<td>0.012</td>
</tr>
<tr>
<td>Using organization services for personal use (making long distance telephone calls).</td>
<td>39.822</td>
<td>20</td>
<td>0.005</td>
</tr>
<tr>
<td>Concealing one’s errors.</td>
<td>51.193</td>
<td>20</td>
<td>.000</td>
</tr>
<tr>
<td>Taking extra personal time (arriving late for work, leaving early).</td>
<td>41.505</td>
<td>20</td>
<td>0.003</td>
</tr>
<tr>
<td>Falling asleep at work.</td>
<td>46.890</td>
<td>20</td>
<td>0.001</td>
</tr>
<tr>
<td>Eating snacks while at your work station.</td>
<td>29.800</td>
<td>20</td>
<td>0.073</td>
</tr>
</tbody>
</table>

These results indicated strong support for rejecting the null hypothesis 4d: Having children will not affect ethical views.

DISCUSSION
Padding an expense account more than 10% seemed to be disfavored by all demographic groups, across the board. However, most students did not find it unethical to pad the expense account by less than 10%.

In comparing the results, some of the findings were intuitive. For example, padding an expense account by a large amount (more than 10%) was considered worse than padding a small amount (less than 10%). The elements of bribery (giving gifts and accepting gifts in exchange for special treatment) were grouped together.

The current project has led to many interesting results. The most unethical activity was passing blame to an innocent co-worker. Students considered passing blame to an innocent person was worse than concealing your own errors. Authorizing someone to violate rules of the organization was considered worse than not reporting the violations of another employee.

Falling asleep at work was considered more unethical than falling asleep at church. The least unethical activity was falling asleep at church. This was our expectation. While both actions are inappropriate, falling asleep at work is the more unethical business.
practice. Eating snacks at the work station was the only action that was considered ethically neutral, which was also our expectation.

Another interesting finding was the importance of tobacco use. Three of the twenty questions were statistically significant for tobacco use: calling in sick to get a day off work ($x^2=22.440$, df = 8, $p=.004$); falling asleep at work ($x^2=15.327$, df = 8, $p = .053$); and authorizing another employee to violate the company policies ($x^2=24.490$, df = 8, $p = .002$). These three significant results were greater than the impact of gender or indoctrination (year in school). We do not have any explanation or theory why the use of tobacco has more impact in ethical questions than gender or indoctrination, nor have we found any research which theorizes an explanation. More research is needed in the area of tobacco use and ethics to determine the relationship.

The main focus of our project was to examine maturity and its impact on ethics. We believe that maturity is composed of several factors, including age, marriage, employment, and parenting. We examined each one of these four factors. All four had some evidence in support. Interestingly, the evidence for the significance of parenting was very strong. Thirteen of the twenty questions were statistically significant for having children. No other demographic factor had half as much impact as whether or not the survey respondent had children. We conclude that having a child is an element of maturity that has the greatest impact on the individual.

**IMPLICATIONS FOR FUTHER RESEARCH & CONCLUSION**

Like all research projects, our study has limitations. One limitation of this study is the sample size. A larger sample size could result in more detailed analysis of the subgroups. In addition, the larger sample size should include more non-business majors (broken down into fine arts, liberal arts, sciences, etc.) as comparison groups. Also, with a larger sample size, the business group could be sub-divided into discipline areas (accounting, finance, management, etc.) to see if any specific business discipline had different views. Clearly, there are areas for further research on this topic.

A larger sample could specify the effect of having children. While we found a significant ethical difference between having children and not having children, does having more children increase the ethical awareness of the parent? We would need a larger sample to include more students with multiple children for an accurate comparison.

Also while students of two major political ideologies were surveyed (liberal-conservative) future research may also wish to examine groups subscribing to other ideologies such as libertarianism.

**CONCLUSION**

Many previous studies on ethics have been published with new demographic factors being examined. This project examined ethical views of students and the effect of maturity on their decisions. In doing so, we considered maturity to be more than just age, but that maturity includes being employed, age, being married, and having children. We discovered that the most important factor of the four was parenthood. Having children was more significant than gender, choice of major, or any other factor examined. We hope that future research further examines this factor.
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NEW STYLE SHEET FOR 2015 FOR MUSTANG JOURNALS

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ABSTRACT

This research details the preferred style sheet for submissions to Mustang Journals in the business disciplines and the social sciences. (Legal papers use the same title information but use Harvard Blue Book format for footnotes). The first thing to note is an abstract of 150 words or less is indented. The methods discussed will benefit those who are writing their papers for any of the Mustang Journals. The abstract should be in italics.

INTRODUCTION

This paper conveys the style sheet elements in an example. All papers should be submitted in MS-Word format. All text should be in Times New Roman with a 12 point font. Do not use any special formatting other than the space bar. All paragraphs should be indented via the tab button.

First, you should note that the title is in all capital letters and bold. After the title, skip two lines. Put in the first author’s name in bold, but not in all capital letters. Underneath the name, write the author’s school affiliation in italics. If more than one author, indicate with an * which author is the corresponding author and put the contact information for the authors at the end of the paper. After the last author’s information, skip three spaces and put in the heading for the abstract.

For references in the body of the paper, we use the following format. The current population of Finland is 5,401,267 at the end of 2011 (Statistics Finland, 2012), comparable in size with Oklahoma in the United States. If a direct quote is used, “the page number is added at the end” (Ludlum, Moskalionov, and Ramachandran, 2010 at 17). Headings for the paper should be centered and in all capital letters and bold.

METHOD FOR BUSINESS AND SOCIAL SCIENCE PAPERS

Terms should be defined and references given. If there is one reference for a statement, use this format (Arcada, 2012). If a statement has multiple references, use this format as a guide. Females tend to be more ethical than males (Ludlum and Smith, 2011; Ludlum, 2010; and Ludlum, 2004). The references are separated by a semicolon. If you are using references, you should NOT use any footnotes. Include that information in the text of the paper.

Statistics, if used, should be explained. The statistical information can be reported as this example. A strong majority of students agreed (69% agreed, 11% disagreed). We also
found that students who were employed ($x^2=13.976, df=8, p=.082$) and younger students ($x^2=75.717, df=44, p=.002$) supported more individualized views of ethics.

The statistical information can also be included in a chart or graph. Please insert the graph(s) or chart(s) into the paper where they belong. Remember, the papers will be printed in black and white only. Therefore, you should experiment with any graph that requires multiple shades to be understood or read.

**IMPLICATIONS FOR FUTURE RESEARCH & CONCLUSION**

Do NOT use any header, footer, or page numbering system. These are tedious to correct and edit for the final journal proof. Following a conclusion, you should put all of your references. Main headings should be in all capital letters, centered, and bold type. Secondary headings (if used) should be in all capital letters and centered. The references should not be numbered. Instead, put the references in alphabetical order by the author’s last name.

Be cautious about using links to find your references, since the links change so often, they are useless a year after the paper is published! After the end of the body of the paper, skip three spaces, then put in the heading for references. Skip another space then include the references. Single space all references. Keep all references in 10 point font. Notice that Mustang Journals uses *italics* rather than underlining. Italics are much easier to read and duplicate. After the references, put the information for contacting the author(s) with school affiliation and email address.

**REFERENCES**


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