



# **Bryant University**

## **The Honors Program**

**Senior Capstone Projects**  
**2008 – 2009**  
**Project Summaries**

## **MISSION**

The Bryant University Honors Program offers its members a personalized, distinctive experience that enriches their academic, social, cultural and professional talents in a mentor-oriented environment.

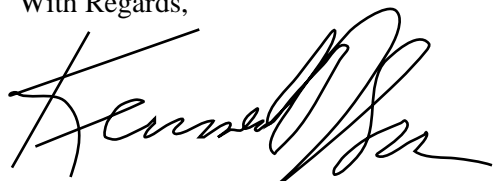
## **SENIOR CAPSTONE PROJECT**

Each member must successfully complete honors-designated courses and achieve minimum grade point averages to be certified as a graduate from The Honors Program. In addition, all seniors must complete a Senior Capstone Project. This project, under the guidance of a faculty committee, consists of a thesis or creative media project to fulfill the capstone of their Honors Program coursework. Successful completion of this capstone requires the student to present their project at the annual Colloquium as well as submit a full and summary manuscript based on Program guidelines.

This publication represents the summary of twenty senior capstone projects submitted for the 2008 – 2009 academic year. Complete manuscripts of all projects are available through the Bryant University Digital Commons website at <http://digitalcommons.bryant.edu/honors>.

On behalf of the Division of Academic Affairs, please enjoy the quality research of our undergraduate students in The Honors Program. We are proud of their achievements and their focus on academic excellence.

With Regards,

A handwritten signature in black ink, appearing to read 'Kenneth J. Sousa', written in a cursive style.

Kenneth J. Sousa, PhD  
Coordinator, The Honors Program

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**JAPANESE PLAYERS IN MLB: AN ECONOMETRIC ANALYSIS OF LABOR  
DISCRIMINATION**

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April 2009

**ABSTRACT**

In recent years, Major League Baseball (MLB) teams have increasingly drawn talent from the international market. This study employs econometric techniques to test the various labor discrimination issues facing Japanese players playing in the United States' MLB. Prior to this research, there have been remarkably few studies focusing on Japanese players in MLB. Data from the 1995 to 2007 seasons has been analyzed, and high degrees of discriminatory pay scales have been found for Japanese pitchers. The findings suggest that Japanese batters do not face such pay discrimination. Positional discrimination has been the subject of investigation. Japanese players are found to be disproportionately pitchers. Suggestions for future research topics are also presented.

**INTRODUCTION**

This paper will investigate issues pertinent to the assimilation of Japanese baseball players in the United States' Major League Baseball system. In order to gain a more complete understanding of this issue, broad research has been conducted in the area of baseball's historical place in Japanese history. In Japan, "America's" game thrives in its own right. This study includes passages detailing various aspects of baseball in Japan. The fundamentals of Japanese baseball are introduced first. Following this section, a brief historical context of baseball in Japan and an explanation of the posting system is provided. Koshien, the annual high school tournament is also profiled. The game play differences between Major League Baseball (MLB) and Japan's Nippon Professional Baseball (NPB) league will be interesting to even the most casual baseball spectator. Several of baseball's factual and hypothetical globalization efforts are also provided in the introductory pages of this study.

The main purpose of this study is to investigate the issue of discrimination, using econometric analysis, regarding Japanese baseball players playing in America's Major League Baseball. Of this wide-reaching topic, salary discrimination will be the main focus. Various econometric devices, including liner regression, the Chow Test, "bootstrapping," random sampling, and Oaxaca decomposition will be utilized in order to best reveal the true nature of the MLB labor market. Positional segregation as well as salary discrimination will be investigated. Demographic influences and inclusive team performance have also been analyzed, albeit to a lesser extent. The following is a list of specific questions that this study attempts to address:

1. What are the best salary predictors for Japanese-born players playing in the United States and do these differ from those of non-Japanese players?
2. Does the average salary level of equally-talented players differ between Japanese and non-Japanese?

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3. Do returns-to-experience in MLB differ between Japanese and non-Japanese?
4. Do Japanese-born players playing in the United States face positional discrimination?
5. Do Japanese-born players playing in the United States face customer discrimination?
6. Do inclusive teams perform better than their homogeneous counterparts?
7. What are the characteristics of inclusive teams and do they differ from their homogeneous counterparts?

As the world becomes increasingly global and interconnected, this research paper warrants much merit. Events such as the World Baseball Classic and Olympic Games continue to demonstrate to the world how the sporting arena possesses the ability to transcend political and religious differences in order to bring together diverse groups of nations and people. Professional sports leagues continue to seek talent from the international stage and as they do so, this study may serve as a foundation for future research efforts.

Additionally, many of the findings of this report will be enhanced by the additional observations provided with the increasing diversity of Major League Baseball. Many nations, namely those of Eastern Europe, Africa, and Cuba have sent remarkably few players to MLB; however, this trend will likely reverse as the world continues to shrink. As more nations and players are welcomed to MLB, this report may be utilized as a basis for examining their equitable treatment in the labor force.

### CONCLUSION

Using Major League Baseball statistics of the 1995 through 2007 seasons, this study has investigated the issue of labor discrimination, specifically in terms of Japanese players. As outlined in the introductory section, this study intended to answer seven specific questions.

1. What are the best salary predictors for Japanese-born players playing in the United States and do these differ from those of non-Japanese players?

A detailed summary of the salary regression and Oaxaca decomposition is provided in the body and appendix to the report. Salary discrimination, defined as unequal pay for equal work, was examined first. The results indicate that Japanese batters, compared to non-Japanese batters, do not face salary discrimination. Japanese pitchers, however, do suffer from salary discrimination. In some cases, namely in the Oaxaca decomposition of pitchers, the level of discrimination is indeed quite severe.

2. Does the average salary level of equally talented players differ between Japanese and non-Japanese?

In terms of average salary levels, the distinction between batters and pitchers is also evident. All else equal, Japanese pitchers are paid less than comparable non-Japanese pitchers. However, the results from the batters' regressions are not as concrete. Therefore, we cannot conclude that Japanese batters are paid premiums over equally skilled, non-Japanese players.

3. Do returns-to-experience in MLB differ between Japanese and Non-Japanese?

In answering this question, the results mirror those found earlier—Japanese pitchers face high levels of discrimination. Japanese pitchers with proven success are paid less than non-Japanese pitchers with proven success. However, once again we cannot make concrete conclusions regarding Japanese batters.

4. Do Japanese-born players playing in the United States face positional discrimination?

Japanese players are disproportionately pitchers as compared to batters. However, this void appears to be rapidly closing. Each year more Japanese batters are coming to MLB. Between Japanese and non-Japanese players, the proportions of players that are outfielders are not

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significantly different. The same statement is true for catchers. Thus, Japanese players do not face unfair disadvantages in the context of playing the outfield and catcher positions. Between Japanese and Non-Japanese players, the proportions of players that are infielders are significantly different. This means that Japanese players do face unfair disadvantages in the context of playing the infield positions.

5. Do Japanese-born players playing in the United States face customer discrimination?

Previous studies have indicated that fans prefer watching players of their own race. This study reached inconclusive results regarding the customer discrimination hypothesis. This area should be the basis of future studies.

6. Do inclusive teams perform better than their homogeneous counterparts?

Teams classified as “Inclusive” have achieved higher levels of wins and total attendance as compared to teams classified as “Homogeneous”. These results alone cannot prove causality. Future studies could focus on this topic. In such studies, variables such as team market size should be held constant.

7. What are the characteristics of inclusive teams and do they differ from their homogeneous counterparts?

Inclusive teams tend to be located on the east and west coasts, as opposed to the country’s interior. In general, Homogenous teams tend to be located inland. Inclusive teams tend to be located in large metropolitan markets. Homogeneous teams tend to be located in smaller metropolitan markets.

**A GREEN ENDEAVOR: THE ROLE OF BRYANT UNIVERSITY'S FACULTY ON AN ENVIRONMENTALLY RESPONSIBLE CAMPUS**

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April 2009

**ABSTRACT**

This thesis researches and analyzes Bryant University faculty practices and motivations with regards to consuming and recycling paper. The project incorporated survey instrumentation to gather quantitative data on which to base conclusions. In addition, paper usage was directly observed, along with analysis of faculty feedback to an online survey. A marketing campaign addressed faculty practices and encouraged faculty reduction of paper. Results show that paper recycling in the targeted faculty suite slightly increased in the short-term following the marketing campaign, either through heightened awareness or seasonal office disposal; however, measurement over a greater span of time with sustained marketing may produce a more reliable trend. Recommendations that are derived from this research will help the University to implement more efficient recycling policies and thereby reduce administrative operating costs.

**INTRODUCTION**

The purpose of this project is to reduce campus paper waste and increase recycling, as well as to provide recommendations for changing faculty attitudes and practices, thereby reducing campus operating costs.

Examination of published literature on paper recycling studies in offices or college campuses forms model practices and strategies for Bryant faculty suites. Paper usage will be measured through paper supplies collected in faculty suites and calculation of waste paper generated on Bryant campus. Survey research will explore faculty practices, habits, and motivations for on-campus paper use, as well as define the tone and outcome of the proposed marketing campaign. Insights from this data direct a marketing effort to target Bryant University faculty and encourage their paper conservation. After designing a marketing campaign directed towards faculty, recycling and waste volume

will be reassessed, in order to quantify the effectiveness of the marketing campaign.

Hypotheses tested by this research will include:

1. Bryant faculty can reduce campus needs for paper through a change in printing formats and/or electronic document substitution.
2. Bryant faculty paper usage habits can change, with enforcement of positive perceptions of recycling and conservation.
3. A marketing campaign targeted towards Bryant faculty will have a positive impact on paper conservation on campus.

## **BACKGROUND INFORMATION**

### Bryant University

The current method used to collect trash and recyclables in the Unistructure building involves using labeled containers as a means of initially separating waste, followed by the maintenance staff emptying these containers each day. Bryant University supplies each faculty office with one small, blue recycle bin reserved for papers including magazines, printing paper, newspapers, and phone books. Offices also have a small waste bin for non-recyclable waste and trash such as food-soiled materials. Additionally, bins of varying styles (but usually with small circular openings) are placed at intervals throughout the Unistructure, with several located at key traffic points within faculty suites. These are meant for bottles and cans, which may be plastic, glass, and aluminum.

### Green Offices

Despite all advances in technology, individuals still have not overcome the need for the convenience of paper. UK's HR Magazine begs the question; why isn't employee recycling rewarded much in the same way as sales commissions, or operating under budget? Experts reason that because of cross-functional operations it is also difficult to identify individuals responsible for measurable differences (Anonymous, 2008). In some offices, recycling is incentivized with contests or monetary compensation.

### Paperless Campuses

According to Young (2002), the move towards a "paperless" campus or environment resembles an often unattainable dream. One reason is the overwhelming internal culture already in place that may cause existing printing practices to continue, as users are accustomed to their respective reading habits. Instead of restricting or reducing paper usage, the source or printing is merely re-allocated to a different part of the supply stream.

### Environmental Marketing

Shrum, Lowrey, and McCarty (1994) recognize that the various aspects of consumer behavior, demographics, and psychographics will affect willingness to recycle. If a consumer culturally values collectivism over individualism, he or she is more likely to recycle. Some individuals may maintain that recycling is too time consuming and may not recycle if they are unaware of available methods, or have little knowledge of how to precisely recycle different materials. Additionally, promotions and lottery-based incentives to introduce or advertise recycling programs often result in tangible improvements; however, this behavior is usually temporary and returns to baseline activity once the promotion has ceased.

## **METHOD**

Paper usage was measured through paper supplies collected in faculty suites and calculation of waste paper generated on the Bryant campus. Survey research explored faculty practices, habits, and motivations for on-campus paper use, as well as defined the tone and outcome of the proposed marketing campaign. Insights from this data directed a marketing effort to target Bryant University faculty and encourage their paper conservation. After designing a marketing campaign directed towards faculty, recycling and waste volume was reassessed, to quantify the effectiveness of the marketing campaign.

## **CONCLUSION**

In summary, the scientific findings of this marketing campaign show the willingness of many faculty members to change their habits to affect efficient waste management. The overall challenge of a change in faculty practices is not always to incentivize or promote sporadic instances where recycling occurs, but to change the culture and affect perceptions.

**GENDER ADVERTISEMENTS: REPLICATION OF A CLASSIC WORK EXAMINING  
WOMEN'S PORTRAYAL IN MAGAZINES AND FAMILY PHOTOGRAPHS**

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April 2009

**ABSTRACT**

In 1979, Erving Goffman, produced the classic work, *Gender Advertisements*, in response to the era of feminism. Goffman then arranged his findings “with malice” into seven categories in order to demonstrate to others the apparent infantilization and subordination of women he saw present in advertising. My study is a replication of Goffman’s research, designed to evaluate whether thirty years of feminism and cultural enlightenment have changed the way women are displayed in magazine advertisements. My method is grounded in phenomenology, and like Goffman’s original, foregoes a random sample of advertisements in favor of a deeper understanding of the phenomenon in its original context, which is the dominance of displays of female subordination and infantilization in those advertisements. This study also goes a step beyond Goffman’s original work to analyze how women portray themselves in family photographs; that is, when they are in control of themselves and their situation. In conclusion, my study demonstrates that the infantilization of women still occurs in much advertising and that women, when given the opportunity, portray themselves as strong, confident females.

**INTRODUCTION**

American women have come a long way since the days of our grandmothers, who saw themselves primarily as wives and mothers. Today women can do anything, from becoming a mother to a CEO to a politician. Yet, still, as of January, 2009, the number of female CEOs of the 500 largest publicly traded companies numbered only thirteen. Women continue to make “slow progress in the number of female directors, officers and highest paid” (Jones, 2009). One area in which women continue to make progress is as CEOs of the largest companies, making up 7.4% of the largest 81 corporations (Jones, 2009). This is indeed progress, as back in “1996 there was only one female CEO of a Fortune 500 company, co-CEO Marion Sandler of Golden West Financial, acquired by Wachovia in 2006” (Jones, 2009).

An explanation for this situation is that women view power horizontally. They feel that power is about influence not rank (Sellers, 2008). Women “tend to view their lives in chapters... many drop out early to do other things” (Sellers, 2008). For example, Meg Whitman of eBay retired at 51 and is thinking about getting into politics (Sellers, 2008). This may also explain why the percentage of women as top earners fell from 6.7% in 2007 to 6.2% in 2008 (Catalyst, 2008).

**LITERATURE REVIEW**

Men and women clearly think differently. Males and females hold different opinions regarding “risk, collaboration and ambiguity” (Jones, 2009). This suggests that a company with a mix of male and female leaders will outperform a competitive company run by people of a single sex (Jones, 2009). The different views and ideas offered by men and

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women are a perfect example of why it is necessary for women to make larger strides in the business world. Our culture must take on “a new way of thinking about difference, and this involves rejecting the idea that equality-versus-difference constitutes an opposition” (Scott, 1988, p. 39). We must look equally at the different views and ideas of women and men, but as women strive to reach equality they cannot “give up ‘difference;’ it has been our most creative analytic tool” (p. 43). Instead, women must acknowledge their differences in thinking style and views of power from those of men as a strength in order to achieve equality.

#### Goffman Study

In 1979, social scientist Erving Goffman published his classic work, *Gender Advertisements*. *Gender Advertisements* was published in response to the era of feminism and critiqued the way women were portrayed in magazine advertisements. Goffman did not focus on overt sexism in advertisements; instead, his work centered on gender displays and the ritualized infantilization of women in advertisements. He focused on how women were displayed in advertising, as opposed to the way men were reflected. Goffman recognized that women are often displayed as children in child-like poses, playing dress up, and needing protection. These commercial displays influence our culture, subordinate women and may lead us to believe these are normal states or conditions for women.

Goffman was able to investigate the extent of infantilization in gender displays by collecting advertisements from popular magazines and newspapers. These advertisements were “chosen to fit into sets, each set to allow the displaying, delineating, or mocking up of a discrete theme bearing on gender, especially female gender,” (Goffman, 1979, p. 24). In other words, using Goffman’s own expression, he developed these sets “and arranged [them] with malice” (p. 24) in order that all people would be able to see what he saw—the subordination and infantilization of women in advertising. As delineated by Vivian Gornick in her introduction to Goffman’s classic

monograph, these were: (1) A woman is only taller than a man if he is her social inferior; (2) A woman’s hand is seen “just barely touching, holding or caressing—never grasping, manipulating or shaping;” (3) Men are always instructing women; (4) If the advertisement calls for a person to “sit or lie on a bed or a floor that someone is almost always a child or a woman;” (5) If a man’s head or eye is averted it is to an intellectual, social, or political superior; if a woman’s head or eye is averted it is always to a man; (6) Women are often shown mentally drifting when in close contact with a male; (7) Women more often than men “are pictured at the kind of psychological loss or remove from a social situation that leaves one unoriented for action” (1979, p. viii). Goffman used the advertisements “to jog one’s consideration of three matters: the gender behavioral styles found in actual life, the ways in which advertisements may present a slanted view thereof, and the scene-production rules specific to the photographic frame” (Goffman, 1979, p. 25). The advertisements display how gender is pictured, not as it is actually performed.

Goffman’s selection of advertisements does not focus on women with “clutched detergents and half-naked bodies, Goffman concentrates on hands, eyes, knees, facial expressions, head postures, relative sizes; positioning and placing, head-eye aversion, finger biting and sucking”(Gornick, 1979, p. viii). Goffman’s approach purposefully, again, “with malice,” shows us how every aspect of the advertisements infantilizes women. Goffman’s most important contribution “is the continuous, ever deepening connection he makes between our image of women and the behavior of children” (p. viii). Just as children receive love, guidance and shelter from their parents, advertisements present women as needing the same care from men. “You will note that there is an obvious price that the child must pay for being saved from seriousness” (p. viii). This price is the same that women pay when they are seen drifting off, needing assistance or looking in awe at men. Women pay the price of not being seen as equals. In many of the advertisements in the Goffman book there is a repeated usage of

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“women posed as children, acting like children, looking like children: utterly devoid of the natural sobriety which one associates with the adult mien” (p. viii). Just as children play dress up, women in advertisements appear to be wearing their clothes as costumes, while men seem to be wearing them appropriately.

#### Research Model

My project began a year ago with the collection of magazine advertisements from an array of magazines. These magazines ranged from style magazines, such as *In Style Magazine*, to middle class working women’s magazines, such as *Redbook*, to more sophisticated general interest magazines, such as *The New Yorker*. My sample also consisted of advertisements taken from newspapers, such as *The New York Times*. Just as Goffman did in his study, I arranged my findings into the same seven categories as well as two new categories, to show the apparent display of subordination and infantilization of women.

My next step was to collect a representative sample of family photographs. In order to do this I placed an advertisement in the Bryant University newspaper, *The Archway*. I placed this advertisement in time for students to collect family photographs while home for Christmas vacation. I also placed an advertisement in *The Three Village Times*, a local newspaper in my hometown. I received one response to my advertisement which ran for the entire month of January in four issues. Other photographs came from my friends and family. After collecting the advertisements and photographs, I selected 40 advertisements and 15 photographs to use as my sample for analysis.

The advertisements and photographs selected for my study were chosen using a research method grounded in phenomenology. Phenomenology is a form of qualitative research that stresses the “consciousness, an awareness of thoughts and feelings” (Cahn & Hanford, 1984, p. 279). A phenomenologist “attempts to experience the meaning of the subject matter” (p. 279). In my study, I am looking beyond the obvious or expressed scenes pictured in magazines and

family photographs to find deeper meaning in the subject matter. In magazine advertisements we can look beyond the product advertised to the displays of women in child-like poses and performing child-like actions. In family photographs we are able to look past the activities in the scene and focus on the strong confident men and women displayed. In my work, as in Goffman’s original, this deep textual analysis is designed to illuminate what communication theorist Katherine Miller calls “the essence of objects and experience [that] becomes obscured by taken-for-granted concepts that come to be known as common sense” (2005, p. 54).

By using phenomenology I can give an indicative sample of my observations from magazine advertisements, as well as an indicative sample of my observations in family photographs. Phenomenology is a proper basis for my research because it aims to gain understanding of the content within a natural setting. Phenomenology focuses on “the everyday life world as an object of study” (Miller, 2005, p. 55). I do not need a random sample because the displays found are commonplace *and* taken-for-granted in advertising.

Just as Goffman arranged his photos “with malice,” I am able to do the same to show the obvious examples of subordination in advertising. These advertisements show that daily activities are taken for granted and become common sense, even something as demeaning as the infantilization of an entire gender. It is important that women are not shown in traditional gender roles as that may become the common sense or natural understanding of women’s role in society.

In family photographs I can use this analysis to uncover how women truly want to be displayed. The appearance of strong, confident women is present in virtually every photograph of a female I selected. When women are around family they do not wish to conceal their emotions or censor their actions. By using this deep textual analysis

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to collect my pictures I am creating an indicative selection of the modern woman.

### CONCLUSION

Growing up I was always taken care of by my parents. Both attended all of my school functions, from field days to graduation. I have always thought that when the time came I would want to have a traditional family where my husband would be the bread winner and I would nurture and take care of my family and my home. Throughout my research I have realized that I deserve and should have a broader understanding of what a “traditional life” means.

I believe that my goal to have a “traditional life” stems from what I have seen in advertising. When we look at magazine advertisements we continuously see men caring for women as if they are children. This may lead our culture to believe that women need men to care for them. Personally, I love being taken out on dates where the man pulls out my chair, holds the door, and pays the bill; but what am I giving up in exchange for these courtesies? By allowing magazines to ritually infantilize women, or at least seeing these displays as natural or commonplace, women may give up the ability to be taken seriously. Goffman states, “Nonetheless, whether we pose for a picture or execute an actual ritual, what we are presenting is a commercial, an ideal representation under the auspices of its characterizing the way things really are” (1979, p. 84). In other words, when advertisements display women posed as children, psychologically withdrawn or subordinated, they are characterizing a cultural ideal of the way things are in actuality. In that sense when we execute a ritual such as dating and allow the man to continually pick the restaurant or pay the bill, we are bending to that cultural ideal subordinating us as women.

However, I am heartened when we analyze actual photographs. Here we can see that the images of women in magazine advertisements seem to have little effect on how women view and display themselves. When we look at women in photographs that they themselves take we see that they are not conforming to the cultural norms created through advertising. Instead, we see that women choose to portray themselves as the strong, modern woman.

There have been great strides against obvious sexism in advertising. My study evaluated a pool of advertisements arranged to be indicative of a more subtle form of sexism, the subordination of women. Through this study we can see the progression from overt sexualization to more subtle displays of subordination.

In order to continue to see changes in magazine advertisements, we must look beyond the images displayed, “to make us see the unnatural in the natural in order that we may rescue the warm life trapped inside the frozen image” (Gornick, 1979, p. ix). We cannot allow magazine advertising to continually display the infantilization of women when there are millions of strong women in our country. To return to Vivian Gornick’s powerful expression, “Beneath the surface of ordinary social behavior innumerable small murders of the mind and spirit take place daily” (1979, p. ix). It is not fair for women to be subordinated through advertising when they have so much knowledge to offer our culture. By allowing advertising to continually hyper-ritualize the infantilization of women an entire gender is being held back from reaching its full potential. In order to avoid the “small murders of the mind and spirit” we must look beyond the products advertised and understand the display of subordination occurring within advertisements.

## **THE POTENTIAL USE OF MOBILE COMMUNICATION IN THE CLASSROOM**

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April 2009

### **ABSTRACT**

The emergence of technology into higher education has drastically altered the nature and quality of learning experiences. Recently, demands among higher educational communities have centered on the need for increased mobility with regards to technology. In the fall of 2008, a number of schools, namely the University of Maryland, Freed-Hardeman University, and Abilene Christian University, issued mobile hand-held devices to a group of incoming students in an effort to meet the demands for increased mobility in educational technology. The Technology Acceptance Model (TAM) attempts to examine user acceptance of new technology by measuring user perceived usefulness and perceived ease of use of the newly issued technology. A survey taken at Bryant University in February of 2009 studied the potential student acceptance of new mobile hand-held technology. Statistical analysis found significant differences in the mean responses between the freshman/sophomore group and the junior/senior group of students. Also, significant differences were found between students with a Communication major and those students with Accounting, Actuarial Mathematics, and Marketing Majors.

### **INTRODUCTION**

Educational institutions constantly seek new opportunities and techniques to improve the quality of education. In the recent past, this goal has been aided through technological innovation. Students and faculty members could easily increase the quality of their work with assistance from this technology. As a result, expectations among both faculty and students as to the quality of work produced and availability of these resources increased, leading higher educational institutions to research and invest in new technology.

The recent advancement of hand-held mobile technology, such as Personal Digital Assistants (PDAs), Smartphones, and certain mp3 players with Internet accessibility, has transformed these devices into miniature computers. A number of colleges and universities have embraced this technology in an effort to enhance classroom

experience and extend educational opportunities beyond what was available with previous technology. This paper will examine the opportunities Mobile Learning (m-learning) – the process of learning with a hand-held mobile device – offers to higher educational classroom experiences.

### **PROGRESSION OF TECHNOLOGY AND EXPECTATIONS**

Educational experiences have drastically changed either as a direct or indirect influence of technological advancement in the recent past. Initially, desktop computers were made available in campus libraries, classrooms, and computer labs for use by both students and faculty in the early 1990s. This technology allowed for increased efficiency in producing academic work. However, a number of issues presented themselves as a result of this new wave of technology. Desktop computers were

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not always available as they were located in buildings which closed overnight (Oblinger & Rush, 1997). Also, the lack of mobility inherent with desktop computers limited students' and faculty members' ability to work in convenient areas.

Laptop computers presented a potential solution to the problems associated with the use of desktop computers. As early as 1994, laptop programs at certain educational institutions issued machines to every member on campus, eliminating availability issues. In addition, laptops were more portable than their desktop counterparts, allowing for students and faculty members to perform tasks wherever they deemed convenient (Oblinger & Rush, 1997). Laptop computers, however, were not being introduced into the classroom setting as these machines were viewed as added weight to an already overwhelming bag of books and notes. The advancement of hand-held mobile technology presents another solution to a technological problem. These devices have been developed to perform similar tasks as laptop computers, including having the ability to edit word processing documents and gain access to the Internet.

### **INTEGRATION AT HIGHER EDUCATION INSTITUTIONS**

In the fall of 2008, a number of colleges and universities issued hand-held mobile devices to a group of their students in an effort to take advantage of the opportunities made available as a result of this technology. Three examples of these institutions are the University of Maryland, Freed-Hardeman University in Tennessee, and Abilene Christian University in Texas. These institutions identified that mobile technology was currently available in many classrooms in the form of cellular phone devices and decided to take advantage of this technology to create innovative educational opportunities. The main objectives of the mobility learning initiatives put in place at these schools was to enhance the learning experience and increase student and faculty interactions both in and out of the classroom. (OIT, 2008)

A number of issues have been identified during the first year of the integration process at these various schools. One major difficulty was the adoption among faculty members. Specifically, while a number of educators embraced the new technology, a group of faculty members opposed the integration of mobile technology as they were content with teaching in traditional lecture and chalk board techniques. (Bentley & Scott, 17 Feb 2009) While some conflict was observed, a number of benefits were also associated with the introduction of these devices, including increased student interaction in classroom discussion and constant access to campus news and information. Clearly, these schools have begun the technological innovative era to introduce this new technology into the educational process.

### **TECHNOLOGY ACCEPTANCE MODEL**

In 1989, Fred Davis at the University of Michigan developed a theory entitled the Technology Acceptance Model (TAM) which theorizes that user acceptance to a new technology is dependent upon the users perceived usefulness and perceived ease of use of that technology. A number of research studies have been conducted which have further examined the validity of the TAM. Most recently, a 2007 study found the theories expressed by the TAM were still applicable to the current technological environment and that both variables of perceived ease of use and usefulness are necessary for technology acceptance. (Abuhamdieh & Sehwal, 2007)

With assistance from the TAM, administrators could structure more informed decision making as to whether or not their campus community would accept a new technology. This information could help determine whether or not a school should invest heavily in a new technology. However, the aforementioned higher educational institutions did not use the TAM throughout their integration processes due to a little understanding of the theory's application.

### **EXAMINATION OF TECHNOLOGY ACCEPTANCE MODEL**

A survey consisting of various questions was administered to a range of Bryant University students to gauge student acceptance to hand-held mobile technology. Respondents were asked to rate questions measuring perceived ease of use and perceived usefulness of the technology on a scale of 1-5, 5 providing a response which strongly perceived the technology to be easy to use or useful, 1 providing a response which strongly perceived the technology to not be very easy to use or useful. Perceived efficiency, defined as the combination of perceived ease of use and perceived usefulness, was used as the depended variable.

Analysis of the data found perceived efficiency varied as a factor of class level, where freshman and sophomores perceived significantly higher efficiency than juniors, and sophomores perceived significantly higher efficiency than seniors. This could be a result of younger generations of children being introduced to new technology at increasingly younger ages. Data analysis also found perceived efficiency varied slightly as a factor of declared major, where Communication majors perceived significantly

lower efficiency than Accounting, Actuarial Mathematics, and Marketing majors. Communication majors may understand the elimination of nonverbal cues associated with using these devices more than other majors, which could suggest the reasoning behind these results.

### **CONCLUSION**

The advancement of technology has and will continue to introduce new opportunities to enhance educational experiences. A number of colleges and universities have already begun introducing new hand-held mobile technology in an effort to create innovative educational opportunities for both students and faculty members. The Technology Acceptance Model offers assistance with which to structure more informed decision making for administrators on whether to invest in a new technology, yet a lack of awareness to this theory has limited these inherent benefits. A survey study at Bryant University concluded perceived efficiency may vary as a factor of class level as well as declared major. In conclusion, further research with regards to availability of new technology and the TAM should be conducted to continue enhancing the learning opportunities of tomorrow.

**WE OWE IT TO THE EARTH. THE IMPORTANCE OF ENVIRONMENTALLY-FRIENDLY LIFESTYLE CHANGES DURING THE TRANSITIONAL COLLEGE YEARS**

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April, 2009

**ABSTRACT**

This paper aims to explain and justify my choice of film as the medium employed to persuade my audience of the need for environmentally-friendly lifestyle changes to be made by individuals. In order to effectively stimulate action by college students, the target audience, film was used to communicate the necessity of developing green habits. During these years students in higher education develop intellectually and mature into adults. It is a prime time to learn simple green lifestyle changes and translate them into their daily behavioral repertoire.

To begin my project I researched current information about the state of our environment, how individuals can do their part, and why it is important to reduce your impact on the environment. Then the documentary was produced, the steps of which will be detailed in the paper. In order to validate my use of film, academic databases were searched for applicable articles of the influential powers of television and documentaries specifically. After the documentary was produced it was tested on an Ecology class and a control group was utilized. The results showed an increase in desire to perform green habits.

**INTRODUCTION**

Choosing visual broadcast media as my medium in attempting to inspire my audience to take action resulted in a very different process than a traditional written thesis. The research, filming, and testing processes were unique to creating a documentary. Each stage of the process is detailed and explained throughout the supplementary written paper. The research focused on both gathering current green practices and statistics as well as accumulating scholarly articles pertaining to the power and intricacies of documentaries in evoking action. Producing the documentary was a time-intensive process that involved many steps, beginning with writing a script all the way to editing the final piece. After the film was completed, it was shown to a test group and they were asked to complete a survey. The same survey was also

given to a control group who did not view the documentary. These surveys were analyzed and several encouraging results, as well as some limitations, were identified.

**SURVEY FINDINGS**

The findings from the survey reveal several effects of the film. As expected, the film increased awareness that Bryant University provides a recycling program to its students. There was a 46% increase in ‘Yes’ answers between the control group and the test group. Since the film explicitly states that the campus does offer a recycling service and gives a step by step guide of how to get involved, this increase was expected. While providing the viewer with the steps, the film also highlighted the ease with which students can recycle on campus. There was a median difference between the two groups

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of 1.5 for this question, proving that the majority of viewers considered recycling on campus to be easier after watching the film. Consistent with strategies to evoke action discussed earlier, the film aimed to emphasize the low-effort and low-cost associated with recycling on campus. Improving student's perception as to the difficulty of recycling on campus was a main objective of the documentary so to see this improvement is encouraging. Along the same lines, the increase in students who saw the film and said they planned to recycle more on campus from those who did not see the film is a positive result. As stated directly in the documentary, a call to action was asked of viewers to do their part. The 32.5% increase in students who answered with some level of 'Accurate' (answering with a 5, 6, or 7) from those who didn't view the film to those who did is an accomplishment for the piece. This statistic attests to the film's ability to inspire intentions to perform immediate action on the part of the environment. Thus, the third hypothesis:

*H3: The film will increase the viewer's intentions to partake in environmentally-friendly practices:*

Was correct and viewer's had more intentions to partake in green habits than non-viewers.

The increase in those who responded that 'reducing' and 'reusing' is important was expected as well. The intensification of viewer's perspective of the importance of these simple green habits proves the first hypothesis correct:

*H1: The film will increase the viewer's understanding of the importance of simple green lifestyle changes.*

Because so much more emphasis is put on recycling than the other 'R's of reducing and reusing, it was expected that highlighting the lesser known 'R's would result in a heightened awareness of the significance of reducing and reusing by the viewer. Because recycling is emphasized by society, it is not surprising that there was no noticeable change in response

between the control group and test group regarding perception of recycling. Even those who did not view the film were likely to have the opinion that recycling is important.

There was no identifiable increase in knowledge of understanding of reducing, reusing, and recycling. All three statements to these questions were answered similarly by both groups. Because of the lack of discrepancy between the control group and the test group, the second hypothesis:

*H2: The film will increase the viewer's knowledge of how to partake in environmentally-friendly practices.*

Could not be proven correct. The similar answers between the groups could be due to the fact that the respondents understood what the words themselves meant and they assumed they then understood how to apply them. For future studies, having open-ended questions in which the respondents must list ways to apply those terms to live more of an environmentally-friendly lifestyle would be telling. Perhaps then there may be a noticeable difference between those who viewed the film and those who did not because viewers of it would have specific, applied habits.

The fourth hypothesis:

*H4: The film will decrease the viewer's belief that adopting green habits is difficult.*

Was confirmed with a 40% increase by respondents who viewed the film and believed the statement was inaccurate (responding with a 1, 2, or 3). 80% of viewers believed that the statement was inaccurate, establishing that the film decreased the opinion that recycling on campus is difficult. Because of the action evoking strategies discussed earlier, lessening the stereotype that recycling is difficult is imperative in inspiring action.

Overall, the film achieved several of its goals and positively altered viewers' perceptions of going green. Although through the survey it cannot be gauged whether or not any of the

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audience members actually partook in increased green habits after viewing, it can be said their intentions to do so were augmented. The feedback and analysis of the survey results provides positive assessment as well as areas for improvement. After viewing the film, an impromptu discussion broke out during which several students in the class expressed their

support of my cause. Numerous students asked to receive more information and suggested I take further action to get students more involved in green practices, specifically, recycling. This discussion was very rewarding as I was not anticipating a lively dialogue regarding the positive impact my film could have.

## **THE EFFECT OF OBESITY ON STATE HEALTH CARE EXPENDITURES**

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April 2009

### **ABSTRACT**

The purpose of this study is to examine the effects of obesity rates on per capita state health care expenditures. A two-stage least square regression model is used. In the first stage of the estimation, factors influencing obesity rates are determined. The determinants of obesity rates are outlined throughout the research process. In the second stage, the impact of obesity rates on per capita health expenditures across states is evaluated. The empirical results indicate that obesity rates do indeed have a direct effect on state health care expenditures. After reviewing the project's results, various solutions are proposed as possible methods to slow and perhaps reverse growing obesity rates with the objective of reducing health care expenditures. The solutions offered may possibly decrease the prevalence of obesity across the nation and in turn lower per capita health care spending.

### **INTRODUCTION**

Obesity is regularly discussed by today's doctors, families, news anchors and television talk show hosts. Its escalating presence has led to an increased need for investigation of causes and methods of restraining its growth. The research found within this research paper exposes the current health issues caused by increased caloric consumption and decreased rates of exercise, in addition to higher levels of health care spending encountered by obese individuals. The research provides an in-depth assessment of the current state of obesity across the United States, examining a multitude of factors that contribute to the recent trend of rising obesity levels. The conclusions gained from this research will provide the United States with specific knowledge and insight regarding the importance of controlling obesity for the purpose of reducing healthcare expenditures. Moreover, the conclusions derived from the research will provide insight regarding the possibility of decreasing obesity rates through taxes. These results could potentially assist in

decreasing the prevalence of obesity across the nation.

Few studies have focused on obesity's effects on health care expenditures. A majority of research has looked at the overall trend of rising health care costs rather than focusing on the impact of lifestyle choices and outcomes on costs. Consequently, the research put forth in this document will contribute a solid foundation of knowledge surrounding the relationship between obesity and health care expenditures.

### **RESULTS**

#### Too Much Food

The growing phenomenon of obesity can be attributed to technological advancements witnessed by society over the past several years. As technology has developed and caused significant changes, it "has simultaneously lowered the cost of calories and raised the cost of physical activity" (Lakdawalla et al, 2005). To begin with, one can examine the trend of lowered food costs. A majority of technological enhancements have led to a fall in prices,

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particularly among food products. The law of demand suggests that individuals will increase consumption of items as prices fall, which adds to the notion that society is motivated by low cost to consumer more food.

Agricultural and technological innovations have enhanced suppliers' abilities to provide food at low costs and increased speed. Moreover, improved distribution technologies have decreased the costs associated with food procurement further lowering the overall costs. Mass preparation, deep freezing, increased preservatives, artificial flavors, and microwavable goods have become increasingly popular and cost effective in the recent years. With the growth in convenience technologies, increased accessibility of food has spurred increased consumption of goods thus leading to higher levels of obesity. In previous years, consumers used raw agricultural crops to mold into edible food, a process often requiring a significant portion of time to complete. However, in today's society, mass preparation has allowed food manufacturers to cook food in a central location followed by quick shipments to consumers for rapid consumption (Cutler et al, 2003). Consumers' increase in consumption can occur in various ways; increased variety of foods consumed, increased frequency of food consumption, choice to consume high calorie or high flavor foods that had previously been unavailable or increased overall consumption of individual foods (Cutler et al, 2003). Obesity rises with an increased consumption of food, particularly those with high caloric content.

#### Too Little Exercise

Americans often use physical activity as a means of offsetting calorie intake. However, in recent years, physical activity has risen in cost. According to researchers, "when home or market production involves manual labor, the worker is paid to exercise" (Lakdawalla et al, 2005). The concept of wages is intended to serve as a form of monetary reward for physically demanding careers. Outside of one's occupation, people pay to exercise via two methods; in the literal sense, money for gym memberships and in economic terms, the

opportunity cost of leisure forgone. In general, society has seen a trend of decreased physical activity required to complete a variety of tasks. This reduction can be attributed to the rise in technology as a means of simplifying everyday tasks (Variyam, 2005).

In historical eras, a majority of Americans relied on manual labor for income, frequently located in the agricultural industry. Today's economy has witnessed a shift in the focus on agriculture as "less than two percent of the U.S. workforce is in agriculture" (Finkelstein and Zuckerman, 2008). According to Variyam, "these forgone energy expenditures now have to come from voluntary physical activity involving the conscious allocation of time, effort, and sometimes money, as when people join a gym or sports club" (2005). As fewer Americans work in the agricultural and manufacturing sectors, fewer calories are burned in today's stereotypical desk job. With the absence of forced energy expenditures, individuals are left with the burdening choice of whether or not to voluntarily engage in physical activity.

#### Data and Methodology

This study examines demographic variables, obesity trends, and health care expenditures across 48 of the U.S. (excluding Hawaii and Alaska due to data availability limitations) from 1997-2004. The relevant geographical market for this study was determined to span across all of the United States. Obesity, a far reaching epidemic, is not limited to one contained location. Rather, individuals and families have seen and felt the effects of obesity to varying degrees across the nation. While other countries have also seen growing weights among their populations, the United States has undoubtedly witnessed the most substantial weight increase, placing it at levels higher than those recommended by doctors and physicians nationwide. According to 2003 health data gathered by the OECD (Organization for Economic Cooperation and Development), the United States leads other countries with its considerably higher obesity rates at levels of 30.6%.

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A two-stage least squares regression model is a method used for studies where a dependent variable is correlated with the cause(s) of the independent variable(s). In this research paper, a two-stage regression model explores the relationship between obesity and per capita health care expenditures. The following table illustrates each of the two stages found in this research project in detail. The two stages found in the model represent a stage in which new dependent variables are created to substitute for original ones followed by a stage in which the regression is computed in a single least squares regression using the newly created variable, predicted obesity levels.

<b>Stage One</b> <i>Time Period:</i> 1997-2004	<b>Stage Two</b> <i>Time Period:</i> 1997-2004
<i>Dependent Variable:</i> Obesity	<i>Dependent Variable:</i> Per Capita Health Care Expenditures
<i>Independent Variables:</i> Income, Employment, Age, Race, Sex, Poverty, Ethnicity	<i>Independent Variables:</i> Income, Education, Age, Race, Sex, Poverty, Ethnicity
<b>Instrumental Variables;</b> Precipitation (Summer & Winter), Temperature (Summer & Winter)	<b>Predicted Obesity Levels</b> (from the first stage)

An instrumental variables approach represents one way of establishing causal relationships. The selected instruments must influence one variable but not the other. In this specific report, four instrumental variables were chosen that were related to obesity but had no relationship with health care expenditures in any way. These four variables fall under the categories of temperature and precipitation; Summer Precipitation, Winter Precipitation, Summer Temperature and Winter Temperature. The significance of these variables (as discussed in the following paragraph) emphasizes a cause and effect relationship as opposed to a mere association between obesity and health care.

Empirical Results

The most significant aspect of the first stage of the model is the signs and statistical significance on the estimated coefficients of the instrumental variables. Winter precipitation proved to be significant at the 10 percent level, with a t-Statistic of 1.927382. Winter precipitation may only have a slight impact on obesity due to its lack of influence on the decision to exercise. Most exercise during the winter is conducted indoors due to inclement weather conditions. Consequently, if it is raining outdoors, people are often unaffected by their decision to continue to exercise indoors. Summer precipitation may have been determined as insignificant because a strong number of people may deem summer rain as refreshing. This therefore may not influence one's decision to exercise. Temperature also possesses a relationship with obesity levels. Summer temperatures and winter temperatures often reach extreme highs and lows, respectively. As a result, one may choose to forego exercise based on uncomfortable levels of heat or cold that may be unsuitable for exercising. In addition, temperature may dictate the type of food one cooks. For example, on warm days one can grill chicken outdoors on a grill which is much healthier and possesses more nutritional value than a fried chicken cutlet. However, winter temperatures may not allow for outdoor grilling thus forcing one to resort to fried chicken cutlets.

Perhaps the most interesting and relevant conclusions to this project are seen in the second stage analysis of obesity and health care expenditures. The variable of obesity levels produced a significant coefficient, illustrating a tremendous direct relationship. For every one percentage point increase in obesity levels, per capita health care expenditures increase by approximately \$189. Essentially, the original hypothesis of a direct relationship existing between obesity levels and health care expenditures is confirmed through this finding. This relationship exists due to the increased amount of doctor visits, medical expenses and medical complications associated with increased obesity levels.

## **CONCLUSION**

The purpose of this study was to determine the relationship between obesity and health care expenditures. Successful research determined by this study indicates that obesity does indeed directly affect the level of per capita health care expenditures. A sound model was built using a variety of inputs and controls in order to accurately predict obesity's effects. In order to heighten the model's credibility, a larger time period could further be examined in addition to the results put forth in this paper.

As previously stated, in using a variety of controls and instrumental variables, this research determined obesity as directly related to health care expenditures. To reiterate the model's findings, every one percent increase in obesity levels results in approximately a 189 dollar increase in health care expenditures.

After careful research and analysis, it is clear that obesity is a growing epidemic across the nation. According to the CDC, "although Medicare and Medicaid pay approximately half of obesity-attributable money, each taxpayer is now responsible for a payment of approximately

\$180 a year for obesity related medical costs for public sector health plans." This supports the conclusions derived in this research paper. A growing concern for Americans of all ages and backgrounds, obesity not only increases health concerns and mortality rates, but also it increases the monetary obligations of individuals. Obesity's wide reaching effects are not to be dismissed but rather should be addressed through active policies geared towards increasing nutrition and exercise along with education and awareness.

To end the current obesity epidemic, the research focus must extend to incorporate all influential techniques to slow obesity growth rates. This extends "beyond genetic, metabolic, and drug development studies to encompass – and emphasize – population based behavioral interventions, policy development, and program evaluation" (Nestle and Jacobson, 2000, p. 23). A variety of policies, publications, media, and education must be adopted in order to target the wide array of people affected by obesity. Taken together, these programs may in fact reduce the rates of obesity and thus the level of health care expenditures encountered by Americans today.

## **EVALUATING EFFECTIVENESS OF EMPLOYEE ATTRACTION STRATEGIES**

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April 2009

### **ABSTRACT**

This project deals with the effectiveness of attraction strategies, specifically those utilized by corporate accounting firms at Bryant University. The primary concern of the research was to identify various aspects that influence the recruitment of college students and ultimately share this knowledge with the companies, subsequently rendering the recruitment process more efficient for everyone involved. In order to accomplish this task, several methods of data collection were used including surveys of companies, surveys of students, interviews, and participant observation. This data was then organized and analyzed to determine the strategies each firm engaged in, the effect of those strategies, and how well each company perceived their efforts to work. In the end, it was evident that some companies were proficient at the attraction game, while others believed incorrectly that their approach was highly successful. Hopefully by being alerted to the presence of these inconsistencies, companies will be able to refine some of their recruitment practices and be able to hire the right people with less spending in the future.

### **INTRODUCTION**

The business environment is constantly changing. This has been the story since the beginning of trade; however, never has that been more apparent than in our current age. Steps of business evolution that once took several years, decades, and even centuries to climb are now leaped in months. With the rapid advancement of technology and subsequently, the ever shrinking world due to globalization, these significant alterations are occurring at an exponential pace. A company cannot afford to stand still in this modern age or a rival will certainly replace their niche. Employees are the groundwork for competitive advantages in today's world (Berthon, Ewing, & Hah, 2005, p. 152). Due to this fact, hiring new talent that can keep pace with the current times is of vital importance now more than ever before. According to Randstad's 2008 World of Work Report, the number one personnel issue facing American companies is "hiring the right people with the right skills" (p. 8).

### **LITERATURE REVIEW**

#### Existing Research

After reviewing a large portion of the literature that has been published on this topic, there are two observations that can be concluded. The first observation is that a majority of the research in the area has been done on the topic of retention. This is an important subject; however, most of this research overlooks the critical first step of retention, which is attraction. A company must find the right people first in order for their retention efforts to be worthwhile. The second important observation that comes from a review of the current literature is that most of the sources are outdated. Granted that some lessons learned from the studies are still valuable, but the business world changes rapidly, therefore, current data is necessary for optimal recruiting practices.

As far as the literature is concerned, the most common methodology that organizations utilize for recruitment purposes is to attract the most

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individuals possible and then filter out ones that demonstrate potential and mesh well with the corporate ideals. One of the best recruitment tools for attracting quality prospects to an organization is that group's reputation. Having a strong reputation can potentially allow reduced recruitment spending and increased retention (Berthon et al., 2005, p. 154). Other recruitment tools include promotional giveaways, information sessions, direct advertising, and utilization of company websites. All of these are also known as employer branding, which is described as "the sum of a company's efforts to communicate to existing and prospective staff that it is a desirable place to work (Berthon et al., 2005, p. 153).

#### Theory

According to Gowan & Zhang (2008), "scholars have suggested that because applicants have incomplete information about organizations, they interpret information they receive [from recruiters] as signals about the organizations' working conditions" (p. 660). This is essentially the basis of signaling theory, which attempts to explain communication through various signals. Since these factors vary widely from company to company and are extremely difficult to know without actually working at a specific place, especially for students fresh out of college, various attraction strategies are aimed to convey this knowledge to potential new hires.

### STUDY

#### Objective

The purpose of this study is to identify and evaluate the various methods that accounting companies utilize to attract their employees. Data has been collected on a sample of both large and mid-sized accounting firms that recruit at Bryant University including Deloitte, PricewaterhouseCoopers, Tofias PC, Disanto, Priest & Co. and Blum Shapiro. This data was gathered through a variety of methods including interviews, observation, and surveys of both company representatives and students at Bryant. Afterwards, analysis was conducted to provide beneficial information to students and employers

on the topic of attraction and the recruitment process.

### RESULTS

#### Personal Preference

There are a couple of uncontrollable factors that influence attraction efforts greatly. These include the general condition of the economy and also certain personal preferences of the potential new hires. For example, one personal preference that influences the decision of a prospective new employee is the size and location of a company. Survey results suggest that over 43% of student respondents would be willing, or prefer to work out of the New England area. This is only possible with the two larger firms that recruit at Bryant; therefore attraction of those students by the mid-size firms is greatly impeded. Other personal preferences that are crucial to recruitment efforts are future plans of the students and interest in corporate ideals such as social responsibility and community service.

#### Reputation

Since reputation is a crucial part of the attraction process, a segment of the surveys attempted to measure the student's perception of each company's reputation compared to the company's perception. There were some interesting points that this comparison highlighted in regards to reputation. First of all, the two large firms (Deloitte and PWC) received the highest reputation rating from the student respondents, which was expected. Those two companies were also aware of their own reputation on campus, therefore there was little discrepancy between the two measurements. A problem was apparent however when looking at the comparison between the students' and company representative's perception of reputation for the DiSanto, Priest & Co. firm. The company representative believed that the firm had a much stronger reputation than the students indicated. This is potentially a problem because the firm might be engaging in activities to build its reputation on campus; however,

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these actions might not be as effective as the company believes.

#### **Communication**

To better align company perceptions with actual student perceptions, companies need to ensure that their messages reach the students through the most effective means. Several forms of attraction are utilized by the accounting firms including information sessions, corporate sponsored events, and the giving away of promotional products. Although there are numerous methods of recruiting, some methods are certainly more effective than others. This topic comprised another portion of the survey and interview questions. After the data was collected, it became apparent that the most influential mode of communication was word of mouth by professors. Also on this topic, the students noted that their favorite corporate giveaway was pens and highlighters due to their functionality.

#### **Possible Improvements**

Through analysis of the various research completed on attraction and the data gathered

from the companies as well as the students, there are a few strategies that companies might want to consider when attempting to recruit their workforce. One suggestion is that the companies focus more of their efforts on the most influential communication form. Professors can be a huge asset to the recruitment process and the results conclude that they are effective. Another suggestion is that the companies use previous interns during the school year as company representatives. This would not only allow the company to keep in contact with their valuable interns, but also provide an excellent first hand source for other students. Also, by increasing the frequency of the messages, the companies can become more visible to the students on campus.

#### **CONCLUSION**

In summary, the recruitment process is always evolving to meet the needs of the business world and the changing expectations of the individuals who are the future of these companies. In order to recruit efficiently and effectively, companies must constantly evaluate their methods and when necessary, make improvements to the process because attraction is vital to survival.

## **PRODUCT PLACEMENT AND THE EFFECTS OF PERSUASION KNOWLEDGE**

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April 2009

### **ABSTRACT**

This study examines the effect of persuasion knowledge and cognitive busyness on attitude toward a brand embedded in a popular movie. Product placement is filling an increasingly important role in marketing strategy as conventional techniques have been rendered ineffective by their own ubiquity. Cognitive busyness was hypothesized to cause a product placement message to be processed on a superficial, peripheral level. If joined with persuasion knowledge, the subject's lack of ability to devote resources to critically evaluate the message would activate compartmentalized knowledge of products and brands increasing the ease of this information's mental accessibility and thus aid the formation of favorable brand attitudes. A controlled laboratory experiment reveals that when viewers watch the movie in a natural setting, viewers with persuasion knowledge exhibit lower attitude toward the placed brand than viewers without persuasion knowledge. However, such backlash brand-damaging effects are absent, if not reversed, when viewers watch the movie in a cognitively busy setting.

### **INTRODUCTION**

Imagine two consumers, Nathan and Sarah, watching a movie, *Runaway Bride*. They are both watching the same scene, yet are engaged with it differently: when Julia Roberts jumps on the truck that conspicuously shows its brand name, FedEx. Nathan is busy multitasking — while watching the movie, he is ironing his pants and listening to music on a radio. On the other hand Sarah is focused and immersed in the movie, and it is to this which she pays her full attention. Who would develop a more positive attitude toward FedEx, the embedded brand? Would it be Nathan or Sarah? Now further imagine that Nathan and Sarah were consciously aware that marketers inserted the FedEx truck into the film in order to influence their attitude toward the delivery company. Would Nathan and Sarah's reactions differ if they have persuasion knowledge of the marketer's intention? The current paper attempts to answer these questions by examining the convergence of product placement, persuasion knowledge and

cognitive busyness and the implications that the overlapping of these theoretical concepts can have in marketing strategy.

### **LITERATURE REVIEW**

Products, media, and consumers are evolving so fast today that it is often hard for marketers to find a "sweet spot" where these three units profitably converge. Many think that product placement exists at just such an intersection and it has become a preferred mode of strategic communication between consumers and businesses. Product placement is the practice of inserting brands or products into the narrative of entertainment media where it would traditionally be unexpected.

There is some evidence of negative attitudes emerging where entertainment marketing practices are not well integrated into the entertainment vehicle, but appear so obviously contrived that they disrupt the entertainment narrative (Barn 2005). The situation in which an ostentatious marketing message induces a

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consumer to form a poor attitude can be explained by the persuasion knowledge model pioneered by Freistad and Wright in 1994. They described persuasion knowledge as the knowledge that people develop about how, why, and when a message is intended to influence them, which, they say, serves to help customers cope with persuasive episodes. However, this knowledge lies dormant until triggered by a stimulus; often the ostensible message of a sales pitch.

This study is aiming to find a way around the subversive effects of activated persuasion knowledge. Since many cognitive psychologists believe that a person's capacity to focus their attention is limited and that cognitive resources are allocated to the primary task with the rest remaining as spare capacity (Kahneman 1973) we presume that we can send a product placement message along a peripheral processing route when the subject is cognitively constrained.

This presumption is based on study in which it was found that when people were cognitively busy with a simultaneous task, low-prejudiced individuals lacked the necessary capacity to exert the effort needed to avoid discriminatory behavior (Devine 1989) which manifested itself in biased observations and word-choice. What this shows is that when people are engaged in a distractive task, they have a reduced ability to control processes in situations that they would typically deliberately try to control (Cralley 2005), showing an area of vulnerability in which marketers could capitalize.

Furthermore, it has been shown that recent exposures to a target render the target more readily accessible in memory; in turn, this increased accessibility enhances the ease with which consumers' identify and recognize the target (Jacoby and Dallas 1981). This conceptual fluency theory simply postulates that if something, such as a brand or product is easy to remember, the consumer will associate that ease of recall with the product qualities and formulate positive attitudes toward it as a result. If consumers base their product evaluation and

brand-choice decisions not only on information they have about the brand but also on how easy it is for them to process the information (Lee and Labroo 2004), then persuasion knowledge could be a powerful tool when its link to coping behaviors is broken and only the reservoir of product and brand knowledge were to come to the forefront of the consumers' attention.

- a) Hypothesis 1: In the cognitively non-busy condition, participants with persuasion knowledge will have lower attitude toward the placed brand than will participants without persuasion knowledge.
- b) Hypothesis 2: In the cognitively busy condition, participants with persuasion knowledge will have higher attitude toward the placed brand than will participants without persuasion knowledge.

#### Method

To test our hypothesis, the attitude measure for FedEx was submitted to a 2 (Cognitively Loaded vs. Natural) x 2 (Persuasion Knowledge vs. No Persuasion Knowledge) fully factorial ANOVA. 68 undergraduate students from marketing 201 classes volunteered to participate for extra credit and they were tested in a lab where each subject had a computer, pair of headphones, and relatively private terminal where they could not see their neighbor.

The dependant variable was the attitude toward the brand, which was measured after subjects' exposure to the product placement using a 7 point semantic differential scale. A number of filler clips were used to disguise the purpose of the study, some which had products placed in them and some that did not.

Someone in the cognitively busy group was shown a 7 digit number that they were asked to memorize by reciting it in their head in anticipation of having to recall it at the end of the test. And people loaded with persuasion knowledge were told that the purpose of the

study was to examine the effects of product placement.

The analysis revealed significant two-way interactions,  $F(1, 63) = 11.03, p < .01$ . As predicted, contrasts revealed that among cognitively non-busy participants attitude toward the brand was significantly *lower*,  $t(32) = -3.32, p < .01$ , when they had persuasion knowledge ( $M_{knowledge} = 5.02$ ) than when participants did not have persuasion knowledge ( $M_{no-knowledge} = 6.02$ ). However, among cognitively busy participants, attitude toward the placed brand FedEx was *higher*, although non-significant,  $t(31) = 1.47, p = n.s.$ , when participants had persuasion knowledge ( $M_{knowledge} = 5.92$ ) than when they did not have persuasion

Knowledge ( $M_{no-knowledge} = 5.42$ ).

## CONCLUSION

The findings supported the notion that viewers who have insufficient cognitive resources to allocate to information processing may be forced to rely heavily on the accessibility heuristic, where persuasion knowledge helps them recall the brand, which may lead to heightened attitude toward the placed brand. However, when consumers have ample cognitive resources available for information processing, they are better able to fully digest the content, so that persuasion knowledge triggers the defense mechanism to kick in, and results in lowered attitude toward the placed brand.

This study not only reaffirmed the validity of the persuasion knowledge model, but showed that it is not an unequivocal enemy of marketers. The marketplace knowledge that guards against persuasion can be separated out, and simply the previously accumulated knowledge informing the customer of the brand and product can be utilized if the cognitive capacity of the consumer is sufficiently monopolized.

## **ICANN, CULTURAL IMPERIALISM, AND DEMOCRATIZATION OF INTERNET GOVERNANCE**

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April, 2009

### **ABSTRACT**

Since its burgeoning in the 1990's, internet Governance has largely been managed by the United States government. The government has charged internet technical tasks and functions to the Internet Corporation for Assigned Names and Numbers (ICANN). Along with the United States government, ICANN has been the subject of heavy criticism for its inadequate international representation. Many interpret US hegemony over the internet as culturally imperialistic. The following paper explores some of the advantages and disadvantages to multilateral Internet governance. First, it will evaluate ICANN's ability to both democratize their internal decision-making and internationalize the web by better serving foreign Internet end-users. Next, the paper examines the attitudes of Americans towards the US relinquishing control to international organizations such as the United Nations. The conclusions address both effectiveness of ICANN as well as what may be hindering the US from surrendering control to foreign governments based on nonpolitical reasons.

### **INTRODUCTION**

The Internet Corporation for Assigned Names and Numbers (ICANN) is a non-profit corporation based in Marina Del Rey, California. ICANN assumed various internet-related technical responsibilities as of September 18, 1998. The organization supplanted the United States government's Internet Assigned Numbers Authority (IANA) and oversees the IANA's function. Since its inception, ICANN has come under heavy criticism and scrutiny for harboring a US bias. Many claim ICANN organizationally favors the US government's agenda and does not fairly represent the welfare of the largely non-American internet community. Much of the scrutiny, while critical, is accurate.

The Internet began as a domestic creation and until the 1990's was largely contained within the United States. Today, the internet is a powerful, global medium with a reach that passes over

transnational boundaries. However, ICANN continues to operate out of little-known Marina Del Rey, California as a United States private corporation. Since the United States government established ICANN, the Internet landscape has drastically changed. However, the US government has extended their contract with ICANN through 2011 (McCarthy, 2006). The question becomes whether or not ICANN satisfies the current demands of the world's Internet population.

### **ICANN AND GLOBAL DEMOCRACY**

#### Cultural Imperialism

Many believe that American conglomerates have penetrated and permeated many walks of life across the globe. Their presence is ubiquitous and is sometimes described as destructive to foreign cultures. McDonald's and American movies can be found all over the world, in both rich and poor countries. The Internet harbors a more interesting medium for culturally

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imperialistic dynamics. The issues of language and unilateral internet governance impede upon the sovereignties of others as well as their ability to preserve and transmit their cultures as America does.

The intuitive solution to the current issue of internet governance is to forfeit power to the United Nations. It is already democratized and favors some of the major internet players via the permanent Security Council. Despite the benefits, a thematic issue arises when we consider “authoritarian regimes such as China, Saudi Arabia, and Iran” taking greater roles with an international internet (USA TODAY, 2005). While international opinion claims American hegemony, the US government claims that ICANN is not state-run and that relinquishing control would signal devolution toward the long since passed governmentally overseen telecommunications (Cukier, 2005). What’s more, it may be a “recipe for stifling bureaucracy and indecision” (USA TODAY, 2005). However, there are two problems that will persist. First, different governments with a wide array of agendas may defect (as is believed to be a legitimate possibility), thus compromising the internet’s integrity as a global medium. Second, it can be argued that the United States has a duty to the rest of the world. The argument is deontological, whereas other security-related, economic, and socio-political concerns are consequential reasons and are discussed at length by Cukier in “*Multilateral Control of Internet Infrastructure and its Impact on US Sovereignty.*”

#### Multilateralism

A survey was used to explore the attitudes of Americans to determine what affects their sentiments towards multilateralism of internet governance. Respondents favor the change in approach for the sake of preserving democratic values. The threat of authoritarian governments affects their opinions but many respondents believe that they still deserve equal involvement at a deontological level. In addition, respondents place a dichotomy between foreign governments and the internet end-users (the true stakeholders). Internet end-user representation

poses as a critical factor in affecting their views on changes to internet governance.

#### My Name, My Language, My Internet

The impasse between the US and world leaves ICANN as one of the primary targets of criticism and as the primary agent for internationalizing the web. A major goal they have undertaken is to more completely incorporate non-Latin-based languages. The My Name, My Language, My Internet initiative was released on their website in October of 2007. Internet users may test eleven new language scripts including Arabic, Cyrillic, Greek, Hebrew, and Tamil. The domain name system, which coordinates the matching of hostnames to internet protocol addresses, was not designed to understand many scripts used by international users. The ongoing challenge is to adopt an elaborate system to allow the domain name system to accept the eleven new scripts. The development may or may not actually help international users. Systems have been created to allow non-English speakers to better manage a global medium that is, arguably, linguistically imperialistic.

Information gathered from focus groups of international students detailed the helpfulness of ICANN’s initiative. Participants generally felt that the changes would not be very impactful. English is fast becoming the lingua franca and is widely understood to varying degrees. In addition, foreign internet users have been able to successfully adapt to the current internet design and interface. Programs exist that convert English characters into those of other languages.

#### A Democratic Process

Currently, there are generic, sponsored, reserved, pseudo, and country code top level domains (like .com and .org). ICANN plans to expand the number of generic top level domains in order to provide the 1.6 billion internet users of the world with more meaningful and descriptive TLDs. Concerns arise over offensive top level domains such as “.xxx.” The .xxx TLD was once considered by ICANN to be on

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the internet, but it was ultimately struck down after ICANN was pressured by the federal government. The disapproval of .xxx bypassed normal democratic procedures at ICANN and was based on American standards of morality. With plans to expand these TLD's, questions arise regarding ICANN's ability to democratically judge the appropriateness of top level domain candidates. Currently, an international arbitration body has been setup to judge whether new TLDs are acceptable under "universal standards of morality."

### CONCLUSION

Internationalization of the internet is paramount, and the democratization of ICANN (or any other organizational apparatus that could be created) will help achieve this goal. An improved internationalization of the internet will allow access to more users and, thus, expand cyberspace. The ongoing expansion of the web enhances its value as a communicative medium. JS Mills' marketplace of ideas thrives on unfiltered, unfettered, and untrammled communication and diversity. By adding internet users, we unlock untapped potential in the World Wide Web. In addition, we may better serve the greatest number with the greatest good (utilitarianism). These consequential arguments oblige ICANN to cultivate and

develop an internet that maximizes expansion, which means removing any language barriers and expelling bias and favoritism.

The steps ICANN takes towards democratizing themselves and internationalizing the internet show signs of improvement on ICANN's part. Their ability to make progress in their shortcomings allows us to better understand the direction ICANN and internet governance is moving. The justification of ICANN's continued existence hinges upon its ability to be progressive. Otherwise, foreign governments will have every right and reason to grumble. ICANN will continue to endure the challenges of fair and democratic internet governance. Their "international arbitration body" creates a practical and ideal precedent for which they may use to set standards that pass beyond the scope of their technical stewardship. Still, how does one define universal standards of morality? What do we look to in determining whether or not a policy is just or not? The answer is to incorporate an outside presence into the organization as much as possible. Without this practice, foreign government pressures will only intensify. The World Wide Web has grown too big for the US to assume dominion without challenge.

## **HOW DO YOUNG WORKERS PREPARE FOR RETIREMENT?**

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April, 2009

### **ABSTRACT**

The Millennial Generation is defined as those ages 15-30 in 2009 and is comprised of 80 million individuals (Elswick, 2004). This study explores how a segment of this generation, young workers between the ages of 18-30, is currently saving for retirement given the unprecedented economic challenges they face. These challenges include rising everyday expenses, record amounts of student loan and credit card debt, as well as how they will prepare for retirement given the uncertainty surrounding Social Security. The purpose of this study is to evaluate young workers current financial situation, retirement plans, and retirement expectations. Using data collected from a survey distributed to 149 individuals between the ages of 18 and 30, the study examines how young workers are preparing for retirement and if any variables increase the likelihood of preparation. The results of the study show that age and education play the most significant role in the likelihood that an individual is saving for retirement. In addition, young workers appear to have identified the challenges facing the Social Security system and recognize the need to compensate for these payments to be adequately prepared for retirement.

### **INTRODUCTION**

A new generation known as “Millennials” has emerged with numbers exceeding the often-studied Baby Boomer generation. The Millennial generation includes 80 million individuals who were born from 1979 to 1994. In comparison, the Baby Boomers are comprised of 76 million individuals born during the period 1946 to 1964 (Elswick, 2004). Baby Boomers are the largest group to enter retirement and much attention has been paid to their retirement needs. However, insufficient attention has been paid to how Millennials are coping with the unprecedented challenges they face towards retirement and what steps they need to take to be able to successfully retire. This study examines Millennials that are currently between the ages of 18 and 30 because these individuals are more likely to be financially independent and looking towards their future than Millennials under the age of 18.

The familiar retirement mantra of the past, known as the “three legged stool,” is becoming increasingly unsteady for today’s young workers. The first leg of the stool, defined benefit plans, or pensions, is not offered at a majority of companies today and is instead being replaced by a defined contribution plan that is funded wholly or in part by the employee. The second leg of the stool, Social Security payments, faces an uncertain future as the foundation of the fund has been eroded by mismanagement, overspending and a decrease in the amount of employees paying into the system, and is currently projected to be bankrupt by 2049, as the first Millennials are turning 60 (CBO, 2008). Lastly, the third leg of the stool, personal savings, is not compensating for the decrease in funds received from Social Security and employer sponsored retirement plans. The national personal savings rate is believed to be at or below 0%, which raises the question of how young workers will prepare for retirement if they are not saving (BEA, 2009).

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A primary objective of the current study is to evaluate younger workers thoughts on retirement and add to the understanding of young workers financial outlook and expectations for their future. This study explores young workers current financial situation, how they perceive their financial management skills, how young workers plan on financing their retirement, their expectation of Social Security payments, and if/how young workers plan on compensating for the weakening second leg of the retirement stool, Social Security payments. The answers to these questions are explored by analyzing the observations collected from a survey.

**SURVEY PROCEDURES**

The analysis of how young workers prepare for retirement is based on information acquired through a survey distributed during the period of December 10, 2008 to January 30, 2009. A total of 149 young adults completed the twenty six question survey. Study participants consisted of current Bryant undergraduate students, Bryant alumni, and young adults outside of Bryant.

**DATA FINDINGS**

Young Workers Current Financial Position

As shown in the table below, as an individual’s age increases, the likelihood that they are saving for retirement also increases. A possible explanation for this is as young workers age their income level increases and they can afford to set money aside to save for retirement. Also, as young workers get older they may realize the growing importance of starting to save for retirement at a young age. In addition, education level also has a positive relationship with saving for retirement. Individuals that had completed a Bachelor’s or Master’s degree were much more likely to already be saving for retirement than high school or community college graduates.

	<b>When will you begin saving?</b>	<b>I’m already saving</b>	<b>Sometime in the near future</b>	<b>I’m not sure</b>
<b>Age</b>	18-21 years old	12.7%	65.5%	21.8%
	22-25 years old	70.4%	25.9%	3.7%
	26-30 years old	97.1%	2.9%	0.0%

Money Management Knowledge

When asked specifically about their familiarity with retirement savings vehicles such as Individual Retirement Accounts (IRA), 401(k) plans, and employer sponsored pension plans, only 22% of young workers stated that they were “extremely familiar with these accounts.”

Since many of these young workers stated that they are enrolled in these accounts, it is interesting that these individuals

<b>Familiarity</b>	<b>%</b>
Extremely Familiar	22.15%
Somewhat Familiar	51.00%
Not Familiar	26.85%

are not more familiar with the fundamental characteristics of these accounts. These statistics demonstrate the importance of financial education, whether it be provided by employers, universities or high schools, so that young workers are more familiar with how these accounts operate, in order to better understand their financial position and how to better benefit from using such accounts.

How Young Workers Will Finance Their Retirement

When asked to choose one source where the majority of their retirement income would come from, 54% of 18-21 year olds believe that the

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biggest income source will come from personal savings. However, the majority of 22-30 year olds stated that a 401(k) plan will be the biggest source of their retirement income. Other data collected from the survey shows 22-30 year olds were much more likely than 18-21 year olds to have a 401(k) plan, which may be why they believe this is where most of their retirement income will be derived. Overall, 57% of 18-30 year olds believe an employer sponsored retirement plan, such as a 401(k) plan or pension will provide the largest amount of retirement income. As shown in the table below, an extremely small percentage of young workers will rely on Social Security payments or a job during retirement to provide money to live on. This table illustrates that a majority of young workers understand the need to save for retirement themselves and take advantage of employer sponsored retirement plans in order to have ample income to draw from during retirement.

	Retirement Income Source (years)	Personal Savings %	Empl. Retirement Plan %	Soc. Sec. %	Job During Retirement %
Age	18-21	54.0	40.2	2.3	0.0
	22-25	29.6	66.7	0.0	3.7
	26-30	20.0	80.0%	0.0	0.0

Expectations of Social Security

The graph below shows that 18-21 year olds have the most dependence on Social Security payments to provide income during retirement. This coincides with other data from the survey in which 47.1% of 18-21 year olds stated that they would use Social Security to finance their retirement. The graph also shows that 22-25 year olds will depend on Social Security the least, which also corresponds with other data, as only 29.6% of 22-25 year olds claimed that Social Security will be an important factor in their retirement income.

	Depend. on Soc. Sec. (years)	Very Much %	Some-what %	Very Little %	Not at all %
Age	18-21	2.3	37.9	48.3	11.5
	22-25	3.7	14.9	40.7	40.7
	26-30	0.0	31.4	42.9	25.7

How will Young Workers compensate for the weakening Social Security System?

A majority of young workers are not planning on Social Security being a significant source of income during retirement. The study found that 38.3% of Millennials plan on increasing contributions to personal savings; however, this may be difficult as young workers face mounting debt, rising expenses and smaller salaries. Another 32.9% of Millennials plan to start saving at a younger age to compensate for reduced Social Security payments. By beginning to save at an earlier age, young workers will be able to reap the benefits of compounding, which should provide more retirement savings when they reach retirement age. Only 6.0% of Millennials surveyed cited that they will not compensate for any income lost from Social Security payments.

**CONCLUSION AND IMPLICATIONS**

Given the increasing responsibility young workers are facing regarding their retirement planning, this study found that young workers seem to be aware of the challenges they face and are still managing to save for retirement. Survey responses show that although young workers everyday expenses get in the way of saving for retirement to some extent, the majority of young workers are still finding a way to save for retirement. Not only are young workers focusing on the importance of saving for retirement now, survey respondents clearly indicate that they understand the challenges lying ahead in the Social Security system and they plan on compensating for this uncertainty so they are not ill-prepared when it is time to retire. Due to the changing macroeconomic conditions since this study was conducted from December 2008 to January 2009, young

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workers' ability to save may have changed significantly.

With 80 million young adults between the ages of 15-30 in the United States, it is essential that more attention be paid to the financial future of this generation. While much work has been published regarding the preparedness and expectations of Baby Boomers, little has been published that promotes how saving early can help prevent the largest generation of retirees from being ill-prepared in retirement. Although members of the financial services community have long been promoting the importance of starting to save early for retirement, very little has been done to instruct young workers how to save for retirement given the current and future obstacles they face, such as debt and a dwindling Social Security System.

Should the financial future of Millennials continue to be placed on the back burner, the fiscal burden these individuals will place on the government will be too great to withstand. Given the challenges already plaguing government sponsored retirement programs, the question arises of how the government will be able to provide basic financial support Millennials during their golden years. One answer to counteract the burden that will be placed on the government is for the government to act now and use federal funding to mandate personal financial planning classes for high school students. These classes would instill the basics of personal finance and ensure that every young worker entering the workplace has adequate knowledge of savings vehicles, loans, mortgages, credit cards and retirement planning.

Another option would be to provide a tax credit to individuals of all income levels that attend financial seminars or use financial planners. The purpose behind this tax credit would be to increase the likelihood that individuals would gain knowledge about retirement planning from these seminars and would be more apt to integrate these concepts into their own finances. Employers can also help young workers prepare for retirement by using auto-enrollment in company 401(k) plans. Employers can take out a set percentage, such as the minimum contribution to receive a company match, and invest the funds in a target date retirement fund. Auto-enrollment eliminates the possibility that some employees will not set up their own retirement fund and may result in better preparation for retirement for these workers. Although the findings of this study produce a more optimistic picture of young workers current financial habits and retirement preparedness than previous research, this project adds to the understanding of Millennials' financial outlook and expectations for the future. The results show that a segment of this generation understands the importance of saving for retirement even in the face of debt and rising expenses; thus this paper should be used to alert other members of this generation that saving for retirement is essential and is possible, even amidst rising expenses. By informing young workers from an early age about the importance of starting to save early for retirement, these individuals will learn to save as much as they can afford and will be able to reap the benefits of compounding when it comes time for retirement.

**PERFORMANCE OF MAJOR LEAGUE BASEBALL PLAYERS DURING THEIR  
“FREE AGENCY” SEASON**

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April, 2009

**ABSTRACT**

Do pro athletes try harder and perform better during their free agency year? Each year this question is asked in many professional sports. The purpose and objective of this project is to discover whether Major League Baseball players actually have better statistics during their free agency year. The result will add creditability to one side of the issue at hand. Data collected consists of offensive statistics in the year prior to their free agency year, their free agency year itself and the year after their free agency season. A simple paired T-test was applied for six major offensive categories: HR/AB, RBI/AB, AVG, OBP, SLG, and OPS. Two analyses were taken. The first analysis was between the year before their free agency season and their contract year and the second was between their free agency season and the year after. All data was compiled into spreadsheets and T-tests were conducted. Analysis confirmed that athletes showed an increase in their numbers from the year before the free agency year to their free agency year in all six categories, but only a significant increase in one category, RBI/AB. Data also showed that from their free agent year to the following year there was a significant drop off in statistics in all six categories. As a result, on average, athletes do tend to perform better during their free agency season. However, since there were only two significant increases in statistics, motivation to get a bigger contract cannot be the only reason for the increase in statistics. There were other reasons that affected an athlete's performance from year to year independent of whether it was their free agent year or not. These reasons are explored in more detail within the paper.

**INTRODUCTION**

Have you ever wondered if a professional athlete realizes that he must increase his productivity because his future compensation depends on it? In fact, it is widely accepted that player performance in any sport is a direct determinant on the amount and length of their contract. As a result, the pressure put on these athletes is exceptionally high. Most people view sports as entertainment. Although this is true, athletes do not receive a set pay over their entire career. They need to keep performing in order to stay in the league and make the big bucks.

After much deliberation, this topic was considered for the Honor's Capstone project because I, for one, am a huge MLB fan. I am a New York Yankees fan, and I have always been interested in the difference between big market teams such as the Yankees, compared to a small market team such as the Tampa Bay Rays. As a result, I wanted to study whether players who received a large contract from big market teams really had the numbers to support it. As this would be too difficult to analyze, my current research topic came to mind. I always believed that players do consciously try to play better during their free agency year because they are

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indeed money driven. This project would, in the end, prove or disprove my own theory.

Research was conducted to determine whether athletes actually do perform better during their free agency season. This was determined by collecting three years of data for every class A and class B free agent within the MLB. The three years in question are the year before their free agency season, their free agency year (contract year), and the year after.

#### **HYPOTHESIS**

The reason why I wanted to research this project was that I believed players do play better during their free agency season. Taking into consideration the logistics of this idea, it does indeed make sense. Have a better season and earn more money and stability. As a result, the testable hypothesis within this project is that MLB players, excluding pitchers, will have better statistics during their free agent year compared to previous seasons and even seasons after free agency.

As mentioned, pitchers are excluded from this research project. The reason for this exclusion is that pitchers statistics are too dependent on other variables. For one, pitchers are too dependent on their team. As opposed to a position player where individual success is easily measured, pitchers statistics could be easily skewed. Two reasons that pitchers are too dependent on their team include run support and the performance of the bullpen. The amount of innings pitched is also an issue for pitchers. A starter will only start about thirty games per year but will pitch over 200 innings while closers and relief pitchers could pitch in about eighty games a year but only pitch in 100 innings or less, on average. Even though starters do pitch more innings, having this difference decreases the comparability between pitchers.

There were several reasons why Major League Baseball was chosen for this study. First and possibly the most obvious reason for any sports follower, is that in the MLB, salary can be closely related to individual performance (Ahlstrom, Si, & Kennelly, 1999). Second,

baseball is a highly individualistic sport. It is one of the only major sports where player's statistics are independent from the teams or other players. Finally, there are accurate and direct comparable performance measures available (Ahlstrom, Si, & Kennelly, 1999). In the MLB, there are clear-cut statistics that can be evaluated in determining the individual success of a player's season.

For those who are not familiar with the term free agency. Major League Baseball and the Player's Association (MLBPA) created free agency in 1976. By definition, a free agent is a player whose contract with a team has expired. This player is now able to sign a contract with any other team of his choosing. Teams around the league enter into bidding wars trying to convince these individual players to sign with their respective clubs.

There have been many arguments and discussions over this issue over the past couple of years. This project will contribute another viable analysis for scholars and experts to debate. They will be able to compare seasons of the new millennium to other seasons, such as in the 1990s. If this hypothesis is proven, this information could actually be used in real life situations. For example, a manager would know when his players should have a peak season. This will enable the manager to play those players more and give them a chance to emerge as great ball players. This is a win-win for everyone involved. Another possibility if the hypothesis is correct is that the information will be good for fantasy sports lovers. These lovers could do some research and find out what players are in their free agent year and this could be a good technique to get the best team possible and find some sleepers late in the draft.

#### **METHODOLOGY**

Free agent years that were analyzed within my research project started with the 2000 season and went through to the 2007 season. Instead of analyzing one year, we felt our results would be more accurate if multiple years were analyzed. It was interesting to find that there was not an

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easily accessible resource where all the free agents for each year could be found. Therefore, many different sources were used to collect the necessary data. The six statistics that were focused on were home runs per at bat (HR/AB), runs batted in per at bat (RBI/AB), batting average (AVG), on base percentage (OBP), slugging percentage (SLG), and on base plus slugging percentage (OPS). The test that was used to check the hypothesis is called a paired two sample for means t-test. The two-sample test is used to determine if two population means are equal. A paired t-test was used because there is a one to one relationship between the values in the two samples. This means that the same subject is being compared but measured at different years.

### **CONCLUSION**

There were many problems that I encountered while doing my research. These problems consisted of not taking in account retirement, trade prone players, team performance,

switching leagues, injuries, elite players, and old age. In spite of these problems I could reasonably state that the testable hypothesis that MLB free agents do play better during their free agency year has been disproved. There is no significant evidence that players do play better during their free agency season. Although there were some statistics that supported this idea, more statistics did not. There was significant evidence, however, that players perform better during their free agency season as compared to the season after. This could be the result of adjusting to a new team. Overall, the data shows that performance is not a function of whether or not a player is playing out his contract. Other factors must contribute to a player's performance other than the motivation for money. If not, then a player's basic ability must be the primary reason. Even though there is no significant evidence that players play better during their free agency year, it is known, however, that players are conscious of the advantages of playing better during this very important year.

**GENDER ADVERTISEMENTS: REPLICATION OF A CLASSIC WORK EXAMINING  
WOMEN, MAGAZINES, AND FACEBOOK PHOTOGRAPHS**

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April, 2009

**ABSTRACT**

In 1979, Erving Goffman published *Gender Advertisements*, the seminal work in critiquing gender displays in advertising. Goffman noted seven major phenomena that demonstrated the cultural infantilization of women and their ritualized subordination in advertisements. This study, conducted in Goffman's phenomenological tradition, investigates modern commercial advertisements to update Goffman's work and determine the presence of a new phenomenon, the mechanization of women. Advertisements were collected and studied based on Goffman's five coding categories: relative size, feminine touch, function ranking, ritualization of subordination, and licensed withdrawal. In addition, Facebook photographs were analyzed based on the same coding categories to find whether women portray themselves in personal yet publically available photographs in the same way as women are displayed by others in advertising images. The results indicate that modern advertisements portray women in much the same manner as in the 1979 advertisements from Goffman's original study, and evidence can be found that supports a new advertising pattern of the mechanization of women. However, in Facebook photographs, women tend to display themselves with greater individuality than the way they are portrayed in commercial advertisements. These findings have greater implications on the future of gender displays in advertising and women's self-portrayal, particularly in relation to the creation of a new feminist movement.

**INTRODUCTION**

In 1979, sociologist Erving Goffman published *Gender Advertisements*, a groundbreaking study of the representation of women in commercial advertisements. Goffman focused on frame analysis, gender displays, and the nuances of body positions and movements, and he coded and purposively displayed advertisements based on five categories: feminine touch, function ranking, ritualization of subordination, relative size, and licensed withdrawal. Goffman's work noted seven prevalent phenomena in commercial advertising, all of which demonstrated the advertising industry's infantilization of women, despite the progress of the women's rights movements.

Since the publication of *Gender Advertisements*, however, advancements have been made toward women's rights and gender equality, including a greater presence of women in the workforce and politics. In addition, media literacy and analysis has brought greater attention to the way that the advertising industry represents women and their roles in society. Taking these developments into consideration, this study sets out to update Goffman's work to contemporary times and determine whether his findings have - or have not - changed after the thirty years of feminism and cultural enlightenment on magazine advertisements.

My research is ultimately concerned with two topics: the portrayal of women in advertisements and the way that women portray themselves

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when given the opportunity to do so in their own lives. Therefore, in addition to replicating Goffman's work and seeking evidence to determine the potential of an eighth phenomenon, the mechanization of women in advertising, I will also review the social networking website Facebook to determine how women choose to advertise themselves through publicly shared and displayed photographs. By comparing commercial advertisements to Facebook photographs, I hope to better understand the potential effects of the advertising industry on individuals and the ways in which they view and portray themselves.

### RESEARCH METHODS AND RESULTS

#### Method

The sample of magazine advertisements was drawn from issues of national general interest and women's magazines from January 2008 to January 2009. The advertisements were collected in partnership with Kristen Brekne of Bryant University, another researcher studying advertisements and gender displays. From our sample of over three hundred advertisements, I chose 33 advertisements that fully encompassed the criteria of Goffman's pre-established coding.

In addition to magazine advertisements, Facebook photographs were analyzed for deeper cultural meaning. The photographs used were gathered from individuals with pre-established Facebook accounts. A Facebook group was created called "Bryant University Research Project – Share Your Facebook Photos!" and membership in the group signified agreement to participate in the study. In addition, a paid advertisement was created and placed on Facebook. This advertisement was targeted to individuals between the ages of 18 and 25 who were college students at one of eighteen universities across the United States. Ultimately, there were 97 participants, and from these participants over 13,000 photographs were made available. A final sample of 26 photographs is featured in the study, all of which were chosen using Goffman's coding system.

#### Results Discussion

The images I came across throughout my research demonstrated that little has changed in the portrayal of women in commercial advertisements from 1979 to today, and Facebook photographs infrequently reflect the phenomena found in advertisements. The first finding is not surprising when taking into account how society has used and continues to use advertisements to simplify life. The second, however, might be considered a heartening surprise, as it demonstrates that when women are free to display or represent their own gender, they do it with much more freedom and individuality than what is seen in most commercial advertisements. Advertisements help society shape its perceptions of the world and the ways in which it views appropriate gender roles and behavior. According to Davis and Baran (1981), we look to advertisements and other forms of mass media as "simple solutions" for society's problems. Rather than consciously process day-to-day problems or issues, individuals can quickly identify solutions with little to no thought because these solutions ultimately create social norms that dictate appropriate behavior and reactions. Thus, advertisers rely on the same types of images because they allow people to quickly generate the same types of thoughts and reactions every time.

In comparison, there are no hidden meanings or heuristics needed for Facebook photographs because they capture real moments in time. While it is natural for people to present optimal images of themselves and their friends, reality as captured by real, everyday people who are not in the advertising industry does not emulate the reality exhibited through advertisements. Instead, there are photographs of family, friends, and social situations; women are not infantilized or subordinated in comparison to men. If women do emulate poses, gestures, or expressions from advertisements, they often do so in an intentionally ironic way and the photographs are not taken seriously. Advertisements are meant to portray the advertisers' sense of what is ideal in society; they want people to look to advertisements as a

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guide for their lives. Both advertisements and Facebook photographs appear to be natural when reviewed separately, but when comparing the two, it is clear that photographs, which reflect how women portray themselves and their personal realities, are better societal representations. Rather than photographs emulating advertisements, advertisements need to begin better reflecting the relationships, behaviors, and roles of both men and women in reality.

### **CONCLUSION**

Goffman's work was especially relevant when it was published because it came after the onset of one of the largest women's movements in history. Although my research does not appear to be published at a similar time, it can be

argued that it is actually being published at a time of an ongoing, silent movement that is being carried out using communication and grassroots campaigns. The results of my research can be part of this movement and used to critique subsequent advertisements and the way in which people, particularly women, are regarded in society. In addition, my research on Facebook photographs aims to provide a deeper meaning to the social networking website. With the increasing popularity of social networking sites, it is critical to understand how people are viewing and utilizing these sites, as well as how they are viewing and interpreting photographs of themselves and others. My hope is that my research and analysis will be used to study and critique the potential cultural effects of how women present themselves and view the world around them.

**REVISITING THE MIND-BODY PARADOX: CAN BRAIN FUNCTIONING EXPLAIN  
MORAL REASONING**

Brianna Mahan  
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Faculty Sponsor: Dr. Brian Blais  
April 2009

**ABSTRACT**

With this paper, I attempt to explore possible neural correlates of morality. We define morality as the one part, structure, or process of the brain that could be linked to an innate ability to understand and determine right versus wrong. An understanding of right of right and wrong can provide us with a sense of guilt and empathy for an action or another person. Right and wrong will be defined through a primarily Judeo-Christian perspective, as it was the principle respondent among our questionnaire. There is a possibility for differences among other religions. For that reason, we expect the neural correlate to be flexible enough to lead to variations. Mirror neurons, or neurons with the ability to excite while watching and executing an action, will be the neural correlate I will explore. Using a combination of Jaynes' theory of consciousness, Hawkins hierarchical temporal memory, and a pattern recognition associative network, I will recreate a mirror neuron network, which could represent a learning pattern which develops to classify actions as “right” or “wrong” (Jaynes, 1990, Hawkins 2005).

**INTRODUCTION**

Many would question why I would research two fields that tend to never get along: religion and science. Both fields overwhelmingly argue they cannot, and do not, overlap. However, I find that science and religion offer a hand to one another in many explanations of natural functions (Miller 1999). For example, science can explain why a star will collapse into black hole, but religion can offer us a scope of the beauty, enormity, and implications of this event.

With this paper, I attempt to explore possible neural correlates of morality. We define morality as the one part, or structure, or process of the brain that could be linked to an innate ability to understand right versus wrong. An understanding of right and wrong can provide us with a sense of guilt and empathy for an action or another person.

**JAYNES AND HAWKINS**

Jaynes' Theory of Consciousness and Metaphors

Jaynes starts by outlining six specific features of consciousness, and then outlines five distinct items that are not specific to consciousness, which include that consciousness is not a copy of experience, consciousness is not necessary for concepts, consciousness is not necessary for learning, consciousness is not necessary for thinking, and consciousness is not necessary for reasoning.

Hawkins and Hierarchical Temporal Memory

Hawkins uses a hierarchy to explain how humans learn and remember events in life. At the lower level of this hierarchy, nodes only recognize small part of a pattern, such as a line segment or a corner. The lower level nodes feed information about their section to an upper level node, which puts together the input and compares it to previously learned patterns. When

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the node recognizes part of a pattern, it is fed upward in the hierarchy until the top node recognizes the entire pattern and action and can therefore be taken. Hawkins assumes neurons perform four basic actions: Discover Causes, Inference, Prediction, and Behavior. We discover causes through learning from our external environment. Once we have discovered causes, we can infer as to what will happen in the world. Prediction is part of our feedback loop. We are often unaware that we are predicting actions. We only become aware of our predictions when they do not match what is happening in the world. These criteria all add up to define a behavior on behalf of the individual.

### **PSYCHOLOGY AND NEUROSCIENCE**

The purpose of this paper is entrenched in the notion that psychology, neuroscience, and religion all affect one another, and their interconnectedness is key to understanding our emotions, actions, behaviors, feelings, and morality. Only in understanding the interconnectedness of psychology, neuroscience, and religion, can we effectively understand human nature. Necessary to this explanation is mirror neurons. Mirror neurons act as a link between individuals, exciting both when a person performs an action, and when a person watches someone else perform that action. This link could serve as an innate connection between humans.

Vedantam (2007) reports it is innate in humans to be good. The primitive part of the brain that is activated by food or sex, the reticular formation, is also active when performing a “good” or “right” action. This could mean morality was an evolutionary “plus”, something that helped survival. This could be because if you covered someone else’s back, they would cover yours, helping protect each other from the elements or greedy neighbors. The article also states that the foundation of morality is empathy.

So we must be conscious of ourselves to have a sense of agency, and we need a sense of agency to have empathy, and we need empathy for morality. Furthermore, we need morality to

establish a sense of guilt, which is often counteracted with organized religion. God can be seen as our redemption for guilt, which is what we feel when our actions do not match our sense of what is morally good and right. The only way our actions would not match our moral judgment is through conflicting brain areas. When we have a hard time judging what is morally correct in a situation, it is because multiple areas are competing with each other.

### **MIRROR NEURONS**

Mirror neurons are neurons found in different parts of the brain that activate both while watching an action being performed, and performing the action. Therefore, when I open a door, the neurons that excite in my brain excite in the person watching the door being opened. Mirror neurons play an important role in my hypothesis because they are a physical connection among all humans and monkeys, and they allow a link between the action of others and my actions. This is a prerequisite for morality.

Mirror neurons were first found in Area F5 of monkeys. The neurons fired when watching activities such as grasping, manipulating, holding and tearing (Fadiga et al.1995). They found that the excitability of the motor system increases when a subject is watching a motor action. Also, due to the set up of the experiment, they could conclude that this effect depended on observation, not the possibility of having to repeat the action. Buccino (2001) discovered that, indeed, regions activate in a somatotopic manner. This means that these mirror neurons are not solely discovered in one area of the brain, and don’t represent just one action, but represents a plethora of observations. These observations could strengthen certain connections, and weaken others, which could explain why in on society, something is considered the norm, but considered immoral in other societies. This also fits into pattern recognition. We become more accustomed to seeing and processing certain patterns, and therefore we are more likely to notice when that pattern is not met.

## **ANALYTICAL DATA**

### Survey

I wanted to test whether different religions responded differently to moral situations, and the extent of intergroup differences. Important to the purpose of this paper is defining the difference between right and wrong. Since the context in which we learn patterns matter, I provided the same action in different contexts to determine if there was a significant difference in response. I hypothesize that there will be significant differences in responses between contexts, yet the responses will be similar between religions per item.

### Computational Model

For the purposes of this paper, we have used an associative network as a basis for our mirror neuron learning process (Bechtel, 2002). The associative network represents different clusters of specific attributes of a subject. For example, we have a cluster that is the stimulus (what is going on in the world), a cluster that represents

the teacher, and a cluster that represents my own personal actions. When a teacher performs an action, and it is in a certain context (world state/stimulus), and my actions represent those of the teacher, the hidden units create a stronger connection between the units, increasing the weights between units. After many repetitions of this “learning”, the weights between attributes and the hidden layer become stronger, creating a prediction of attributes if only one attribute was presented.

## **CONCLUSION**

Mirror neurons, through their use of pattern recognition and repetition, work as a fundamental connection between individuals. This connection and understanding of feeling, and in turn sympathy, is defined as empathy. Empathy can also be defined as the foundation of morality. When an individual is able to understand the emotional and physical consequences of an action on another, their actions are said to be moral in nature.

**YOUTH MARKETING: TWEENS' SUSCEPTABILITY TO VIRAL MARKETING AND  
ADVERTISING – IS IT ETHICAL?**

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April, 2009

**ABSTRACT**

The term “tween” has been coined in recent years to describe the age group that falls between children and teenagers. Currently these tweens have been recognized as a market that is very profitable for marketers to target, but there are still many mysteries and misconceptions about this demographic that make this a difficult task. Additionally, since these consumers are at a vital stage of development in their lives, it is important to understand the effects that these outside influences have on them. In order to better understand the level of influence on tweens, a quasi-experiment was conducted with a survey instrument to determine how susceptible tweens are to outside influence and whether they are more likely to believe an advertisement or their friends about a product. It was found that tweens are low to moderately susceptible to influence and that they are very susceptible to both advertisements and peers. Based upon these findings, it is likely that advertisements are influencing tweens to make poor decisions that are having negative effects on their health and their relationships. It is important that these effects are explored now before future generations of tweens become increasingly tainted by advertising pressures.

**INTRODUCTION**

In the United States, children and young teenagers have been the target of companies' advertising campaigns for many years. Ovaltine, for example, advertised Uncle Wiggily cartoon character mugs to the purchasers of their product in 1924. (Collectibles, 1995) These kinds of promotions are directly aimed at children who do not yet have the intelligence, judgment, and experience that are necessary to make product decisions. In the past, they also did not usually have the financial capability, which meant that these product purchases would first have to be approved by, and often purchased by a parent.

Now, however children and teens have more buying power and are making purchases on their own. This is the result of many factors such as access to money, changing family structure, access to information and specialized stores that cater specifically to their age group. So now we

have young teenagers or tweens as they are often referred to, making purchases or purchasing decisions without the know-how to do so. They buy things that taste good, look good, and that seem to be fun and cool. Unfortunately the things that taste good may not be very nutritious, the things that look good may not be age appropriate, and the things that are fun and cool may be violent or too mature.

This means that these young teens are purchasing things that they probably should not be and it is potentially leading to problems such as obesity, violence, and the phenomenon of “growing up too quickly.” These targeted advertisements are used to make money, not because they have their best interest in mind. Unfortunately these tweens are often unaware that they are being targeted and are highly susceptible to these ads. Should this be allowed?

## **THE TWEEN CONSUMER**

The tween market is especially difficult to define because there is no concrete age group that represents these consumers. The term ‘tween’ is derived from the notion that these kids are in between a child and a teenager. They are mentally, physically, and emotionally experiencing a split between childlike attitudes, bodies, behaviors, and feelings and those of a teenager. Therefore, they have their own set of characteristics that determine their consumption habits and social perceptions. Although there is not a concrete age group to define a tween, this study will use 8-14 year olds because it is the broadest definition.

At the center of a tween’s world is fun. Therefore, the majority of their interests are centered on social interaction with friends. The tween market is completely dependent upon technology. Unlike previous generations, they have been exposed to computers, television, and the latest technological trends, which greatly influence what they buy and how they buy it.

### Advertising Potential

At first glance, it may seem that this group may not be worth the advertising dollars. They do not have jobs, credit cards, cars, or any of the things that typically facilitate purchasing products or services. However, these tweens do make their own purchases and they are very influential over household purchases. Marketing to tweens is also important because they are at the age when brand awareness occurs and in order to make your brand known to them, you must present it to them. In addition, marketing to tweens is relatively easy and can be inexpensive. Based upon the large opportunity that exists in this age group, it is silly not to advertise to them. (Siegel, et al., 2001) Many have divorced parents which has given them more responsibility within the household. They are also given an allowance which has given them purchasing power. Many are now making their own purchases based upon the money they earn and save, which makes them a viable market to pursue.

### Methods of Advertising

Although the tween market may be difficult to understand, they are very easy to reach. They are accessible via nearly any media outlet and they are likely to talk about products or brands that they like. The downside is that this group has been the target of advertising for years and they are tired of the old commercials. They require new and creative marketing techniques that catch their attention and create a desire for the product or service. The most commonly used methods of reaching them are through viral marketing, specialized products/services, network effect and social networking sites, product/brand placement and in-school advertising.

### Quasi-Experiment

In order to more completely understand the relationship between tweens and advertisements, a quasi-experiment was conducted. The intent of the experiment was to determine whether a tween is more influenced by an advertisement, or by their group of friends.

### Hypotheses

- H1: Tweens will score high on the Consumer Susceptibility to Reference Group Influence Scale.
- H2: There will be differences in the degree of influence peers and traditional advertisements have on Tweens, with peers having a greater degree of influence.

Two groups of kids between the ages of eight and fourteen were used. One group had twenty participants while the other had twenty one. Both groups were asked to complete a modified version of the “Susceptibility to Reference Group Influence” scale (SRGI). (See Appendix A) Following administration of the SRGI scale, each of the two groups was given the experimental manipulation. One involved a survey relating to a traditional ad whereas the other involved a peer scenario. Subjects scored low- medium on Susceptibility to Reference Group Influence scale and therefore would not be expected to be influenced by reference groups, but the majority also agreed that they

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would act upon peer influence or advertisement. This contradiction suggests that there was a flaw in the instrument, which may be described by the many limitations that were encountered.

#### Effects of Marketing

Recently there have been many societal problems among tweens that have been attributed to advertising. Some of these problems are related to food and nutrition such as obesity and pediatric eating disorders. There has also been a phenomenon among these tweens that is most often referred to as “growing up too quickly.” Included in this are issues with sex, alcohol and drug use as well as dating and other abuse.

### **CONCLUSION**

After conducting a literary review and a quasi-experiment on tweens 8-14 years old to determine the influence of advertising, several conclusions have been made. First, Hypothesis I has been somewhat confirmed because there was a medium degree of influence noted after the distribution of the Susceptibility to Reference

Group Influence Scale. Results of this scale were expected to have a higher score, but as the limitations suggest, the environment may have created inaccurate results. Additionally, Hypothesis II was disconfirmed because higher levels of peer influence were expected. Again, the administration of the survey instrument suggests that there are flaws with these results. Since tweens cooperated on the surveys, their answers may not reflect a great level of peer influence, but their actions do.

It was anticipated that tweens would be much more susceptible to peer influence but the surveys suggest that tweens are still just as susceptible to advertisements as they are to their peers' influence. This means that marketing and advertising implications are still relevant among this age group and that they are not in fact “immune” to traditional advertisements as was suspected.

Based upon these findings, it appears that advertising to tweens, despite their age, is still very influential and may be contributing to the negative trends that are being observed.

**DOES BRAND IMAGE OR TASTE HAVE MORE INFLUENCE ON CONSUMER  
PREFERENCE FOR ENERGY DRINKS?**

Matthew Moore  
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April, 2009

**ABSTRACT**

In the past, numerous studies have been completed comparing brand image to product performance. In these studies it has been shown that brand image does have an effect on preferences and observers evaluate product performance differently when brand image is part of the equation. However, Generation Y is often cited as being skeptical of advertising, because they have been bombarded with media their entire lives. Therefore, this study examined a product targeted towards Generation Y, energy drinks, and compared stated brand preferences to actual product performance. The sample was 68 college students from Bryant University varying in age from 18 to 23 years old. In the study, participants were asked to complete an online survey about energy drinks and within the survey they were asked to rank five energy drinks (Red Bull, Monster, Full Throttle, Amp, and Rockstar) in order from favorite to least favorite. Several days later, the participants then came to the Applied Psychology Research Center on campus and participated in a blind taste test where they again ranked the energy drinks favorite to least favorite.

Results showed that Generation Y is not immune to advertising. In the survey, Red Bull was clearly the most preferred brand with 47% of respondents selecting it as their favorite. In the blind taste tests, Monster was most preferred with 28% of respondents choosing it as their favorite. When comparing favorites using mean ranks, Red Bull was also most preferred in stated preferences (mean rank = 2.2) and Amp was most preferred in taste tests (mean rank = 2.7). Thus, Generation Y may be more skeptical about advertising, but they are still influenced by marketing efforts as shown by the discrepancy between stated preferences and the taste test preferences. These results provide important information for marketers because they show that advertising dollars aimed at Generation Y are effective.

**INTRODUCTION**

The research question that will be investigated in the following study is whether brand image or taste (product performance) has more influence over brand preference in energy drinks for Generation Y. This will build upon previous knowledge and experiments to see if energy drinks respond to the idea that brand image drives product preference as it has in previous studies regarding products such as orange juice and other carbonated beverages. Specifically, the

following research investigates whether Millennials or Generation Y (The generation born between 1980 and 1994 is commonly referred as Generation Y or Millennials. This study will use the term Generation Y) are either immune or less affected by advertising efforts, or if they fall into the same trends as previous generations have regarding the effects of advertising.

In previous generations it has been shown that advertising has a large effect on brand

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preference. Generation X and Baby Boomers have been targeted by advertising agencies to influence consumption patterns and/or brand preferences. This becomes evident in studies comparing blind versus non-blind taste tests. One great example is an experiment comparing store brand orange juice to a national brand, Minute Maid. Minute Maid scored highest during the non-blind taste test, but during the blind taste test, Minute Maid was the least preferred orange juice. This shows that Minute Maid's use of mass-media and a national marketing campaign creates this brand loyalty and perception of quality (De Wulf, Odekerken-Schroder, Goedertier, & Van Ossel, 2005).

### HYPOTHESIS

H1: Generation Y will exhibit stated brand preferences for specific energy drinks.

H2: Red Bull exhibits a first mover advantage and is the market leader.

H3: Participants' stated brand preferences will not match their taste preferences in the blind taste test.

H4: There will be less difference between stated and taste preferences with increased familiarity with energy drinks.

### PROCEDURE

This study recruited participants from Bryant University. The subject pool was created to include students across majors and classes. While recruiting members, a brief presentation was made in the classroom asking students to participate in a study of energy drinks that would include a survey and a taste test. Then, students were provided with a URL to complete an electronic survey. The survey was to be completed before they participated in the blind taste test. Also, a signup sheet was provided in the classroom, so the participants could choose a time slot to participate in the taste test. 84 students completed the online survey. All blind taste tests were completed in The Applied Psychology Lab at Bryant University.

Participants were asked to sign up for a 15 minute time slot and there was a maximum of 4 students at a time. 68 students who had taken the survey completed the taste test.

For each subject, a small amount of each of the five energy drinks was provided in opaque plastic cups. The samples were labeled A through E. In order to eliminate bias in the form of the order in which the samples were presented, designation of A – E changed each day. Each participant already had their voting sheet and a writing utensil. They were instructed to drink each sample and write down any necessary notes. Once the participants were done with all of the samples they were asked to consult their notes and rank the samples first favorite, second favorite, third favorite, fourth favorite, and least favorite.

### RESULTS

*H1: Generation Y will exhibit stated brand preferences for specific energy drinks.*

Hypothesis one stated that Generation Y will exhibit stated brand preferences for specific energy drinks. In order to test this, we examined brand rankings in the survey. The ranking question asked participants to rank five different energy drinks (Amp, Monster, Rockstar, Red Bull, and Full Throttle) one through five, with one being their favorite. Red Bull was the clear favorite in this question with 47.1% of participants ranking it number one. Also important, is the fact that strong preferences were shown in rankings one through five, because 41.2% of people ranked Full Throttle as their least favorite. We also computed mean ranks with lower numbers indicating the more favored choice and higher numbers the less favored. When looking at mean ranks, Red Bull is again a clear favorite with a mean rank of 2.2. Monster came in second, with a mean rank of 2.5, and Full Throttle was again last with a mean rank of 4.1. Therefore, this data supports H1 and that Generation Y creates stated brand preferences for specific energy drinks.

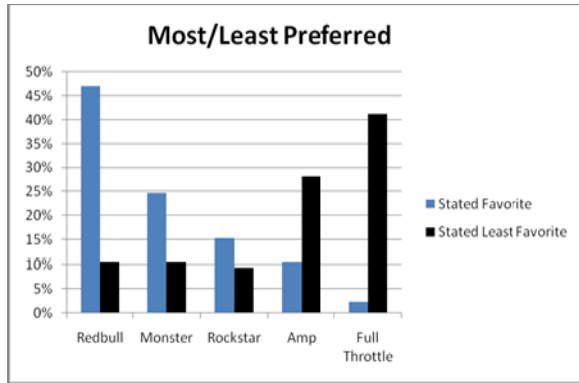


Figure 1: Preference Levels

*H2: Red Bull exhibits a first mover advantage and is the market leader.*

Hypothesis two stated that for Generation Y, like other generations, the first mover is the market leader. Red Bull was introduced in Austria in 1987 after three years of development. Ten years later it launched Red Bull in the United States in San Francisco. From that point forward, Red Bull has spread throughout the country and entrenched their slogan “Red Bull gives you wiiiiings” into the majority of Generation Y’s minds (Noonan, 2001). According to a Bevnet energy drink industry analysis, Red Bull has 42.6% market share based on sales for the year ending December 31, 2006 (Bevnet, 2007). This matches the data from the survey where 47.1% listed Red Bull as their favorite. Thus, hypothesis two has been confirmed.

*H3: Participants stated brand preferences will not match their taste preferences in the blind taste test.*

Hypothesis three states that Generation Y brand preferences in a blind taste test will not match their stated brand preferences. This was tested using a Wilcoxon Signed Rank Test which compares each participant’s stated preference rank with his/her taste preference rank for each of the five brands. Rankings were significantly different at  $p=.001$  for all brands except Monster. Results for Monster approached significance ( $p=.108$ ).

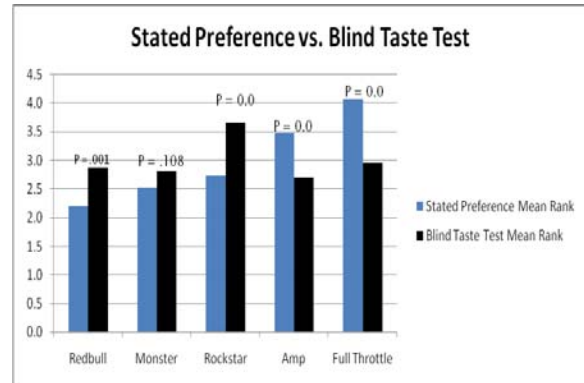


Figure 2: Stated Brand Preference vs. Blind Taste Test

*H4: There will be less difference between stated and taste preferences with increased familiarity with energy drinks.*

Hypothesis four stated that energy drink preferences will be stronger for those who regularly consume energy drinks. The goal for this hypothesis was to show that there was a closer relationship between stated brand preferences and the blind taste test for those who drink energy drinks more frequently. In order to do this, the survey results were split between those who were non-users (does not drink energy drinks), light users (0-1 energy drinks per week), and heavy users (over 2 energy drinks per week), and the differences between stated preferences and the blind taste test rankings were compared between the two groups. A Wilcoxon Signed Rank Test was used to show that participants who were considered heavy users had a statistically significant smaller difference between stated and blind preferences as compared to light users. Surprisingly, non-users also had a smaller difference between rankings of stated preferences and taste preferences. However, they had a small sample size of six, so this result may not be reliable.

## SUMMARY AND IMPLICATIONS

All four hypotheses were supported, and these results have significant implications for marketers. Generation Y has been classically described as immune to advertising, but this study debunks this notion. Although Generation

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Y may be immune to traditional forms of advertising, it is clear that alternative methods have proven extremely successful in forming brand preferences. The best example of this is Red Bull. They were clearly the stated brand preference favorite in this study and they use a wide promotional mix. Although Red Bull uses commercials and print advertising, it is typically a cartoon promoting their slogan “Red Bull gives you wiiiings” or some extreme sport with a large shock value. Beyond traditional advertising, Red Bull also sponsors numerous extreme sport athletes or teams such as: pro motocross rider Travis Pastrana, NASCAR driver Brian Vickers, and MLS team Red Bull New York. Red Bull also sponsors alternative events including the Red Bull Air Race World Championships and the Red Bull Flugtag competition. This unique and aggressive advertising mix is able to penetrate Generation Y’s advertising filters.

While traditional advertising techniques may not be nearly as effective with Generation Y as they were with previous generations (Sutherland & Thompson, 2001), this study provides evidence that Generation Y is not immune to such methods. However, advertising will need to transform into this alternative mode of thought

of “guerilla marketing.” Red Bull, for example, has a tremendous number of representatives that hit the streets to give out free samples. “Guerilla marketing,” or alternative advertising, is going to be the answer to Generation Y. It has been proven in the study that this target can be reached and that their brand preferences influence their product performance evaluations

Beyond marketing and advertising, this study has a lot to say about the smaller players in the market. Energy drinks such as Amp have a taste advantage that they need to vocalize to their target market. If smaller competitors are able to highlight their product attributes, such as taste, that are superior to their competitors, they may be able to take away some market share. What is important is to take into consideration the advertising methods used by the market leader and combine that with the unique message they have to offer. Today, more than ever, Integrated Marketing Communications are vital to brand management. Millennials are the future consumers of the world, so finding ways to reach them is going to be essential to companies’ success.

## **THE IMPACT OF HIGH RISK PROPENSITY ON LIFESTYLE AND CONSUMPTION BEHAVIORS**

Gergely Nemeth  
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April 2009

### **ABSTRACT**

This research investigates the effects of high-risk propensity (as measured by the sensation seeking scale) on lifestyle variables such as substance use and abuse, number of sexual partners and driving behavior, and explores the consumption patterns exhibited by different risk propensity groups. An online survey with 340 participants was conducted; 64 low, 204 medium and 62 high sensation seekers were identified. High sensation seekers exhibited riskier behaviors across the board that led us to conclude that it is in fact a constant personality variable. We have not found a significant difference between age and sports activities one participates in, which can be a good foundation for future research and proving the notion that “risk taking does not disappear, only changes form.” Our findings suggest that marketers should rely on psychographics rather than demographics when accessing and communicating to this risk-taker target segment; they can also leverage this research in new product development and in identifying cross-selling opportunities.

### **INTRODUCTION**

Jumping out of a plane from 13,000 feet is a regular weekend activity for some people. Are they ordinary? Doubtful, they probably enjoy taking risks. High risk propensity seems to be fueled by the desire to experience life to the fullest. Does this high-risk propensity appear in other everyday activities like shopping, driving a car, choosing a partner, gambling, investing and others? This research study is seeking the answer to these questions.

We face decisions on a regular basis as consumers and as social beings, and the way these decisions are made tends to reflect our personalities. Risk is an everyday part of our lives. Some people enjoy risks more than others, some even to the extent that they pick a hobby such as B.A.S.E. jumping or skydiving. They thrive when the adrenalin is rushing through their veins and go out of their way to reach high levels of stimulation. Our research aims to

explore these individuals with high need for sensation seeking (Zuckerman, Kolin, Price, & Zoob, 1964) as it strongly relates to the level of risk propensity.

#### Hypotheses

- H<sub>1</sub>: Risk-takers will have more sex partners, will be more likely to engage in substance use and abuse and exhibit riskier driving behavior.
- H<sub>2</sub>: Consumers with high risk-propensity will be more likely to engage in exploratory consumption patterns for: impulse purchases, automobiles, investments, gambling, sports.

### **RESULTS**

#### Lifestyle Domains

To sum up, high sensation seekers had more sexual partners, were more likely to engage in substance use and abuse (as confirmed by the

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sensation seeking scale) and had more speeding tickets and accidents. The results were conclusive and statistically significant.

Shopping Behavior

<b>Medium Sensation Seekers</b>	
<b>Low Sensation Seekers</b>	<ul style="list-style-type: none"> <li>Buying things on a whim (p=.005)</li> <li>Making shopping lists (p=.001)</li> <li>Impulse purchases (p=.034)</li> </ul>
<b>Medium Sensation Seekers</b>	

<b>High Sensation Seekers</b>	
<b>Low Sensation Seekers</b>	<ul style="list-style-type: none"> <li>Buying things on a whim (p=.001)</li> <li>Making shopping lists (p=.0005)</li> <li>Impulse purchases (p=.002)</li> <li>Shopping is a chore (p=.013)</li> </ul>
<b>Medium Sensation Seekers</b>	<ul style="list-style-type: none"> <li>Making shopping lists (p=.003)</li> </ul>

As we can see the most differences are between low and high sensation seekers. Clear trends have emerged: high sensation seekers are the most likely to buy things on a whim (impulse purchases) and the least likely to make shopping lists. They are also most likely to think that shopping is a chore.

Automobiles

High sensation seekers are the most likely to own a more exciting automobile, followed by medium and low sensation seekers.

Investment Behavior

We did not find statistically significant differences between the kinds of investment a sensation seeker group owns, but there was conclusive evidence what kind of investments they would put their money into if they inherited a larger sum of money (\$100,000). High sensation seekers are more likely to use higher

risk investment vehicles in hopes of higher return.

Gambling

High sensation seekers engage in more gambling activities and spend more money on them.

Sports Activities

The groups had statistically significant differences and a clear trend. High sensation seekers engage in riskier and more sports activities and spend more money on them. We did not find conclusive evidence between age and sports-risk taken.

**CONCLUSION**

We have observed high risk-propensity in lifestyle choices and in consumption behavior. Our high sensation group was indeed different in the aspects that we have discussed. They seem to like driving a little faster – and because of that get more speeding tickets and get into accidents – and also have more sexual partners. Society might not see this as a desirable thing, but being somewhat of a “social-outcast” is part of the high sensation seeking, lifestyle. (Celsi, et al., 1993) Collecting data on these variables can help marketers identify their selected target market, which is relevant in case of an extreme sports company or another product manufacturer or service provider that intends to serve these high sensation seekers. After identifying who these consumers are, the next step is to learn about their different consumption patterns, in order to appeal to them and encourage the purchase of the product/service.

<b>Automobiles Owned</b>	<b>Low SS</b>	<b>Medium SS</b>	<b>High SS</b>
Exciting	4%	14%	18%
In-Between	34%	38%	39%
Boring	62%	48%	43%

The biggest implications for marketers of this study lay with the consumption patterns discovered. As expected, high sensations-seekers exhibit different patterns when it comes to purchasing. Our ANOVA analyses confirmed most of the proposed hypotheses. The biggest difference was between the low and high

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sensation seeking group. We can conclude that our risk taker group will be more likely to engage in impulse purchasing (as this was confirmed by both the “buying things on a whim” and “impulse purchases” variable). Marketers can leverage this knowledge if they are specifically interested in a high risk-propensity target group. The product can be chewing gum or a more sophisticated item; the impulse purchase will be more likely. Building on this, high sensation seekers also are more likely to look at “shopping as a chore.” The survey results indicated that they are less likely to make shopping lists. As discussed earlier, high risk-propensity individuals have a higher optimal level of stimulation, and this can be observed by their exploratory consumption behavior: not making shopping lists, and making impulse purchases. (Steenkamp & Baumgartner, 1992) For high sensation seekers, everything is about the action; appearing as risk-takers not just in their sports activities, but in their consumption behavior draws us closer to the conclusion that sensation-seeking is a personality variable.

An interesting finding that marketers will be able to leverage comes from the relationship between age and sports risk. We have not found

conclusive evidence that age would affect the kind of sports risk a person takes, which can serve as the foundation of future research. This would mean that our thought on “sensation-seeking changing form instead of disappearing over the ages” is true. Because of the obvious physical limits, the kind of sports risk taken might change, but will stay risky nonetheless. Future research is suggested on the topic, but the initial results are promising.

In conclusion, marketers should focus on psychographic instead of demographic segmentation when targeting consumers with high risk propensity. Risk taker consumers are a viable market. After our research, we can conclude that there are opportunities for cross-selling, after successful access to this market segment. Some brands that could take advantage of that are: Red Bull, Underarmor, Burton, Quicksilver, etc. An effective communication strategy is crucial when accessing the consumers. Red Bull has been doing a very nice job with their unconventional marketing strategies, for example sponsoring extreme sports athletes, and organizing action sports events (i.e.: Red Bull Air Day). Also the mentioned companies can develop products specifically geared towards sensation seekers.

**THE IMPACT OF THE SUMMER OLYMPICS ON ITS HOST CITY: THE COSTS  
OUTWEIGH THE POTENTIAL BENEFITS**

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April, 2009

**ABSTRACT**

In the eyes of a host city, the reason to host the Summer Olympic Games has evolved from shining glory on athletic feats to receiving the perceived benefits from the opportunity. In the current times, there are a record number of Olympic events generating a demand for the construction of a larger amount of Games facilities than ever before. However, nations still vie for the winning bid to host the Olympics in one of their cities. This paper seeks to show that the costs of hosting the Games outweigh its tangible benefits. In detail, it will look at the financial, political, and social costs and benefits of hosting the Olympics and examine how they impact the host city. Then the perceived benefits of hosting the London Olympics will be examined. Specifically, this paper will show that the costs of hosting the London Olympics outweigh its tangible benefits, especially in times where the world is in a global recession. Overall, the purpose of this project is to present the drawbacks of hosting the Olympics. It concludes with suggestions on how to make hosting the Olympics a more cost-effective endeavor.

**INTRODUCTION**

It is commonly believed that there are a great deal of benefits gained from hosting the Olympics such as: alterations in the design of the city, changes to the physical and current environment, the representation of a city and country and its culture, improvements in air, road and rail transport, changes in governance and public decision-making, innovations in politics and political relationships, potential increased tourism and business activity, the creation of new sporting venues which will have potential for post-Games community use, the potential for greater community consultation and involvement, and the involvement of the community as volunteers and torch-bearers (Cashman, 2002). However, these benefits are not as great as they are perceived to be, and they come with a great deal of drawbacks. The reason that people often become excited about these Olympics ('universal enthusiasm') and think these benefits are a result of them is because the

community organizers use terms such as "urban renewal, improved transport or better sporting facilities" when pitching the Olympics. The people who bear costs become fixated on these terms and fail to critically evaluate the truth (Cashman, 2002). Many times, these benefits are not as great as they are reported to be.

**BACKGROUND**

The parties involved in the Olympics include the athletes, the International Olympic Committee, the International Federations, the National Olympic Committees, the local residents, the television networks, the local/national governments, and local businesses. These parties all have a different interest in the Games and close attention should be paid to who benefits and bears the brunt of the costs involved with hosting.

To attain the bid to host the Games, a country must go through two phases which involves

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answering a questionnaire and an onsite inspection based on the following criteria: government support, general infrastructure, available venues, transportation availability, and hospitality opportunities. The host city is selected seven years prior to the Games by majority rule. London will host the 2012 Games.

Overall, it is rather clear that the reasons for which host cities bid to host the Games have shifted from promoting athleticism to self-promotion. Compounded with the doping and corruption, there have been many questions about whether the Games are still worth hosting, especially when the costs are now approaching \$50 billion per Summer Game. One of the problems lies in the fact that there are four main misconceptions in the economic impact studies which determine the benefits of hosting. These misconceptions are: treating costs as benefits, using gross spending instead of net changes, ignoring opportunity costs, and using inflated multipliers.

### IMPACT

#### Financial Impact

The cost of bidding to host the Games is approaching \$50 million. The perceived benefit of increased tourism is speculative at best. The pre-Olympic phase of the Games involves many of the infrastructure expenditures, which often times are incorrectly justified by an increase in GDP. Some of these projects are not even included in the cost of the Games, but should be since their reason for construction is to support the Games. Other drawbacks include the risk of disaster, delays in other projects, and most importantly the opportunity costs. The operational stage of the Games often is a wash or produces a small profit, so this stage cannot justify their hosting.

The post-Olympic stage of the Olympics fails to produce much of the perceived “legacy benefits.” No ex-post study found “improvements in economic growth or living standards,” only onetime changes (Owen, 2005). Often, the full increase in GDP is used to offset the cost of the Games, but only the increase in taxes on the increase in GDP can be used to

offset the cost of the Games, which it fails to do. As far as the increase in visitor spending, it fails to outweigh any major share of the cost of the Games. Additionally, the increase in local employment is very small. Lastly, the costs infrastructure improvements fails to outweigh the benefits they bring from their post-Games use, especially with their high maintenance costs.

#### Political Impact

The perceived political benefits of increased world-wide exposure and attention to the local and national politicians, drawn from the increase in national pride, come with many drawbacks. These drawbacks include showcasing the weaknesses of the host country, which occurred during the 1980 Olympic boycott, and, during the 2008 Beijing Games where China’s lacking environmental policy and its human rights abuses in Tibet were exposed. Additionally, the politicians that might utilize funding toward local programs are cast out of the spotlight due to the great amount of attention given to the Olympic organizing committee and its representatives.

#### Social Impact

The Olympics are said to bring about an increased display of local culture, convenience to the Games, increased attention, the clean-up of the local environment, and an increased interest of sports among local residents. However, these perceived benefits come with even greater drawbacks. One drawback was the poor display of local culture, which happened when Beijing showed its scary communist ways to the rest of the world. Other drawbacks include the forced removal of local residents from their homes, closure of local tourist attractions, heightened security risk, overcrowding, driving restrictions, and traffic congestion. Although, the construction of the Olympic venues may be “environmentally friendly,” the simple fact that construction is undertaken brings about harm to the environment through the creation of carbon monoxide and waste. Lastly, the perception that local residents’ interest in sports is increased due

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to the hosting of the Games is unfounded in almost all academic studies.

#### 2012 Olympic Impact on London

The budgeted costs for the London Games are approximately £9.375 billion. Applying the drawbacks of hosting the Olympics to the 2012 London Games will show that the Games are no longer worth hosting. The expected benefits of the London Games (increased interest in sports, the regeneration of its host city, the creation of 50,000 new jobs, the transformation of the country to “environmentally friendly” and the showcasing of London as a “global city”), all have drawbacks which outweigh their perceived benefits. These benefits are no longer consistent with the original purpose of hosting the Games. Additionally, many of these benefits have previously been expected, but have failed to be achieved. Why would London fare better? Even Londoners doubt such potential benefits will be achieved. Overall, it is likely that the London Olympics will come with many hidden costs and will fail to achieve their expected benefits, especially due to the current global economic downturn.

## **CONCLUSION**

After this intense literary review, the overall conclusion is that there are many setbacks to hosting the Olympics and it seems clear that the actual costs of hosting the Olympics far outweigh its perceived tangible benefits. Although, it is difficult to trace whether the Olympics have actually been intangibly beneficial, the opportunity costs of hosting the Olympics often fail to be accounted for. Furthermore, the other opportunities (ex. social programs, healthcare, etc.) would potentially have offered the same or better intangible benefits as well as tangible ones (financial, social, and/or political).

With an understanding of this conclusion, one would question why the cities continue to host the Olympics. Arriving at an answer to the question is rather simple; the benefiteres of the Olympics are doing an excellent job covering up the fallacies in the perceived benefits of hosting the Olympics. The parties who bid to host the Olympics, who are generally skilled politicians and businessmen, are receiving the majority of the benefits, but not absorbing the brunt of the costs. These parties “sugar coat” the costs to the taxpaying community, who in turn allow the hosting of the Olympics to continue. Until the taxpayers and local citizens rise up and take action, cities will continue to host the Games.

## **WHAT DETERMINES LEADERSHIP STYLE?**

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April, 2009

### **ABSTRACT**

This project examines selected traits valued in friends by educated individuals, and it seeks to determine if these valued traits vary by gender, race, and generational cohort. A literature review reveals that variations in leadership attributes are evident among these traits. In order to test the broad applicability of this literature, data were taken from the General Social Survey (GSS). The key analyses center on correlations between gender, race, and cohort, on the one hand, and the selected valued traits identified with effective leadership on the other. In some cases, the literature yields weak hypotheses, and in other cases the research is solely exploratory.

According to leadership expert Peter Northouse, the personal traits of intelligence and sociability are closely tied to effective leadership. This project examines the influence of gender, race, and cohort on how much these traits are valued.

The findings of this project have potential usefulness for organizations to better understand how these three leadership traits are associated with gender, race, and age—perhaps ultimately influencing how organizations train and view their managers.

### **INTRODUCTION**

The major objective of this project is to uncover how social background might explain differences in what is valued in leadership styles. In today's corporate America, there is a growing need for employers to understand and embrace diversity. This project seeks a better understanding of why differences exist in the level of importance placed on various leadership traits among individuals of different gender, race, and cohort. It is hoped that the conclusions gained from this research will provide organizations with a better understanding of individual differences rooted in social background. It is also hoped that my research will contribute to a broader knowledge of why diversity of leadership style exists, and what benefits and/or obstacles it has to offer.

### **HYPOTHESES, EXPLORATIONS, & INTERPRETATIONS**

#### Gender

My prediction is that females will tend to place the highest emphasis on sociability as a leadership trait, while males will tend to place the highest emphasis on intelligence. Numerous studies have been conducted to explore the differences in personality, values, and behavior of men and women. The Morrison et al. (2008) study found that female leaders are more adept at mentoring, fostering trust, building positive working relationships, and motivating others—all characteristics of sociability.

Furthermore, the Grisoni and Beeby (2008) study found that male leaders are more adept at decision-making, problem-solving, negotiating, and communicating verbally—all of which are associated with intelligence. Research reveals

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that men and women indeed have different leadership traits. Moreover, the overall pattern of findings in these studies support my hypothesis that women should be more inclined to emphasize sociability, while men should be more inclined to emphasize intelligence.

#### Race

Because there is little research on the relationship between race and ethnicity with leadership style, this phase of my project is exploratory. It seems obvious that racial differences would influence leadership styles, norms, role expectations, and traditions governing the relationship among various members of society.

#### Generational Cohort

My prediction is that the Generation X cohort will tend to place the highest importance on Sociability. Author Anne Houlihan (2009) attests that Gen Xers, those born between 1965 and 1980, place much more importance sociability and work/life balance than prior age cohorts. The research is unclear as to how we would predict the importance given to intelligence.

### **METHODOLOGY**

This project analyzes data collected by the General Social Survey, a well-known sample of the U.S. population that “contains a standard 'core' of demographic, behavioral, and attitudinal questions, plus topics of special interest” (General Social Survey, 2009). The GSS provides no direct measurements of personality traits related to leadership style. The 1993 GSS, however, does contain a question that provides a good proxy and taps into the personal traits valued by individuals. More specifically, item #476 states: “I’m going to read seven qualities one might look for in a personal friend. All of the qualities may be desirable ones for a personal friend, but I’m interested in those that are most important to you.” The seven qualities that respondents could select from include a) creative, b) cultured, c) dynamic, d) fun-loving, e) honest, f) intelligent, and g) responsible.

Using this sample, I analyzed the influence of gender, race, and cohort on the likelihood of an individual to value two of the five leadership traits identified by Peter Northouse—intelligence and sociability. In order to do so, I will assume that those who responded that d) fun-loving was an important characteristic value sociability; and those who responded that f) intelligent was an important characteristic value intelligence.

The data are for individuals participating in the 1993 GSS and include only those individuals that have completed at least one year of college—with the assumption being that these individuals are more likely to work in a professional atmosphere and have had more leadership experiences.

The GSS data were analyzed using the Statistical Package for the Social Science. The key data analysis procedure used was cross tabulation; to determine statistical significance the Chi-Square statistic was calculated for each crosstab.

### **DISCUSSION OF FINDINGS**

As predicted, females were more likely to feel that sociability is very important as a personal trait. My prediction regarding the relationship between gender and intelligence was non-confirmatory. I had hypothesized that males would place more emphasis on intelligence as a personal trait, and the findings were opposite. Females were slightly more likely to value intelligence than men. We further investigated the relationship between gender and sociability and gender and intelligence by controlling for race. When race was added into the mix the positive relationship between gender (female) and sociability disappeared for Nonwhites and strengthened slightly for Whites. For Nonwhites, sociability was equally important for both males and females. This leads to conclude that Nonwhite males value sociability more than white males, and would therefore emphasize the importance of sociability skills among leaders more than White males. The positive relationship between gender (female) and intelligence strengthened for Nonwhites and

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disappeared for whites. For whites, intelligence was equally important for both males and females. For Nonwhites, the relationship strengthened considerably.

We explored the relationships between race and sociability and race and intelligence to determine if any correlations existed. We found that Nonwhites are slightly more likely to value sociability and significantly more likely to value intelligence compared to whites.

As predicted, members of the Generation X cohort were most likely to believe Sociability is a “very important” quality. We also found that traditionalists were most likely to believe intelligence is a “very important” quality. Interestingly, the emphasis on intelligence has declined in recent years. When we controlled for gender, we found that the original relationship between cohort and sociability maintained itself for both females and males. The relationship between cohort and intelligence yielded surprising results. It strengthened significantly for females but switched direction for males. This implies that while females have placed less emphasis on intelligence over time, males have placed more emphasis on intelligence over time.

## **CONCLUSION**

Social background matters. In today’s competitive business environment, leadership has become an increasingly important quality. Companies are constantly in search of extraordinary leaders to strengthen their competitive position and get results. Human Resource specialists are seeking ways to train their employees to become more effective leaders. Part of being an effective leader is understanding followers. Many leadership theories, including situational leadership and transformational leadership, emphasize the importance of determining follower needs first. It is my hope that this study will encourage leaders to try to better understand those whom they lead by taking into consideration their social backgrounds. In a nutshell, grasping the similarities among different social groups in the importance placed on the personality traits of leaders will allow leaders to better match their leadership style to the preferences of those whom they lead.

**A COST-BENEFIT ANALYSIS OF THE TRANSITION FROM GAAP TO IFRS IN THE UNITED STATES**

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April, 2009

**ABSTRACT**

This research intends to determine the costs and benefits of the transition from Generally Accepted Accounting Principles (GAAP) to International Financial Reporting Standards (IFRS) in the United States. This study targets the costs and benefits of the transition in three areas of accounting: Academia, Corporate and Public. The transition could potentially have large implications on investment in the US and around the world, and therefore, this study aims to see if it is beneficial for the US to adopt IFRS.

To ascertain the costs and benefits of the transition, this research used an online survey to obtain knowledge and opinions of professionals from the three areas of accounting. Based on the results, this research shows that the benefits of the conversion far outweigh the costs and therefore the US should adopt IFRS. Transitioning to IFRS will allow the US to regain strength in the global investment market as financial statements will have greater comparability and hopefully this will benefit the economy as a whole. However, with the US being the last major economy to make the conversion, the longer the Securities and Exchange Commission (SEC) takes to agree to go forward with IFRS, the longer it will take for investment in the US to increase and for US investors to prosper in the global market.

**INTRODUCTION**

International Financial Reporting Standards (IFRS) are the most widely used set of accounting principles across the world. Over 12,000 companies in 113 countries have adopted IFRS in some degree, and more countries are continuing to adopt the standards each year with the hope of increased comparability of financial statements (AICPA, 2008a). This will allow investors from all over the world to invest in the best stocks, bonds, and other financial instruments anywhere across the globe and not just in their own country or region. With the United States currently debating the transition from US GAAP (Generally Accepted Accounting Principles) to IFRS, this research will attempt to show the costs and benefits of the potential conversion. First, this research will

examine some of the main differences between GAAP and IFRS and how this will affect reporting in the US and comparability of financial statements across the globe. Next, with the recent changes in office in the US, this study will delve into some of the updates and changes on the topic of IFRS over the past six to eight months. Finally, we will turn to the main piece of this investigation and look at a survey that will explore the costs and benefits of the transition from GAAP to IFRS in the United States.

This study will focus on three main areas of accounting; education, public accounting, and private accounting, and attempt to show the costs and benefits of the transition to IFRS in these sectors. To determine the costs and benefits of the transition, this research will be

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supported by a survey which will provide responses from insightful professionals in these three areas of accounting. In the area of education, this survey is focused on retrieving insight about the transition from US GAAP to IFRS in terms of curriculum, hiring of staff/faculty, and textbooks. It is important that educational institutions alter their teachings to account for the foreseen transition and to prepare students as they enter the workforce whether it is in academia, public accounting, or corporate accounting. In the field of public accounting, auditors must learn IFRS so they are able to apply the standards during assurance projects. Updates in training and the hiring of new staff will be essential in public accounting, but this survey will mainly look at how the conversion in public accounting will affect corporate accounting in terms of rates charged, billable hours, tax planning, and time to complete the conversion. In terms of private accounting, this survey will focus on all of the administrative costs associated with the transition. Audit costs, non-audit costs, staffing, technology, time, and revenue effects will all be taken into account in this survey. The transition will be most valuable in the area of corporate accounting as it will allow companies to display themselves to potential investors from all around the world.

Respondents to this survey also provided benefits of the transition at the end of each of their respective sections of the survey to provide insight on some of the advantages of the transition. Lastly, this survey provides some general knowledge and opinions from the professionals who took this survey. Each respondent provided their thoughts on the transition, the possible affect on competition in the accounting market, and the potential effect on the US economy.

### **CONCLUSION**

This research is a brief overview of the costs and benefits of the transition from US GAAP to IFRS. Not a lot of research has been done on this topic and there is a great deal of information still to be obtained. This survey only touches the surface on this topic and with more time and

resources; substantial and pertinent information could be gathered on this subject. Based on the results from the survey, the benefits are greater than the costs and therefore the US should be on route to adopt IFRS in the near future. With the transition potentially coming soon, more research on this subject could be helpful and beneficial to companies who will undergo the transition from US GAAP to IFRS. However, there is still an abundance of uncertainty about the transition due to all of the changes in authority over the past few months. Companies at this time are taking educated guesses on the transition issues and processes, when they should be doing extensive investigations into the potential costs and benefits so that they will be prepared when the time comes to make this transition.

Based on the information obtained from this study, companies should be starting to prepare for and understand the transition. Most companies have already begun to do this but there are many who have not. IFRS will bring many benefits to companies and investors but will require a lot of time, effort, and money to implement. Focusing on determining reasonable estimated costs for things such as hardware changes, software alterations, re-training of employees, and paperwork will help provide a better understanding of the expenses companies will face throughout the transition phase. These costs were looked at during this study but there was an extreme uncertainty about how these costs would be affected in these areas, which shows companies should devote more time to researching costs. Weighing all of the costs and benefits will be advantageous to companies in their initial preparation for the transition so companies will be geared up to go once IFRS are embraced by the SEC. This process will be vital for a quick and efficient transition and therefore, it is necessary that companies begin now, their preparation for the transition to IFRS.

When the SEC decides to go forward with the transition, the US will be the last major economy to develop IFRS. Therefore, with over 110 countries already using IFRS, it is necessary that the US make the transition in a timely manner.

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Once the US makes the conversion, financial statements will become more comparable and provide investors with the ability to invest their money anywhere in the world. This will in turn bring more foreign investment to the US and hopefully help the economy in the foreseeable future.

One issue with the transition is many professionals are worried about how IFRS will be taught to students and how professionals will be educated on the standards. Based on the survey and recent developments about IFRS, educational institutions and companies are beginning to provide knowledge about IFRS to students and professionals. When the SEC does finally elect to go ahead with the conversion, especially if they use the current timeline, there will be time for individuals to become educated on the new standards. With a buffer zone of a couple of years before the transition becomes official, this will give professionals time to become familiar with and practice the new standards along with giving colleges and universities the time to develop a new and integrated curriculum. As long as schools continue to incorporate IFRS into their current curriculum and companies keep on providing tools and programs that allow professionals to learn IFRS until the transition becomes official, there should be no future problems in the development of knowledge and understanding of IFRS.

As of now, we see there is a current convergence between US GAAP and IFRS. This study believes that this convergence needs to continue to an extent to make the transition successful. With recent troubles involving scandals and fraudulent reporting, the SEC needs to be cautious when adopting IFRS as there is large amounts of room for interpretation of the rules. To protect investors, a combination of US GAAP with IFRS will help to keep some of the current regulations in place to prevent future reporting problems. It is still necessary to adopt the core of IFRS to allow comparability of financial statements, however it is also essential to have good oversight and for companies to adhere to regulations. Therefore, a convergence

of US GAAP and IFRS, which is currently taking place, should continue to be implemented because it is in the best interest of all parties affected by the transition.

Lastly, the SEC must make a decision soon. Time is being wasted focusing on every detail of the conversion when it is essential that the US make the move and make it quickly. As of now, based on the current roadmap, the US will finish the transition in 2016. This is 5 years after the last of the other major economies will have made the transition to IFRS which will affect the US's ability to be a key player in the global market. Investors now have over 12,000 companies in over 110 countries to invest in and are no longer focused on just the major markets (like the US). With the US still using GAAP, it is more work for investors to try and compare financial statements when they already have an abundance of companies to invest in that are using IFRS. Therefore, the SEC should and must make a decision in the near future to help investors and help the US economy be a player in the global market. The decision can be made this year or the next (not 2011), and then the timeline for the transition can be moved ahead a year or two which would be beneficial to companies, investors, and the economy. A staged transition will still be in the best interest of companies to help with the cost burden, but companies have enough resources to be able to make this transition by 2014 or 2015, if they start now, and this will help the US return as a significant part of global investing and the global market.

In summary, the benefits of the transition to IFRS outweigh the costs in all three areas of accounting (academia, corporate, and public). Companies will be able to appeal to global investors as financial statements will be comparable all around the world. With increased investing in the US, this can only help and strengthen the US economy. In academia, educational institutions and companies have already begun to provide information about and teach IFRS to accounting students and professionals. In public accounting, firms have already begun preparing for the transition and

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providing consulting to companies who will be impacted when the transition occurs. Corporations have begun to prepare for the transition but are still learning about the effects, impacts, and costs the conversion will have. The transition has already begun in the minds and practices of accounting professionals and now it is time for the SEC to follow suit and make a decision on when the transition will

occur. Based on what other countries have done in terms of converting to IFRS, the sooner the US begins and completes the transition, the better off the economy will be due to the consistency around the world. This conversion could potentially have a large impact on the US economy as it will affect the decisions of investors all around the world and promote investing in the US.

**MACROECONOMIC DETERMINANCE OF WORKER REMITTANCES FOR LATIN  
AMERICAN AND CARRIBEAN COUNTRIES**

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April, 2009

**ABSTRACT**

A regression analysis was performed to identify which macroeconomic factors influence the magnitude to worker remittances to over thirty Latin American and Caribbean countries. Age dependency ratio, land area, net migration, labor force, population and unemployment were found to be significant predictors of remittances. A time series exponential model was developed to forecast the level of remittances for the next ten years. The results suggest that remittances to Latin American and Caribbean countries will reach USD 190,810 million in 2018.

Based on the above findings, this paper will help scholars understand better what drives worker remittances in Latin American and Caribbean countries and provide an insight into unofficial capital flows from developed to developing countries in the global economy, now and in the next ten years. This forecast may be of further benefit to receiving countries in that it may help to develop economic policies that may promote both development and economic sovereignty. A comparison of money received as remittances and money received from foreign direct investment is also provided. The growing amount of remittances flowing from developed to developing countries needs to be properly accounted and budgeted for, to avoid economic loss in the future. The better remittances are understood and the greater the accuracy of official remittance figures, the better policies will be at regulating the situation.

**INTRODUCTION**

Worker remittances are unique in that they consist of individual independent transfers of an average of about USD100 to USD300 per month by migrants to their home countries. Economic migrants worldwide were estimated at 175 million in 2006 and, if put in one country alone, would constitute the sixth highest populous country in the world (Gables, 2006). The region, constituted by Latin American and Caribbean countries, is the highest remittance-receiving region in the world. A number of studies involving worker remittances have been conducted, revealing the effects of worker remittances on both host and home countries. Some of their results will be discussed in the next two sections.

This paper focuses on the following:

- The importance of worker remittances will be determined in terms of investment capital. Many developing countries rely on remittances as a safe and consistent source of income. This objective will later help with the comparison of the impact that worker remittances have, in terms of international capital inflows.
- It will be determined whether worker remittances vary positively, negatively or remain neutral with given changes in selected macroeconomic variables.

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- The extent of variation in the level of worker remittances will be tested against variations in a number of macroeconomic variables. The corresponding changes in the magnitude of remittances with given changes in some macroeconomic variables will be investigated further. Different combinations of variables will be analyzed in order to determine which combination most accurately predicts worker remittances.
- A projection of remittance capital flow from developed countries to Latin American and Caribbean countries will be determined by forecasting the level of worker remittances based on past remittance data trends. This projection will help with long term development planning in Latin American and Caribbean countries and may also assist other analysts in determining future global money inflows and outflows.

Based on these four research objectives, this paper will help economists understand what drives worker remittance in Latin American and Caribbean countries. This will lead to a better understanding of the investment and capital inflow to these countries. Also, based on these analyses, economists may be able to predict the flow of capital from the developed world to Latin American and Caribbean countries over the next ten years, given the past trends in worker remittances.

### CONCLUSIONS

Based on the findings, this paper will help scholars to better understand what drives worker remittances in Latin American and Caribbean countries and will provide insight into unofficial capital flows from developed to developing countries in the global economy, now and in the next ten years. Instead of ignoring these capital flows, governments of both remittance-supplying and remittance-receiving countries should pay more attention to this form of unofficial capital flow. Making the remittance

process easier for migrants may be a first step in understanding the full impact of these transactions on domestic economies as well as on the global economy. Also, governments in developing countries may find it useful to put these flows to work in the economy by providing more financial engineering options to receiving families. This could lead to a multiplier effect of money taking place and this effect may provide consistent stimulus to the receiving economy. A better understanding of remittances and “unstigmatizing” the act of sending remittances home to family members will support host countries in terms of implementing economic measures to improve the performance of their economies.

In this study, we have found that net national savings, age dependency ratio, birth rate, foreign direct investment, gross domestic product, labor force, land area and population vary positively with worker remittances, while external debt, inflation, net migration and unemployment have been observed to vary negatively with worker remittances. Out of the 30 countries studied, 17 have higher values for remittance per capita compared to foreign direct investment per capita. The 30 countries have remittance per capita ranging from USD 5.23 to USD 1393.51.

The analysis of various regression models has shown that the macroeconomic variables which predict worker remittances most accurately are net migration, population, land area, labor force, age dependency ratio and unemployment. The model based on these variables was significant for predictive purposes since the model’s F ratio had a p-value of 0.000. The p-values of the individual variables were also significant. The coefficient of determination for the model, R-sq, was remarkably high at 97.9%.

Moreover, since remittances have historically grown exponentially, it has been determined that remittances are likely to continue to increase in this exponential fashion over the next ten years. It is forecasted that remittances to Latin American and Caribbean countries will reach USD 190,810 million in 2018. The growing amount of remittances flowing from developed

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to developing countries needs to be properly accounted and budgeted for, to avoid economic loss in the future. The better remittances are

understood and the greater the accuracy of official remittance figures, the better policies will be at regulating the situation.

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