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Implications of physical attractiveness on time allocations from salesperson to customer

Emily Anne Prinsen

University of Northern Iowa

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IMPLICATIONS OF PHYSICAL ATTRACTIVENESS ON TIME ALLOCATIONS FROM
SALESPEerson TO CUSTOMER

A Thesis
Submitted
in Partial Fulfillment
of the Requirements for the Designation
University Honors

Emily Anne Prinsen
University of Northern Iowa
May 2010
This Study by: Emily Prinsen

Entitled: Implications of Physical Attractiveness on Time Allocations from Salesperson to Customer

has been approved as meeting the thesis or project requirement for the Designation of University Honors.

_________________________________________________
Date
Dennis Clayson, Honors Thesis Advisor, Marketing

_________________________________________________
Date
Christine Schrage, Honors Thesis Advisor, Marketing

_________________________________________________
Date
Jessica Moon, Director, University Honors Program
Abstract

The purpose of this study was to determine if more attractive females—as compared to less attractive females—received better customer service in terms of time it took the salesperson to interact with the customer. The hypothesis was not supported; in fact, just the opposing outcome occurred. Less attractive females were served more promptly than attractive females. The study was performed in a mid-size city in the Midwest.
Implications of Physical Attractiveness on Time Allocations from Salesperson to Customer

Physical attractiveness is a phenomenon that has been in existence as long as the human race, but only since the 1960s have the implications of physical attractiveness been subject to scrupulous scientific examination. The recent surge in the study of physical attractiveness effects can be partially attributed to increases in the effect of physical attractiveness in psychology, marketing, law, and the recent growth in the implications of beauty. In 1969, Elliot Aronson summarized the taboo in studying the effects of physical attractiveness in saying:

“It is difficult to be certain why the effects of physical beauty have not been studied more systematically. It may be that, at some levels, we would hate to find evidence indicating that beautiful women are better liked than homely women…most social psychologists implicitly prefer to believe that beauty is indeed only skin deep—and avoid the investigation of its social impact for fear they might learn otherwise [p. 160].”

Shortly thereafter, it seems as though the researching community interpreted Aronson’s statement as a challenge to satisfy its curiosity about the effects of physical attractiveness. Preliminary studies developed the underlying structure of future physical attractiveness studies to come. A notable study published in 1972 coined the “what is beautiful, is good” theory claiming that physically attractive people are perceived as having personalities that are more socially desirable and live a happier life than those persons who are less physically attractive (Dion et al., 1972).

Studies in the field have evolved to focus more narrowly on the utilitarian benefits and setbacks of varying levels of physical attractiveness throughout the life cycle. Research has shown that attractiveness has an effect on hiring potential, level of pay, and even opportunity for climbing the corporate ladder (Hamermesh and Biddle, 1994). Finding a positive correlation
between high physical attractiveness and personal benefit, researchers found that entire organizations could benefit from a similar exploitation of beauty. While dozens of studies on physical attractiveness were being published, academia was also producing publications on business strategy operations, specifically customer service.

A qualitative model for measuring service quality was developed in 1985 stating the ten determinants of service quality including: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer, and tangibles (Parasuraman et al., 1985). Modified in 1988, the new SERVQUAL model became a quantitative measure of service quality and collected the former ten determinants into five categories, including: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). The same model was revised again in 1996 to specifically meet the service quality measurement needs in the retail store industry (Dabholkar et al., 1996). The retail store-specific SERVQUAL model is comprised of two tiers under the overall umbrella of retail service quality. The second tier under retail service quality includes: physical aspects, reliability, personal interaction, problem solving, and policy. A third tier then extends to include the categories of appearance, convenience, promises, doing it right, inspiring confidence, and courteous/helpful (Dabholkar et al., 1996). The second-tier dimension of personal interaction in the retail service quality model of SERVQUAL correlates with the second-most important dimension from the original SERVQUAL model—assurance.

Additional research expands on the idea that the personal interaction or service encounter is a key component in customer service quality perceptions and expectations by developing measurable components of personal interaction and service encounters. One of the
measurable components is communication time which accounts for 74 percent variability in customer perception (Soteriou & Chase, 1998; Kellogg & Chase, 1995).

**Research Objective**

The purpose of this study was to combine the two studied areas of physical attractiveness and customer service to determine if more attractive females received better customer service in a “medium-sized city” in Iowa than less attractive females. The study focused primarily on communication time. Ideally, the customer receiving the most communication time would be noted to have received the better customer service quality. However, it has been noted that each individual customer has his or her own tolerance zones for communication time (Soteriou & Chase, 1998). A tolerance zone is defined as “the range of service performance that a customer considers satisfactory,” (Parasuraman et al., 1991). Nevertheless, for the nature of this study and for the simplicity of measurement, the customer receiving the most communication time was considered to have received the better customer service quality. The intended suggestion from the results of this study is for management to implement a level of awareness to employees concerning their discrimination of customer physical attractiveness and how it may affect overall customer satisfaction. The study tests the following hypothesis:

**Hypothesis**

Hypothesis 1: More attractive females shopping at retail locations in the Cedar Valley will receive better customer service in terms of time allocation from the salesperson than less attractive females.

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Literature Review

The following sections summarize the many interrelated topics involved in testing the hypothesis of female physical attractiveness and its effects on customer service. First, a broad overview of physical attractiveness is described, followed by which elements men and women value in rating physical attractiveness of the opposite sex. Described next are the effects variances in facial attractiveness have in everyday life including employment potential, hire-ability, wages, and productivity. The third topic covered in the literature review is customer service and how it has evolved to create a high impact on the profitability of an organization. Described next is the development of the SERVQUAL model—created for measuring service quality. Because a service scenario is tested, the actual service encounter is defined and explained. Lastly, there is an overview on existing research that has correlated physical attractiveness and customer service.

Physical Attractiveness

Each member of the human species has unique physical characteristics such as skin color, limb length, and muscular build. We are a species that has developed variation in height, weight, eye color, and hair color. With the exception of identical siblings, no two members of the human race look the same from all perspectives. Despite the multitude of differences in physical characteristics, the human population has developed succinct preferences for physical attractiveness. According to Hamermesh (1994), “within a culture at a point in time, there is tremendous agreement on standards of beauty…today the same facial types are even preferred by people of different races on different continents” (Hamermesh & Biddle, 1994). Among Western cultures, the six underlying dimensions of physical attractiveness include the face, physique, height, perceptual distortions (such as academic status, personality, and attitudes), association
with others, and context (Patzer, 1985). Based on similar characteristics, in 2009, the Discovery Channel aired “The Science of Sex Appeal,” a special program which broke down sexual attraction into several factors including voice, scent, walk, and facial symmetry. Of the many dimensions affecting physical attractiveness, the face is deemed the most important factor of physical attractiveness as it results in the greatest overall physical attractiveness variance (Budge, 1981).

Men and women determine and value attractiveness in a partner differently. Women, as a whole, judge a man’s attractiveness based upon characteristics of ambition, social status, age, and athleticism, among others (Buss and Schmitt, 1993). Some of these dominant characteristics can be seen in male facial features such as the chin and nose (Wade, 2000). More dominant males, and therefore more attractive males, have broader chins (Gangestad et al., 1994).

However, a woman’s appearance “evokes a stronger reaction than a man’s” (Harper, 2000) and it is parallel reasoning then, that men hold a “higher premium on the physical attractiveness of their romantic partners,” (Jonason, 2009). Men rate a woman’s attractiveness based upon many characteristics in the female face and body (Jonason, 2009). The facial features that are most positively correlated with female physical attractiveness are infant-like features including large eyes, a small nose, and a small chin (Cunningham, 1986). Similarly, the features of maturity that are positively correlated to physical attractiveness are prominent cheekbones and narrow cheeks (Cunningham, 1986). Additionally, high eyebrows, large pupils, and a large smile are expressive features that are positively correlated with female physical attractiveness (Cunningham, 1986).

**Effects of Facial Attractiveness in Everyday Life**

Facial attractiveness impacts a variety of elements in an individual’s life including mate choice, job selection and pay, and perceived quality of life to name a few. Research has shown
how varying levels of facial attractiveness can impose influences on daily life. One of the foundational studies involving facial physical attractiveness was published in 1972 and coined the theory, “what is beautiful, is good,” (Dion et al., 1972). The group utilized yearbook photographs that were rated on physical attractiveness in a pilot study. Sixty students were asked to answer a plethora of questions on the personality traits and the likelihood of happiness about the persons in the stimulus photographs. Results from the study concluded that attractive people are perceived as having a higher occupational status, marital competence, social and professional happiness, total happiness, likelihood of marriage, and greater social desirability than less attractive persons (Dion et al., 1972).

On Employment Potential and Hire-ability. A 2009 study published in the *Swiss Journal of Psychology* examined the effects physical attractiveness had on the job recruitment process. Forty experienced employment recruiters ranked job applicants based on the factors of utility, desirability, and hire-ability. The job applicants were portrayed through similar resumes where the major variable was the applicant’s photograph. The photographs on the resume were rated prior to the recruitment study and there were attractive and unattractive applicants alike. The applicants were considered for sex-typed managerial jobs, and sex-typed, non-managerial jobs. Results from the study found that “attractive applicants received higher hire-ability ratings than did unattractive ones,” (Desrumaux et al., 2009). In addition, “being unattractive was more disadvantageous for a female than for a male sex-typed job,” (Desrumaux et al., 2009).

Even letters of recommendation can be influenced by the level of facial attractiveness of the applicant. Nicklin and Roch (2008) formulated an extensive study where 244 participants received an application package that included a job description, resume, photograph, and letter of recommendation of an applicant. Differences were only found in the photograph (attractive or
not attractive) and in the letter of recommendation (inflated or not inflated). The participants then rated the applicants on hire-ability and perceived future success rates. Analysis of the results determined that for women, facial attractiveness in combination with a non-inflated letter of recommendation will result in higher perceived success rates (Nicklin and Roch, 2008).

**On Wages and Productivity.** In their 1994 article, *Beauty and the Labor Market*, Hamermesh and Biddle uncovered an unconventional discrimination factor in the labor market—attractiveness. Together, they studied the results of three large-scale surveys (The 1977 Quality of Employment Survey involving 1,515 respondents from the United States; The 1971 Quality of American Life Survey involving 2,164 respondents from the United States; and the 1981 Canadian Quality of Life survey involving 3,415 respondents from Canada) “to determine whether standard earnings equations yield evidence of a pay difference based on looks,” (Hamermesh & Biddle, 1994). They found that varying levels of attractiveness impacted pay for both men and women. For men, the unattractive penalty was a loss of about nine percent in hourly earnings, whereas the premium for attractiveness in men was a five percent increase in hourly earnings (Hamermesh & Biddle, 1994). For women, the unattractiveness penalty was a five percent decrease in hourly earnings and there was a four percent increase in hourly earnings for the attractive female premium (Hamermesh & Biddle, 1994). Although the percentages may seem miniscule, when considered over an entire working career the difference in pay is quite substantial. The duo also concluded an opportunity advantage for the attractive population, stating that “better looking people sort into occupations where beauty may be more productive,” (Hamermesh & Biddle, 1994). Similar results were found in a study published in 2000. Barry Harper, with London Guildhall University, completed the largest study known, relating physical attractiveness to quantitative benefits or setbacks. The study utilized more than 11,000
participants and sought to discover a relationship between attractiveness and level of pay. Harper found that being unattractive resulted in definite penalties for both men and women’s income (15% and 11% below average for men and women, respectively). However, Harper also found that the “premium for attractiveness was typically found to be small and insignificant.” (Harper, 2000).

Hamermesh and Biddle further explored the relationship between physical attractiveness and earnings in an empirical study on the attractiveness and wages of more than 4,400 lawyers graduating from the same law school over a span of 17 years. The study took into account employer discrimination for those lawyers who were not self-employed as well as the variances in practicing in the public versus private sector. Theoretically, more attractive lawyers would sort into the private sector because private firms utilize marketing techniques to gain new clients and to retain current customers. The data for the study—the head-and-shoulder photographs as well as earnings—was obtained from school records and follow-up surveys. The photographs were ranked and standardized on level of physical attractiveness by men and women of varying ages and analyzed for a correlation with wages. The investigators found that “the evidence strongly suggests that beauty [physical attractiveness] is not merely correlated with, but actually causes differences in earnings,” (Hamermesh & Biddle, 1998).

Hamermesh continued studying the economic outcome of physical attractiveness in the labor market questioning whether productivity or employer discrimination of the “beautiful” employees accounted for a variance in wages. Along with Parker, Hamermesh analyzed photographs of instructors from 463 classes taught the University of Texas at Austin along with 16,957 completed student evaluation forms from the same classes. Hamermesh and Parker (2005). The study attempted to differentiate the evaluation on instructor beauty alone by
controlling for a number of factors that could potentially have impacted the results such as gender, minority/majority status, whether or not the instructor is a native English speaker, and whether or not the instructor is tenured. Results from the study suggest that “measures of perceived beauty have a substantial independent positive impact on instructional ratings by undergraduate students,” (Hamermesh & Parker, 2005). The investigators were not able to identify if the impact was due to a correlation in beauty or another variable such as employer or student discrimination. However, they did recognize that student evaluations are in part what educational administrators utilize when judging faculty performance and “determining promotions, special recognitions, and teaching awards,” (Hamermesh & Parker, 2005).

**Customer Service**

It has always been known to entrepreneurs, managers, and business strategists that there is a distinct difference in business strategy for products versus services. However, until the mid 1980s there had been little empirical research done to clarify what impact that difference had on employee-customer interactions. Since then, research has suggested a chain of impact: customer service quality impacts customer perceptions, which impacts customer satisfaction, which impacts customer loyalty, which impacts organization revenues, which in turn impacts the business’ overall bottom-line. This escalating chain reaction stemming from customer service quality is of great importance to management at any and every organization, but especially those organizations in the service industries. “*Training Magazine* reported in 1987 that companies viewed customer service as the most critical future challenge for training departments,” (Stum & Church, 1990).

Studies concerning the impact of customer service have suggested that poor customer service can be quite detrimental to any organization, in fact, “the most common reason that
customers switch to a competitor is poor service,” (Stum & Church, 1990). Furthermore, research has determined that a dissatisfied customer will spread his or her opinion to 10-20 other individuals—an exponential negative impact to the revenues of any business (Becker & Wellins, 1990).

Parasuraman et al. (1985) explains that a customer’s perception of an organization must meet or exceed his or her original expectation of the organization in order for the customer to be satisfied. Creating the greatest variance in customer perceptions versus customer expectations was the personal attention factor in the services category (Gagliano & Hathcote, 1994). Gagliano and Hathcote give 13 examples of which salesperson actions affect personal attention including: never too busy to respond, courteous employees, offers individual attention, and prompt service among others.

**Service Quality Model**

Before 1985, just 25 years ago, there was no universal definition of service quality, much less a fundamental model available for use in measuring it. A study published in the 1985 fall issue of the Journal of Marketing eradicated this situation in hopes of improving the customer service sector of any given business. Parasuraman et al. explored existing work on service quality and performed focus groups and in-depth interviews resulting in a declaration of dimensions of service quality and the development of a qualitative service quality model. The ten dimensions of service quality are as follows: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding (Parasuraman et al., 1985).

Three years later, the group refined the service quality model in attempts to make measurements quantitative. Through a series of data collection and refinement, Parasuraman, Zeithaml, and Berry consolidated the number of service quality dimensions to five (tangibles:
physical facilities, equipment, and appearance of personnel; reliability: ability to perform the
promised service dependably and accurately; responsiveness: willingness to help customers and
provide prompt service; assurance: knowledge and courtesy of employees and their ability to
inspire trust and confidence; and empathy: caring, individualized attention the firm provides its
customers), and produced the SERVQUAL model, a reliable, consistent, and applicable
quantitative measurement of customer-perceived service quality. The two most important
dimensions are reliability and assurance, respectively (Parasuraman et al., 1988).

Although the SERVQUAL model had received high reviews across the broad scope of
service quality, Dabholkar et al. modified Parasuraman’s 1988 SERVQUAL model to
specifically meet the needs of the retail market resulting in a three-tiered hierarchial model (see
Table 1) of service quality (Dabholkar et al., 1996).

The Service Encounter

Specific to the services industry, there is an inevitable “link,” contact, or service
encounter with the customer that can be defined as a “face-to-face interaction between a buyer
and a seller,” that affects the customer perception of a store, its employees, and its merchandise
(Soteriou and Chase, 1998; Solomon et al., 1985). This service encounter perception ultimately
affects the purchasing decisions of the customer which are reflected in the store’s revenues and
overall financial success. A decline in quality of the service encounter may result in a potentially
detrimental outcome for the business organization (Dotson, 1992). For this reason, it is important
for service managers and employees to realize the underlying factors of customer perception and
know in which areas to improve.
Table 1

Hierarchical Model of Service Quality (Dabholkar, et al. 1996)

This link with the customer can be found in Dabholkar's second-tier dimension, personal interaction, as well as in the SERVQUAL dimensions of responsiveness and assurance. Kellogg and Chase (1995), further develop the concept of personal interaction or the service encounter in defining “customer contact.” In fact, according to their 1995 study, customer contact can be quantitatively measured using the combined values of “communication time, information
richness, and the level of intimacy,” (Kellogg & Chase, 1995). Of the three values, communication time is of great importance as it accounts for 74 percent variability in the customer contact model (Soteriou & Chase, 1998).

**Correlating Physical Attractiveness and Customer Service**

While there is extensive research done on the topics of physical attractiveness and customer service quality individually, little research exists that directly correlate the two. Of the published works however, physical attractiveness has indeed been found to impact, or be impacted, in various scenarios of the customer service setting.

Gabbott and Hogg (2000) realized that in an interpersonal communication setting, the physical attractiveness of the sender would have an effect on how a message was received. They hypothesized that in a *service encounter* setting, the consumer would be more satisfied with the service delivered from an attractive salesperson when compared to a less attractive salesperson. Contrary to their hypothesis, the dependency roles were reversed and higher customer service satisfaction resulted in higher physical attractiveness ratings of the salespersons (Gabbott & Hogg, 2000). However, like many other studies in the field, Gabbott and Hogg did not test their hypotheses in a real-life scenario, but instead utilized a videotaped scene lowering the study’s reliability.

A most recent study published in the *Journal of Retailing and Consumer Services* also found a correlation between salesperson attractiveness and customer service satisfaction. Having utilized black and white photographs along with scripted scenarios, Soderlund and Julander (2009) found that “the encounter with the high attractiveness service worker produces a higher level of customer satisfaction than the encounter with the low attractiveness service worker,” (Soderlund & Julander, 2009).
Varying levels of physical attractiveness have shown an impact not only on service quality, but on overall salesperson performance. A 1999 study surveyed 339 pharmacists who had all been called on multiple times in the past by the same four pharmaceutical sales representatives. The researchers chose to utilize pharmacists and pharmaceutical sales representatives because of ease of data collection on pharmaceutical sales from registered pharmacists. The pharmacists were asked to evaluate each sales representative on 21 different dimensions, including attractiveness. In this case, the level of physical attractiveness of the representative had a significant impact on the representative’s sales; however, the significance of the impact diminished as the length of the sales representative-pharmacist relationship increased (Ahearne et al., 1999). This study was the first to employ data from actual sales setting.

Also drawing from real-life scenarios, Kim and Lennon (2005) published a study that investigated the interactions between customer and salesperson with respects to customer dress. Observing what happened in three large-sized clothing specialty stores, the researchers aimed to discover if well-dressed customers received friendlier service than poorly-dressed customers and if well-dressed customers were served more promptly than poorly-dressed customers. The “dress” of customers was determined on the following components: attractiveness of clothing, fashionability of clothing, formality of clothing, femininity of clothing, overall grooming, hair grooming, make-up, fabric quality, accessory quality, and purse quality (Kim & Lennon, 2005). It is important to note the components of overall grooming, hair grooming, and make-up, as these factors play a large role in the overall level of physical attractiveness of the customer face—the variable characteristic in the study at hand. After observing 90 customer-salesperson interactions, the investigators concluded that friendliness of service and promptness of service were indeed affected by customer dress (Kim & Lennon, 2005). The duo also concluded that
well-groomed hair, although minimal, was a contributing factor to variances in promptness of service (Kim & Lennon, 2005).

A study testing a similar connection of the affect customer appearance has on customer service was published in 2005 in the *Journal of Retailing and Consumer Services*. V. Ann Paulins of Ohio University suggested that customer appearance through *dress* may influence the level of customer service in retail store settings. The hypothesis was tested using 163 female subjects who each chose a store of familiarity and visited that store three times over an eight week period. Before entering a store, the subjects completed a modified SERVQUAL questionnaire expressing her expectations of the store’s customer service quality. Subjects were then instructed to vary their appearance through dressing in “college student” attire, business professional attire, and in an unkempt fashion for each respective visit. Following each visit, the subject completed the same modified SERVQUAL questionnaire expressing her actual experience of customer service quality from the store. Paulins found that customer dress did indeed affect customer service quality, in fact, “the less professionally customers dressed, the lower the level of customer service they received,” (Paulins, 2005).

**Methodology**

A pilot study was performed prior to the field study portion of the research. In the pilot study, photographs of female volunteer stimulus persons were ranked according to level of physical attractiveness. Based on the pilot study attractiveness ratings, three female volunteer stimulus persons were asked to participate in a field study led by the principal investigator. Only females were utilized because shopping is a sex-role activity dominated by females (Buttle, 1992). It was imperative to separate the study by gender because Hamermesh and Biddle (1994) explain that attractiveness is rated differently by gender (Hamermesh & Biddle, 1994). College-
aged students were used in the pilot study as well as the field study because of ease of access. Furthermore, the retail locations were chosen because they are frequented by college-aged females and the locations were easily accessible. In the pilot study, a total of 208 college students from the University of Northern Iowa (98 males, 98 females, and 12 respondents not indicating gender) rated nine female stimulus photographs according to level of physical attractiveness. The mean average age of the respondents was 19.5 years and the median average age of the respondents was 19 years.

**Female Stimulus Photographs**

A Facebook Event was created by the principal investigator asking for volunteers for a study. The volunteers had to fit the following criterion in order to be considered for the study: ages 19-24, height within 5’3” and 5’5”, between 110 and 150 pounds, and a current University of Northern Iowa student. The qualification specifications were determined based on average height and weight data from the National Health Statistics Reports published in 2008.

The first nine females to volunteer in response to the invitation were selected as the female stimulus persons. The invitation described the purpose of the research as well as any potential harms and benefits the volunteers would receive from participation. Each female volunteer was informed that her photograph would be taken and ranked by college students. For her photograph, each volunteer was instructed to dress in a fashion in which would be typical attire for shopping in the mall (jeans and a nice shirt). The females were also instructed to perform their own everyday makeup routine. Each female volunteer signed a consent form which indicated that she was fully aware of how her photograph would be utilized for the study. The nine female stimulus head-shot photographs were taken by the principal investigator.

**The Survey Instrument**
The survey (see page 29) was distributed to two large lecture classes in the humanities area of study. The classes contained both males and females, freshmen through senior status. The instrument was completed by the participants while a PowerPoint presentation with the female stimulus photographs was shown at the front of the classroom. Each slide of the PowerPoint presentation contained a full-color image of one female stimulus mounted onto a white background as found in the methodology of Hamermesh and Biddle’s 1998 empirical study on lawyers. To eliminate any investigator bias, the order of the female stimulus photographs was chosen at random. To further eliminate bias, the order of the female stimulus photographs was reversed when the survey was distributed to the second lecture class. The environment for ranking the photographs was consistent as the rankings were performed on the same day, in the same classroom, and only one hour apart. The survey instrument gave a brief explanation of the purpose of the study, while the principal investigator read off the same script for each class, instructing the participants in how to properly complete the survey instrument. The survey listed numbers one through nine, each followed by a nine point Likert-type scale, ranging from 1 (unattractive) to 9 (very attractive), where the participants were instructed to mark (via an X, circle, or a simple line) where he or she ranked the physical attractiveness of the female stimulus photograph. The survey also contained two demographic questions (gender and age) for running correlation tests in SPSS. Once completed, the surveys were gathered by the principal investigator, sealed in an envelope, and brought to an adviser for SPSS input.

**The Field Study**

From the survey results three female stimulus participants were asked to continue with the second part of the study in the field: the female stimulus with the lowest average attractiveness score, the female stimulus with the highest average attractiveness score, and the
female stimulus with the median average attractiveness score. The three female stimulus persons participated in the field study voluntarily, and were awarded a cash gift in the amount of $30 USD. The field study was performed in 30 retail locations in Waterloo, Iowa and Cedar Falls, Iowa where college-aged females would normally shop. The principal investigator observed as the female stimulus persons visited each shopping venue as if she were actually browsing the merchandise for purchase. In order to test the physical attractiveness variable of each female stimulus, the female stimulus persons entered the store alone. To eliminate a comparative bias, the order in which the female stimulus persons entered the retail store rotated. The female stimulus persons measured the amount of time it took the salesperson to make an initial verbal greeting. A cell phone stop watch was used by one female stimulus person and a running watch was used by the other two female stimulus persons. The timing devices were operated by the female stimulus persons. The principal investigator recorded the data collected on-site.

Data Analysis and Results

Analysis and Results of the Survey Instrument

The mean physical attractiveness rating was calculated for each female stimulus photograph by averaging across the evaluations provided by the survey participants. For confidentiality purposes, the principal investigator was not involved in entering the data and was not permitted to know the results of the survey until the female stimulus photographs were codified and the field study portion of the research complete. The difference in mean averages of physical attractiveness ratings between the highest-rated female stimulus photograph and lowest-rated female stimulus photograph was statistically significant ($t(205)=26.59$, $p<.00001$). If there was a difference in how males rated the female stimulus photographs versus how the females ranked the female stimulus photographs, in every case, women ranked the stimulus photographs
more attractive than did males. There was no correlation in age of survey participant and rating of physical attractiveness.

**Analysis and Results of the Field Study**

Table 2 shows the number of occurrences (counts) and overall percentages from the 30 retail locations that each female stimulus (ranked medium attractiveness, low attractiveness, and high attractiveness) waited the least (1.00), second most (2.00), and longest (3.00) amount of time to receive verbal interaction from the salesperson.

Table 2

<table>
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<th>Pic</th>
<th>TimeRank</th>
<th>1.00</th>
<th>2.00</th>
<th>3.00</th>
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<td>36.7%</td>
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<tr>
<td></td>
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<td>30.0%</td>
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<td>% within Pic</td>
<td>33.3%</td>
<td>33.3%</td>
<td>33.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% within TimeRank</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>33.3%</td>
<td>33.3%</td>
<td>33.3%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Columns 1.00 and 3.00 under the “TimeRank” heading are the most relevant sets of data as they represent which female stimulus received the most prompt service and which female stimulus received the least prompt service, respectively. Of the 30 scenarios at the retail locations, the low-attractive female stimulus person received the most prompt service 15 times, or 50 percent of the time. The high-attractive female stimulus received the most prompt service
in only six of the 30 scenarios. Similarly, the high-attractive female stimulus received the least prompt service in 13 out of the 30 scenarios, a greater occurrence than any of the other two female stimuli. The differences, however, were not statistically significant ($\chi^2 = 7.00$, df=4, $p=0.136$).

Table 3 shows the actual “time to be waited on” in terms of seconds. The person with the highest attractiveness took the longest to be served and the median person was waited on in the least time. Again, the difference did not reach the traditional level of statistical significance ($F(2,72)=2.99$, $p=.057$).

**Table 3**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Std Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>20</td>
<td>21.10</td>
<td>25.20359</td>
<td>5.63569</td>
<td>9.3044</td>
<td>32.8956</td>
<td>.90</td>
<td>96.00</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>29</td>
<td>32.1966</td>
<td>39.98793</td>
<td>7.42557</td>
<td>16.9860</td>
<td>47.4071</td>
<td>.30</td>
<td>153.60</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>26</td>
<td>69.7788</td>
<td>113.73784</td>
<td>22.30583</td>
<td>23.8391</td>
<td>115.7186</td>
<td>.30</td>
<td>495.10</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>42.2660</td>
<td>74.60082</td>
<td>8.61416</td>
<td>25.1019</td>
<td>59.4301</td>
<td>.30</td>
<td>495.10</td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

The results of the study did not support the initial hypothesis. In fact, the female stimulus with the low physical attractiveness rating received more prompt service than both the medium-attractive female stimulus and the high-attractive female stimulus. Additionally, the female stimulus with the high-physical attractiveness rating received the least prompt service more often than the medium-attractive stimulus, who received a least prompt service more often than the low-attractive female stimulus.

The results are completely counter-intuitive from what was predicted based on existing research; however, several factors may suggest partial explanations for the results. The majority
of existing research is based only upon photographs and hypothetical scenarios. Saying you will
do something and actually following through with the action are two different things. If the study
had not included “live” female stimulus persons, but instead presented the salespersons with
three different photographs and asked, “Which customer would you serve first?” the results may
have been drastically different.

The self-image of the salesperson will have an affect on how he or she interacts with the
customer as well. A more attractive salesperson may have no trouble speaking to an attractive
customer; however, a less attractive salesperson might be intimidated, nervous, or even scared to
talk to an attractive customer. Furthermore, the gender of the salesperson may have an affect on
how he or she interacts with the customer. A male salesperson might show more attention to
female customers than might a female salesperson.

Another factor that is difficult to control for but may play a large role in interaction
between the salesperson and the customer is the personality and confidence level of the
customer. A bright and peppy customer will likely demand more and possibly quicker attention
from the salesperson than would a quiet, somber individual.

Implications

Managerial Implications

Business strategists have determined that management of customer service quality can
become a competitive advantage for a business (Jones, 2000). The competitive advantage is
realized through the outcome of the chain reaction stemming from customer service quality. To
state it blatantly, “service matters: good service keeps customers coming back; poor service loses
customers, even previously loyal ones,” (Becker and Wellins, 1990).
The managerial implications derived from the results of the present study suggest that more attractive females do not realize a premium in customer service quality in terms of time allocation because of their level of attractiveness. Additionally, less attractive females do not realize lower qualities of customer service in terms of time allocation because of their level of attractiveness. The results show an uneven distribution in promptness of service when the attractiveness variable is considered; less attractive females were served more promptly than more attractive females. The study results do not claim however, that more attractive females are lost customers due to a lower quality of customer service. Management can implement training or increase salesperson awareness of the uneven distribution of prompt service. Every customer entering a business should receive similar service from the salesperson; ideally the service would be of good quality as opposed to poor.

**Limitations and Recommendations**

The present study includes a number of limitations that may have an effect on the outcome; therefore, changes in the methodology are recommended in further explorations. In the recruitment process of the female stimulus volunteers, it was assumed that the volunteers met the requirements of weight, height, and age; no measurements were recorded. Upon photographing the female stimulus volunteers, it was instinctive for that the females to smile for the photograph. This should have been controlled for because smiles may result in higher physical attractiveness ratings (Cunningham, 1986). Furthermore, the female stimulus persons did not necessarily smile during the field study upon entering the retail stores which could have potentially affected the salesperson’s judgment on the level of physical attractiveness of the female stimulus.

Another limitation became evident in the initial stages of the field study. It was recognized early that the principal investigator could not attain quality data on the service
encounter and time allocations from salesperson to the female stimulus person. A revision in the field study methodology was immediately implemented, and the female stimulus person was instructed to operate the timing device with little to no supervision from the principal investigator. This could have resulted in skewed data due to human error and inconsistencies. Furthermore, this abrupt change in methodology reshaped the quantitative objective of time allocation. While maintaining a measurement on time, the female stimulus persons measured the amount of time that had passed before the salesperson initiated a verbal communication with the female stimulus person.

Also during the field study, a data-collection opportunity was missed. It is recommended that future studies record demographic data on the salesperson as variances in these categories will likely affect how the salesperson rates the physical attractiveness of the female stimulus person. Past research shows that age and gender have an affect on attractiveness ratings (Cunningham, 1986; Jonason, 2009). Overall, males will rank female stimulus persons higher than females will rank the same female stimulus persons (Jonason, 2009). In addition, data could be collected on the number of salespersons in the store as well as the number of customers in the store. A variance in these factors may result in a variance in the time it takes a salesperson to interact with the customer.

Finally, the study was performed in one medium-sized city in Iowa. This may not be representative for the entire state of Iowa, much less the entire American population. Further research should be performed by replicating the study in the Midwest, in another region, or possibly in another country.
References


The Survey Instrument

<table>
<thead>
<tr>
<th>Physical Attractiveness Survey for Undergraduate Research Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implications of Physical Attractiveness on Time Allocations from Salesperson to Customer</td>
</tr>
<tr>
<td>Principal Investigator: Emily Prinsen</td>
</tr>
</tbody>
</table>

You are invited to participate in a research project conducted through the University of Northern Iowa. If you know any of the following individuals, you are not permitted to participate.

Please rank the photographs you see projected on the screen based on level of physical attractiveness with 1 being unattractive and 9 being very attractive. Mark your ranking on the number lines provided.

1. 1----2----3----4----5----6----7----8----9
2. 1----2----3----4----5----6----7----8----9
3. 1----2----3----4----5----6----7----8----9
4. 1----2----3----4----5----6----7----8----9
5. 1----2----3----4----5----6----7----8----9
6. 1----2----3----4----5----6----7----8----9
7. 1----2----3----4----5----6----7----8----9
8. 1----2----3----4----5----6----7----8----9
9. 1----2----3----4----5----6----7----8----9

Demographics: Please list your age in years _____
Check one: Male □ Female □
Survey Participant Script

Hello, my name is Emily Prinsen, and I am a senior marketing student at UNI. I am conducting a study that explores the relationship between physical attractiveness and customer service. The question I want to answer is: do more attractive people receive better customer service?

You are invited to participate in my project by completing this survey. The survey should take no longer than five minutes to complete and there are no foreseeable risks in participating.

The University requires you give consent to participate in the survey. To protect your anonymity, I have permission to waive your written consent, and by simply completing and returning the survey, you have given your consent to participate. Your participation is completely voluntary and will have no affect on your grade in this class.

The survey displays photographs of nine females. I would like you to fill out the survey, ranking each photograph from 1 through 9; with 1 being unattractive and 9 being very attractive. Thank you for your time and participation; if you have any further questions or would like more information, you can contact me at eprinsen@uni.edu.
Female Stimulus Volunteer Consent Form

Informed Consent for Undergraduate Research Study

Implications of Physical Attractiveness on Time Allocations from Salesperson to Customer

Principal Investigator: Emily Prinsen

You are invited to participate in a research project conducted through the University of Northern Iowa. Signed consent is not required for the study; however, I personally like to receive written consent that you understand the study. The following information is provided to help you make an informed decision about whether or not to participate.

The purpose of the study is to determine if physically attractive people receive better customer service in terms of time allocation in comparison to people who are less physically attractive.

Three participants and a salesperson will be observed in a retail location. Times will be recorded on how long it takes the salesperson to engage the customer, how long the salesperson stays engaged with the customer, as well as a count on how many times the salesperson repeats engagement. Differences are intended to be found in the measurements based on the differing physical attractiveness (plain, average, attractive) of the three participants.

Prior to entering the store, the participants will be ranked on physical attractiveness by students at the University of Northern Iowa. There will be a pool of nine participants whose photograph will be taken and ranked. The participants will be unidentified in the ranking process, and the principal investigator will be unaware of which participants are deemed plain, average, and attractive. Only three of the nine original participants will complete the research to the end of the study.

The principal investigator will withhold disclosure of the results of the physical attractiveness ranking from the study participants to minimize any chance of psychological and emotional risk. However, the participant should be aware of those risks prior to consent. Students performing the ranking will be asked not to complete the ranking if they can identify the participant.

The participants selected to do the field study will receive a gift card in the amount of $30 funded by the University of Northern Iowa College of Business Administration Undergraduate Research Program, or a cash equivalent.

Your participation is completely voluntary. You are free to withdraw from participation at any time or to choose not to participate at all, and by doing so, you will not be penalized or lose benefits to which you are otherwise entitled.
If you have questions about the study you may contact or desire information in the future regarding your participation or the study generally, you can contact Emily Prinsen at 563-580-6204, or the project investigator’s faculty advisors, Dennis Clayson 319-273-6015, or Christine Schrage 319-273-2126, at the Department of Marketing, University of Northern Iowa 319-273-2955. You can also contact the office of the IRB Administrator, University of Northern Iowa, at 319-273-6148, for answers to questions about rights of research participants and the participant review process.

I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement. I am 18 years of age or older.

____________________________     ____________________
(Signature of participant)         (Date)

____________________________
(Printed name of participant)

____________________________     ____________________
(Signature of investigator)        (Date)

____________________________     ____________________
(Signature of instructor/advisor)  (Date)

____________________________     ____________________
(Signature of instructor/advisor)  (Date)

One copy of this agreement must be returned to the principal investigator, Emily Prinsen, and the other is provided to the participant. Signed consent forms must be maintained for inspection for a minimum of three years.