

THE PERCEPTION OF ELECTRONIC MAIL NAMES AND HOW
THOSE PERCEPTIONS AFFECT A JOB-RELATED EVALUATION PROCESS

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Abstract

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An Examination of the Attitudes Toward Email Names and their Effects During the
Selection Process (121pp.)

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The purpose of this research was to assess the existence of attitudes and connotations toward email names, as well as to apply a theoretical framework for describing the process of how those attitudes may influence job related evaluations. Results from 2 studies using undergraduates confirmed the existence of various attitudes toward different email name-types, as well as the influence of those perceptions on evaluations of various selection criteria. These results suggested that individuals need to be aware of the potential impressions others have of them based on their email names. However, while results indicated that email name-type did not have an influence on interview decisions, the quality of individuals' resumes did affect whether or not an applicant was asked to return for an interview.

Approved:

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Table of Contents

	Page
Abstract	3
Acknowledgments	4
List of Tables	7
List of Figures	8
Introduction	9
Research on Names.....	12
Names, Occupational and Job Success.....	20
Attitude Theory and Names.....	22
Attitude-Behavior Relationship.....	23
How Attitudes Can Guide Behavior.....	27
The Effects of Email Name During the Selection Process.....	32
The Uniqueness of Email Names.....	36
The Current Research.....	37
Study 1	37
Method	41
Participants.....	41
Design.....	41
Materials/Stimuli.....	42
Measures.....	44
Procedure.....	45
Results	46
Data Analysis.....	46
Descriptives.....	47
MANOVA Results.....	47
Correlational Results.....	53
Discussion	54
Name-Type Effects.....	54
Name-Type by Rater Sex.....	55
Interrelationship of Measures.....	56
Conclusion.....	57
Study 2	57
Method	61
Participants.....	61
Design.....	61
Materials/Stimuli.....	62
Measures.....	63
Procedure.....	64
Results	65
Discussion	73
Evaluation of Selection Criteria.....	74
Email Name Influence.....	75

Interview Contact (Action)	76
<u>General Discussion</u>	77
Limitations of the Present Research	80
Applications and Future Research	83
Conclusion	85
<u>References</u>	86
<u>Appendix A: Revised Name Connotation Profile (Computer Version)</u>	100
<u>Appendix B: Demographics Questionnaire</u>	105
<u>Appendix C: Study 1 Consent Form</u>	106
<u>Appendix D: Study 1 Experimental Script</u>	107
<u>Appendix E: Study 1 Debriefing Statement</u>	108
<u>Appendix F: Artificial Resumes</u>	109
<u>Appendix G: Selection Criteria</u>	115
<u>Appendix H: Influence Dimensions</u>	117
<u>Appendix I: Study 2 Consent Form</u>	118
<u>Appendix J: Study 2 Experimental Script</u>	119
<u>Appendix K: Study 2 Debriefing Statement</u>	120
<u>Appendix L: Email Name Sample Blocks</u>	121

List of Tables

Table		Page
1.	Means, Standard Deviations, and Correlations of all Study 1 Variables	48
2.	Multivariate Analysis of Variance for Name-Type (Conventional vs. Unconventional) and the RNCP factors	49
3.	Multivariate Analysis of Variance for Name-Type (Professional vs. Unprofessional) and the RNCP factors	50
4.	Means, Standard Deviations and Correlations of all Study 2 Variables	67

List of Figures

Figure		Page
1.	Schematic diagram of Fazio's (1986) Attitude Accessibility Model	98
2.	Schematic diagram of the process model that is being tested	99

Introduction

The Internet has been shaping our society since it has become a widely used resource. It has produced various changes to the workplace including dramatic alterations in recruitment and job searches (Lievens & Harris, 2003). In today's computer oriented society, 16.4% of regular Internet users indicated that they have used the World Wide Web in their job searches (Harris & Paajanen, 2003). Also, a recent study by the U.S. Department of Commerce (2002) showed that over 7% of the U.S. population (both regular and infrequent users) use the Internet when trying to find a job. While it is apparent that many job seekers are now using the Internet as a resource, it is also becoming evident that employers are relying heavily on this same resource for recruitment. Gere, Scarborough, and Collison (2002), reported in their survey of 275 companies showed that approximately 1/3 of companies' recruitment budgets were being spent on Internet recruitment. Their study also showed that many other organizations felt that Internet recruitment broadened their markets, reduced their costs, provided more qualified applicants and made the overall recruitment process easier.

The manner in which an individual goes about actually applying for a job has typically been to send a resume to a potential employer and await notification of an interview for the desired position. The employers, on their part, review the information that they have been provided from all of the potential employees, to decide upon certain candidates to invite for an interview. With the increased usage of online Internet recruitment, this information may still be used in the selection process but much, if not all, information and correspondence is now sent via electronic mail (email). Each

potential applicant is able to create his or her own unique email name, which is the equivalent of his or her own given name. Names, like physical appearances, can and do impart certain significant and differential impressions on those who are evaluating them (Mehrabian, 1997).

While the impact of such characteristics as gender (Cleveland, Stockdale, & Murphy, 2000), race and culture (Cox, 1993), aging (Birren & Schaie, 2001), sexual orientation (Ellis & Riggle, 1996), and physical attractiveness (Polinko, 1999) have become apparent issues in the workplace, there has been much less consideration and awareness of the important contributions of names in affecting various workplace decisions (Mehrabian, 1997). Mehrabian (2001) identified certain characteristics that are attributed to individuals on the basis of their names. He and others have demonstrated how important it is for individuals to make a consciously concerted effort to choose a name, and perhaps an email name, that will elicit positive attitudes in the individual who is making the employment decision.

The scope of the problem dealing with perceptions of names has prompted many researchers to examine the attributes and stereotypes associated with an individual's given name. Some of the attributes that have been examined include: popularity, evaluation, and job success (e.g., Bruning, Polinko, Zerbst & Buckingham, 2000; Buchannan & Bruning, 1971; Garwood, Cox, Kaplin, Wasserman & Sulzer, 1980; Joubert, 1985; Karlin & Bell, 1995; Mehrabian, 2001; Mehrabian & Valdez, 1990). While these researchers have examined the existence of attitudes and stereotypes associated with names, virtually no research has developed a theoretical process that may

explain how an individual uses these attitudes and stereotypes regarding names and email names to guide future behavior.

It is evident that an individual's behavior may be driven by social as well as cognitive factors, which will in turn influence and determine how he or she will behave in a given situation (Fazio, 1986). Recent psychological theories have begun to examine the underlying mechanisms of how attitudes influence behavior (e. g., Devine, 1989; Fazio, 1986; Fazio, 1990). Several theorists have examined the distinction between controlled and automatic processes and the ways each can be applied to various social-psychological phenomena (Devine & Monteith, 1999). The processes that lead many people to engage in stereotyping behavior is typically considered automatic in nature (Devine, 1989). In this case, an individual attempting to hire a new employee through the use of current online recruitment methods may unknowingly engage in stereotyping based on the automatic activation of an attitude from memory when making selection decisions based on email names. Likewise, though, an individual who is evaluating a potential job candidate may knowingly alter his/her evaluations because of the individual's email name. In this case, an individual is going through very distinctive and controlled cognitive processes (Schneider & Shiffrin, 1977). It may even be possible that there are various automatic components that are acting within different controlled, deliberative process as has been suggested by some researchers (i.e., Ajzen & Fishbein, 1980).

The purpose of the present research is to assess the existence of attitudes and connotations toward email names, as well as develop and test a theoretical process model to determine if the attitudes and perceptions associated with email names do indeed

influence the evaluation and action of those making various decisions, such as during the job selection process. Additionally, this research will offer possible avenues of exploration to determine if social-cognitive explanations (i.e., Schneider & Shiffrin, 1977) can be used to determine how these attitudes and stereotypes can guide an individual's behavior during the selection process.

Research on Names

Names have long been used as stimulus material in social psychological research (Banaji & Greenwald, 1995). Strunk (1958) comments that, "historically, one's name has always represented an important aspect of the self." (p. 64). Names are also important to those interested in personality, in that they may become part of an individual's self-concept (Lawson, 1971).

The relationship between perceived personality and name has received periodic attention (Ansbacher, 1947; Jahoda, 1954; Plottke, 1946; Strunk, 1958), and in general the evidence supports the existence of this relationship. In a specific study, Strunk (1958) attempted to address some additional aspects of an individual's attitude toward names. The results of this study showed that the first name was the most critical. This was most likely due to the fact that first names are used as reference points. The first name is not only meaningful to the individual, but to others as well. Because of this evidence, it can be easily understood why attitudes toward email names and other monikers may also be important.

The perceptions of names have also been shown to influence self-esteem (Strumpfer, 1978), achievement in school (Busse & Seraydarian, 1978; Savage & Wells,

1948), teacher's expectations (Harari & McDavid, 1973), grading of essays (Erwin & Calev, 1984), and even emotional disturbances in children (Ellis & Beechley, 1954). Erwin and Calev (1984) note that people seem to develop strong emotional feelings and responses for their own names. Previous research shows that these feelings may in turn affect the judgments and evaluations made by others (Strunk, 1958).

Allen, Brown, Dickenson, and Pratt (1941) were among the first to conduct research dealing with names. Initially, many individuals went by their intuition as to whether a name was appropriate to give to their child. Very early on, Schoenfeld (1942) demonstrated that there were clear and consistent stereotypes of first names among American students. Allen and his colleagues (1941) commented that there are certain first names that have, and always will possess enduring characteristics that may be either pleasant or unpleasant. They believed, though, that with repetition, any name or nickname could become desirable and therefore occur more frequently in a culture. Their study showed that the preferences for first names depended on their frequency within the culture (in this case a student body). They also found a gender effect, in that men found common names more desirable than they found uncommon names, but the opposite was true for women.

Certainly, names are subject to becoming fads just as clothing or hairstyles. A name that was very popular 50 years ago may be virtually unknown today (e.g., Granville), and in some cases may connote an opposite aesthetic value (e.g., Percy). There is also evidence that strongly suggests that people, like objects, tend to be judged by their labels (McDavid & Harari, 1966). This is one reason why research should

continue to evaluate attitudes and stereotypes associated with names, nicknames, and other monikers, including email names.

The attractiveness of an individual's name has been described in a variety of ways. Drawing from much of the previously mentioned research, name attractiveness has been described by global terms, such as frequency and desirability (e.g., Allen, Dickinson, & Pratt, 1941; Busse & Seraydarian, 1978; Erwin & Calev, 1984), preference (e.g., Garwood, Cox, Kaplan, Wasserman, & Sulzer, 1980; Harari & McDavid, 1973), and liking (e.g., West & Shultz, 1976). Many of these studies deal with attempting to assess attitudes and stereotypes toward certain names and have shown that stereotyping of names does occur. However, the research has been characterized by limitations in the number of names studied, as well as in methodologies, which usually included rank ordering of names according to liking, desirability or uniqueness (Lawson, 1971). It was because of these methodological limitations that Lawson (1971) began to use a semantic differential analysis as a more efficient assessment of different names. This method was utilized in an attempt to understand the connotations and attitudes toward different names. In the semantic differential analyses used in this research, names were often rated on the three basic dimensions: evaluation (good-bad), activity (active-passive), and potency (strong-weak) (e.g., Buchanan & Bruning, 1971; Lawson, 1971, 1973, 1980).

Semantic Differential Analysis. With techniques for measuring attitudes becoming more efficient, researchers began to use the semantic differential technique (Osgood, Suci, & Tannenbaum, 1957) to generate alternatives to the more global assessment of the attractiveness of names (Mehrabian, 2001). The Osgood Semantic Differential technique

has a great advantage over the previous attitude scales in that it is a scale in itself (Oskamp, 1977). This technique measures the connotative meaning, or implied meaning, of the concept or object being measured by using a series of two opposing adjectives at the ends of each scale. Research (Osgood, Suci, & Tannenbaum, 1957) has reported a great deal of success using this technique on a wide variety of concepts. There are three basic dimensions: 1) an evaluative dimension, 2) an activity dimension, and 3) a potency dimension. Osgood (1965) recommended that the evaluation dimension be used as the prime indicator of an attitude toward an object because it is the most heavily weighted in people's judgments (Oskamp, 1977).

Lawson (1971) utilized this method to conduct a study that addressed some of the limitations with the research dealing more with the global assessment of names. In his study he increased the number of names that were usually assessed, which was typically 30 because of limited computer capacity, to 818 names, and relied on the semantic differential technique for rating the names. His study identified common men's names that were considered "good" rather than "bad", "active" rather than "passive", and "strong" rather than "weak". Lawson (1971) notes, that by some links being stronger toward one evaluation than the other ("bad" as opposed to "good"), there would be a tendency to use that description when encountering a similar attitude object. As an example, according to Lawson (1971) when an individual encounters a name that is common, he or she is more likely to associate it with more of a positive evaluation ("good", "active", "strong") than when he or she encounters an uncommon name in

which he or she has relatively weak links and would therefore give a negative evaluation (“bad”, “passive”, “weak”).

Similarly, research conducted by Buchannan and Bruning (1971) relied on a semantic style evaluative technique to assess the connotative meanings of first names and nicknames. Rather than using Lawson’s three dimensions (1971; 1973;1980), Buchannan and Bruning used three different dimensions: “like”-“dislike”; “active”-“passive”; “masculine”-“feminine” in an attempt to broaden the range of differences in connotative meaning. They found that both men and women rated men’s names more likable, more active, and more masculine than women’s names. This research raised the question of whether these connotative meanings of names could lead to expectations, which could affect one’s perception (Buchannan & Bruning, 1971).

Beginning in the early 1990s, Mehrabian conducted multiple studies that attempted to blend much of the research dealing with the more general, global assessment of attitudes and stereotypes associated with names into a variation of Osgood’s semantic differential analysis. Mehrabian attempted to facilitate the investigation in the area of names research by identifying the major components of name connotations. These connotations would be utilized to determine characteristics that names implied about people (Mehrabian & Valdez, 1990). By using the factors of favorability, desirability, preference, those connotations more specific to names alone could be recognized and used for more effective analysis of attitudes toward an individual based on his or her name.

In a series of three studies Mehrabian and Valdez (1990) identified six basic dimensions of name connotations: success, morality, health, warmth, cheerfulness, and masculinity-femininity, by first generating a comprehensive listing of name connotations and then examining the names on 38 positive characteristics using a semantic scale. Because this study was exploratory in nature, they also examined the systematic differences in these connotations between male and female names. They discovered that stereotypes associated with male versus female names were more evident for raters of the opposite sex.

Mehrabian (1992) dissected the previous literature dealing with names into four different lines. The first line dealt mainly with showing that common names were judged as being more desirable than uncommon names and the degree of frequency and desirability with which names occurred (e.g. Busse & Seraydarian, 1978; Joubert, 1985; West & Shultz, 1976). According to Mehrabian (1992) the goal of the second line of studies was to determine if there were handicapping effects of uncommon, undesirable, or unattractive names (e.g. Garwood, Cox, Kaplan, Wasserman, & Hulzer, 1980; Harari & McDavid, 1973). The third line of research relied on the semantic differential analysis to characterize general name connotations (e.g. Buchanan & Bruning, 1971; Lawson, 1980). By using variations of Osgood's Semantic Differential Technique, characteristics that were connoted by names were generated. Finally, according to Mehrabian (1992), the fourth line of research attempts to show evidence of an association between uncommon, peculiar, unique, or undesirable names on areas such as maladjustment, academic performance, and professional achievement (e.g., Ellis & Beechley, 1954).

Mehrabian clearly recognized that the semantic differential analysis developed by Osgood, Suci, and Tannenbaum (1957) was effective for making evaluations of meaning. The adaptation of the technique for name connotations used by Lawson (e.g., 1971), as well as Buchannan and Bruning (1971), provides vital dimensions for which to measure attitudes toward names. Building on these concepts, Mehrabian (1997) noted that much of the previous semantic differential research identified dimensions that could be utilized to identify emotional or affective responses to situations or stimuli (including names). Because of limits to the old model (e.g., Buchannan & Bruning, 1971; Lawson, 1971), Mehrabian sought to develop a new line of research related to the connotations associated with names. In order to do so, Mehrabian developed new models/methods that would better address these connotations associated with different names.

Mehrabian (1992) then conducted a set of studies which were designed to expand upon the four areas of investigations concerning names. Mehrabian had participants in the first study provide their names along with information regarding their own temperament (pleasantness and dominance). The second study then had participants rate names on measures of desirability, uniqueness and the third study used semantic scales to rate an individual's temperament (pleasantness and dominance) based on his/her name. He found that names judged to be more desirable were rated as more pleasant and more dominant; unique names were judged as less pleasant and less dominant; while the pleasantness-unpleasantness of a person's name was positively correlated with the pleasantness-unpleasantness of his or her temperament. The results from this study show that traits and characteristics can be attributed to a person based solely on his or her

name. To further the expansion of research regarding names, Mehrabian (1990) developed a new measure to assess the connotations associated with names, the Name Connotation Profile (Mehrabian, 1990).

Name Connotation Profile. Mehrabian also recognized that name desirability is an important concept when studying names. Based on his previous work (Mehrabian & Piercy, 1993a, 1993b), he developed the Name Connotation Profile (NCP) (Mehrabian, 1994). Through multiple studies that created numerous characteristics of names, judged names on those characteristics, and then factor analyzed the correlations between the ratings for each pair of characteristics, six factors were identified along with characteristics that defined those factors. The six factors that were identified were: success, morality, popularity, warmth, cheerfulness, and masculine-feminine. It was believed that the NCP could be used to examine differences in the impressions that were conveyed by common versus uncommon names, native versus foreign names, androgynous versus gender-specific names, or “crisp and snappy” sounding versus melodic sounding names. Mehrabian (1997) firmly believed that this tool could be used for studying a wide range of issues involved with names research.

Mehrabian (1997b) revised his NCP in an attempt to make his evaluations of names simpler and more refined. In a series of seven studies, Mehrabian (2001) used the Revised Name Connotation Profile (RNCP; Mehrabian, 1997b) to address many of the issues he had previously raised. The RNCP was created by factor analyzing the attractive and unattractive characteristics underlying the NCP, which created a more parsimonious set of factors that could be used to investigate the differential reactions to names

(Mehrabian, 2001). The four new factors were: 1) Ethical Caring, 2) Popular Fun, 3) Successful, and 4) Masculine-Feminine. The internal consistency reliability coefficients for each new factor were considered highly satisfactory: Ethical Caring (.95), Popular Fun (.91), Successful (.81), and Masculine-Feminine (.92).

Mehrabian (2001) feels that the RNCP is a valuable tool that should be utilized when attempting to study the relationship between individual characteristics that are connotated by names and psychological adjustment. He further recognizes that an important avenue for this research needs to come in the individual characteristics that are connotated by names and how they impact work and career. Names are used every day throughout our lives, and work is no exception, as other researchers have shown.

Names, Occupational and Job Success

A study by Bruning, Polinko, Zerst, and Buckingham (2000) attempted to determine whether or not expectations of job success were related to the degree to which the masculinity or femininity of a person's name matched the stereotypic masculinity or femininity of the planned occupation through the use of a semantic differential type analysis. They believed that raters would evaluate masculine men's names as more likely to succeed in jobs that were stereotypically more masculine and vice versa for feminine, female names. When the match between actual and stereotypic was not present, the likelihood of success would be much lower.

Before the actual study began, a large sample of undergraduate students rated over 1300 names on three semantic scales (active/passive; masculine/feminine; like/dislike). Eight male names and eight female names (four high in masculinity, four

high in femininity) were then used to conduct the study. The researchers were able to examine occupational success expectations based on those names by having subjects read a series of short scenarios describing occupational choices of 8 men and 8 women (as identified by the names). Their results supported the predictions and indicate that names do have an effect on expectation of job success. Bruning et al. (2000) suggest that when additional information is not present, an individual will be evaluated on other information that is present, such as their name. While this seems to be true when examining names that differ on gender and masculinity-femininity, more recent research has sought to determine if names are related to other diversity characteristics.

Recent research has begun to examine how different ethnic sounding names have an influence on getting a job. African Americans have chosen distinctive names for much of the last century. Census records showed that 100 years ago, the 20 most popular names for whites and blacks were the same, while only a handful coincide today. A recent study from the National Bureau of Economic Research has suggested that black sounding names may actually impede one's chances of getting a job (Bertrand & Mullianathan, 2003). In this study, approximately 5,000 resumes were sent out in response to classified advertisements. The resumes that were sent out were identical in all respects (within each condition), except for the names that were presented. By measuring callbacks and emails received for an interview, the researchers found that resumes containing "white" names received 50 percent more interview requests than did resumes containing African American names. They also found that those resumes containing white names received 30 percent more call backs than did resumes containing African American names when

both were associated with high quality resumes. Based on the same implications proposed by Bruning and his colleagues (2000), there should have been no discrimination between the resumes since other, arguably more important and more relevant, information was available. The results showed that resumes containing “white” named applicants received one response for every ten resumes sent out, whereas resumes containing “black” named applicants received one response for every fifteen resumes sent out. Based on these results, the authors believe that there is still a substantial amount of unfair discrimination in the job recruiting and selection processes based on the perceived race of the employees, as determined by the applicant’s name.

It is evident that there are attitudes and connotations associated with names. It is because of this that the current research should be updated to include the newest monikers and email names, as well as becoming integrated with theory to explain how those attitudes influence subsequent behavior. To fully understand research dealing with attitudes toward names and email names, it is important to recognize the direction of past and present research dealing with attitudes and behavior.

Attitude Theory and Names

Much of the previous research dealing primarily with names, nicknames, and other monikers has examined attitudes and stereotypes associated with those names (e.g. Bruning & Husa, 1972; Jourbert, 1985; McDavid & Harari, 1966; Mehrabian, 2001; West & Shults, 1976). While most of the research dealing with names identified the presence of attitudes and stereotypes, there has been little theoretical explanation as to why and how names, nicknames, email names or other monikers are used when making evaluative

decisions. While Buchannan and Bruning (1971) raised the idea that the attitudes and connotations of names could lead to certain expectations, thereby altering one's perceptions and perhaps, evaluations, there has been no attempts to test a theoretical model examining this or any other process. Additionally, research is lacking on whether there are similar attitudes and stereotypes associated with email names as there are with given names and nicknames.

Specifically, there has been research examining certain aspect of names such as liking (West & Shultz, 1976), frequency and desirability (Allen, Brown, Dickenson & Pratt, 1941; Busse & Seraydarian, 1978; Karlin & Bell, 1995); and connotative associations (Bruning, Polinko, Zerbst & Buckingham, 2000; Buckingham & Bruning, 1971; Mehrabian, 1990, 1993a, 1993b). However, this research has not been fully integrated with theory to determine if these attitudes and perceptions influence one's evaluation, thereby influencing behavior (i.e. decision making). Social-cognition research has developed theories and methods that have become increasingly useful when attempting to investigating when and how attitudes are used in making decisions and evaluations of objects. To understand how recent theorists have come about developing models and theories pertaining to this issue, understanding the basis behind the relationship between attitudes and behavior should be examined.

Attitude-Behavior Relationship

Attitudes have been one of the most commonly studied constructs throughout all of psychology. Allport (1935) defined attitudes as, "...a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon

the individual's response to all objects and situations with which it is related." (as cited in Regan & Fazio, 1977). Using this definition, researchers began to examine the relationship between attitude and behavior. While this concept has played a central role in psychological research, it has not been until recently that much of the systematic work has begun to actually make progress in understanding the relationship between attitude and behavior (Fazio, 1990).

Early research done by LaPiere (1934) began to raise questions relating to the relationship between attitudes and behavior. However, with the exception of the work by LaPiere (1934), much of the early work dealing with attitudes actually examined attitude formation and change. It was not until Wicker (1969) wrote a critical review of the research dealing with the inconsistencies in the literature, that research examining the attitude-behavior relationship took the forefront in testing attitudes (Fazio, 1986; Fazio, 1990; Petty & Cacioppo, 1986). Until this time it had been assumed that there was a one-to-one correspondence between attitudes and behavior (Fazio, 1986). Spurred by Wicker's (1969) review, research spanning the late 1960s through to the present has devoted a considerable amount of time and effort toward attempting to explain and understand the relationship between attitude and behavior (for reviews see Chaiken and Stangor, 1987; Cialdini, Petty & Cacioppo, 1981; Cooper & Croyle, 1984; Eagly & Himmelfarb, 1978).

While later findings showed that the bleak picture portrayed by Wicker (1969) was greatly overstated, the issue continued to fuel research (Fazio, 1990). Further reviews (e.g., Fazio & Zanna, 1981; Schuman & Johnson, 1976) gave a more optimistic view

regarding the attitude-behavior relationship. While there has been considerable evidence that there is little or even no relationship between attitudes and behavior, there has also been evidence supporting a strong relationship between attitudes and behavior (e.g., Kelman, 1974). Because of these contradictions within the existing literature, new research directions began to branch off to identify other factors relevant to the attitude-behavior relationship.

Researchers began to explore the conditions under which an individual's attitudes would and would not predict his or her behavior (e.g., Ajzen & Fishbein, 1977, 1980; Fazio & Zanna, 1981). Once the conditions under which attitudes would and would not predict behavior had been specified, researchers began to examine and explore the underlying processes that corresponded to the attitude-behavior relationship (Petty & Cacioppo, 1986). Research has shown that there are normative constraints (for a review of the literature see Ajzen & Fishbein, 1977), as well as situational variables dealing with an individual's vested interest (Sivacek & Crano, 1982) that can affect the attitude-behavior relationship. Additionally, personality factors have been found to relate to the attitude-behavior relationship (Fazio, 1986). Attitudinal qualities such as the relationship between affective and cognitive components (Millar & Tesser, 1986; Norman, 1975), the temporal stability of attitudes (Schwartz, 1978), confidence in the attitude (Fazio & Zanna, 1978), as well as how the attitude was formed (Regan & Fazio, 1977) have each been shown to influence the relationship between attitude and behavior.

In addition to the many situations and circumstances surrounding the use and formation of attitudes, there has been research dealing with methods of changing

attitudes. Relying on the research dealing with the predictive nature of the attitude-behavior relationship, Petty and Cacioppo (1986) relied on earlier models of communication (e.g., Hoveland, Janis, & Kelley, 1953) to develop a general theory of attitude change called the Elaboration Likelihood Model (ELM). Other theories such as the Theory of Reasoned Action (Fishbein & Ajzen, 1975) and the Theory of Planned Behavior (Ajzen, 1991) attempted to address attitudinal components and their relation to an individual's intention to perform some behavior.

Despite the abundant amount of empirical research dealing with the relationship between attitudes and behavior, there had been little attention given to one very fundamental issue regarding this relationship; "How do attitudes guide behavior?" (Fazio, 1986; 1990). There is no doubt that the research, which has been conducted, has achieved an extensive understanding of "when" attitudes are related to behavior (Fazio, 1990). To answer this question of "how" attitudes guide behavior, many researchers (e.g., Fazio, 1986; Fishbein & Ajzen, 1975) have developed process models that were designed to "elucidate" the process by which attitudes guide behavior. It is believed that models of the attitude-behavior process can provide the needed theoretical perspective, by providing a conceptual integration of how and why certain factors affect the attitude-behavior relationship (Fazio, 1990). The purpose of this research is to utilize concepts from fully developed theoretical models to develop a new theoretical model to explain the influence that attitudes toward email names has on various evaluations during the selection process.

How Attitudes Can Guide Behavior

When discussing the issue of the attitude-behavior process there are different models to choose from. While behavior may be guided by conscious, deliberative, controlled processes in which an individual reflects on the attitudes that are relevant to a given situation, another method in which attitudes may guide behavior is in a more spontaneous or automatic manner (Fazio, 1990). The individual is not actively considering all of the relevant attitudes and he or she is essentially unaware of, and the influence that those attitudes could have in that situation. According to Fazio (1986), “An attitude is essentially an association between a given object and a given evaluation... (which) may range in nature from very “hot” (the attitudinal object being associated with a strong emotional response) to a “cold” cognitively based judgment of the favorability of the attitude object.” (p. 214). Based on previous research, Fazio developed a process model that attempts to address “how” attitudes guide behavior.

Attitude Accessibility Model. According to Bargh, Chaiken, Bovender, and Pratto (1992), the extent to which attitudes may be activated upon mere exposure of an object is the central concept to Fazio’s (1986) theory of the process by which attitudes about a given object ultimately guide behavior. [Figure 1](#) presents a schematic diagram of Fazio’s (1986) model of the attitude-behavior process. While the purpose of Fazio’s model is to determine whether attitudes can and do influence behavior automatically, the current research is more interested in determining if attitudes toward email names are influencing behavior during an evaluation process. The current research will not attempt to verify the automaticity or deliberativeness of attitudes’ influence on behavior. The attitude

accessibility model is discussed because the concepts within the model can serve as a basis for developing a model that can be tested.

In order to understand the attitude accessibility model, it is important to understand the assumption that social behavior is a function of an individual's perceptions in the immediate situation where an object is encountered (Fazio, 1986). There will always be ambiguous situations, and it is how people behave that is a function of how they perceive and define that situation. This is important in realizing that the extent to which an attitude can and does influence an individual's perceptions will ultimately determine the degree to which those attitudes guide subsequent behavior (Fazio, 1986).

According to this model, an individual's attitude will influence his or her own perceptions of the attitude object in the immediate situation and essentially define the situation for him or her. Again, this may occur in a very conscious manner, or it may occur without the awareness of the individual. Fazio, (1986, 1990) makes a note that psychology has recognized that interpretations of objects (i.e. perceptions) are dependent on knowledge structures, affect, values, and expectations that an individual holds. This statement echoes Buchannan and Brunning's (1971) belief that the attitudes and connotations of various names could lead to expectations that could be used during an evaluative decision making process.

Research has shown that behavior toward a target person is influenced by an individual's perceptions of that target person (see Snyder & Swann, 1978; Snyder, Tanke, & Berscheid, 1977; Word, Zanna, & Cooper, 1974). Assuming that these immediate

perceptions regarding an attitude object are consistent with the individual's attitude, then there will be consistency in regard to that individual's attitude-behavior relationship. This implies that attitudes will guide behavior through their mediating impact on perceptions (Fazio, 1986).

Research has shown that many people rely on normative guidelines when making evaluations, and they may also have a tremendous impact on an individual's definition of the situation and subsequent behavior (Fazio, 1986). Milgram's (1963) obedience studies are an example of how norms regarding different figures can influence a person's definition of the situation.

Defining the event and the situation in relation to norms and perceptions regarding some attitude object are essential in explaining when the attitude-behavior relationship will hold consistent. While this is true, not all situations are based on normative principles, and therefore the attitude-behavior process may never begin because the attitude is never activated from memory when an object is encountered. If the attitude is never activated, a person may never even consider the attitude object in evaluative terms (Fazio, 1986). It is because of this that the activation of the attitude from memory upon observation of the object is the primary step that must occur.

The premise behind Fazio's (1986) process model provides a basis of understanding and a useful framework to examine the effects of attitudes toward email names during a job selection process. First and foremost, the attitude must be accessed from memory upon observing the attitude object. Once the attitude is activated from memory, the attitude may affect the individual's immediate perceptions that enable him

or her to appropriately define the situation. It is evident that among the different elements within Fazio's model, attitude activation is the most crucial of them all. It becomes important to determine what determines whether or not someone will access and activate their attitudes when coming in contact with an attitude object.

Attitude Accessibility. Fazio (1986) states that situational cues, which define an attitude, are responsible for the activation of an attitude. He believes that there are contextual cues that aid in the attitude activation. Research by Snyder and Kendzierski (1982) provides support for this belief that contextual cues within a situation prompt the activation of an attitude.

While the cues present within the situation have been shown to facilitate the activation of an attitude, there is the possibility that an attitude may be activated with no attitude relevant cues present at all (Fazio, 1986). While some research has relied on the identification of contextual cues, other research has examined the effects of category accessibility.

Srull and Wyer (1979) believe that the likelihood that a behavior is encoded is a function of the accessibility of that particular category in memory. Additionally, they believe that the particular category that was used to encode a behavior will be activated when making subsequent judgments of a person along various dimensions (Srull & Wyer, 1979). According to Srull and Wyer (1979) much of the previous research dealing with accessibility (i.e., Ross, Lepper, Strack, & Steinmetz, 1977) suggests that the most easily accessible cognitions about an object or event have a major influence on future judgments. Similarly, Higgins, Rholes, and Jones (1977) found support for the belief that

once a concept is activated, as the result of its use for one purpose, its accessibility is enhanced. Because of this, its likelihood of being used for future judgments increases.

It is because of these findings that Srull and Wyer (1979) believe that once a judgment of a stimulus has been made on the basis of new information, this judgment will be used again for later inferences upon which the judgment was originally based. Through a set of two experiments, Srull and Wyer (1979) found that the category accessibility is a major determinant of the way in which information is encoded into memory and subsequently used to make judgments. They had participants develop scenarios which were designed to activate concepts that were associated with hostility (in study 1) and kindness (in study 2). These individuals then read very ambiguous descriptions about individuals and were then asked to rate the target individual on a variety of trait dimensions. According to Srull and Wyer (1979), the ratings of the target individuals were higher in the respective categories (hostility or kindness) depending on whether the specific concept had been activated during the scenario development. These findings serve as the basis for much of the later research surrounding attitude accessibility and its effect on subsequent behavior. The role of category accessibility has been shown to greatly influence subsequent decision making (Srull & Wyer, 1979). Based on this research, it seems evident that if an attitude is activated, then it will influence subsequent decision making, such as during a job selection process. Additionally, the situational cues that are present are how we can assure that various attitudes will be activated. By placing individuals in different situations, various attitudes

are activated and they may in turn influence the evaluative as well as the decision making process.

The Effects of Email Name Attitudes During the Selection Process.

Within the personnel selection literature, attitudes have been examined in various ways. Literature has addressed how various attitudes influence aspects of organizational fit (e.g., Kristoff, 1996), as well as how applicants reaction to various selection procedures (e.g., Gilliland, 1993). According to Juodvarkis, Grefe, Hogue, and Svyantek (2003), the study of attitudes and stereotypes associated with an individual is a common area within the study of selection in organizations. Specifically, they note that these attitudes and stereotypes have been shown to affect evaluations on selection criteria when individuals are applying for the same job (Gardner & Discenza, 1988).

According to Juodvarkis and colleagues (2003), cognitive stereotypes held by those making decisions are what act as the influencing mechanisms when making evaluations on selection criteria. Because of this, final evaluations are not determined solely by an applicants own abilities and job-related characteristics, but also include the degree to which those abilities and characteristics fit with the evaluator's preconceived notions. While research has shown this to be the case when examining different attitudes toward gender in organizational selection (i.e., Gardner & Discenza, 1988), it seems relevant to believe that attitudes toward given names, email names, and other monikers would have a similar effect.

While individuals' given names may continue to be influential, their email names are quickly becoming their new identity. Unfortunately, there has been no research

dealing with the examination of this phenomenon. It seems logical to infer that many of the same findings and implications that have come from the “names” research can be generalized to email names. Most people realize that there are stereotyped attitudes and connotations associated with certain names, and they may purposely avoid them to avoid unfair discrimination. While several names researchers (e.g., Brunning et. al, 2000; Mehrabian & Piercy, 1993b) have commented that these attitudes should not be as influential in the presence of more relevant information, other research (Bertrand & Mullianathan, 2003) has shown this to not always be the case. Just as Juodvalkis and colleagues (2003) noted, preconceived cognitive stereotypes may have led to different evaluations of individuals simply based on their names. If these preconceived attitudes toward given names have an influence on selection decisions, it seems reasonable that attitudes toward email names would have similar effects, especially in today’s sophisticated technological arena.

With email names emerging as the new reference point and beginning to redefine an individual’s identity, some may not even be aware of the fact that they may be unfairly discriminating against a potential employee on the basis of their email names. Since job recruitment, application, and selection is occurring on the Internet more than ever, an individual’s email name has become an overlooked characteristic. It is because of this that employers may knowingly or unknowingly discriminate against a person based on their implicit attitudes toward that individual’s email name. There has been virtually no research that examines the attitudes, stereotypes, or connotations associated

with email names, and because of this many people may be hindering their chances of getting a job.

Additionally, the research dealing primarily with names, nicknames, and other monikers (such as email names) is lacking in regard to theory. While Buchannan and Bruning (1971) did imply that there could be possible effects of attitudes toward names on an evaluation process, nothing has been empirically tested. A formal theoretical model that can explain how attitudes may affect subsequent job selection decisions should provide a better understanding of how attitudes toward names and email names may influence subsequent behavior. Because of this, a new process model ([Figure 2](#)) examining the attitudes and perceptions of email names and how they may influence an evaluative process will be examined. This process model has been developed based upon the underlying principles drawn from other models within the literature dealing with the relationship between attitudes and behavior (e.g., Fazio, 1986, Fishbein & Ajzen, 1975). By testing this model, we will not only be able to determine what/if there are specific attitudes and connotations associated with different email names, but also how they may influence an individual during an evaluation process as well as in making a final decision.

Based on previous names research (e.g., Mehrabian, 1992), we know that people infer various attributes about a person based on his or her given name. Those same researchers strongly believed that those attributes could and would influence how an individual is evaluated. While an individual's email name may not be as influential during the actual hiring process, it may be very influential during the initial screening of job applicants. As it has already been mentioned, research in decision making has

demonstrated that context can influence decision outcomes (Stevenson, Busemeyer, & Naylor, 1990). Recent research has examined various aspects that play a key role in the initial screening decisions of job applicants (i.e., McKinney, Carlson, Mecham, D'Angelo, Connerley, 2003). In this particular research, various recruiters viewed resumes that were submitted for an available position. It was the job of those individuals (i.e., the decision makers) to review the resume and then determine which individuals (i.e., resumes) "warranted" an invitation for an interview (McKinney, et al., 2003). Other research has had decision makers identify which resume characteristics were the most important/influential when making decisions of the favorability and suitability of the various job applicants (e.g., Brown & Campion, 1994; Hutchinson & Brefka, 1997).

This line of research has examined how various resume characteristics have been influential in the initial screening process of the overall job selection process. Because the Internet is now a tool that many individuals are utilizing when applying for jobs, this position of initial screener will be much more important. For large corporations, there could be the potential for an overload of applicants for any given position. Because sending a resume is so easy, some individuals may be highly qualified, while others may be grossly underqualified. Because of this, the screening process becomes vital for "weeding out" those applicants who would be considered unsuitable. This research will examine if the attitudes and perceptions of various email names will influence how an individual is evaluated, and ultimately if they are invited back to the company for an interview.

The Uniqueness of Email Names

As it has been mentioned previously, the research by Bertrand and Mullianathan (2003) showed that there were obvious effects of an individual's given name on his/her chances of being contacted for an interview. Unfortunately, an individual's given name is still a part of their identity and they will not change it just to get hired for a job. Email names are unique factors that, while they may have the same effects as given names, should be considered in a different light. Many times individuals do not create their own given name and therefore have virtually no choice but to use it when applying for jobs. Email names, on the other hand, are under the complete control of the individual. While some have noted that an individual's email name is becoming his or her "new" identity, this should not excuse the choice to use, what may be considered, inappropriate email names when applying for jobs. It is because of this, that a controlled, deliberative process of evaluation could be understood. If an individual (i.e., one making a screening decision) comes across a resume that has good qualifications, but a very inappropriate email name, they may consciously exclude that person by considering the best interest of the company. Yes, that individual may be qualified, but do you really want him/her representing your company with an obscene email name. This is just one more question that may be resolved with this research.

By utilizing the methodologies from the names research, the attitudes and connotations, associated with an individual because of his/her email name, can be identified. Additionally, examining how those perceived attributes influence an evaluation during a screening process will help us to better understand the attitude-

behavior relationship that may exist. Ultimately, determining when/if these attitudes affect the selection process may provide insights for those individuals who are applying for various jobs. Everyone wants equal consideration when applying for a job. Hopefully, this research will be able to provide some useful, practical suggestions as well as theoretical issues that can provide future directions for this line of research.

The Current Research

The purpose of the current research was to explore the existence of attitudes and connotations that are associated with various email names. Additionally, the process of whether attitudes and perceptions of individuals, based on their email name, influence subsequent evaluation and behavior in relation to job selection was also examined.

Study 1

The goal of the first study was to assess and examine the attitudes and connotations that are associated with various email names. To do so, participants were administered the Revised Name Connotation Profile (RNCP) (Mehrabian, 1997, see Appendix A), which they used to rate a listing of email names on four name connotation factors (Successful, Popular Fun, Ethical Caring, and Masculine-Feminine). Mehrabian (1993b, 1997, 2001) notes that studies of common versus uncommon names has provided a basis for examining conventionally spelled versus unconventionally spelled names. Unconventional names are, according to Mehrabian and Piercy (1993b), unusual, unique, or uncommon names, while conventional names are common names. Additionally, because this study was mainly concerned with evaluations in a work setting, the professionalism of names was also examined. Professional names were those that were

considered to be appropriate for the workplace, while unprofessional names were not appropriate for the workplace. Based on this, as well as other research by Mehrabian (2001), many of the same findings that he discovered in relation to conventional and unconventional names should hold true for email names as well. In addition to Mehrabian's scales, the participants were asked to rate the "conventionalism" and "professionalism" of the email names. Participants were placed in a work-related context by telling them that they were serving as "screeners" in a Human Resources department of a large corporation. This gave them some situational cues (Fazio, 1986) for which to make appropriate evaluations of email names according to the RNCP.

To develop a listing of conventional and unconventional email names, as well as professional and unprofessional email names, multiple subject matter experts (SME's) were used to generate a thorough listing of email names. The email names included email addresses that contain names, letters and numbers, and slang names or nick names. All of those email names generated by the SME's were used as stimulus material to evaluate the connotations associated with those email names in the first study. Based on the categories of email names that were used and the evaluations of both the RNCP as well as the level of conventionalism and professionalism, the following hypotheses were offered:

H1A: Conventional email names will imply more positive characteristics about individuals than will unconventional email names.

H1B: Professional email names will imply more positive characteristics about individuals than will unprofessional email names.

Secondly, following the evidence provided by Mehrabian and Piercy (1993b), I hypothesized the following:

H2A: Unconventional email names will connote less success, less ethical caring and less masculinity than will conventional email names.

H2B: Unprofessional email names will connote less success, less ethical caring and less masculinity than will professional email names.

H2C: Conventional email names will connote less popular fun than will unconventional email names.

H2D: Professional email names will connote less popular fun than will unprofessional email names.

Third, I predicted that the individual factors associated with email names were related to each other in much the same way as they were when Mehrabian (2001) examined name relationships. Therefore I postulated the following:

H3A: The ratings on the Successful scale will be significantly, positively related to the ratings on the Popular Fun scale.

H3B: The ratings on the Successful scale will be significantly, positively related to ratings on the Masculine-Feminine scale.

H3C: The ratings on the Successful scale will be significantly, positively related to the ratings on the Ethical Caring scale.

H3D: The ratings on the Ethical Caring scale will be significantly, negatively related to the ratings on the Masculine-Feminine scale.

Fourth, in dealing with the email name aspect solely, it has been evident from research (Allen et al., 1941) that there have been gender effects in how desirable men and women find common and uncommon names. Based on these findings, I postulated the following:

H4A: There will be a significant interaction between name type (conventional vs. unconventional) and rater sex. Specifically:

H4A₁: Men will find conventional email names more desirable (higher ratings on the Successful, Popular Fun, and Ethical Caring scales) than unconventional email names, since they will connote higher masculinity.

H4A₂: Females will find unconventional email names more desirable (higher ratings on the Successful, Popular Fun, and Ethical Caring scales) than conventional names, since they will connote higher femininity.

H4B: There will be a significant interaction between name type (professional vs. unprofessional) and rater sex.

H4B₁: Specifically, men will find professional email names more desirable (higher ratings on the Successful, Popular Fun, and Ethical Caring scales) than unprofessional email names, since they will connote higher masculinity.

H4B₂: Specifically, females will find unprofessional email names more desirable (higher ratings in Successful, Popular Fun, and Ethical Caring scales) than professional names, since they will connote higher femininity.

Method

Participants

A total of 200 undergraduate students enrolled in introductory level psychology courses at a large Midwestern university participated in this study. Based on previous research (Mehrabian & Piercy, 1993b) each of the names that were used were to be assessed 20 times each. Because of this, a sample of 200 subjects was required for the 200 different email names. The sample consisted of 69 males (34.5%) and 131 females (65.5%), with an average age of 18.67. Ninety-seven percent of the sample was either freshman (84%) or sophomores (13%) and all of the seven major colleges in the university were represented. Students received a mandatory or extra course credit for their participation in the experiment. The students enrolled in the experiment through the experimental website sign-up system.

Design

This was a factorial design study. The independent variables were name-type (between subjects) and rater sex (within subjects), and the dependent variables were the four name connotation factors. Subjects rated each name on the four Revised Name Connotation Profile factors: Ethical Caring, Popular Fun, Successful, and Masculine-Feminine. These four factors served as the dependent measures in this study. Each email name was rated by 20 raters and the average scores for each name were used in subsequent analyses.

Materials/Stimuli

Email names. To develop an appropriate listing of email names, and then evaluate those names, a name generation task was employed in the attempt to develop an extended list of various types of email names. To begin this process, 16 faculty and student instructors, who were teaching either: PSY 101, PSY 120, PSY 221, or PSY 226 were sent forms indicating the purpose of the study and requesting their participation for this task. The forms asked each person to generate 20 email names (10 each, for 2 dimensions) that would be considered either conventional or unconventional; or professional or unprofessional.

Based on the work of Mehrabian (1993b, 2001), conventional email names were defined as names that were considered usual or common types of email names (not considering appropriateness in the workplace), whereas unconventional email names were defined as those that were unusual or uncommon types of names (not considering appropriateness in the workplace) (Mehrabian & Piercy, 1993b; Mehrabian, 2001). Additionally, unusual or uncommon types of email names were defined as unusual spellings of regular names (such as Myke instead of Mike) along with unique ethnic names and unusual slang/nick names (Mehrabian & Piercy, 1993b; Mehrabian, 2001).

For the purpose of this research, professional email names were defined as those email names that were considered appropriate for the workplace, whereas unprofessional email names were defined as email names that were considered inappropriate for the workplace. Based on this information the faculty and student instructors were given two weeks to fill out the email name forms and return them to a designated party. While

follow-up emails were sent midway through the two week process, only seven forms were returned. Because of the lack of a sufficient number of email names from this process, additional email names were acquired from a survey that had been performed by university representatives to assess an organization wide program, which was not associated with the current study. These names were part of public domain, and were therefore adequate for use in this name generation task. The reason it was appropriate to use these email names was that the emails that came from these surveys were obtained from individuals from the same population as those that would have been obtained from faculty and student instructors. A total of 250 different email names were developed through the above email name generation tasks and all were used for the sorting section of this stimuli generation.

The 250 email names were then sorted by six different raters. All raters were graduate students (5 industrial/organizational psychology students and 1 social psychology student). Only I/O students sorted names according to their professionalism. Three of the raters sorted all of the names into either a conventional category or an unconventional category. The other three raters sorted names into either a professional category or an unprofessional category. Those names that had 100% agreement by all three raters in at least one of the two dimensions (i.e., conventionalism or professionalism) were selected and used as stimulus material for the first study. The resulting 200 email names were then broken down into 20 different “blocks” that consisted of 20 email names each (see Appendix L). These blocks were then used in Study 1 for a blocked randomization procedure of presentation.

Measures

Revised Name Connotation Profile (RNCP). This scale was developed by Mehrabian (1997) to assess the connotations associated with names through the use of four different factors (see Appendix A). Those four factors are: 1) Ethical Caring, consisting of qualities such as: trustworthy, loyal, sincere, kind, generous, etc; 2) Popular Fun, consisting of qualities such as: humorous, popular, cheerful, outgoing, adventurous, curious, etc.; 3) Successful, consisting of qualities such as: successful, ambitious, intelligent, independent, confident, assertive, and creative; and 4) Masculine-Feminine, consisting of masculine and feminine qualities. Each factor demonstrated highly satisfactory internal consistency coefficient alpha as reported by Mehrabian: Ethical Caring (.95), Popular Fun (.91), Successful (.81), and Masculine-Feminine (.92).

Each email name was rated on each of these factors using a 9-point Likert-type rating scale that ranged from 1 (none of the characteristics) to 9 (extremely high degree of the characteristics) and included a verbal description for each numerical score. A computer-based version of this scale was created for this study. Research by Gosling, Vazire, Sirvastava, and John (2004) has shown that computer-based results may be generalized across different formats, and these results were consistent with findings from traditional paper and pencil methods. The computer based version had virtually identical instructions as the paper-based version and names were evaluated on an identical semantic-type scale. In addition to RNCP ratings, participants were also asked to rate the names on two 4-point scales ranging from 1 (highly Conventional/Professional) to 4

(highly Unconventional/Unprofessional) to determine the level of professionalism and conventionalism connoted by each name.

Procedure

Each participant entered the laboratory and was directed to a computer that had a consent form in front of it. Each computer monitor was turned off and participants were instructed to leave the monitors off until instructed otherwise. Participants were told to read over the consent form (Appendix C) and sign if they wished to continue. After completing the consent forms, the participants were read an experimental script (see Appendix D). Participants were asked to imagine themselves as a Human Resource (HR) representative who was evaluating individuals for an available position. This aided in giving them situational and contextual cues that would influence their perceptions of the various email names. It was their task, as this HR representative, to rate various people who were applying for the available position via email. The rating process was done via a computer-based survey. After the experimental script was read, all participants were instructed to turn on their monitors and begin. Instructions for the rating process were presented to the participants on the computer and copies of the same directions were handed out to each participant several minutes into the study, for referencing purposes. Each participant received 20 email names to rate on the six dimensions (Ethical Caring, Popular Fun, Successful, Masculine/Feminine, Conventionalism, and Professionalism). Twenty “blocks” of 20 email names were developed and a block randomization method was used to insure that all names were rated 20 times each while controlling for any order

effects (see Appendix L). Any and all clarification questions or computer problems were handled by the experimenter.

Once the participants had finished the computer based survey they were instructed (by a prompt on the computer) to leave the computer as it was and see the experimenter. Each participant was given a copy of the consent form (signed by the experimenter) for contact information and was also given a debriefing form (see Appendix E) explaining the study.

Results

Data Analysis

Two multivariate analysis of variance (MANOVA) tests were used to explore the possible contributions of email name-type (as perceived by the participants), rater sex, and the interaction of name type by rater sex on the four dependent measures.

The first MANOVA was used to explore the possible contributions of email name type (conventionally spelled versus conventionally spelled), rater sex, and the interaction of name-type by rater sex on the four dependent measures (the four name connotation factors). This MANOVA was used to examine the name-type main effect for Hypothesis 1A the univariate results for Hypotheses 2A and 2C, and the interaction effects for Hypotheses 4A, 4A₁, and 4A₂.

The second MANOVA was used to explore the possible contributions of email name-type (professionally spelled versus unprofessionally spelled), rater sex, and the interaction of name type by rater sex on the four dependent measures (the four name connotation factors). This MANOVA was used to examine the name type main effect for

Hypothesis 1B, the univariate results for Hypotheses 2B and 2D, and the interaction effects for Hypotheses 4B, 4B₁, and 4B₂.

A correlation matrix was also generated to examine the intercorrelations of the four dependent measures for the examination of Hypothesis 3 (A-D).

Descriptives

Each email name was rated by 20 different raters and the average scores for each name were used in subsequent analyses. Based on the participants evaluation of the conventionalism and professionalism of the email names, 109 of the email names were considered conventional while 91 were considered unconventional. Additionally, 99 of these email names were considered professional while 101 were considered unprofessional. Intraclass correlations were performed to examine the level of agreement among all 20 different raters for the conventionalism and professionalism of each email name. Intraclass correlations for the conventionalism and professionalism of the email names were, $r = .88$ and $r = .95$ respectively. This indicates that there is a high degree similarity in the rating of each email name across all 20 raters. Table 1 contains the descriptive statistics of all of the variables used in this study including: means, standard deviations, and bivariate correlations.

MANOVA Results

Hypothesis 1A: Conventional email names will imply more positive characteristics about individuals than will unconventional email names. This hypothesis was partially supported. The overall MANOVA with name type (conventional vs. unconventional) as the between-subjects factor, sex as the within-subjects factor and the

Table 1
Means, Standard Deviations, and Correlations of all Study 1 Variables.

RNCP Factor	M	SD	1	2	3	4	5	6
1. Ethical Caring	3.15	2.11	--	.32*	.46*	.16*	-.01	-.03
2. Popular Fun	4.42	2.67		--	-.06*	.20*	.40*	.59*
3. Successful	3.73	2.25			--	.14*	-.28*	-.45*
4. Masculine	4.40	2.91				--	.06*	.08*
5. Conventionalism	2.32	1.05					--	.61
6. Professionalism	2.58	1.14						--

* $p < .001$

four RNCP factors as dependent variables showed a significant name-type effect, $F(4, 195) = 78.14, p < .001, \eta^2 = .61$, which indicates that the groups differ in at least one mean weight (see Table 2 for source table). Based on this, the following univariate effects specific to Hypotheses 2A and 2C were examined to determine if the conventionally spelled email names connoted more desirable ratings.

Hypothesis 2A: Unconventional email names will connote less success, less ethical caring, and less masculinity than will conventional email names.

Hypothesis 2C: Conventional email names will connote less popular fun than will unconventional email names. These hypotheses were partially supported. Univariate results showed significant differences between conventional and unconventional email names for all four dependent measures; ethical caring $F(1, 198) = 4.36, p < .05$, popular fun $F(1, 198) = 249.21, p < .001$, successful $F(1, 198) = 114.29, p < .001$, masculinity $F(1, 198) = 5.49, p < .05$, although not all were in the expected direction. Cell means showed

Table 2
Multivariate Analysis of Variance for Name-Type (Conventional vs. Unconventional) and RNCP Factors

Source	df	F (Pillai's Trace)	η
Between Subjects			
Name-type (Conventionalism)	4	76.14**	.61
Within subjects			
Sex	4	8.70**	.15
Sex X Name-type	4	7.28**	.13
Error	195		

** $p < .0001$

that unconventionally spelled email names were judged to connote less success ($M=3.14$ vs. $M=4.32$), supporting part of Hypothesis 2A. Cell means also showed that conventional email names were judged to connote less popular fun ($M=3.14$ vs. $M=5.95$), supporting Hypothesis 2C. Contrary the hypothesis, participants rated unconventional email names as having higher levels of ethical caring ($M=3.35$ vs. $M=3.10$), as well as higher levels of masculinity ($M=4.67$ vs. $M=4.18$).

Hypothesis 1B: Professional email names will imply more positive characteristics about individuals than will unprofessional email names. This hypothesis was also supported. The overall MANOVA with name- type (professional vs. unprofessional) as the between-subjects factor, sex as the within-subjects factor, and the four RNCP factors as dependent variables showed a significant name-type effect, $F(4, 195) = 136.77$, $p < .001$, $\eta^2 = .74$, which indicates that the groups differ in at least one mean weight (see

Table 3 for source table). Based on this, the following univariate effects specific to Hypothesis 2B and 2D were examined to determine if the professionally spelled email names connoted more desirable ratings.

Table 3
Multivariate Analysis of Variance for Name-Type (Professional vs. Unprofessional) and RNCP Factors

Source	df	F (Pillai's Trace)	η
Between Subjects			
Name-type (Professionalism)	4	136.77**	.74
Within subjects			
Sex	4	9.05**	.16
Sex X Name-type	4	6.89**	.13
Error	195		

** $p < .0001$

Hypothesis 2B: Unprofessional email names will connote less success, less ethical caring, and less masculinity than will professional email names.

Hypothesis 2C: Professional email names will connote less popular fun than will unprofessional email names. These hypotheses were partially supported. Univariate results showed significant differences between professional and unprofessional email names for all four dependent measures; ethical caring $F(1, 198) = 5.19, p < .05$, popular fun $F(1, 198) = 362.92, p < .001$, successful $F(1, 198) = 178.64, p < .001$, masculinity $F(1, 198) = 11.31, p < .01$, although not all were in the expected direction. Cell means showed that unprofessional email names were judged to connote less success ($M=3.12$ vs.

$M=4.46$), supporting part of Hypothesis 2B. These means also showed that professional email names were judged to connote less popular fun ($M=2.90$ vs. $M=5.91$), supporting Hypothesis 2D. Contrary to hypothesizing, participants rated unprofessional names as having higher levels of ethical caring ($M=3.35$ vs. $M=3.08$), as well as higher levels of masculinity ($M=4.74$ vs. $M=4.06$), both failing to support Hypothesis 2B.

Hypothesis 4A: There will be a significant interaction between name type (conventional vs. unconventional) and rater sex. Specifically:

4A₁: Males will find conventional email names more desirable (higher on successful, popular fun, and ethical caring) than unconventional email names.

4A₂: Females will find unconventional email names more desirable (higher on successful, popular fun, and ethical caring) than conventional email names.

These hypotheses were again, partially supported. The overall MANOVA yielded a significant interaction between name-type and rater sex, $F(4, 195) = 7.73, p < .001, \eta^2 = .13$, providing support for Hypothesis 4A (see Table 1 for source table). Cell means showed that males rated conventional names as having higher levels of successful ($M=4.38$ vs. $M=4.27$), popular fun ($M=3.29$ vs. $M=2.99$), and ethical caring ($M=3.30$ vs. $M=2.90$) providing full support for Hypothesis 4A₁. Cell means also indicated that females rated unconventional email names higher in popular fun ($M=6.06$ vs. $M=5.85$) providing support for Hypothesis 4A₂. Contrary to the hypothesis, males rated unconventional email names higher on ethical caring ($M=3.51$ vs. $M=3.19$) and success ($M=3.25$ vs. $M=2.99$), when compared to females. Because Hypothesis 4A₁ was fully supported, it is appropriate to conclude that males find conventional email names more

desirable than unconventional email names. Because there was only partial support for Hypothesis 4A₂, there was not enough evidence to conclude that women find unconventional email names more desirable.

Hypothesis 4B: There will be a significant interaction between name type (professional vs. unprofessional) and rater sex. Specifically:

4B₁: Males will find professional email names more desirable (higher on successful, popular fun, and ethical caring) than unprofessional email names.

4B₂: Females will find unprofessional email names more desirable (higher on successful, popular fun, and ethical caring) than professional email names. The overall MANOVA yielded a significant interaction between name-type and rater sex, $F(4, 195) = 6.89, p < .001, \eta^2 = .12$, providing support for Hypothesis 4B (see Table 2 for source table). Cell means showed that males (when compared to females) rated professional names as having higher levels on successful ($M=4.50$ vs. $M=4.42$), popular fun ($M=3.17$ vs. $M=2.73$), and ethical caring ($M=3.27$ vs. $M=2.89$) providing full support for Hypothesis 4B₁. Additionally, cell means also showed that females (when compared to males) rated unprofessional email names as having higher levels of popular fun ($M=6.10$ vs. $M=5.81$), providing partial support for Hypothesis 4B₂. Contrary to the hypothesis males rated unprofessional email names as having higher levels of ethical caring ($M=3.51$ vs. $M=3.19$), successful ($M=3.25$ vs. $M=2.99$) when compared to females.

Correlational Results

Table 1 presents a correlation matrix that was used to examine all components of Hypothesis 3.

Hypothesis 3A: The ratings on the Successful scale will be significantly, positively related to the ratings on the Popular Fun scale. This hypothesis was not supported, as there was a significant negative relationship between successful ratings and popular fun ratings, $r = -.06, p < .001$, although small.

Hypothesis 3B: The ratings on the Successful scale will be significantly, positively related to the ratings on the Masculine-Feminine scale. This hypothesis was supported with a significant positive relationship between successful ratings and masculine-feminine ratings, $r = .14, p < .001$.

Hypothesis 3C: The ratings on the Successful scale will be significantly, positively related to the ratings on the Ethical Caring scale. This hypothesis was supported with a significant positive relationship between successful ratings and ethical caring ratings, $r = .46, p < .001$.

Hypothesis 3D: The ratings on the Ethical Caring scale will be significantly, negatively related to the ratings on the Masculine-Feminine scale. This hypothesis was not supported, as there was a significant positive relationship between ethical caring ratings and masculine-feminine ratings, $r = .16, p < .001$.

Discussion

The purpose of study 1 was to examine the attitudes and connotations that are associated with email names. Overall, the results of the study support much of the previous research dealing with names in that there are certain connotations that are associated with various types of email names. The results showed that participants had very different perceptions of conventional and unconventional email names, as well as professional and unprofessional email names.

Name-Type Effects

Specifically, these results suggested that conventional email names, as well as professional email names, were somewhat more desirable than were unconventional and unprofessional email names. Traditionally, research has suggested that higher scores on ethical caring, success, and popular fun denote more positive characteristics (Mehrabian and Piercy, 1993). Because both conventional email names and professional email names connoted higher levels of success, Hypothesis 1A and 1B were partially supported. Because of this, one can conclude that individuals who use conventional or professional email names are considered more successful, ambitious, intelligent, independent, confident, assertive, creative (all adjectives that make up the successful dimension) than individuals who use unconventional and unprofessional email names.

While previous theories hypothesized that conventional email names would have higher levels of popular fun, it seems reasonable in this case (where participants were placed in a workplace situation) that those email names that were more unconventional and unprofessional would connote higher levels of popular fun. Results of the study

showed that unconventional and unprofessional names were more playful, humorous, popular, cheerful, outgoing, good-looking, adventurous, friendly, athletic, healthy, and curious (all adjectives associated with the popular fun dimension) than were conventional and professional email names. This result seems very reasonable especially when considering the fact that individuals were placed in a work setting and in such a setting it would seem more appropriate to have an email name that connoted successful characteristics rather than popular fun characteristics.

Name-Type by Rater Sex

While some research has found no interaction between name-type and rater sex (Mehrabian & Piercy, 1993b), there have been other studies that found sex differences in the desirability of different types of names (e.g., Allen et al, 1941). The results of the current study suggest that there are sex differences in the perceptions of both the conventionalism and professionalism of email names. It was expected that men would find conventional and professional email names as being more desirable, while women would find unconventional and unprofessional email names as being more desirable. Due to problems associated with the masculine-feminine scale, however, issues related to the masculinity or femininity of various email names could not be accurately evaluated.¹

Results did suggest that men found both conventional and professional email names as

¹ Prior research has suggested that conventional names connote more masculinity, while unconventional names connote more femininity (Mehrabian & Piercy, 1993b). Based on an examination of the data, it appeared that the participants may have misunderstood the masculinity-femininity scale. Specifically, names that were highly masculine in nature (i.e., BigDaddy@), and those that *should* have been highly feminine in nature (i.e., foxylady@) were both rated as highly masculine. Because of this, many of the results regarding the masculinity-femininity of email names cannot be accurately explained. It is also no longer relevant to infer (as hypothesized) that men preferred conventional and professional email names because they were more masculine or that women preferred unconventional and unprofessional email names because they were more feminine. Since I cannot make definitive conclusions about the masculinity-femininity of names I will not include this in the discussion of the results.

more desirable than unconventional and unprofessional email names. However, there was not enough evidence to suggest that women find unconventional and unprofessional email names more desirable.

Based on a re-examination of the results from Mehrabian and Piercy (1993b), it seems as though they had a similar problem associated with the masculinity-femininity scale, although they did not report any problems associated with the scale. Based on this, the format of the scale may need to be reevaluated. Future research may be able to provide more useful analyses that will allow for more accurate conclusions.

Interrelationship of Measures

Overall, the results of the correlational analysis did not support the findings from previous research (i.e., Mehrabian, 2001). It is important to note that all of these relationships are significant due to the very large number of observations, although only a few of the results were meaningful. One of the more interesting findings regards the negative relationship between successful and popular fun ($r = -.06$). Based on prior research, I had hypothesized that there would be a positive relationship between these two measures. While the relationship is very small (yet significant due to the large sample size), the direction of the relationship is interesting. As was discussed previously, participants were put into a workplace setting, and it seems reasonable to conclude that those names considered high in success would be considered low in popular fun. As seen in previous analyses, those names that were considered conventional and professional were rated as being more successful, while unconventional and unprofessional email

names were rated as higher on popular fun. Based on this, the results seem to indicate that fun, or unique, names may not be perceived as appropriate for work-related settings.

Conclusion

As others have noted, names, email names, and other monikers convey various impressions in subtle and implied ways (Mehrabian, 1981; Mehrabian & Piercy, 1993b). It seems as though individuals may be failing to recognize that their email names may be conveying these subtle and inadvertent effects on how they are being perceived in various situations. Because many of these individuals may be creating these unique, unconventional/unprofessional email names while they are in high school or college, they have no idea about the possible inferences that are being made about them.

With the ever growing use of the Internet for business and professional use, an individual's email name is now their new identity. One may infer from the results of this study that there are specific perceptions that are associated with different types of email names. Failing to recognize the possible effects of using unconventional and unprofessional email names could be very detrimental in work-related situations. The next step is to understand how the perceptions associated with various email names influence the job selection process.

Study 2

The second study of this research concerned integrating a theoretical framework of attitude and behavior (i.e., Figure 2) with the research on names (Bruning et al., 2000; Mehrabian, 2001) and email names. Specifically, this study was used to determine if various attitudes and perceptions associated with email names affect a job-related

evaluation of an individual. According to Fazio (1986), “Responding to a measure involves an instance of associating an attitude object with a given evaluation, thus enhancing the strength of the object-evaluation association and, hence, the accessibility of the attitude.” (p. 217). Much of the research dealing with the activation of attitudes has had participants respond to an attitudinal inquiry at some point throughout the study. Research by Srull and Wyer (1979) showed that category accessibility (attitude accessibility in this case) is an important factor in the encoding of information and will be used when making evaluative judgments. By having participants respond to various attitudinal inquiries regarding criteria for job success, we can be assured that the attitude, which they have toward a particular object (being evaluated), is indeed activated. The primary interest of this study was to determine if the various attitudes and connotations toward email names had an effect in an evaluation process, which may have led to some action. Because of this, the methodology that was used was similar to that which had been used in the research dealing with the recruiter’s evaluations during the initial screening process (e.g., McKinney et. al., 2003).

To this end, participants were presented with a series of resumes and then they were forced to respond to a series of selection relevant criteria (partially determined by Campbell, 1992). Just as in the recruitment literature, participants were be asked to make an evaluation and then determine if they would like to invite each/any of the individuals back to the company for an interview. Following each resume evaluation the decision makers were asked to identify which characteristics were the most influential during the decision making process. Just as Bruning et al. (2000) had participants respond to an

inquiry regarding job success, a similar measure, using selection criteria, was used to determine if an email name had an effect on the selection process. Because of this I postulated the following:

H1A: Participants will rate resumes, which contain email names that are considered highly conventional, to be higher in the selection criteria (effort, personal discipline, management, cognitive ability, conscientiousness, success, social skills, motivation) than those email names considered highly unconventional.

H1B: Participants will rate resumes, which contain email names that are considered highly professional, to be higher in the selection criteria (effort, personal discipline, management, cognitive ability, conscientiousness, success, social skills, motivation) than those email names considered highly unprofessional.

Additionally, research performed by Higgins, Rholes, and Jones (1977) provided evidence that once a concept is activated as a result of its use for one purpose, its relative accessibility is enhanced, and its likelihood of being used to evaluate other information increases. Srull and Wyer (1979) found that exposure to behavioral instances of a trait in one context may activate a schema associated with a trait, and the schema may then serve as a basis for interpreting subsequent information received in different contexts. Because of this, I postulated the following:

H2A: Those who open an email from an artificial inbox will rate the email name as having a higher level of influence than those who were not forced to

open an email and those who were presented with resumes containing no email names.

H2B: Those who open an email from an artificial inbox will be more likely than those who were not forced to open an email and those who were presented with resumes containing no email names, to ask an individual to return for an interview.

H2C: Those who were forced to open an email from an artificial resume will have higher ratings on the selection criteria than those were not forced to open an email and those who were presented with resumes containing no email names.

H2D: There will be a significant interaction between resume group and name-type on the selection criteria.

H2E: There will be a significant interaction between resume group and name-type on the likelihood of being asked to return for an interview.

The resumes used for evaluative purposes in this study come directly a study by Bertrand and Mullianthan (2003), which dealt specifically with name types as well as the quality of resumes that were sent out for job openings. While they found specific name-type effects, they also found effects related to the resume quality (i.e., high and low quality). Because of this I have postulated the following:

H3A: High quality resumes will be rated higher than low quality resumes on the selection criteria.

H3B: High quality resumes will be more likely than low quality resumes to be asked to return for an interview.

H3C: There will be a significant interaction between resume quality and name-type on the eight selection criteria.

Method

Participants

To achieve a medium effect size of .25 (Cohen, 1988), approximately 168 observations would be needed to achieve a sufficient power level of .80. Because each participant rated 4 different resumes a total of 48 participants were needed for the necessary power. A total of 90 subjects participated in this study. All participants were undergraduate students enrolled in introductory level psychology courses at a large Midwestern university. The sample consisted of 32 males (35.6%) and 58 females (64.4%) with an average age of 19.07 years. Ninety-two percent of the sample consisted of freshman (70%) and sophomore (22.2%) and all seven major academic colleges were represented in this sample. Students received a mandatory or extra course credit for their participation in the experiment. The students enrolled in the experiment on the experimental website sign-up system.

Design

This study was a 2 X 2 X 3 factorial design that utilized multivariate and univariate statistics. The independent variables were: name-type (professional, unprofessional), which was within subjects, resume quality (high quality, low quality), which was within subjects and resume group (forced to open an email, not forced to open

an email, control-no email name presentation), which were between subjects. The dependent variables were: the eight selection criteria, the reported influence of an email name in the decision process, and whether or not the hypothetical individual was asked to return for an interview.

Materials/Stimuli

Email names. A total of four email names were used for this study. Ideally, the email names that were to be used would have been non-gender specific names, which had an average rating on the masculinity-femininity scale and also scored the highest on conventionalism and professionalism. Unfortunately, as was noted previously, it appeared that the participants misunderstood the masculinity-femininity scale in Study 1. While some of the participants used the scale appropriately (higher values representing more masculinity and lower values representing more femininity), many rated email names that were more feminine in nature as being highly masculine. Regardless of whether an email name was highly masculine or highly feminine, they were rated the same (highly masculine). Because of this, it was impossible to determine which names were actually non-gender specific and which were mis-specified. Therefore, four email names were chosen that were rated high in the conventionalism and professionalism from Study 1 and had roughly equal masculine-feminine scores. Two of the email names were rated as both highly conventional and highly professional and two of the email names were rated as both highly unconventional and highly unprofessional. Due to a high correlation between the two name types (i.e., $r = .84$), only one name type (i.e., professionalism) will be used. Based on this, the four email names that were chosen for use in this study were,

mharmon@ (highly professional), jsmith8888@ (highly professional), drunkensquirrel@ (highly unprofessional), and HtoTHEhizzy03@ (highly unprofessional).

Resumes. The four email names selected were placed on artificial resumes that were derived from the study done by Bertrand and Mullianathan (2003) (see Appendix F). There were two types of resumes: those considered “high quality” and those considered “low quality”. The resumes contained information regarding education, affiliations, previous work, skills and qualifications, as well as references. The resumes that were given to each participant were identical except for the email names that were associated with them. These resumes were given to participants to assess and rate on several selection criteria.

Measures

Selection Criteria. Participants will assess the various resumes they are given on multiple criteria related to any selection process. According to Campbell (1992) there are eight main dimensions that could be used to classify any job in the Dictionary of Occupational Titles (Department of Labor, 1991). These eight components, according to Campbell (1992) are: 1) job-specific task proficiency, 2) nonjob-specific task proficiency, 3) written and oral communication, 4) effort, 5) personal discipline, 6) facilitating peer and team performance, 7) supervision, and 8) management/administration. For the purpose of this experiment, 1) effort, 2) personal discipline, and 3) management were used along with 4) cognitive ability, 5) conscientiousness, 6) success, 7) social skills, and 8) motivation. These criteria were rated on a five point Likert-type scale ranging from 1

(Strongly Agree) to 5 (Strongly Disagree) (see Appendix G). Because of the nature of the scale, all scores were recoded so that higher scores were more desirable.

Influence Dimensions. Once participants rate various “potential employees” on the various selection criteria they were asked to rate how influential various aspects were in guiding their decisions. These dimensions/characteristics included email address (independent of domain name), education, age, experience, etc. These were rated on a five point Likert-type scale ranging from 1 (Extremely Influential) to 5 (Not at all Influential) (see Appendix H). For analysis purposes, this scale was reverse coded such that higher numbers indicated a higher level of influence.

Procedure

As individuals entered that lab they were directed to a seat containing an informed consent form. Individuals participated in one of three conditions: 1) open an email containing a resume from an artificial inbox, 2) presented with resumes containing individuals’ email address as their contact information, 3) presented with resumes containing not contact information (i.e., no email address). The quality of the resumes, as well as the email names attached to each resume were all counterbalanced to control for order effects or carry over effects. Participants had no knowledge of what condition they were in and had no knowledge of the other conditions that existed. All participants were provided an instruction sheet (see Appendix J) explaining their role in the simulation. The experimenter read the instruction sheet aloud to be sure that everyone had the same instructions and had the same understanding of the simulation.

The instructions told each participant that they were an entry-level employee working for a large corporation. They were told that their company advertises job openings on an online job posting website called “Godzilla.com”. Their job was to aid in the selection process by screening the applicants. They were told that the job that was open was a general, managerial, upper level position and that they needed to select those individuals who they felt would be suitable for the position. They were asked to carefully examine each resume and then rate the individual on the various selection criteria as well as decide if they would like to invite the individual back to the company for an interview. Even though they were only receiving a limited number of resumes, participants were instructed to consider the overall picture that there may be other people applying for the same position. They were told that they must use their discretion in deciding who to invite back for an interview. They could invite one, two, three, or all four applicants back for an interview. After the resume was evaluated on the selection criteria, the participants were given the “Influence Dimensions” form in which they could identify which components influenced their decision making process. This form was filled out without looking at the resume or criteria sheet. This process was continued until all four resumes had been rated. Finally, each participant filled out a demographic sheet. Upon completion, each participant was given a copy of the consent form as well as a debriefing form (see Appendix K) telling them the purpose of the study.

Results

A correlational analysis of name-type indicated that the conventionalism and professionalism of email names was highly related, $r = .82$, so name-type was collapsed

across the two categories. Because the nature of the study is concerned with a work setting, it is also more relevant to consider these names as either professional or unprofessional (which is how they will be referred to for the remainder of the study). Additionally, because name-type was collapsed across the conventionalism and professionalism of the email names, Hypotheses 1A and 1B were collapsed into one analysis. Table 4 presents descriptive statistics of all variables in this study, means, standard deviations, and bivariate correlations.

To examine Hypothesis 1A&B, a multivariate analysis of variance (MANOVA) was utilized to examine the mean differences in the eight selection criteria between those email names that were considered professional versus those considered unprofessional.

Additionally, an analysis of variance (ANOVA) was used to examine the group differences associated with the examination of Hypothesis 2A and chi-square was utilized to determine if there were differences in the likelihood of different experimental groups inviting the hypothetical applicants back to the company of an interview (i.e., Hypothesis 2B).

Hypotheses 1A and 1B. Across resume groups, participants will rate resumes containing email names that are considered highly professional to be higher in the selection criteria than those email names considered highly unprofessional. These hypotheses were supported. An overall repeated measures MANOVA, with name-type as the within subjects factor and the eight selection criteria as the dependent variables, showed a significant name-type effect, $F(8, 52) = 2.54, p < .05, \eta^2 = .28$. Based on this result the individual univariate tests were examined. They yielded significant differences

Table 4
Means, Standard Deviations, and Correlations of all Study 2 Variables.

Factor	M	SD	1	2	3	4	5	6	7	8	9	10
1. Effort	1.82	.66	--	.62**	.58**	.58**	.50**	.63**	.38**	.63**	.62**	.01
2. Responsibility	1.85	.64		--	.53**	.56**	.53**	.60**	.40**	.58**	.58**	.03
3. Management	2.22	.96			--	.70**	.40**	.82**	.43**	.57**	.73**	.02
4. Cognitive	2.09	.79				--	.44**	.75**	.44**	.63**	.68**	.02
5. Conscientious	1.87	.65					--	.53**	.32**	.52**	.51**	-.13*
6. Success	2.27	.91						--	.45**	.68**	.77**	-.05
7. Social	2.00	.68							--	.43**	.46**	.08
8. Motivated	2.02	.70								--	.61**	-.04
9. Quality	2.17	.88									--	.02
10. Influence	3.391	.48										--
			N									
11. Professionalism												
	Professional		120									
	Unprofessional		120									
12. Invite												
	Yes		196									
	No		158									

* $p < .05$ ** $p < .001$

Note: Responsibility = personal responsibility, Cognitive = cognitive ability, Social = social skills, Quality = participants perceived resume quality, Influence = email name influence during the evaluation process.

between name-type and effort, $F(1, 59) = 5.54, p < .05$; personal responsibility, $F(1, 59) = 7.80, p < .01$; management $F(1, 59) = 6.19, p < .05$; conscientiousness, $F(1, 59) = 10.55, p < .01$; success $F(1, 59) = 15.53, p < .001$; and motivation, $F(1, 59) = 6.13, p < .05$. There

were no significant differences between name-type and cognitive ability, $F(1, 59) = .69$, $p > .05$, and social skills, $F(1, 59) = .50$, $p > .05$.

An examination of cell means showed that professional email names were rated higher in effort ($M=3.28$ vs. $M=3.11$), personal responsibility ($M=3.28$ vs. $M=3.10$), management ($M=2.95$ vs. $M=2.72$), conscientiousness ($M=3.25$ vs. $M=3.03$), success ($M=2.93$ vs. $M=2.63$), motivation ($M=3.09$ vs. $M=2.93$), and social skills, although not significantly ($M=3.08$ vs. $M=2.98$). These results support the hypothesis that resumes containing professional email names would be rated higher in the selection criteria than would be unconventional/ unprofessional email names.

Hypothesis 2A: Those who open an email from an artificial inbox will rate the email name as having a higher level of influence than those who were not forced to open an email and those who were presented with resumes containing no email names. This hypothesis was partially supported. A one-way ANOVA was conducted, with resume group (i.e., open a resume from an email from an inbox, presented with a resume with an email on it, control group or only receiving a resume with no email name on it) as the independent variable and email name influence as the dependent variable (recoded so that higher scores indicate more influence). The ANOVA yielded a significant resume group effect, $F(2, 356) = 32.33$, $p < .001$. A Bonferroni post-test revealed that there was a significant difference between the inbox group and the control group ($M=3.00$ vs. $M=1.79$), as well as between the resume plus email group and the control group ($M=3.03$ vs. $M=1.79$), but no significant difference between the inbox group and the resume plus email group ($M=3.00$ vs. $M=3.03$).

While there was no significant difference between the inbox group and the resume plus an email group, there were differences between those groups and the control group. This shows that exposure to email names, regardless of their presentation, do affect an individual's self-reported influence ratings.

Hypothesis 2B: Those who open an email from an artificial inbox will be more likely than those who were not forced to open an email and those who were presented with resumes containing no email names, to ask an individual to return for an interview.

This hypothesis was not supported. A chi-square (with group as the rows and whether or not they were invited back for an interview as the columns) was used because this study was only looking at the likelihood that an event would or would not occur. The results indicated that there was not a significant difference between email group and the likelihood of inviting an individual back for an interview, $\chi^2(2, N=354) = 1.95, p > .05$. A second chi-square also indicated that there was no significant difference between name-type and the likelihood being invited back for an interview, $\chi^2(1, N=237) = 2.66, p > .05$.

Hypothesis 2C: Those who were forced to open an email from an artificial resume will have higher ratings on the selection criteria than those who were not forced to open an email and those who were presented with resumes containing no email names. This hypothesis was partially supported. An overall MANOVA, with resume group as the between subjects factor and the eight selection criteria as the dependent variables, showed that there was no significant resume group effect, $F(16, 162) = .99, p > .05, \eta^2 = .09$. However, an examination of the univariate tests showed that there was a significant difference between at least one of the resume groups and cognitive ability,

$F(2, 87) = 4.37, p < .05$. Bonferroni post-tests indicated that there was a significant difference between the artificial inbox group and the control group ($M=3.08$ vs. $M=2.78$), but not significant differences between the inbox group and the resume group ($M=3.08$ vs. $M=2.86$) and between the resume group and the control group ($M=2.86$ vs. 2.78). There were no significant differences between any of the resume groups and effort, $F(2, 87) = .97, p > .05$, personal responsibility, $F(2, 87) = .81, p > .05$, management, $F(2, 87) = 1.46, p > .05$, conscientiousness, $F(2, 87) = .64, p > .05$, success, $F(2, 87) = 1.98, p > .05$, social skills, $F(2, 87) = 1.95, p > .05$, and motivation, $F(2, 87) = .77, p > .05$. Overall, these results suggest that there was no difference in which resume group an individual was in and their overall ratings on the selection criteria.

Hypothesis 2D. There will be a significant interaction between resume group and name-type on the selection criteria. This hypothesis was partially supported. An overall repeated measures MANOVA, with resume group (inbox group and resume plus email group) as the between subjects factor and name-type as the within subjects factor and the eight selection criteria as the dependent variables, showed no significant interaction between resume group and name-type and all eight selection criteria, $F(8, 109) = 1.17, p > .05, \eta^2 = .08$. An examination of the univariate tests indicated there was a significant resume group by name-type interaction for management, $F(1, 116) = 6.20, p < .05$, and cognitive ability, $F(1, 116) = 5.17, p < .05$. Cell means showed that for the resume plus email group, resumes with professional email names were rated as having better management and administrative skills than resumes with unprofessional email names ($M=3.02$ vs. $M=2.58$). Additionally, for the resume plus email group, resumes with

professional email names were rated as having higher cognitive ability than resumes containing unprofessional email names ($M=3.00$ vs. $M=2.72$). There was no significant interaction for effort, $F(1, 116) = 1.05$, $p>.05$, personal responsibility, $F(1, 116) = 1.43$, $p>.05$, conscientiousness, $F(1, 116) = .91$, $p>.05$, success, $F(1, 116) = 1.81$, $p>.05$, social skills, $F(1, 116) = 1.80$, $p>.05$, and motivation, $F(1, 116) = .28$, $p>.05$.

Hypothesis 2E. There will be a significant interaction between resume group and name-type on the likelihood of being asked to return for an interview. This hypothesis was not supported. Due to the binary nature of the dependent variable a logistic regression was conducted to examine the interaction between resume group and name-type on the likelihood of being asked to return to a company for an interview. The logistic regression indicated that there was not a significant interaction between resume group and name-type on the likelihood of being asked to return to a company for an interview, $\chi^2(1, N=237) = .46$, $p>.05$. This indicates that resumes containing professional names were not more likely than resumes containing unprofessional email names to be invited back for an interview, regardless of whether the rater was forced to open a resume from an artificial inbox, was given a resume with an email name as the contact information, or whether they were given resumes with out email names as the contact information.

Hypothesis 3A: High quality resumes will be rated higher than low quality resumes on the selection criteria. This hypothesis was supported. A repeated measures MANOVA indicated a significant main effect for resume quality in regard to the eight selection criteria, $F(8, 79) = 58.19$, $p<.001$, $\eta^2 = .86$. An examination of the univariate

tests indicated a significant difference in quality for ratings of effort, $F(1, 89) = 172.15$, $p < .001$; personal responsibility, $F(1, 89) = 76.85$, $p < .001$; management, $F(1, 89) = 295.01$, $p < .001$; cognitive ability, $F(1, 89) = 225.21$, $p < .001$; conscientiousness, $F(1, 89) = 38.22$, $p < .001$; success, $F(1, 89) = 360.03$, $p < .001$; social skills, $F(1, 89) = 38.22$, $p < .001$; and motivation, $F(1, 89) = 147.13$, $p < .001$. Based on these univariate results, an examination of cell means indicate that higher quality resumes were rated higher in effort ($M=3.50$ vs. $M=2.84$), personal responsibility ($M=3.38$ vs. $M=2.92$), management ($M=3.41$ vs. $M=2.16$), cognitive ability ($M=3.36$ vs. $M=2.47$), conscientiousness ($M=3.32$ vs. $M=2.97$), success ($M=3.31$ vs. $M=2.15$), social skills ($M=3.19$ vs. $M=2.84$), and motivation ($M=3.30$ vs. $M=2.68$).

Hypothesis 3B: High quality resumes will be more likely than low quality resumes to be asked to return for an interview. This hypothesis was also supported. A chi-square analysis, with self-reported resume quality (high, low) as the rows and whether or not they were invited back for an interview as the columns, showed that there was a significant relationship between self-reported resume quality and the likelihood of whether or not the applicant was invited back for an interview, $\chi^2(1, N=354) = 182.40$, $p < .001$, OR=48.42. This indicated that while an individual's email name does not affect the likelihood of being asked back for an interview, the overall quality of the resume does. The results suggest that applicants with high quality resumes were more likely to get invited back for an interview than were applicants with low quality resumes.

Specifically, the odds that a high quality resume was invited back for an interview was 48

times greater than the odds that a low quality resume was asked to return for an interview.

Hypothesis 3C. There will be a significant interaction between resume quality and name-type on the eight selection criteria. This hypothesis was partially supported. A repeated measures MANOVA indicated that there was not a significant interaction between resume quality and name-type, $F(8, 109) = 1.84, p > .05, \eta^2 = .12$. Univariate results showed that there was a significant interaction for management, $F(1, 126) = 5.60, p < .05$, and success, $F(1, 116) = 5.95, p < .05$. Cell means showed that for high quality resumes, those containing professional email names were rated as having higher management and administrative skills than those containing unprofessional email names, ($M=3.38$ vs. $M=3.03$). Additionally, cell means indicated that for high quality resumes, those containing professional email names were rated as being more successful than those containing unprofessional email names, ($M=3.34$ vs. $M=2.94$). There was not a significant interaction for effort, $F(1, 116) = 1.05, p > .05$, personal responsibility, $F(1, 116) = 1.72, p > .05$, cognitive ability, $F(1, 116) = 1.86, p > .05$, conscientiousness, $F(1, 116) = 1.04, p > .05$, social skills, $F(1, 116) = .58, p > .05$, and motivation, $F(1, 116) = .17, p > .05$.

Discussion

While there has been a significant amount of empirical research that has demonstrated the existence of attitudes and perceptions associated with names (e.g., Bruning et. al., 2000; Mehrabian, 2001), very little research has examined whether or not those names have an influence during a job selection process. Mehrabian (2001) believed

that in the presence of more important (i.e., more relevant) information (such as on a job resume), the attitudes and connotations associated with names would not affect decision making. Despite this belief, Bertrand and Mullianathan (2003) discovered that name-type did indeed affect the chances that someone was contacted for an interview. With the continuing use of the Internet to apply for jobs, individuals will rely on their email name as their reference point for which to be contacted. An individual should be aware of the possibility that he/she could be hindering their chance of getting a job simply because of their email name.

While the results of study 1 indicated that there were specific perceptions that were associated with different types of email names, study 2 was designed to determine whether or not those perceptions would have an influence during the selection process (both for ratings on selection criteria as well as deciding whether or not the hypothetical applicant was invited back for an interview or not). Overall, the results suggested that the attitudes and connotations associated with email names did affect the evaluation of different individuals, but those perceptions did not affect the chances of being asked to return to the company for an interview.

Evaluation of Selection Criteria

The results of this second study suggests that the different types of email names (i.e., professional vs. unprofessional) affect an evaluation of an individual on various selection criteria. The results indicated that professional email names were rated higher on all of the selection criteria, except for cognitive ability. Those individuals who had professional email names were believed to display more effort, more personal

responsibility, better management skills, more success, and be more motivated than individuals with unprofessional email names.

It is interesting that these results were consistent across the quality of the resume as well as the method of presentation (i.e., inbox group vs. resume plus email address), as was indicated by a non-significant interaction between resume group and the selection criteria as well as a non-significant interaction between resume quality and name-type. That is, professional email names were rated higher on these selection criteria regardless of whether or not they were on high quality resumes or low quality resumes, as well as regardless of whether or not the participants were forced to open an email from an artificial inbox or whether they were given the resume with the email address as the contact.

Email Name Influence

Results of this study also showed that the presence of an email name had an effect on the self-reported influence of that email name in determining evaluations of the various selection criteria. It did not appear to matter if the participants had to open an email containing the resume, or if they were just presented with the resume (both conditions had an email name as the contact information). Regardless, those who did not have an email name as the contact information (i.e., the control group) did not rate that email name as having an influence on the rating process. Theoretically, those individuals in the control group should have reported that the email name had no influence because it was never present.

It seems interesting that some of the people still rated the email name as influencing their decision making. This suggests that it is possible for an individual to look at a resume and not be aware of all of the information that is (or is not) present. Additionally, it is important to note that once individuals rated one resume, they then rated three more resumes on the same measures. After the first resume, the participants may have been more likely to look for all of the information that had influenced their decisions. Because of this there may be implications for both the automatic, as well as controlled influences of attitudes on behavior (Schneider & Shiffrin, 1977). If individuals were initially unaware of the presence of the email names, then this may imply that some automatic processes could be influencing their evaluations. Additionally, after the first resume, the participants were aware of the information they would be asked, which implies the use of very deliberate, controlled processes for the evaluation process.

Interview Contact (Action)

While the results of this study suggest that the attitudes toward email names do affect the evaluation of an individual, they do not support other findings, which suggest that an attitude, which was used for one purpose, will influence the evaluation of other information (Higgins et. al., 1977). The results from this study showed that there was no difference in the likelihood of being asked to return for an interview, regardless of the resume group. This seems particularly interesting when looking at the two groups that contained email names as their contact information in comparison to the control group. Since there was not a significant resume group by name-type interaction on whether or not someone gets invited back for an interview. It seems to imply that there presence of

an email name is not the deciding factor when attempting to determine whether or not to invite someone for an interview.

Based on these results, a second analysis revealed that there was a relationship between the resume quality and the likelihood of being asked back for an interview. Indeed, the odds of being invited back for an interview were nearly 50 times greater for high quality resumes than low quality resumes. This finding supports early findings reported by Bertrand and Mullianathan (2003).

Additionally, as indicated in Figure 2, this study attempted to determine whether the perceptions associated with email names affected evaluations and whether they, in turn, affect specific action (inviting an applicant back for an interview). This study revealed that there was no relationship between name-type and whether or not someone was invited back for an interview. This finding seems to imply that while there were differences in evaluations based on name-type (professional vs. unprofessional), these perceptions did not influence the actions of whether or not someone was invited back for an interview. These findings may lead to new insights as to why and how various factors affect the job selection process (mainly the screening process).

General Discussion

“The Internet is no longer just another marketing channel; it’s not just another advertising medium; it’s not just another way to speed up transactions. The Internet is the foundation for a new industrial order.” (Hamel & Sampler, 1998 as quoted in Cascio, 2003; p. 407). According to Hoff and Hamm, 2002) the number of Internet users is still rising, by 48% in 2000, another 27% in 2001, and boasts over 500 million users

worldwide today. The Internet will continue to shape our society in many ways including recruitment and job searches (Harris & Paajanen, 2003; Lievens & Harris, 2003). Not only are people relying on the Internet as a resource, but organizations are also recognizing the value of using the Internet as a means of advertising available positions (Gere et. al. 2002). With individuals becoming more familiar with using the Internet as a source for job searching, some have noted that an individuals' email names are now their new identity.

As Mehrabian (1997) noted, names impart certain impressions on other individuals who are making evaluative judgments. A significant amount of research has examined the attitudes and stereotypes associated with an individual's given name (e.g., Buchanan & Bruning, 1971; Mehrabian, 1992; Mehrabian, 2001), but none had examined the perceptions associated with email names. With the growing popularity of using the Internet this is an area that deserves greater attention. Results from Study 1 indicated that there are very distinct attitudes and connotations associated with various types of email names. While many people have the urge to be very creative when developing their email names, they may not even be aware of the fact that they may be imparting specific perceptions about themselves based solely on their email name. This may be advantageous in some situations, but when applying for a job, applicants should make sure they are giving the best possible impression about themselves.

In addition to examining the attitudes and perceptions associated with names, email names, and other monikers, some research has attempted to determine if job-related ratings were affected by these attitudes and connotations. Some have examined how

various attitudes affect ratings of expected job success (Bruning et. al., 2001), while others have examined how different name types influenced an individual's chances of being contacted for an interview (Bertrand & Mullianathan, 2002). Again, while these studies examined the effects of given names on these various phenomena, virtually no research had examined the process through which the perceptions of email names influenced a job-related evaluation process.

Study 2 was designed to determine how different types of email names influenced the ratings of various selection criteria during a job selection process. Participants were placed in a work-related situation. They were told to examine different resumes for individuals who were all applying for a managerial position. Each of the resumes were sent via email and each had an email name/address for its contact information. Findings from this study generally supported the notion that different types of email names (professional vs. unprofessional) led to significantly different ratings of the various selection criteria. However, not all of the hypotheses were confirmed.

Previous research has suggested that an attitude's accessibility would be enhanced (i.e., attitude activation) as a result of its use for one purpose, and its likelihood of being used for other evaluations would also be enhanced (Higgins et. al., 1977; Srull & Wyer, 1979). However, results from this study suggested that the type of email name did not influence the likelihood of being asked to return for an interview. It seems as though the use of the attitudes toward email names for the selection criteria did not influence subsequent decisions regarding an invitation back to the company for an interview. Other findings suggested that the quality of the resume was the main determinant in whether or

not a hypothetical applicant was invited back for an interview. Overall, though, the results did confirm that the attitudes associated with different email names did influence the evaluation of the selection criteria. However, those same attitudes did not influence the quality of the resumes in making decisions regarding interview invitations.

The urge to be creative may lead many people, college and high school students in particular, to deliberately select, or develop, email names that can be considered unconventional or unprofessional. The general findings from both of the current studies indicate that there are attitudes and perceptions associated with different types of email names and that those perceptions do indeed influence an evaluative process that is present during the selection process. These findings suggest that an individual should be very careful when selecting an email name, especially when applying for a job. Failing to realize that certain types of email names demonstrate various perceptions (sometimes adverse) may hinder an individual's chances of being selected to move on during a job selection process.

Limitations of the Present Research

The current research is like all research in that various limitations require some of the findings to be examined and interpreted with care (Runkel & McGrath, 1972). One of the main limitations of this study was the use of participants from a college population. This may not be as crucial with Study 1 as with Study 2 in that the main purpose of Study 1 was to address and assess the existence of attitudes and perceptions associated with email names. Presumably, those attitudes and perceptions would be held by most people, regardless of whether they were college students or not.

In regards to Study 2, an argument may be made that college students do not have the same training nor experience to make accurate evaluations of potential applicants. While some research has also noted such limitations of this type of methodology (using a college population) (i.e., McKinney et. al., 2003), others have suggested that the situation in which participants are placed, “plays a greater role in determining the generalizability of an experimenter’s outcome than does the sample’s demographic representativeness or the setting’s surface realism.” (Berkowitz & Donnerstein, 1982; p. 249 as cited in Locke, 1986).

In both Study 1 and Study 2 participants were told that they were a Human Resource representative working for a large corporation. In both instances, participants were told their task was to aid in the screening process during the selection process. It is entirely feasible that college students would represent many of the characteristics of a person holding this position (i.e., screener), including: college-level education, an entry level position, etc.

Another limitation of this research, Study 1 in particular, is the email names that were used. While, they were generated through rigorous process further research should continue to examine different email names and the perceptions associated with those as well. Additionally, different types of email names should be used for Study 2, in which resumes are rated.

Another area of concern deals with the measures themselves. Specifically, the masculine-feminine scale of the RNCP proved to be problematic. As was discussed earlier, participants tended to rate both highly masculine email names, as well as highly

feminine email name as being high on this scale. Participants should have rated highly masculine email names as high on this scale, while highly feminine email names should have been scored very low on this scale. This limitation should be considered when examining the results of Study 2. Ideally, the names that were used for the study would have been rated as neutral on this masculine-feminine scale. Because of the participant's mis-interpretation, an alternative method had to be used when deciding which email names would be used for the second study.

The second study is also limited because of the resumes that were used. As has been an issue in similar studies (i.e., McKinney, et. al., 2003), the use of only a limited number of resumes may not provide a realistic scenario for participants. In any authentic screening situation, an individual would experience numerous different resumes, including different qualities. This study relied on resumes that were considered high quality and low quality and it is important to note that these resumes had been used in other more applied research (i.e., Bertrand & Mullianathan, 2003). Additional research should attempt to examine the interaction between name-type and resume quality. Between subjects designs, in which individuals only receive one type of email name, or one type of resume quality, may be able to lend insights into such interactions.

Finally, it should be noted that all of the measures were self-report measures. Self-report measures have the tendency of limiting the information that is gathered to only that which the participant wishes to dispel. Researchers must trust in the honesty of the participant's answers. Additionally, all of the dependent variables for study 2 were

only one question measures. In the future, it may be more appropriate to use more reliable and valid measures.

Applications and Future Research

Overall, the connection between the attitudes and perceptions associated with email names and the influence those perceptions have on an evaluation process has been shown to be worth continuing investigation. While it appears that there are various attitudes associated with email names and that those perceptions may influence the evaluation of various selection criteria, further research is still needed to understand how and when these attitudes will lead to subsequent behavior.

One avenue for future research on this topic is to determine whether these attitudes are operating from more automatic or controlled standpoints, or both. Previously noted findings suggest that there may be some automatic components involved in this process, but there definitely seem to be controlled processes operating as well. By relying on various process models (e.g., Fazio, 1986; Fazio, 1990) research dealing with the attitudes associated with email names may provide insights into which components are more automatic and which are more controlled responses.

Another path for future research concerns the methodology for assessing the attitudes and connotations associated with email names. There have been numerous methods for examining the attitudes associated with names, but only the most recent (i.e., Mehrabian, 2001) was utilized in the present research. Further research should also attempt to make specific recommendations for those trying to figure out what email name to use when applying for a job. Along these lines, Dr. Diane Halpern, APA president, has

recently provided her suggestions as far as “do’s and don’ts of resume writing” (*Monitor on Psychology*, 2004), although her suggestions were not substantiated empirically. While it seems obvious to many people that there could be ramifications for using “cutesy” email names, the current research is the only known research that has empirically examined these effects. Future research should attempt to provide specific examples of different email names that are “good” and “bad” for various situations (including work). Additional topics of interest include the differences between email names that were full names, initials of a given name, slang names, nick names (as well as all of the above with the incorporation of numbers - e.g., john.doe1234@). This exploration alone could provide useful recommendations to those who are job hunting.

While this research focused on the attitudes toward email names, research should also incorporate an examination of domain names. Many people still rely on generic domain names (e.g., hotmail.com, yahoo.com, aol.com, etc.), but many more are beginning to purchase their own “unique” domain names (e.g., @smith.com). An expansion of this idea also goes toward instant messaging as well as the new “email language” that many people are beginning to use. While your email name seems to be important when applying for a job, someone already employed should still be conscious of “proper business etiquette”, which discourages using Internet slang when sending work-related communications. This habit has become such a common method of social communication that many are now carrying it over to work as well (Halpern, 2004).

Conclusion

It seems very reasonable that if you are only using an email name for social communication, there is no reason for not using unique, unconventional email names. However, for more professional (i.e., work-related) activities, a good suggestion is to have multiple email addresses (i.e., email names). This way you can use the most appropriate email name for any given situation. Being creative is not necessarily a bad thing. The important issue is to remain cognizant about the impressions you want to convey.

If people fail to recognize what is considered appropriate, they may be hindered when they are applying for a job as well as during employment. Overall, the findings from this research do provide compelling evidence that email names have specific connotations associated with them and that these perceptions can influence a job related selection process. While previous research has shown numerous effects for given names, email names need to be considered somewhat differently. Unlike given names, email names are chosen by each individual. If individuals fail to recognize the possible effects of the email name they are choosing to use, they may be unknowingly hindering their chances of being hired for a job. While the present studies do make some connections in terms of an attitude behavior relationship, future research is needed to examine the various limitations as well as provide illumination for the other areas of lacking information. Only then will be able to make strong recommendations to job seekers who are applying for employment through various online services.

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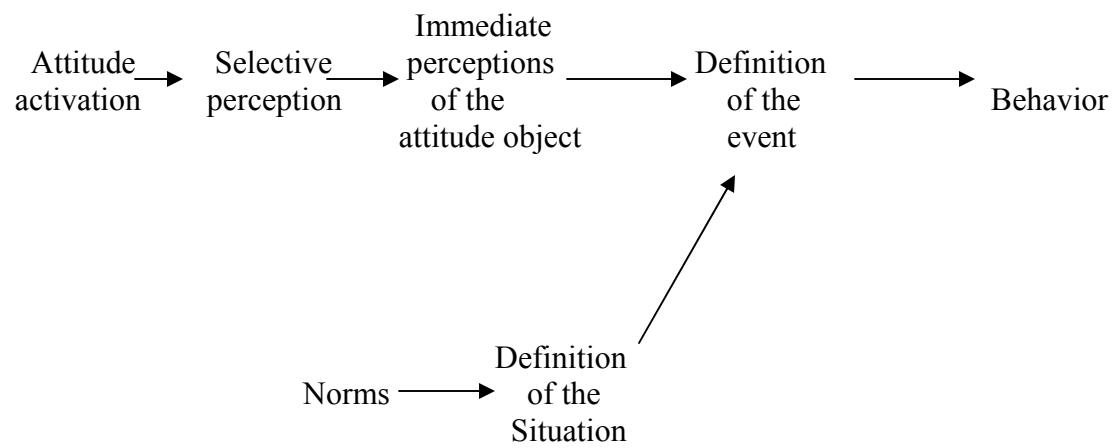
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Figure Captions

Figure 1. Schematic diagram of Fazio's (1986) Attitude Accessibility Model

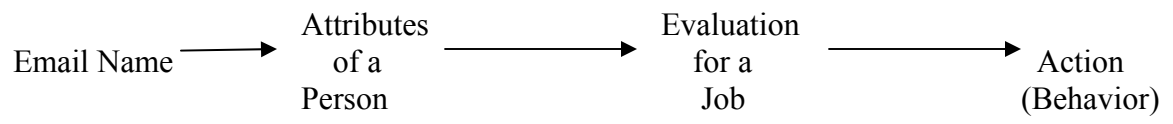
Figure 2. Schematic diagram of the process model that is being tested

Figure 1



[\(back to text\)](#)

Figure 2



[\(back to text\)](#)

Appendix A: Revised Name Connotation Profile (Computer Version)

INSTRUCTIONS

What can you tell about a person from their email name? You will find six separate groups of characteristics below. Each of these groups is defined for you with a list of highly interrelated adjectives or a definition. For example, “POPULAR-FUN” (playful, humorous, popular, cheerful, outgoing, good-looking, adventurous, friendly, athletic, healthy, curious) includes adjectives that together define a general characteristic that is broader than any one of the component adjectives implies. In addition to these four groups of characteristics you will rate email names according to the two other dimensions (conventionalism and professionalism). Take your time and **think about each group of adjectives/definition as a whole** so you will know what is meant by the entire group as a unit.

ETHICAL-CARING: trustworthy, loyal, sincere, kind, generous, honest, respectful, caring, polite, patient, warm, moral, obedient, sensitive, responsible, religious, loving, congenial.

POPULAR-FUN: playful, humorous, popular, cheerful, outgoing, good-looking, adventurous, friendly, athletic, healthy, curious.

SUCCESSFUL: successful, ambitious, intelligent, independent, confident, assertive, creative.

MASCULINE: the opposite of feminine

CONVENTIONALISM: **conventional** email names can be thought of as usual or common types of email names whereas **unconventional** email names are unusual or

uncommon types of email names (such as Myke, along with unique ethnic names and unusual slang/nick names).

PROFESSIONALISM: **professional** email names are considered appropriate for the workplace, whereas **unprofessional** email names are considered inappropriate for the workplace.

You are given an email name list (consisting of email names we want you to rate) and an Answer Sheet where you can record your ratings. **PLEASE KEEP ALL THE FOLLOWING PRECAUTIONS IN MIND AS YOU RATE THE VARIOUS NAMES.**

1. Rate each name exactly as it is spelled – do not alter the name in any way while thinking about it and rating it.
2. If you come across a name that you use, please don't rate it.
3. When you rate a name, **do not** think of a specific person you know who may have that name or a similar name. Instead, imagine that you are about to meet a person for the first time (someone introduced by a friend, maybe a blind date, or a new coworker or a new roommate). Imagine that you have not yet met the person and all you know about this is their email name and their gender. Knowing only the name and gender of this individual, how do you picture the person and how would you describe this person on each of the six characteristics?
4. Be sure to keep the gender that goes along with an email name in mind while you rate an email name.
5. Periodically, please reread and review the six groups of characteristics. For example, remember that "ETHICAL-CARING" includes the qualities trustworthy, loyal, sincere, kind, generous, honest, respectful, caring, polite, patient, warm, moral, obedient, sensitive, responsible, religious, loving, and congenial. You need to keep all qualities within a group of characteristics in mind while rating an email name on that group.
6. In rating the **masculine-feminine** quality implied by each name, use high numerical scores for masculine-sounding names and use low numerical scores for feminine-sounding names.

1 = none of the characteristics

2 = very slight degree of the characteristics

3 = slight degree of the characteristics

4 = slight to moderate degree of the characteristics

5 = moderate degree of the characteristics

6 = moderate to high degree of the characteristics

7 = high degree of the characteristics

8 = very high degree of the characteristics

9 = extremely high degree of the characteristics

7. Finally, please take your time, concentrate, and give us as carefully measured ratings as you possibly can. When you feel you are getting tired or losing concentration, please set the material aside and come back to it later. It is very important that we have your best efforts here, because others will be relying on your ratings. So, please be careful.

EMAIL NAME LIST

You will be given a list of email names and will be asked to rate each name on the six dimensions provided. Once you have completed a name, click next to move to the next name. You will repeat this process until you have exhausted the list of email names.

Appendix B: Demographic Questionnaire

Directions: Please answer the following questions. This information is strictly confidential.

1. What is your age? _____

2. What is your sex? (check one) Male _____ Female _____

3. What year are you in school? (check one)

Freshman _____ Sophomore _____ Junior _____ Senior _____

Other (please explain) _____

4. What “college” is your academic major within? (check one)

Arts and Sciences _____ Business _____ Communication _____ Education _____

Engineering and Technology _____ Fine Arts _____ Health and Human

Services _____ Undecided _____

5. Using the categories below, please describe the work experience you have had,
listing the most recent first

Job Description and Time Spent Working (in months)

Check one

	Summer Full-time Other (explain)
	Summer Full-time Other (explain)
	Summer Full-time Other (explain)
	Summer Full-time Other (explain)
	Summer Full-time Other (explain)

Appendix C: Study 1 Consent Form

TITLE OF RESEARCH: Attitudes and perceptions regarding email namesPRINCIPLE INVESTIGATOR: Kevin TamaniniDEPARTMENT: Psychology

I. Federal and university regulations require us to obtain signed consent for participation in research involving human subjects. After reading the statement below, please indicate your consent by signing this form.

II. STATEMENT OF PROCEDURE:

I understand that I will be asked to participate in a survey on attitudes and perceptions regarding email names. I understand that this study will take approximately 1 hour of my time should I complete the study. I understand that my main task is to answer questions of my attitudes and perceptions regarding email names. I understand that the results of my participation in the study and my responses to questions during the study will be kept in the strictest of confidence. Any identifying information, such as this signed consent form, will be kept separate from the data collected and locked in the principle investigator's office.

There are no known risks for participating in this research. The benefits include helping the investigators understand attitudes and perceptions regarding email names. If you would like to know more about this study, write your name and address on the back of this form. If you have any questions about this study, please contact Kevin Tamanini, Psychology Department, Ohio University, Anderson Hall 105, Athens, OH, 45701; email: kt109402@ohio.edu

III. I certify that I have read and understood the statement of procedure and agree to participate as a subject in the specific research described therein. I agree that all known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I understood that participation in this study will earn me credit toward mandatory or extra credit in certain general psychology courses. I certify that I am at least 18 year of age.

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)-593-0664.

Signature: _____

Printed name: _____

Date: _____

Appendix D: Study 1 Experimental Script

Experimental Script:

Please turn off all cell phones at this time.

Today you will be participating in a study that is designed to explore the attitudes and perceptions that are associated with email names. Imagine that you are working as a Human Resource representative for a large corporation. Your responsibility as a Human Resource representative is to look at incoming emails from people who are applying for an available position. It is your duty to go through the emails and evaluate the individuals. Based on your position as a Human Resource representative, you will be asked to rate various email names on the dimensions provided. This will be a computer-based questionnaire and your responses will be entirely confidential and can never be associated with you, so please be as honest as possible. Please answer the entire questionnaire. When moving from one page to the next you may experience a delay in loading time. Please be patient during the entire questionnaire procedure. Directions for the rating process will be presented on the computer and a copy of them will also be given to you for referencing. When the computer presents you with a message that you have completed the study, please see the instructor and you will be free to leave. If you have any questions during the study please raise your hand. If you have any questions about the study, I will answer them at the end of the session. Please keep in mind your position as a Human Resource representative when rating the various names. Thank you for your participation.

Appendix E: Study 1 Debriefing Statement

Debriefing Statement: This study was designed to identify the attitudes and perceptions associated with email names. I am interested in studying these attitudes and connotations toward email names to understand the potential influence an individual's email name may have on his/her chances of getting hired for a job. With advances in technology and newer selection procedures the type of email name that an individual uses when applying online for a job may influence the individual making the selection decision.

Appendix F: Artificial Resumes

OBJECTIVE

To secure a position as a manager with an established organization utilizing my sales, communication, negotiating skills, knowledge and experience.

EXPERIENCE*04/01-Present* **Senior Account Executive**

Tmobile- Chicago, IL

- Responsible for sales of cellular service & data plans to Fortune 1000 & under, including individual sales.
- Exceeded sales quota consistently
- Rated from top 10% in Region to Top 5% in Region
- Recipient of the President's Club Award Annually
- Certified Government Account Executive
- Blackberry Certified
- Blitz training with new sales representatives to show them how to get appointments, sell the programs and then close the deals.

01/00-06/03 **Hardcore Security**

Manager of Sales & Consulting- Orland Park, IL

- Solicit and close accounts for use of Private Security
- Hiring, supervising, training & certification with the State of Illinois (PERC)

08/97-04/01 **Verizon Wireless**

Major Account Representative- Rolling Meadows, IL

- Responsible for sale of cellular service plans to Fortune 500 companies
- Previous expertise in paging plans in the Chicago area including NW Indiana.
- Recipient of President's Club Award (top 10% Nationally) annually.
- Implemented training course for new recruits- speeding profitability.

10/90-12/97 **Media One**

Senior Sales Representative- Romeoville, IL

- Responsible for sale of residential cable service plans.
- Clients generated through cold calling and door to door canvassing.
- Consistent sales leader, producing in the top 5% regionally.

EDUCATION

06/1996 Technical Institute of Learning - WA
Associates of Arts Degree (AA) – Business Management and
Entrepreneurship – Specialization in Retail Management.

SKILLS AND ABILITIES

- Professional Selling Skills
- Experienced in cold calling, selling the products, meeting customer needs, negotiating and closing the deals.
- Proficient with Microsoft Word, Internet and Cell phone, and blackberry.

REFERENCES

- Available upon request

OBJECTIVE

To use my proactive client management and sales/marketing skills in an ethical and challenging managerial environment.

EXPERIENCE

11/02-Present **New Business Development Manager**

Frontline Technology LLC- Vernon Hills, IL

- Stated mission is New Business Development of target markets for IT Infrastructure and Microsoft Business Solutions products.
- 85% of day is dedicated to outbound cold calls.
- Developed initial prospect database from publications, trade sources, city/county/state government agencies and the Internet.
- Created and produced materials for email, fax and print distribution. Supervised timely, cost effective distribution of marketing materials.
- Determine potential to Active Prospect and onsite visit for personal contact by partners of firm.
- Maintain aggressive follow up schedule utilizing ACT and Filemaker Pro database software.
- Cold calling initiative is demonstrating strong growth and Branding awareness.

07/99-11/2002 **Account Manager**

SBC Ameritech- Arlington Heights, IL

- Inbound Sales and Outbound “grow the business” cold call canvassing, ADSL, ISDN, T1, Shared Web Hosting consultative sales.
- Established and maintained top 10 percent sales leaders position from the first month of employment.
- Received excellent performance reviews.
- Hand-picked to go on site and train Small Business Office representatives’ call-center in Pewaukee, Wisconsin.

09/97-07/99 **Inside Sales Account Manager**

CDW Computer Centers- Vernon Hills, IL

- Promoted to Local Area Network (LAN) Sales.
- Consistently met or exceeded sales goals.
- Worked independently to establish myself with growing national (active & inactive account base).
- Among select group to participate in Intel & IBM direct response hotlines.
- Created and designed new Account Manager Direct Mail initiative that will be used by 1600 Government, Corporate & Network account managers.

- Received Volume Software Sales VSL, LAN and Apple Products Certifications.

04/78-09/97 **Owner Operator**

Lincolnwood Printing Center- Chicago, IL

- Successfully implemented an aggressive Sales strategy that tripled sales volume of this start-up enterprise in less than two years.
- Created innovative Direct Mail, Telephone and Outside Sales campaign that promoted key services: printing, duplicating, desktop publishing and database management.
- Outside sales daily regimen consisted of: Cold Calling, visiting on site with new and/or prospective clients.
- Evangelized, prospected and sold direct mail marketing techniques, methodologies and printing to commercial clients.
- Lincolnwood Printing Center, Ltd. was sold November, 1997.

EDUCATION

12/2003 Northeastern Illinois University, Chicago IL
Bachelor of Arts Degree (BA), Liberal Arts

SKILLS AND ABILITIES

- Outbound and Cold Calling Specialist. Customer retention, CSR
- ACT Goldmine proficient
- Technical sales
- Desktop Publishing Marketing Pro
- GSA Federal Government Certified Sales
- Versatile and creative problem solver

REFERENCES

- Available upon request

OBJECTIVE

To obtain a position that will allow me to demonstrate my ability to be an organized and hard working employee.

EXPERIENCE

01/03-03/04 **Teller**

Associated Bank of Chicago- Chicago, IL

- Multiple teller transactions
- Took care of customers' daily transactions
- Cashed checks
- Balanced ATM and Night Deposits
- Promoted our current specials

11/99-04/02 **Cage Cashier/ Banker**

Paradise Hotel & Casino- Peoria, IL

- Maintained a balanced drawer of 75,000 dollars
- Cashed out customers who finished playing table games or slot machine games
- Transported money to and from the vault.
- Cashed customer checks.
- Banked up to \$150,000.00

09/98-04/99 **Cashier**

Hardee's- Peoria, IL

- Run the drive-thru window and front line register.
- Took orders and made sure my drawer balanced.
- Cleaned up my work station at the end of the day.

11/97-10/98 **Cashier/Supervisor**

Kenny Rogers Roasters- Peoria, IL

- Run the cash register and took orders.
- At the end of my shift, counted down my drawer and made sure it was balanced.
- Closed down the store and made sure everything was set for the next day.

SKILLS AND ABILITIES

- Basic computer skills.
- Fluent German.
- Good people interaction skill.

REFERENCES

- Available upon request

OBJECTIVE

To secure a position in this industry.

EXPERIENCE**11/99-01/05 Administrative Assistant**

Longaberger Baskets - Newark, OH

- Kept the office organized and functioning smoothly.
- Served as an administrative transcriptionist, filed papers, and kept track of all filing issues within the department.

11/02-06/03 File Clerk Assistant

Pennsylvania Department of Transportation - Harrisburg, PA

- Performed most secretary functions of receptionist, typist, as well as office organization.
- Assisted in office management and filing system.

EDUCATION

07/2001 Harrisburg Area Community College – Harrisburg, PA
Associates of Arts (AA), Office Management
File Clerk Certificate

SKILLS AND ABILITIES

- I am a certified file clerk and have been for 4 years.
- An excellent communicator.
- A very fast learner.
- Good telephone manner.
- Knowledge of WordPerfect DOS, WordPerfect Windows, MS Word, Excel and PowerPoint.

REFERENCES

- Available upon request

Appendix G: Selection Criteria

Directions: As an entry level Human Resource employee, you need to rate this individual on the various selection criteria below and then determine if you will extend an interview invitation. Please answer **ALL** of the questions by **circling** the most appropriate response for each.

Email name of this individual _____

1. This individual will display a high amount of **effort** when performing the duties and responsibilities required of the available position.

Strongly Agree Agree Disagree Strongly Disagree

2. This individual will display a high amount of **personal responsibility** when it comes to performing the duties and responsibilities required of the available position.

Strongly Agree Agree Disagree Strongly Disagree

3. This individual will perform adequate **management/administrative** duties and responsibilities required of the available position.

Strongly Agree Agree Disagree Strongly Disagree

4. This individual possesses the necessary **cognitive ability** needed to perform the duties and responsibilities required of the available position.

Strongly Agree Agree Disagree Strongly Disagree

5. This individual is **conscientious (reliable, organized, neat, ambitious)**.

Strongly Agree Agree Disagree Strongly Disagree

6. This individual will be **successful** if hired for this position.

Strongly Agree Agree Disagree Strongly Disagree

7. This individual possesses the necessary **social skills** needed to perform the necessary duties and responsibilities of the available position.

Strongly Agree Agree Disagree Strongly Disagree

Appendix H: Influence Dimensions

Directions: Now that you have evaluated this individual's resume on the eight selection criteria, please rate the level that each of following had in influencing your decisions regarding the selection criteria. Please **circle** the response that best describes the level of influence each characteristic had on your selection decision.

1. Email Name

Extremely Influential	Somewhat Influential	A Little Influential	Not Very Influential	Not at all Influential
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2. Work Experience

Extremely Influential	Somewhat Influential	A Little Influential	Not Very Influential	Not at all Influential
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3. Education

Extremely Influential	Somewhat Influential	A Little Influential	Not Very Influential	Not at all Influential
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4. Age

Extremely Influential	Somewhat Influential	A Little Influential	Not Very Influential	Not at all Influential
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5. Resume Quality

Extremely Influential	Somewhat Influential	A Little Influential	Not Very Influential	Not at all Influential
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Appendix I: Study 2 Experimental Script

TITLE OF RESEARCH: Selecting Potential Employees PRINCIPLE INVESTIGATOR: Kevin Tamanini DEPARTMENT: Psychology

I. Federal and university regulations require us to obtain signed consent for participation in research involving human subjects. After reading the statement below, please indicate your consent by signing this form.

II. STATEMENT OF PROCEDURE:

I understand that I will be asked to participate in a simulation in which participants will play the role of an entry-level HR representative responsible for selecting individuals to be contacted for an interview. I understand that this study will take approximately 1 hour of my time should I complete the study. I understand that my main task is to play the role of an entry-level HR representative responsible to make decisions that are related to the selection process. I understand that the results of my participation in the study and my responses to questions during the study will be kept in the strictest of confidence. Any identifying information, such as this signed consent form, will be kept separate from the data collected and locked in the principle investigator's office.

There are no known risks for participating in this research. The benefits include helping the investigators understand the factors that influence an individual when making certain selection decisions. If you would like to know more about this study, write your name and address on the back of this form. If you have any questions about this study, please contact Kevin Tamanini, Psychology Department, Ohio University, 105 Anderson Hall, Athens, OH, 45701.

III. I certify that I have read and understood the statement of procedure and agree to participate as a subject in the specific research described therein. I agree that all known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I understood that participation in this study will earn me credit toward mandatory or extra credit in certain general psychology courses. I certify that I am at least 18 year of age.

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio Universtiy, (740)-593-0664.

Signature: _____

Printed name: _____

Date: _____

Appendix J: Study 2 Experimental Script

You are working for a large corporation who posts available job positions on an online job posting website called Godzilla.com.

You are an entry-level employee in a Human Resources department.

Your duties include the following:

- Aid in the selection process by:
 - Examining resumes sent via email for an **available position**
 - Rate each individual on various selection criteria
 - Decide to invite or not invite an individual to the company for an interview.
- The **available position** is described as follows:

JOB TITLE : Manager. “This is a general, managerial, upper level position and we are selecting for those individuals who will be able to fill the position effectively.”

Instructions

You will receive a number of emails containing resumes of individuals who would like to apply for the available managerial position. Remember, you are not actually giving these people the job; you are only inviting them for an interview, which may or may not lead to getting the job. Remember, however, that you are an integral part of the selection process. You must use your discretion in determining whether or not you invite any of the individuals for an interview. It is important for you to keep in mind that you have this responsibility because there is no way everyone can be interviewed. The company needs you to determine who should move on in the selection process.

Appendix K: Study 2 Debriefing Statement

Debriefing Statement: This study was the second part of a two-part study. The first study was designed to identify the attitudes and perceptions associated with email names. I am interested in studying these attitudes and connotations toward email names to understand the potential influence an individual's email name may have on his/her chances of getting hired for a job. With advances in technology and newer selection procedures the type of email name that an individual uses when applying online for a job may influence the individual making the selection decision.

Appendix L: Email Name Sample Blocks

1	a_moore@		190	TooTrue22@	
2	ac327198@		189	theruspKirchper@	
3	adam2583@		188	td125@	
4	ajk_2403@		187	tara.l.truscott.1@	
5	alliecat@		186	susieque@	
6	AllisonCroyle@		185	sugarmagnolia1985@	
7	amanda.leff@		184	stairway2heaven@	
8	ames222@		183	sp314667@	
9	amypikal@		182	socceriscooltome@	
10	anne_hosay@	block 1	181	sleepy_peepy@	block 11
11	anygirljdm@		180	slapshot006@	
12	applejacks029@		179	skendron@	
13	as142073@		178	sherry_s_chan@	
14	azzamsaeed@		177	sheeby85@	
15	babyface@		176	Shauna@	
16	bacardigirl@		175	shana1183@	
17	bb333394@		174	sh169390@	
18	Bbritty21@		173	seelkesmooth@	
19	bc127791@		172	sb297711@	
20	BigDave@		171	savoinien@	
21	Bighotdaddy@		170	saltgoddess@	
22	Blinc2611@		169	rustball@	
23	blindphd@		168	rummy@	
24	blndmelon@		167	romyaf25@	
25	bn186431@		166	roc870@	
26	bo229884@		165	rm367355@	
27	bobkitten@		164	rdlpern4@	
28	Bota316@		163	rd674899@	
29	BritTay65@		162	qt2004@	
30	BrittonR@	block 2	161	Pyshkie@	block 12
31	bs136098@		160	prttyktygrrl@	
32	Buckeyz@		159	pi938756@	
33	BurtonP@		158	philaguila@	
34	Buston@		157	pg934089@	
35	ce362235@		156	ou812@	
36	coll@		155	ns318797@	
37	colossalman@		154	nineyards@	
38	countryguy_ak@		153	nickatnight@	
39	cp226212@		152	myers@	
40	ctine03@		151	mw310523@	