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Will lil_spoiled_brat42@mail.com get the Job Done? An Analysis of Employees' Email Usernames, Turnover, and Job Performance

Jessica Marie Lillegaard
Minnesota State University - Mankato

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Will lil_spoiled_brat42@mail.com get the Job Done? An Analysis of Employees' Email

Usernames, Turnover, and Job Performance.

By

Jessica Marie Lillegaard

A Thesis Submitted in Partial Fulfillment of the

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Abstract

The research for the following paper titled, Will lil_spoiled_brat42@mail.com get the Job Done? An Analysis of Employees' Email Usernames, Turnover, and Job Performance and authored by Jessica Lillegaard was conducted at Minnesota State University, Mankato located in Mankato, Minnesota. This study was a requirement of the Industrial/Organizational Psychology Master's Program and was conducted during the 2012-2013 academic school year.

The job application process is changing, so personal identifiers, such as email usernames are becoming a potential source of information on job applicants. Previous research presented in this paper shows people do not randomly choose their email, but it is a reflection of their personality. Blackhurst, Congemi, Meyer, and Sachau (2011) found email usernames could also explain some differences in pre-employment assessment measures. The present study coded 16,258 email usernames using the coding scheme developed by Blackhurst et al. (2011). Using tenure, termination, and job performance data provided by a large multinational customer service organization, the present study would examine the relationship between email usernames, tenure, voluntary termination, and performance. There was no significant relationship between email username and performance or tenure; however, participants with unprofessional usernames were more likely to leave the company for a negative reason than if there was no relationship between the variables.

Will lil_spoiled_brat42 get the Job Done? An Analysis of Employees' Email Addresses,

Turnover, and Job Performance.

As the job application process moves online, applicants can apply for job

openings simply by clicking the send icon in their email. The ease of applying means

human resource professionals need to wade through more applications. Remillard (2010)

estimates a manager may only spend ten seconds or less reviewing a resume. Thus, it is

important for an applicant to create a good impression with their resume within the first

ten seconds. A quick glance at an applicant's resume is not the only detail that potential

employers will use to form a first impression. Employers form impressions of applicants

based on small bits of information about an applicant: race (Bertrand & Mullianathan,

2004), gender (Tyler & McCullough, 2009; Zikmund, Hitt, & Pickens, 1978), physical

attractiveness (Morrow, 1990), and small talk before an interview (Barrick, Swider, &

Stewart, 2010) all play roles in how a job applicant is perceived.

Employers will also form impressions of candidates simply from a candidate's

name (Tyler & McCullough, 2009). For instance, Bertrand and Mullainathan (2004)

found that job applicants with Caucasian sounding names such as Greg Baker or Emily

Walsh received 50 percent more callbacks than applicants with African American

sounding names (e.g. Latoya Jones or Darnell Jackson). Short of a name change, an

applicant cannot control the impression created by their name; however, applicants do

have control over the impression they create with their email address. An email address

can reflect its user's interests (luvinthesteelers@mail.com or

softball_player99@mail.com), beliefs (godspreacherman@mail.com), relationships,

(dadscrewloose@mail.com), a way for a user to request more email communication

(sendmichaeldmail@mail.com) or simply its user's legal name.

An email address may also reflect aspects of a job applicant's personality. One

might wonder why a job applicant would choose to apply for a job with a socially

inappropriate or unprofessional email username. For instance, why would

lil_spoiled_brat42@mail.com use this email to apply for a job? Did

babylicious4life@mail.com give thought towards her email choice? Is

cynicalzombie@mail.com, a deliberate statement of identity by its user? Is

gr8tlyendowed@mail.com merely unaware of the impression created by his username?

Gosling's (2008) research shows an individual's email signature quote can provide clues

into how that individual views their own identity. It makes sense an individual's email

signature can represent a part of that person's identity, but research shows significantly

less information, i.e. an individual's email username can also provide details on that

individual's personality. An email username can reflect an individual's personality

characteristics or other personal attributes (Back, Schmukle, & Egloff, 2008; Blackhurst,

Congemi, Meyer, & Sachau, 2011), in addition to providing a way for a recruiter to form

a quick judgment of an applicant (Fitzpatrick, 2010; Gissel, 2012; Johnson, 2010). The

purpose of this study is to expand on the previous findings of Back et al. (2008) and

Blackhurst et al. (2011) by examining the relationship between an applicants' email

usernames and their performance on the job.

Email and Impression Formation

As Utz (2004) found, it is commonplace for individuals to have more than one

email address. In general, when people use email for work related or professional

business, they are more likely to use a professional email username (i.e. the part of the email address before the @ symbol) such as the user's legal name or initials. However, the study found there were large inter-individual differences in the extent to which people think about their email address choice. Those who thought carefully which email to use tended to use their main email for personal or work-related purposes, while using a secondary email for raffles or when giving an email out may result in spam emails. Individuals who did not deliberately think about which email to use only differentiate between emails when they are deliberately asked for their email. In addition to the inter-individual differences in how deliberate email usage is, men who have email skills tended to choose their email deliberately. If an individual is deliberately thinking about which email to use, the username may be an attempt to create a certain impression.

It is important to understand how this email choice can influence the job application process. Previous studies suggest that details about an applicant do play a role in the selection process. Gissel (2012) found that nonstandard email usernames could have an impact on the selection process similar to an applicant's physical characteristics. She found an applicant's email address could have an impact on an interviewer's evaluation of an applicant's social skills and competence, as well as influence a decision to recommend an applicant continue in the selection process. Participants in Gissel's study rated the resume of an applicant applying for a customer service position. After reviewing the resume, the participants rated the applicant on her or his social skills, competence, and general favorability. Additionally, the participants indicated if they thought the applicant deserved an in-person interview. The email username was the only detail manipulated across four conditions: a standard username involving the applicant's

name, a non-standard positive (smileyfacegen or greenadvisor), non-standard neutral (mailings or Yellow_Jr) and a non-standard negative username (megabeastzombie or lilwhitedevil). Gissel found applicants in the non-standard negative email username condition were rated significantly lower than the applicants in the rest of the conditions.

Email and Conscientiousness

If an email address can influence the impression of a potential employee, why would an applicant apply with an email that is unprofessional or even antisocial? Back et al. (2008) and Blackhurst et al. (2011) suggest that the choice of an email username may reflect its user's personality. In the study by Back et al. (2008), research participants rated the personalities of 599 volunteers using only the volunteers' email username. The volunteers provided their email address; then completed several personality measures. The research participants were able to estimate five specific personality characteristics of the volunteers from only their email usernames: neuroticism, openness, agreeableness, conscientiousness, and narcissism. Blackhurst et al. (2011) took this a step further by examining email usernames and pre-employment assessment reports of 14,000 job applicants applying for an entry-level position. Each of the applicants completed measures of cognitive ability, conscientiousness, professionalism, and work-related experience through an online application process. The authors coded the applicants' email usernames into *professional*, *less than professional*, and *otherwise unprofessional* themes. The authors found that applicants with *professional* email usernames scored higher on conscientiousness, professionalism, and a work related experience assessment than applicants' with usernames rated as inappropriate. One limitation in the Blackhurst et al. study was the lack of data on the applicant's age; it is possible age or life experience

was the factor driving the relationships between email username and the pre-employment tests. The present study addresses this limitation by including the applicant's date of birth as well as education.

Back et al. (2008) found that a person's email username does provide some information regarding the person's personality. Conscientiousness, or the degree to which a person is "responsible, dependable, planful, organized, persistent, and achievement oriented" (Barrick, Mount, & Strauss, 1993, p. 715) was one of the traits that people could accurately estimate from a person's email username. Since conscientiousness is a valid predictor of voluntary turnover and job performance across a wide variety of jobs (Barrick & Mount, 1991; Barrick & Mount 1996; Barrick et al., 1993), one could conclude this personality facet could predict applicants' choice of email username as well as their performance. This leads to the Blackhurst et al. study, which found that applicants who use unprofessional email usernames to apply for jobs are less conscientious and do not perform as well on pre-employment assessments as people who apply with professional usernames. The present study will expand on these findings to show applicants who use professional email usernames to apply for a job will stay on the job longer, be less likely to be involuntarily terminated, and have better job performance ratings than applicants who use unprofessional email usernames. For a visual representation of the proposed relationship between employees' email username and job outcomes, please see Figure 1.

Figure 1

The Proposed Relationship between Email Username and Performance.
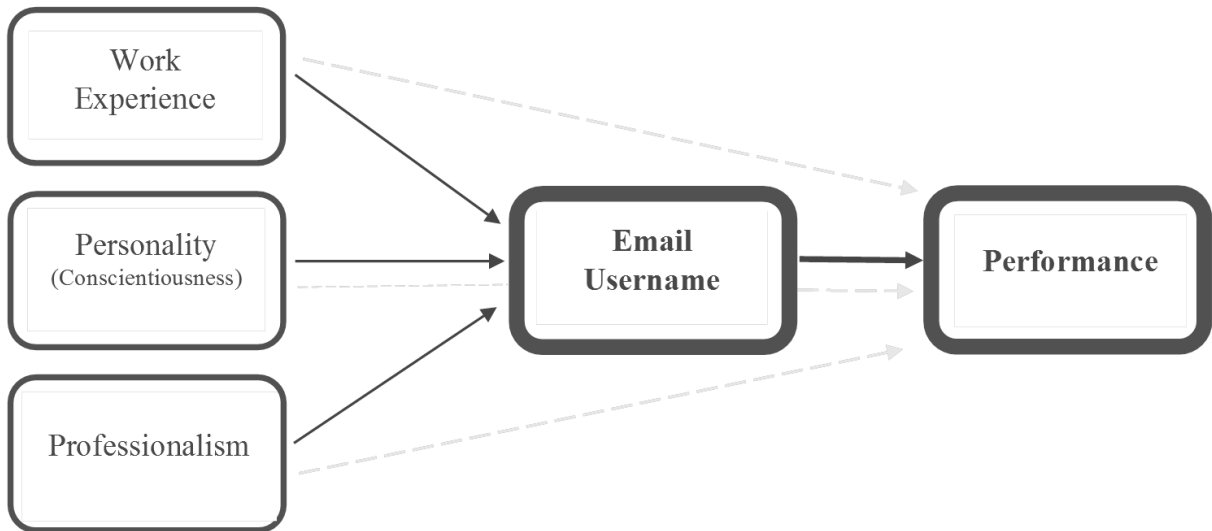
Note. The bolded boxes in the figure are the relationships examined in the current study

Hypotheses

The published research suggests a relationship between why a person chooses a specific email username and certain personality traits, e.g. conscientious. If conscientiousness is a driver of tenure and email username choice, such that a more conscientious person will stay longer with an organization and use a professional email username, a person who uses a professional username will be more likely to stay longer with an organization.

H1: Employees with "professional" email usernames will stay with the organization longer than applicants with "unprofessional" usernames.

Conscientiousness is a valid predictor of voluntary turnover, so a more conscientious person is less likely to be involuntarily terminated. If the participants who

use professional email usernames are higher in conscientiousness, then they will be less

likely to be involuntarily terminated.

H2a: Employees with "professional" email usernames will be less likely to be

involuntarily terminated than applicants with "unprofessional" usernames. H2b:

Employees with "professional email usernames will be less likely to leave the

organization with negative outcomes.

Conscientiousness is a valid predictor of job performance, such that individuals

who are higher in conscientiousness are better performers. Additionally, Blackhurst et al.

(2011) found individuals with professional email usernames perform better on pre-

employment assessments designed to predict job performance. For these reasons,

employees with professional email usernames should perform better on the job, than

employees who use unprofessional email usernames.

H3: Employees with "professional" email usernames will have higher job performance

scores than applicants with "unprofessional." H3b Employees with "less than

professional" *usernames* will have higher performance scores those with

"unprofessional" usernames.

Method

Participants

Participants were 16,258 employees, (8145 females) from a large multinational

customer service organization, hired between January 2007 and August 2012. The

participants ranged in age from 17 to 77 (or 74) with a mean age of 31 ($SD = 10.88$). The

level of completed formal education ranged from a high school diploma to a doctorate

degree, with the majority of individuals receiving a high school diploma. Archival data

were retrieved from the employee's pre-employment selection / Human Resource

information, as well as job performance scores, length of employment and termination

reason.

Procedure

   The organization provided a file with 16,258 email usernames stripped of their

domain name (e.g. @gmail.com or @yahoo.com) to preserve employee anonymity. Four

research assistants at a medium-sized Midwestern university coded all of the usernames.

The subject matter experts (SMEs) in employee selection were asked to code each

username into a 31 category coding scheme developed by Blackhurst et al. (2011). To

establish interrater reliability for the coding scheme, six SMEs all rated the same 200

email addresses. The intraclass correlation for average measures was ICC (3, 1)= .94,

F(162, 810)= 16.75, $p <$ .001. Once the pilot study demonstrated support for the

Blackhurst et al. coding scheme, four of the SMEs coded the remaining email usernames

using the described system. After the emails were coded, turnover, termination reason,

and job performance data were provided by the organization.

   The coding scheme was divided into three general themes: *professional* which

included usernames that incorporated the participants' names, *less than unprofessional*

which included usernames that featured personal interests/hobbies, inspirational

messages, pop culture references, or otherwise odd/ immature themes, and *unprofessional*

usernames that featured references to craziness, sex, drugs, violence, the devil or demons,

and/or criminal activity (for examples of the codes, please see Table 1). As previously

mentioned, the significant differences in the previous research in email addresses were

from the *professional* to both the *less than professional* and *unprofessional* categories.

The latter two categories were analyzed separately in the present study, to see if the

differences increased in a work-related setting as opposed to pre-employment testing.

Table 1

Number of Subjects in Each Email Code with Examples.

Email Username Type	*n*	Example
Professional	9915	
Less Than Professional	5749	
Interest	976	breakdancer303
Self-Promoting	774	hiphopallstar123
Self-Deprecating	148	wonderfulmiztake
Eye Color/ Hair Color	211	blueyedblondie_32
Interest	976	jayjaysteelersfan
Relationship	147	llhgoodewife
Love/ Luv	132	korilovesdavid
Money	7	dmoney03
Pop Culture	129	im_hermione_granger18
Ninja	12	princessninjakitty28
Geeky	485	comp.geek951
Cutesy	710	poohbear_34_2002
Animal	58	fuzzywolf101
Baby	104	brunettebaby1085
King/ Prince/ God	15	goldengod
Slang for Male	74	babyboy4life13044
Queen/ Princess/ Goddess	63	angelbaby_100975
Slang for Female	298	geckogirl088
Angel	94	angelbabyfacegirl
Inspirational	103	cheerfullyserving
Dog	32	moon.dawg
Little/ Lil	243	lil_thickychick
Big	55	bigdaddylance0604
Otherwise Odd/Immature	2345	ez4u2findbob
Unprofessional	580	
Demonic/Devil	56	corpzegrinder666
Sexual	180	fingerbangfreak89
Drugs	89	undead_420
Crazy/Insanity	75	crazy_bitch_90_09
Criminal/ Profanity	201	twistedrebel187

Note. Subtotals may not add up total because a username can have more than one code.

Measures

Turnover. Turnover data was provided for 14,297 participants (8830

Professional, 4960 *Less than Professional*, and 493 *Unprofessional*). The number of days

the employee worked for the company was provided to examine the length of time the participant stayed with the company.

Termination. A termination code was provided for each employee who left the organization as well if the termination was voluntary or involuntary. Additionally, the termination reason data was coded into categories to determine which employee were more likely to leave for negative reason (e.g. Job Abandonment, No Call/ No Show, Attendance issues, etc.) compared to non-negative or other personal reasons (e.g. Different Job, Education, Health Reasons, etc.). This was analyzed separately from whether or not termination was voluntary because employees with inappropriate conduct may have quit before the organization had the opportunity to terminate employment.

Job Performance. Performance data was provided for 4,885 participants (3003 *Professional*, 1717 *Less than Professional* and 159 *Unprofessional*) from July 2011 to September 2012. To measure job performance, the organization divides up employees into stacks, or employees who are performing the same job. A composite job performance score is created by adding three to five weighted metrics that leaders consider important for the employees in each stack. The specific metrics vary by job, month, and stack, so they were not provided by the organization. The composite scores can vary by stack or month. Once the composite scores are obtained for a month, each employee is ranked within their stack, then divided into four tiers or quartiles. To compare the participants in this study, a mean quartile rank score was found for each participant across the year period. This was done because the participants' composite scores cannot be directly compared. When comparing performance among participants, a lower tier rank indicates higher performance ratings.

Results

Descriptive Statistics

The number of emails in each of the three categories (i.e. "professional," "less than professional," and "unprofessional") is provided, along with examples of the codes in Table 1. A Chi-square test of independence suggests there is a relationship between college degree and the type of email, $\chi^2(12) = 230.11$, $p < .001$. The employees with *professional* usernames were more likely to have a college degree, while those with *unprofessional* usernames were more likely to have a high school diploma (for more information, please see Table 2). This suggests participants with higher college-level degrees do not use unprofessional email addresses as frequently as those with a high school diploma or GED. Since many colleges and university provide their students with an email address that is usually a combination of their name, initials, and numbers, it makes sense that those who have attended school beyond high school would have a *professional* email username. People who have attended college might also be more likely to receive information on applying for jobs/ what email usernames might be appropriate for applying to a job. Similarly, an ANOVA indicates there is a significant difference in the mean age of each group, *professional, less than professional* and *unprofessional*, $F(2, 16,250)=1951.79$, $p<.001$. A Games-Howell post hoc analysis shows that there is a significant difference between all three means (please see Figure 2 for means). This also makes sense as people who are older tend to have more life experience and might be less likely to use an *unprofessional* username.

Table 2

Education Level Completed by Email Username Category

Email Category	HS	Non-Degree	Trade School	Associates	Bachelors	Graduate
Professional	6141 (6487)	305 (271)	861 (857)	903 (813)	1074 (888)	155 (122)
Less than Professional	4040 (3775)	134 (158)	505 (499)	402 (472)	368 (516)	44 (71)
Unprofessional	458 (377)	6 (16)	40 (50)	29 (47)	15 (52)	1 (7)

Note. The number in parenthesis is the expected count if there was no relationship rounded to the nearest whole number. Graduate degrees includes both Masters and PhDs.

Figure 2

Mean Age by Email Category

Professional: 31.31
Less than Professional: 30.76
Unprofessional: 28.82
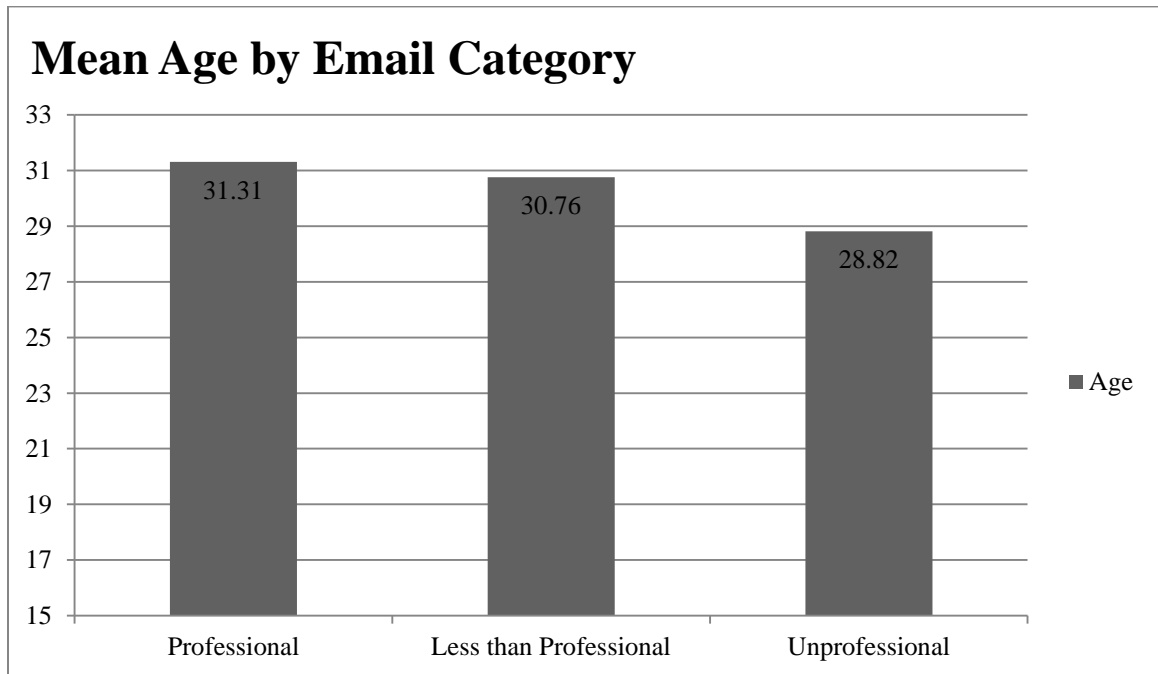
Tenure in Months

Hypothesis 1 was not supported. An ANCOVA indicated there is a statistically significant relationship between employees' email username and how long they worked at the organization when co-varying age and college degree, $F(4, 13{,}633)=3420.64$

$p<.001$. However, the relationship between age, college degree, and tenure is driving the relationship. Email username is not significant, $F(2, 13633)=48.05$, $p=ns$.

Termination

Hypothesis 2 is partially supported. When considering whether or not an employee was considered voluntary or involuntarily terminated by the company (Hypothesis 2), there is no difference between employees with different types of email usernames, $\chi^2(2) = 1.25$, $p=ns$. A Chi-square test of independence indicates there is a significant difference between employees with professional (Hypothesis 2b), less than professional and unprofessional emails in whether or not they left the company for a negative reason, $\chi^2(2) = 22.82$, $p < .001$. The number of employees with professional email addresses who left the organization for personal or non-negative reasons, ($n=$ 3,770) was higher than expected if there was no relationship between leaving the organization for negative reasons, ($n= 3,984$) and the type of email username used by the employee (please see Table 3 for more information). Similarly, the number of employees with less than professional, ($n= 2,336$) and unprofessional, (n= 276) left the organization for negative reasons higher than expected if there was no relationship ($n=2,291, 232$, respectively).

Table 3

Email Category by Termination for Negative Reason

Termination Reason	Professional	Less than Professional	Unprofessional
Non-negative Termination	3770 (3682)	2028 (2072)	167 (210)
Negative Termination	3984 (4072)	2336 (2292)	276 (233)

Note. The number in parenthesis is the expected count if there was no relationship rounded to the nearest whole number.

Job Performance

Hypothesis 3a and b were not supported. An ANCOVA indicates there is a statistically significant difference in the job performance tier based on employee's username, $F(4, 4647)=4.13$, $p<.01$. The significant relationship is driven by the relationship between age and job performance, so email username does not have a significant relationship to job performance, $F(2, 4647)=2.26$, $p=ns$. Further analysis of the unprofessional email usernames found that there is statistically significant difference in job performance of employees who have email usernames with drug references than those without the references, $F(1, 4883)=4.24$, $p<.05$. An ANOVA indicates the negative termination variable created with participants' reasons for leaving the organization does have a significant relationship with employee performance, $F(1, 3,329)= 22.22$, $p< .001$. The mean for the participants who left the organization for a negative reason is higher ($m=2.73$) than for other participants ($m=2.60$). Finally the participants' tenure in months has a significant negative Pearson's correlation with performance tier, $r =-.20$, $p<.01$. Those who perform better stay longer on the job.

Discussion

There was no statistical support for Hypothesis 1, 2a or Hypothesis 3a or 3b. This could indicate there is no relationship between email usernames, tenure and job performance. Age and college degree were driving any significant relationships between the variable. This could suggest the significant relationships found in the Blackhurst et al. (2011) study were the result of age rather than email username. Hypothesis 2b was supported; there was a relationship between employees email usernames and whether an individual left the company for a negative reason such that, employees who have unprofessional usernames were more likely than chance to leave the organization for

negative reasons. While there is not a difference between voluntary and involuntary termination, when other variables such as no call, no show or falsification of company documents are considered the difference between the email usernames is significant. This is in line with research on conscientiousness and the Blackhurst et al. study. Employees who have unprofessional email usernames are less conscientious; therefore, more likely to involuntarily turnover, or leave the organization under negative conditions.

While there was no statistical support for most of these hypotheses, these results must be considered with caution. These data suggest this sample of employees may not adequately represent a different population. While the sample was large, there were several problematic aspects of the dataset. First, there was a large positive skew in the tenure data. The mode for the tenure in days is zero with 1,202, or 8.4% of the employees with tenure information. This suggests there is something about the organization that causes people to turnover quickly. This must be taken into consideration when applying this research in practical application.

In reference to the organization itself, this study does provide some information that could be helpful. The employees who leave the organization for negative reasons are costing the organization money in training costs, missed work time, and counterproductive work behaviors. It might be beneficial for the organization to test if using email usernames as a tool in a multi-hurdle selection process is effective. Since the relationship between job performance and email address was not significant, I would not suggest using it as a major part of the selection process, but instead use it as an initial screen.

Limitations & Future Directions

The main limitations of this student relate to the generalizability of these data. As previously discussed, there seem to be organizational factors that are influencing these data, that cannot be statistically controlled. This limits the generalizability of these results to other organizations. For this reason, it is important to replicate this study within other organizations. In addition, it would be beneficial to examine pre-employment data as well as performance data in relationship to email username to complete the larger picture. The current study proposed conscientiousness as a driver of the email username and performance relationship based on previous research by Blackhurst et al. (2011) and Back et al. (2008). The current study did not obtain any information regarding participants' trait-level conscientiousness. For future research, it is important to understanding the relationships between personality and email usernames to measure participants' conscientiousness to test the proposed relationships.

Another limitation to this study is related to the performance data. These data provided did not provide a way to accurately compare individual across different stacks or job. To compare across different jobs, participants were compared using their average tier. This means information was lost by comparing individual across different jobs throughout the organization. Future research might use a large sample of employees working at the same job so performance can be compared directly without information loss. In addition to replicating this study, it is important to expand our knowledge of how people choose the email address they use. Gissel (2012) demonstrated people do pay attention and form impressions based on email, so why would an individual use an unprofessional email address to apply for a job. To fully understand how an email

username relates to performance it is important to understand how an individual chooses

their email.

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