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RELATIONSHIP BETWEEN PERSONALITY TRAITS OF FINANCIAL REPRESENTATIVES AND PERFORMANCE

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Relationship between Personality Traits of Financial Representatives and Performance

A Thesis

Presented to

The College of Graduate Studies

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In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts in Psychology, Industrial/Organizational Concentration

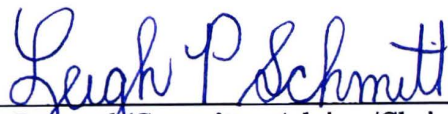
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To the College of Graduate Studies:

We are submitting a thesis written by Ashley Joyce entitled "Relationship between Personality Traits of Financial Representatives and Performance and a Look into a Possible Link between Personality and Motivation and Job Satisfaction." We have examined the final copy of this thesis for form and content. We recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in Psychology, Industrial/Organizational Concentration.



Research/Committee Advisor/Chair



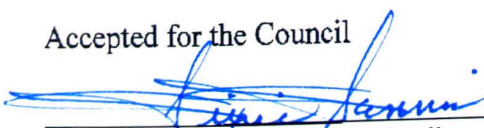
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Abstract

ASHLEY JOYCE. Relationship between Personality Traits of Financial Representatives and Performance and a Look into a Possible Link between Personality and Motivation and Job Satisfaction (under the direction of DR. LEIGH SCHMITT).

The current study explored the relationship between personality traits and overall performance of financial representatives. A total of 63 financial representatives from middle Tennessee completed a questionnaire that included the Big Five Inventory, several questions regarding motivation and job satisfaction, along with some demographic questions. The results of these questionnaires were compared with performance of the financial representatives, measured by amount of insurance premium sold over a one year span.

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Relationship between Personality Traits of Financial Representatives and Performance

It is important for organizations to understand the importance of personality, motivation, and job satisfaction. With the growing interest in personality, more and more organizations are turning to using personality in the selection process; especially since online personality testing has made it much simpler, quicker, and cost-effective. Therefore, it is important to understand the different personality traits and how they relate to the performance of employees. By understanding how certain personality traits can contribute to the performance of employees in certain types of jobs, organizations can make better hiring decisions. Hiring employees with certain personality traits could potentially increase performance, decrease turnover, and increase motivation and job satisfaction. Overall, understanding and studying personality could greatly help organizations.

A great deal of research has been done regarding the link between personality and performance of employees across a variety of settings. While some findings have been consistent across various settings and job types, some findings are contradictory. For example, the personality trait, conscientiousness, has been consistently found to be a good predictor of overall job performance across a variety of settings. However, other traits, such as extraversion has only been found to be a good predictor for certain types of jobs. Therefore, before considering using personality testing for selection, organizations should be sure to use or conduct research specific to the job type they are going to be using the testing for. While there does appear to be research on personality and performance for jobs that involve sales in general, and a little research for insurance salesman, there appears to be no research regarding the personality and performance of

financial representatives. Though financial representatives are involved in sales and some may consider them insurance salespersons, there is more to their jobs than just sales.

Therefore, research should be done for this specific job type to determine the possible link between personality traits and the performance of financial representatives.

A Closer Look at the Five-Factor Model of Personality

Overall, personality is very helpful as a selection criterion because it enables employers to predict valuable things that intelligence and job knowledge and/or experience cannot. Intelligence cannot measure how an employee will fit into the organization or how well they will work with others. It cannot measure whether or not the person will work hard, get the job done, and done right. Personality, on the other hand, can predict these types of things, and better yet is nondiscriminatory which makes it an even greater tool.

The major research and use of personality as a selection criterion is with the use and application of the five-factor model of personality, a specific trait and factor theory. This theory proposes that the five major personality traits are agreeableness, extraversion, conscientiousness, openness, and neuroticism. One of the greatest strengths of the Five-Factor Model of Personality is its' capability to "capture, at a broad level of abstraction, the commonalities among most of the existing systems of personality traits" (John & Srivastava, 1999).

Despite this, the model still has some criticisms. First, many critics have argued that the model "does not provide a complete theory of personality" (John & Srivastava, 1999). This is a valid criticism, but again, the strength of the model is that it is a broad measure of personality and not intended to be a comprehensive theory of personality. The

second complaint, then, is that the theory is too broad, with too few dimensions. The model, though intended to be broad, does attempt to account for this complaint. Although the model only breaks personality down into five broad dimensions, it further breaks these dimensions down into numerous facets.

Another problem that more recent studies have brought up regarding personality as a predictor of production or performance is that it is not always consistent. For example, one study found that certain personality traits may be good predictors during certain stages of a job, but not other stages (Bliese, Bradley, Thoresen & Thoresen, 2004). However, other studies contradict this claim and have found indications that suggest “the true value of personality traits is amplified in the long run” (Lievens, Ones, & Dilchert, 2009). In fact, this study found that the “predictive power of personality as well as the Big Five factors” is just as good, if not better, than cognitive ability measures (Lievens, Ones, & Dilchert, 2009). Despite the potential problems of the Big Five model, it has proved to be useful in many cases in predicting important outcomes, especially outcomes in the workplace. Additionally, the five traits have also been linked with specific qualities, characteristics, and behaviors.

The results from assessments that measure the five major traits of personality have proven to be very useful in the hiring process (Barrick & Mount, 2005). There are several assessments designed to measure the big five personality traits. One measure is the 240-item Revised NEO Personality Inventory, developed by Costa and McCrae (1995). This questionnaire not only measures the big five traits, but also breaks down each of the five personality traits into six more specific facets (Costa & McCrae, 1995). Another measure is Goldberg’s 100-item questionnaire, which uses trait descriptive

adjectives (1992). A third measure is Wiggins Interpersonal Adjective Scale, which also uses adjectives in order to measure interpersonal behavior and the five major personality traits (Trapnell & Wiggins, 1990). Finally, there is the Big Five Inventory, which is a 44-item questionnaire that uses short phrases to measure the big five traits (John, 1990). This questionnaire was developed by Benet-Martinez & John (1998).

Previous research and studies using these assessments find various conclusions regarding the five major personalities and their link with performance. Conscientiousness refers to how goal-oriented a person is and how apt they are to accomplish tasks. Conscientiousness basically measures the dependability and achievement of an individual. In general, the dimension of personality, conscientiousness, has been found to be a consistently good and valid predictor of overall job performance across all job types (Barrick, Dunn, Mount, & Ones, 1995; Barrick & Mount, 1991; Biswas, 2008; Bliese, Bradley, Thoresen & Thoresen, 2004; Burch & Anderson, 2008; Dudley, Orvis, Lebiecki, and Cortina, 2006; John & Srivastava, 1999; Poropat, 2009). Not only has conscientiousness been found to predict performance in the workplace, though, but also in educational settings (Barrick & Mount, 1991; Poropat, 2009). For example, conscientiousness has been linked with things such as good grades (Barrick & Mount, 1991; John & Srivastava, 1999). Overall, a strong relationship between conscientiousness of financial representatives and performance is expected to be found. Since conscientiousness is a good predictor of performance in essentially any and every job type, it is likely to stand true in this setting as well. Financial representatives who are high in conscientiousness will likely perform better.

The other dimensions (agreeableness, extraversion, openness, and neuroticism) have been found to “relate to more specific aspects of job performance” (John & Srivastava, 1999). Agreeableness is often defined as “being pleasant, equable, participative, cooperative, and inclined to interact with other” (Lounsbury, Smith, Levy, Leong, & Gibson, 2009). Agreeableness has been linked with helping characteristics and behaviors such as donating (John & Srivastava, 1999). Some research suggests that the trait agreeableness has no relationship with performance in any job setting, even in jobs where individuals are involved in sales (Barrick & Mount, 1991). In fact, one study actually found that those individuals high in agreeableness actually achieved less sales (Bartram, Martin, Warr, 2005). Other studies have found that the dimension agreeableness seems to be a good predictor only in some jobs, such as jobs where an individual works in groups or teams (Biswas, 2008).

While agreeableness is not often found to be a good predictor of performance, though, it is found to be linked to predict employee integrity (Bliese, Bradley, Thoresen & Thoresen, 2004). This may be why it has been found that, though agreeableness may not typically help salespersons, it is critical for salespersons whose clients feel the need to have a trusting relationship to be high in agreeableness (Bliese, Bradley, Thoresen & Thoresen, 2004). Overall, there seems to be some conflicting research in the area of agreeableness. On one hand, some research suggests that those financial representatives who are higher in agreeableness would have lower performance since the job involves sales. On the other hand, other research suggests that those higher in agreeableness would perform better since clients of financial representatives need to feel they have a trusting relationship with their financial representative. Since the success of a financial

representative depends greatly on both sales and gaining the trust of clients, it is likely that the best level of agreeableness for a financial representative is neither high nor low. Therefore, it is expected that there will be no relationship between agreeableness of financial representatives and performance.

Extraversion refers to characteristics such as being very outgoing and sociable. Those who are very extraverted tend to get along well with many people. They are also more likely to take on leadership roles as extraversion has been linked with leadership characteristics (John & Srivastava, 1999). Some research suggests extraversion is a good predictor of performance across a variety of settings (Biswas, 2008; Bliese, Bradley, Thoresen & Thoresen, 2004). However, the majority of research suggests extraversion to only be a good predictor of performance in certain types of jobs, such as those where an individual works in sales, customer service, or management (Barrick & Mount, 1991; Conte & Gitntoft, 2005; John & Srivastava, 1999). These jobs typically require a high level of social interaction which is likely why those who are high in extraversion typically perform better. Therefore, extraversion also seems to be a good predictor in jobs where team work is required (Biswas, 2008). One study examined the relationship of personality across seven different job types, one being insurance salespersons. This study found that the single most important characteristic and biggest predictor of performance for insurance salesperson was extraversion (Barrick, Dunn, Mount, & Ones, 1995). Extraversion has also been found to be a valid predictor of those who will excel the most from training programs and opportunities and perform the best in training experiences (Barrick & Mount, 1991). Overall, financial representatives must constantly interact with others. They need to be outgoing and be able to work with others including other

financial representatives, other professionals, and clients. Additionally, part of a financial representative's job is acting as an insurance salesperson. Based on this information and the previous research, it is expected that extraversion would be a good predictor of performance for financial representatives. In fact, it is likely to be the best predictor of performance for financial representatives.

Openness typically refers to whether or not a person is open to new experiences. Those who have high levels of openness are typically "receptive to learning, new experiences, novelty, and change" (Lounsbury, Smith, Levy, Leong, & Gibson, 2009). Openness to experience has also been found to be a valid predictor of those who will excel the most from training programs and opportunities (Barrick & Mount, 1991). Additionally, individuals high in this trait also perform better in training experiences (Barrick & Mount, 1991). Some research suggests openness to be a good predictor in some job types, but not a good predictor for performance of employees in sales (Bliese, Bradley, Thoresen & Thoresen, 2004). Overall, it is expected that openness will not be a good predictor of performance for financial representatives.

Neuroticism typically covers negative traits that can cause people to lack interpersonal relationship skills. Those who have very high levels of neuroticism may have personality disorders and depression (John & Srivastava, 1999). Neuroticism is essentially the opposite of emotional stability. Emotional stability measures how well an individual adjusts to certain situations and stresses. Some research suggests that those low in neuroticism, which means they would have a high emotional stability, perform better across a variety of settings (Biswas, 2008; Bliese, Bradley, Thoresen & Thoresen, 2004). Neuroticism especially seems to be a good predictor in jobs that require

individuals to work in groups or teams (Biswas, 2008; John & Srivastava, 1999). That is, those who are low in neuroticism, or high in emotional stability, tend to work better in positions that require team work. Therefore, it is expected that neuroticism will also be a good predictor of performance for financial representatives. It is likely that financial representatives who are low in neuroticism and high in emotional stability perform better.

Overall, it is expected that there will be a link between personality and performance of financial representatives. It is expected that for financial representatives, those who are high in conscientiousness and extraversion will perform better. It is also expected that those low in neuroticism and high in emotional stability will perform better. Additionally, it is expected to be found that agreeableness and openness to experience will not be good predictors of performance for financial representatives. Overall, it is expected that extraversion will be the best predictor of performance for financial representatives. Performance of financial representatives is defined by the amount of insurance premiums sold during one calendar year.

Method

Participants

Questionnaires were sent out to approximately 150 financial representatives at the Pruett Financial Group, an insurance agency primarily affiliated with Northwestern Mutual, and located in middle Tennessee. Participants included 63 financial representatives. The classifications of these participants, including their gender, age, and tenure are outlined in Table 1: Classification of Survey Participants.

Table 1
Classifications of Survey Participants

- ⊙ 63 financial representatives completed the survey
- ⊙ Gender:
 - > 59 males
 - > 4 females
- ⊙ Age:
 - > 21-30 yr olds: 20
 - > 31-40 yr olds: 20
 - > 41-50 yr olds: 11
 - > 51-60 yr olds: 5
 - > Over age 60: 5
- ⊙ Tenure
 - > One year or less: 22
 - > 2-5 years: 12
 - > 6-10 years: 6
 - > 11-15 years: 4
 - > 16-20 years: 9
 - > 21-25 years: 2
 - > More than 25 years: 6

Materials

The Big Five Inventory (BFI) was used (Benet-Martinez & John, 1998). The BFI is one such measure of the Big Five personality traits established by the Big Five Theory. The questionnaire is intended to measure the Big Five Traits, which consists of agreeableness, extraversion, conscientiousness, openness, and neuroticism. The questionnaire consists of 44 items and was developed for the purpose of having a "brief inventory that would allow efficient and flexible assessment of the five dimensions" of personality (John & Srivastava, 1999). The items on the BFI consist of short phrases which are based on trait adjectives intended to measure the five major personality dimensions. Eight to ten items on the BFI are used to measure each of the five dimensions of personality. Additionally, each item aims to measure a different facet of

each dimension. These items are short and simple, but are more efficient and consistent than single adjective items used on some other personality measures such as Goldberg's scale (Goldberg, 1992). On the other hand, the items are less complex than full sentence items used on other measures such as the Revised NEO questionnaire (Costa and McCrae, 1995). Overall, the BFI was chosen, rather than one of the other measures of the Big Five Traits, since it is much shorter, could be set up and analyzed at no cost, and measured only what was intended (as the measurement of more specific facts of each trait were unneeded for this study).

Further, the reliability and validity of the BFI is relatively high. "The alpha reliabilities of the BFI scale typically range from .75 to .90 and average above .80" in U.S. and Canadian samples (John & Srivastava, 1999). Additionally, the reliabilities in three-month test-retest samples "range from .80 to .90 with a mean of .85" (John & Srivastava, 1999). Not only is the reliability of the BFI relatively high, though, but the validity also appears to be high. The BFI has "substantial amount of convergent and divergent relations with other Big Five instruments as well as with peer ratings" which provides evidence for the validity of the BFI.

The participants completed the BFI by choosing statements that reflect each of the five dimensions. Finally, several personal questions were included to collect information regarding age and gender. The number of years the financial representative had been with the company and their current production/performance (defined as the amount of premiums in dollars sold in one calendar year) were collected directly from the agency.

Procedure

E-mails were sent out to all financial representatives at the particular agency by the managing partner. Included in the e-mail was basic information regarding the study, the purpose of the study, a summary of what the questionnaire entailed, and directions for completing the questionnaire. Additionally, the e-mail stated that while the overall end results of the study would be offered to the agency, the individual answers and results of each representative's questionnaire would remain anonymous from the organization. The e-mail included a link the each representative could go to complete the questionnaire.

Results

First, the reliability of the BFI in this study was relatively high. Using Cronbach's alpha, the reliability score for the extraversion scale of the BFI was .849. The reliability for the agreeableness scale of the BFI was .823. For the conscientiousness scale, the reliability was .763. The reliability for the neuroticism scale was .830, and the reliability for the openness scale was .800. Though the reliability for the conscientiousness scale was a little low, all of the reliabilities were acceptable.

After analyzing the full data set, it was determined that the data provided by financial representatives who had been at the company one year or less needed to be removed. First, by breaking down the data by number of years with the company and annual production, it is obvious that financial representatives, who had been with the company one year or less, had the lowest annual production amounts. In fact, 18 of the 22 financial representatives who had been with the company one year or less had an annual production under \$50,000. This makes it clear that there are other factors as to why these financial representatives have low production.

There are several reasons as to why financial representatives in their first year with the company have much lower production volume. First, many of the financial representatives who have been at the company only one year or less likely do not have a full years worth of production for the study. Additionally, financial representatives who have only been with the company one year or less have very low salaries as presented in Table 2: Count of Financial Representatives by Tenure and Annual Production. Much of their time in the first year is spent in training and they have very little experience. Therefore, their salaries in the first year are always going to be much lower than other financial representatives since they are spending much of their time doing things other than focusing solely on selling.

Table 2

Count of Financial Representatives by Tenure and Annual Production

| Count of ANNUAL PRODUCTION | | ANNUAL PRODUCTION | | | | | | | | | |
|----------------------------|----|-------------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| YRS W/ COMPANY | | 0-49999 | 50000-99999 | 100000-149999 | 150000-199999 | 200000-249999 | 250000-299999 | 300000-349999 | 350000-399999 | 400000-449999 | Grand Total |
| | 1 | 18 | 4 | | | | | | | | 22 |
| | 2 | 1 | 3 | 1 | | | | | | | 5 |
| | 3 | | | 1 | | 1 | | | | | 2 |
| | 4 | | 1 | | 1 | | | | | | 2 |
| | 5 | | | 2 | 1 | | | | | | 3 |
| | 6 | | 1 | 1 | 2 | | | | | | 4 |
| | 7 | | 1 | | | | | | | | 1 |
| | 8 | 1 | 1 | | | | | | | | 2 |
| | 9 | | | | | | | | | | 1 |
| | 10 | | | 1 | | | | | 1 | | 1 |
| | 11 | | | | | | | | | | 1 |
| | 12 | | | | | | | | | | 1 |
| | 13 | | 1 | | | | | | | | 1 |
| | 14 | | 1 | | | | | | | | 1 |
| | 15 | | 1 | | | | | | | | 1 |
| | 16 | | 1 | | | | | | | | 1 |
| | 17 | | | | 1 | | | | | | 1 |
| | 18 | | | | | 1 | | | | | 1 |
| | 19 | | | 1 | | | | 1 | 1 | 1 | 3 |
| | 20 | | 2 | | | | | 1 | | | 3 |
| | 21 | | | | | 1 | | | | | 1 |
| | 22 | | | | | | | | | | 1 |
| | 23 | 1 | | | | | | | | | 1 |
| | 24 | | 1 | | | | | | | | 1 |
| | 25 | | | | | | | | | | 1 |
| | 26 | | | | | | | | | | 1 |
| | 27 | | | 1 | | | | | | | 1 |
| | 28 | | | 1 | | | | | | | 1 |
| | 29 | | | | 1 | | | | | | 1 |
| | 30 | | | | | 1 | | | | | 1 |
| | 31 | | | | | 1 | | | | | 1 |
| | 32 | | | | | 1 | | | | | 1 |
| | 33 | | | | | 1 | | | | | 1 |
| | 34 | | | | | | | | | | 1 |
| | 35 | | | | | | | | | | 1 |
| | 36 | | | | | | | | | | 1 |
| | 37 | | | | | | | | | | 1 |
| | 38 | | | | | | | | | | 1 |
| | 39 | | | | | | | | | | 1 |
| Grand Total | | 21 | 16 | 9 | 5 | 2 | 1 | 1 | 1 | 2 | 61 |

To confirm this thought, a chi square test was performed for years with the company (tenure) and annual production (sales). There is a significant chi-square statistic ($\chi^2 = 276.83$ $p = 0.00$). Therefore, the test did confirm that data from financial representatives with only one year or less at the company does not fit with the other data. Looking at the actual versus expected data, it is apparent that there are many more cases of one year and under representatives who produced under \$50,000 annually than there were expected. Therefore, this data supports the fact that based on being at the company one year or less, those financial representatives are going to have very low production amounts despite any other factors. As stated before, this is likely due to the fact that many of these financial representatives did not have a full years worth of production data and also because these financial representatives also are not able to devote all of their time and focus to selling in the first year.

Before determining whether it was necessary to remove all of the data provided from financial representatives who had been with the company one year or less, monthly production was taken into consideration. If one of the primary reasons annual production was much lower for these financial representatives was due to the lack of a full years worth of production data, monthly production could have been used to estimate an average annual production for these representatives. This could have potentially allowed for the use of all of the data. However, using monthly production to estimate annual production would only be a viable option if monthly production was stable. One financial representative was interviewed to determine the stability of monthly production. Cullen Douglass, a financial representative who had been with the company over 20 years stated that monthly production was not stable. He further stated this monthly production can be

“very different from month to month” (C.E. Douglass, personal communication, December 11, 2009). According to him, a number of factors can influence the changes in production from month to month. For example, summer months and winter months typically have lower production as both financial representatives and clients tend to be out of town more during these months.

Based on this information, it was determined that it was in fact necessary to remove data for financial representatives who had been with the company one year or less, the data was also evaluated after taking out all of this data. After taking out data for these financial representatives, descriptive statistics and correlations were calculated. The means, medians, standard deviations, and modes for the reduced data are provided in Table 3: Descriptive Statistics for Reduced Data.

Table 3
Descriptive Statistics for Reduced Data

| | AGE | TENURE | EXTRAVERSION | AGREEABLESS | CONSCIENTIOUSNESS | NEUROTICISM | OPENNESS |
|---------|------|--------|--------------|-------------|-------------------|-------------|----------|
| MEAN | 43.2 | 14 | 30.5 | 36.6 | 35.1 | 18.4 | 36.4 |
| ST.DEV. | 12 | 10 | 6.18 | 6.04 | 5.18 | 5.64 | 6.62 |
| MEDIAN | 41 | 13 | 30 | 38 | 36 | 18 | 38 |
| MODE | 35 | 2 | 35 | 44 | 36 | 22 | 44 |
| MIN. | 25 | 2 | 20 | 21 | 22 | 9 | 22 |
| MAX. | 69 | 39 | 39 | 44 | 44 | 31 | 49 |
| RANGE | 44 | 37 | 19 | 23 | 22 | 22 | 27 |

(n= 39)

The correlations found after the data was removed for financial representatives who have only been at the company for one year or less, which are presented in Table 4: Correlation Matrix of Reduced Data, was stronger. This was likely because less experienced financial representatives do not predict as well as those financial representatives who have been with the company a few years. Additionally, the fact that many of these financial representatives were not with the company a full year, their production data does not reflect a full years worth of sales.

Table 4
Correlation Matrix of Reduced Data

| | EXTRAVERSION | AGREEABLENESS | CONSCIENTIOUSNESS | NEUROTICISM | OPENNESS | TENURE | SALES | AGE | GENDER |
|-------------------|--------------|---------------|-------------------|-------------|----------|--------|-------|--------|--------|
| EXTRAVERSION | 1.000 | | | | | | | | |
| AGREEABLENESS | -0.073 | 1.000 | | | | | | | |
| CONSCIENTIOUSNESS | 0.037 | 0.352 | 1.000 | | | | | | |
| NEUROTICISM | 0.142 | -0.429 | -0.295 | 1.000 | | | | | |
| OPENNESS | 0.253 | 0.240 | 0.122 | -0.021 | 1.000 | | | | |
| TENURE | 0.106 | -0.114 | -0.105 | 0.186 | 0.438 | 1.000 | | | |
| SALES | 0.216 | -0.030 | 0.015 | 0.227 | 0.181 | 0.151 | 1.000 | | |
| AGE | 0.186 | 0.000 | 0.059 | 0.157 | 0.369 | 0.854 | 0.150 | 1.000 | |
| GENDER | -0.249 | -0.134 | -0.271 | -0.025 | 0.137 | 0.031 | 0.217 | -0.036 | 1.000 |

(n=39)

After taking out the data of financial representatives who had only been at the company for one year or less, extraversion appeared to have a weak, positive correlation with openness ($r=.25$). It also appeared to have a weak correlation with neuroticism ($r=.14$), tenure ($r=.11$), and age ($r=.19$). Unfortunately, none of these correlations were significant, likely due to the small sample size of the reduced data. The correlation between extraversion and production in the reduced data was stronger than the full data,

which can be seen in Table 5: Regression of Annual Sales Production on Extraversion Using All Data, and Table 6: Regression of Annual Sales Production on Extraversion Using Reduced Data. The correlation between extraversion with the reduced data was .22, though this was also not significant. Therefore, though there was a weak correlation, it was not able to support the hypothesis that extraversion is a good predictor of performance for financial representatives, as the correlation was not significant.

Table 5

Regression of Annual Sales Production on Extraversion Using All Data

SUMMARY OUTPUT

| Regression Statistics | |
|-----------------------|--------------|
| Multiple R | 0.091457238 |
| R Square | 0.008364426 |
| Adjusted R Square | -0.006442956 |
| Standard Error | 95157.49007 |
| Observations | 61 |

| ANOVA | | | | | |
|------------|----|------------|------------|-------------|----------------|
| | df | SS | MS | F | Significance F |
| Regression | 1 | 4754937644 | 4754937644 | 0.497663626 | 0.483304464 |
| Residual | 59 | 5654591-11 | 9584892355 | | |
| Total | 60 | 5732542-11 | | | |

| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% |
|--------------|--------------|----------------|-------------|-------------|--------------|-------------|--------------|-------------|
| Intercept | 61947.45903 | 64871.49464 | 0.954925725 | 0.343511581 | -67860.10081 | 191755.0189 | -67860.10081 | 191755.0189 |
| EXTRAVERSION | 1462.200747 | 2872.712712 | 0.705452238 | 0.483304464 | -2665.286375 | 5609.687869 | -2665.286375 | 5609.687869 |

Table 6

Regression of Annual Sales Production on Extraversion Using Reduced Data

SUMMARY OUTPUT

| Regression Statistics | |
|-----------------------|-------------|
| Multiple R | 0.216057584 |
| R Square | 0.04668083 |
| Adjusted R Square | 0.020915493 |
| Standard Error | 97876.38966 |
| Observations | 39 |

| ANOVA | | | | | |
|------------|----|-------------|-------------|-------------|----------------|
| | df | SS | MS | F | Significance F |
| Regression | 1 | 17179471146 | 17179471146 | 1.611767451 | 0.186436064 |
| Residual | 37 | 360842-11 | 9482161263 | | |
| Total | 38 | 3690195-11 | | | |

| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% |
|--------------|--------------|----------------|-------------|-------------|--------------|-------------|--------------|-------------|
| Intercept | 44691.67841 | 79397.876 | 0.561878765 | 0.576911557 | -116183.9903 | 205566.7551 | -116183.9903 | 205566.7551 |
| EXTRAVERSION | 3440.072594 | 2555.785197 | 1.346019113 | 0.106486064 | -1733.34704 | 8613.490229 | -1733.34704 | 8613.490229 |

Agreeableness had weak to moderate positive correlations that were significant with conscientiousness ($r=.35$, p value = .03) and neuroticism ($r=-.43$, p value = .01). Agreeableness also had a weak, but insignificant, positive correlation with openness ($r=.24$). Further, it appeared that agreeableness also had a very weak, but negative correlation with tenure, though not significant ($r=.11$). As expected, agreeableness did not appear to correlate with sales ($r=-.03$). Therefore, while this would seem to support the hypothesis that there would be no relationship between agreeableness and production, the correlation was not significant.

Conscientiousness had a moderate, negative correlation with neuroticism ($r=-.30$). It also showed that conscientiousness also had a very weak positive correlation with openness ($r=.12$), and a very weak negative relationship with tenure ($r=-.11$). Unfortunately, none of these correlations were significant, likely due to the small sample size of the reduced data. Additionally, based on the reduced data, the correlation between conscientiousness and production was very weak ($r=.01$). Therefore, this correlation would appear to not support the hypothesis that financial representatives high in conscientiousness would perform better, though the correlation was not significant.

Neuroticism did not appear to correlate with any of the other big five factors, other than the moderate negative correlations with agreeableness ($r=-.43$, p value = .01) and conscientiousness ($r=-.30$, p value = .07). However, based on the reduced data, neuroticism appeared to also have a weak positive correlation with tenure ($r=.19$) and a weak positive correlation with age ($r=.16$), though neither were significant. Additionally, it showed a moderate positive relationship with production/sales ($r=.23$). This correlation, which is actually the opposite of what was expected, is not significant. Therefore, the

hypothesis that financial representatives low in neuroticism would perform better cannot be supported.

Openness had a weak positive, but insignificant, correlation with extraversion as discussed ($r=.25$). Openness also showed to have weak to moderate correlations with agreeableness ($r=.24$) and conscientiousness ($r=.12$), though neither was significant, as previously mentioned. It's correlation with tenure was appeared to show a moderate relationship ($r=.20$), though not significant, as presented in Table 7: Regression of Annual Sales Production on Openness and Tenure Using Reduced Data. It may be important to note that by taking out the first year financial representatives, the relationship between openness and tenure appeared to have a fairly significant change. Looking at Table 8: Regression of Annual Sales Production on Openness and Tenure Using All Data, it shows that there appeared to be a relatively strong and significant relationship between the two factors ($r=.44$, p value = .01) before the one year representatives were removed. Finally, the correlation of openness with age after the data

Table 7
Regression of Annual Sales Production on Openness and Tenure Using Reduced Data

SUMMARY OUTPUT

| Regression Statistics | |
|-----------------------|--------------|
| Multiple R | 0.197484309 |
| R Square | 0.039000052 |
| Adjusted R Square | -0.014388934 |
| Standard Error | 39116.46636 |
| Observations | 39 |

| ANOVA | | | | | |
|------------|----|--------------|-------------|-------------|----------------|
| | df | SS | MS | F | Significance F |
| Regression | 2 | 14352777.655 | 7176388.828 | 0.710490095 | 0.438675484 |
| Residual | 36 | 3.53667E+11 | 9824078904 | | |
| Total | 38 | 3.68019E+11 | | | |

| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% |
|-----------|--------------|----------------|-------------|-------------|--------------|-------------|--------------|-------------|
| Intercept | 61104.01024 | 51761.06665 | 0.665903443 | 0.509717545 | -124896.0573 | 247204.0777 | -124896.0573 | 247204.0777 |
| OPENNESS | 2106.546296 | 1702.965445 | 0.775346366 | 0.440869201 | -3375.32167 | 7588.414262 | -3375.32167 | 7588.414262 |
| TENURE | 649.5952064 | 1734.525982 | 0.469313950 | 0.627237245 | -2668.186607 | 4367.37682 | -2668.186607 | 4367.37682 |

Table 8

Regression of Annual Sales Production on Openness and Tenure Using All Data

SUMMARY OUTPUT

| Regression Statistics | |
|-----------------------|-------------|
| Multiple R | 0.45082948 |
| R Square | 0.20324722 |
| Adjusted R Square | 0.175772996 |
| Standard Error | 88740.36252 |
| Observations | 61 |

| ANOVA | | | | | |
|------------|----|-------------|-------------|-------------|----------------|
| | df | SS | MS | F | Significance F |
| Regression | 2 | 1.16512E+11 | 58256101837 | 7.397739319 | 0.001375258 |
| Residual | 58 | 4.56741E+11 | 7874851941 | | |
| Total | 60 | 5.73254E+11 | | | |

| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% |
|-----------|--------------|----------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Intercept | 76001.4617 | 64703.85345 | 1.174604875 | 0.244952912 | -53517.37199 | 205520.2954 | -53517.37199 | 205520.2954 |
| OPENNESS | -246.1415833 | 2797.580058 | -0.088233222 | 0.891557807 | -3844.2889 | 3352.005733 | -3844.2889 | 3352.005733 |
| TENURE | 4315.391016 | 1151.431064 | 3.747850089 | 0.000413084 | 2010.551342 | 6620.23069 | 2010.551342 | 6620.23069 |

The correlation between openness and production after the data was reduced, was also somewhat stronger, though not significant ($r=.18$). This correlation is still not very strong, though, and with limited data is not significant. Therefore, the hypothesis that openness would not be a good predictor of performance could not be supported or rejected. Finally, after the data was reduced, tenure had a weaker correlation with production, though not significant ($r=.15$). However, openness did have a very strong and significant correlation with age ($r=.85$, p value = .00).

Discussion

As the importance of, and interest in, personnel selection grows, businesses and organizations will continue to become more and more interested in the use of personality and other tools for selection. With the quickness, ease, and relatively cheap price of online personality testing, the use of personality testing for selection will continue to

increase. It is important for organizations to research and understand personality so that they can make better hiring decisions.

Ultimately, the use of personality testing for selection could result in an increase performance, a decrease turnover, and an increase in motivation and job satisfaction. However, it is also important for organizations to research and study personality so that they can better determine and validate certain predictors. The results of this particular study, though not significant, suggest that the findings of some previous studies may not necessarily be true for some (or all) job types, including financial representatives. Therefore, it is vital that these results be further researched to determine personality testing is being used to the best of its abilities.

Overall, the correlations found when analyzing the data as a whole were not very strong. It was expected that extraversion would be the best predictor for performance of financial representatives. This is because research has consistently suggested that extraversion is a good predictor of performance across a variety of settings especially for those who are in jobs such as sales, customer service, or management (Barrick, Dunn, Mount, & Ones, 1995; Bliese, Bradley, Thoresen & Thoresen, 2004; Biswas, 2008; John & Srivastava, 1999; Barrick & Mount, 1991; Conte & Gitntoft, 2005)

However, based on the findings from the original correlations and the regression on extraversion from the full data set (shown in Table 8: Regression of Annual Sales Production on Openness and Tenure Using All Data), this hypothesis was not supported. Additionally, there was not strong evidence to support any of the other hypotheses either. However, there did appear to be a moderate correlation between openness and tenure, and tenure had a strong and significant correlation with production, both before and after the

data was reduced. The correlation between tenure and production before the data was reduced was .45 (p value = .00). After the data was reduced, it still have a significant, positive relationship ($r=.15$, $p = .00$). This suggests that openness could have an indirect role in predicting production.

While previous studies that have shown a link between personality and performance tend to find low correlations (Hurtz & Donovan, 2000; Judge, LePine, & Rich, 2006), these low correlations were still somewhat concerning. It was determined that it was very possible that the inclusion of data from financial representatives who had been at the agency only one year or less could be the cause of this. Based on the low levels of production for first year representatives (as presented in Table 2: Chi Square for Years with Company and Annual Production), it was determined that data may need to be removed for financial representatives who had been at the company one year or less. First, many of these financial representatives did not have a full years worth of production data and, since tenure was such a strong predictor of production, this could throw off the data. Once data for these financial representatives were removed, new correlations and regressions were found to determine if there was actually evidence to support the hypotheses.

After removing the data for financial representatives who had been at the company one year or less, the correlations did appear to be stronger than before. Since many of these representatives did not have a full year of production data, it is likely that they do not predict as well as those financial representatives who have been with the company a few years or longer. However, after first year financial representatives were

removed, though the correlations were stronger, many were not significant, which may have been due to the smaller sample size.

Once data was removed for the first year financial representatives, the correlation between extraversion and production increased to .22. The correlation of extraversion and production, and the regression of extraversion from the reduced data appeared to suggest that there was evidence to support the hypothesis that extraversion is a predictor of performance for financial representatives. Unfortunately, it cannot support the hypothesis as neither was significant. The insignificance of these values may be due to the limited sample size. It is possible that if more data was obtained, these results would be significant enough to support that hypothesis.

Previous research on agreeableness was very conflicting. Some research suggested that agreeableness had no relationship with performance; other research showed that agreeableness was a good predictor of performance for some jobs, and one study even found that agreeableness would have a negative relationship with sales (Bartram, Martin, Warr, 2005). Based on this, the hypothesis predicted that there would be no relationship between agreeableness and performance of financial representatives. After removing the data of those financial representatives who only had been with the company one year or less, the correlation found between agreeableness and production was very weak. This supports the hypothesis that there would be no relationship between agreeableness and production. However, interestingly enough, agreeableness did have a weak negative correlation with tenure. This is important to note because tenure has such a strong correlation with performance/production.

Conscientiousness has consistently been found to be a good and valid predictor of overall job performance in previous research on essentially any job type (Barrick, Dunn, Mount, & Ones, 1995; Barrick & Mount, 1991; Biswas, 2008; Bliese, Bradley, Thoresen & Thoresen, 2004; Burch & Anderson, 2008; Dudley, Orvis, Lebiecki, and Cortina, 2006; John & Srivastava, 1999; Poropat, 2009). Therefore, it was expected that this would be true in this study as well. However, the findings in this study do not support this hypothesis. After removing the data of financial representatives who have been at the company one year or less, the correlation between conscientiousness and production was extremely weak or negligible. However, it is important to note that conscientiousness, like agreeableness, also had a weak negative relationship with tenure.

Research has also been fairly consistent with findings regarding neuroticism in that those who are low in neuroticism tend to perform better (Bliese, Bradley, Thoresen & Thoresen, 2004; Biswas, 2008). However, after reducing the data by taking out financial representatives who have been with the company one year or less, the findings on neuroticism were opposite of what was expected. It was predicted that those low in neuroticism would perform better, as found in previous studies. The correlation between neuroticism and production in this study, though, was a moderate positive correlation. This correlation, however, was not significant, which is possibly, but not necessarily due to the small sample size. With more data, it is possible that this study would find that in some job types neuroticism may actually be a predictor of performance instead of emotional stability being the predictor. This finding, if significant, would be very unique to most findings and could play a huge role in selection. Neuroticism also had a weak positive relationship with tenure, which may also suggest that it could be a good predictor

due to the strong relationship between tenure and production. This correlation, however, was also not significant.

Finally, it was hypothesized that openness would not be a good predictor of performance for financial representatives. This is because there is conflicting research as to whether openness is a good predictor of performance. Some research suggests it is not a good predictor, and other research finds that it is only a good predictor for certain job types (Bliese, Bradley, Thoresen & Thoresen, 2004). Based on the correlations and regressions of this study, the findings appear to opposite what was expected. The correlation between openness and production was weak, but positive (though not significant). Additionally, there was a moderate relationship between openness and tenure, which after the data was reduced, was even stronger and was significant. With such a high correlation between tenure and production, this correlation with openness could be very important. There appears to be a very complicated relationship between openness, tenure, and production. With more data obtained for this study, this relationship could become more clear and prominent.

Overall, the findings of this study were extremely interesting and unique. One major limitation of the study was that many of the surveys obtained were from financial representatives who had been at the company one year or less. This limited the results because many of these financial representatives did not have one full year's worth of production data. Therefore, it was best to remove these from the study to better analyze the findings. Once this data was removed, the size of the sample limited the significance of the results. Therefore, while the findings of this study are very unique and contradict some previous research findings, they are not significant. This is likely due to a couple of

reasons. First, the correlations in this study were primarily low to moderate. Low correlations tend to affect statistical power. However, these low correlations are not very unusual as previous studies that have shown a link between personality and performance tend to find low correlations (Hurtz & Donovan, 2000; Judge, LePine, & Rich, 2006).

A second factor that may have affected the significance of the results was the small sample size. Unfortunately, there are numerous small businesses, as well as positions with smaller numbers in some firms, which cause studies on them to be hindered by small sample sizes, as is the case in this study (Schmidt, Ocasio, Hillery, & Hunter, 1985). However, it is critical to be able to study and research these small businesses and positions, which is why there are new methods being developed to address the problem of small sample sizes (Yu, 2003).

Overall, more data will be attempted to be obtained to further analyze these findings and determine their significance. Or, if more data cannot be obtained, an attempt will be made to apply potential new methods for small samples. If the findings remain the same after more data is collected and they are significant, they could greatly influence the role of personality testing in selection, especially for this job type.

Recommendations for Future Studies

First and foremost, it is recommended that further data be collected for this study in order to determine the significance of these findings. If further data collected continues to support these findings, studies in other environments and job types would be suggested. The findings of this study suggest that previous research in personality testing may not be correct for all job types and some previously found predictors are not good predictors, and vice versa.

Additionally, due to the lower reliability findings on the conscientiousness scale of the BFI, it would be suggested that a future study break down conscientiousness. Furthermore, another study may be done to further investigate the complicated relationship between openness, tenure, and performance as suggested by the findings in this study.

Finally, due to the critical role motivation and job satisfaction play in performance as well, it would be suggested that these two factors also be studied with personality and performance of financial representatives. It would also be suggested that future studies look more closely at the link between personality, performance, and motivation. Some research regarding this already exists. For example, there is research that suggests conscientiousness, extraversion, and openness are predictors of motivation to learn (Fletcher, Major, & Turner, 2006).

Not only is it possible that certain personality traits are likely to be more motivated, but those high in certain personality traits may be more motivated by different sources of motivation. For example, it is likely that there is a link between people with a high level of one trait being more motivated by external sources of motivation, while those high in another trait may be more motivated by internal sources of motivation. If this were found to be true in regard to being motivated in the workplace, organizations could consider personality of employees when implementing motivation techniques so that they are able to motivate the employee to their maximum potential.

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