The Relationship Between Personality and Job Attribute Preferences

Jordan Skinner

This thesis is submitted in partial fulfilment of the Honours degree of Bachelor of Psychological Science (Honours).

School of Psychology

The University of Adelaide

Word Count: 8997

Table of Contents

List of Tables

Abstract

The success of an organisation is contingent upon the attraction of highly talented individuals. Thus, in order to differentiate themselves from their competitors, organisations must offer such individuals a rewards package that they find attractive. The limited literature on this topic has identified various relationships between job attribute preferences and personality traits. However, only weak relationships have been established between these concepts, and there is evidence to suggest that this is related to the bandwidth-fidelity problem. Some authors argue that the solution to this problem is to test personality at the facet level, which would provide more analytical and predictive power. This also allows for the possibility of facets within a particular trait exerting countervailing effects upon job attribute preferences, which might otherwise obscure trait level relationships. The present study aimed to investigate these ideas through an online survey assessing the personality and job attribute preferences of 143 first-year psychology students at the University of Adelaide. Multiple hierarchical regression was used to control for various demographic variables, before Akaike's Information Criterion was utilised to compare the predictive power of personality traits to their respective facets within the Five-Factor Model of personality. The results indicated not only that personality is related to job attribute preferences, but that facets can predict in opposite directions and thus improve analytical power in some circumstances. These findings have implications for improving the validity of personality testing in recruitment settings, and for further research on how organisations can attract applicants with particular personality characteristics.

Declaration

This thesis contains no material which has been accepted for the award of any other degree of diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

Jordan Skinner

9th November 2018

Acknowledgements

I would first like to express my gratitude to my supervisor Dr Neil Kirby, for all of the assistance and ideas he provided me with throughout the year – this project would not have been possible without his help. I would also like to thank Dr Nicholas Burns for his extensive assistance with learning and applying new statistical analyses throughout this project, which saved the day on multiple occasions. A special thanks to the Honours coordinators for their assistance and understanding throughout the year also.

Finally, I would like to thank my amazing girlfriend, friends and family for all of their support. I could not have weathered the obstacles thrown at me this year if it were not for all of you.

1.1 The Importance of Job Attribute Preferences

For any given job opening, large companies will often face many similarly qualified applicants, leading personnel selection researchers to consider many different sources of information in the search for decision-making guidance to provide to employers. Employers want to be able to distinguish between these applicants, as the attraction and retention of highly talented individuals is one of the most important contributors to organisational success (Chapman, Uggerslev, Carroll, Piasentin & Jones, 2005). Thus, it is essential that organisations seek to construct the most competitive workforce possible.

Some investigations of this nature have turned towards personality, with the literature demonstrating that people with certain personality types or profiles perform better within particular roles (and in general), producing better outcomes in both job performance (Judge & Zapata, 2015) and job satisfaction (Bruk-Lee, Khoury, Nixon, Goh & Spector, 2009). For example, extraverted individuals often perform better in positions that make use of their social skills, whilst individuals who perform well in creative positions are often more open to experience (Judge & Zapata, 2015). Employees who are satisfied with their job are more easily retained long term, enhancing talent retention and reducing the significant expenses that are associated with employee turnover (Osicki & Kulkarni, 2010). Consequently, it is important that employers can both identify potentially compatible applicants and appear attractive to them, both during their initial job selection process and the later stages of selection, where applicants may be weighing up offers from different companies. There will likely also be situations that arise where applicants are not similarly qualified, with one or more outstanding applicants. In these circumstances, employers will wish to place themselves above their competitors, constructing an attractive rewards package to entice potentially valuable assets towards their company. So, the importance of job rewards is clearly

important, even in circumstances where personality may not directly impact upon applicant outcomes.

Whilst monetary incentives have historically been one of the most important factors in determining job selection (Cable & Judge, 1994), the literature suggests that in a competitive job market, the magnitude of these incentives can be quite similar (Gerhart and Rynes, 2003). The literature also suggests that pay level is a noncompensatory job attribute; once a particular subjective minimum standard has been surpassed, other job attributes may become more important (Chapman et al., 2005). Thus, employers must look towards other types of rewards (as well as different structures of these incentives) to differentiate themselves and retain valued staff. By rewards, this paper follows a similar trend to that of Vandenberghe, St-Onge and Robineau (2008) in considering all provisions of a company that cater to the individual needs of their employees, whilst 'job attributes' will more broadly include both these rewards and other job/company characteristics, such as the social environment. These job attributes have been demonstrably impactful in predicting organisational attractiveness, with the literature highlighting various individual differences in the attractiveness of attributes such as job security, type of work, promotional opportunities and social environment (Lacy, Bokemeier & Shepard, 1983; Jurgensen, 1978; Vandenberghe et al., 2008).

1.2 Influences on Job Attribute Preferences

Jurgensen (1978) was one of the first researchers to investigate job attribute preferences; his longitudinal study of the Minnesota Gas Company assessed what job applicants thought were the most important attributes of a job. He analysed thirty years of applications to the company, which utilised the Job Preference Form in order to determine whether potential applicants would be satisfied by what could be offered to them.

Interestingly, he did not utilise significance testing throughout his analysis, claiming that the large sample sizes of each group in the study would make even miniscule differences highly significant in a statistical sense, whilst being theoretically and practically meaningless. His analysis demonstrated differences in job attribute preferences with regard to gender, age, occupational experience and education, although gender differences were substantially smaller than expected, and decreased over the 30-year period. Furthermore, there were substantial differences in self-other evaluations, with participants consistently rating pay below other attributes, whilst believing that it would be the most important attribute to others. This research demonstrates that employers should be careful when designing reward packages for a given individual, as they may be subject to the same attribution bias and accordingly place an unnecessarily large emphasis on pay. This increases costs and potentially jeopardises applicant attraction if this is promoted at the expense of other important factors.

Whilst Jurgensen's findings would now rightly be considered dated, it is worth noting that they were relatively consistent over a thirty-year period that was quite tumultuous in terms of political, social and economic change (Jurgensen, 1978). However, throughout the past few decades many Western parts of the world have seen a casualisation of the workforce (Gautié & Schmitt, 2010), and there have been substantial increases in technological capabilities and globalisation. During this time the service economy has also become increasingly prevalent across the world (Buera & Kaboski, 2012), which requires individuals in many more jobs to have contact with co-workers and customers. These factors could have led to substantial changes in job attribute preferences, thus reinforcing the need for further research on this topic. Additionally, the use of significance testing and the generation of effect sizes could be useful in evaluating the importance and practical utility of these findings.

Whilst there have been few investigations of the impact of individual differences on job attribute preferences, some of Jurgensen's findings have since been validated by further study. Lacy et al. (1983) examined the preferences of five representative national samples of the US gathered between 1973 and 1980 ($n = 7281$). They found significant differences attributable to gender, education, occupational prestige, past income, number of dependents and age, with gender being the least impactful of these. Notably, they only included five job attributes in their analysis, which is substantially less than other studies on this topic (eg. Vandenberghe et al., 2008). Occupational experience has also been validated to some extent, with Bretz and Judge (1994) finding that it had a significant effect upon the likelihood that people would accept particular jobs. Vandenberghe et al.'s (2008) study appears to be the most recent in this area that considered Jurgensen's original attributes. They found that most of the aforementioned individual differences were linked to significant differences in attribute preferences, however their study did not find a significant effect for age, number of dependents or work experience. This disparity in findings is not uncommon; Turban, Erying and Campion (1993) included the same 10 attributes as Jurgensen in his Job Preference Form, and they did not find a significant difference in job attribute preferences across gender. Bonsdorff (2011) studied a sample of Finnish nurses ($n = 628$) and found that whilst both financial and non-financial rewards were highly valued, significant age-related differences appeared only with regard to financial rewards, with older nurses valuing them more highly. Thus, the interactions between job attribute preferences and various individual differences such as gender and age are still relatively unclear throughout the literature.

1.3 Personality and Job Attribute Preferences

1.3.1 Personality and Job Attractiveness. Whilst there has been some further investigation of individual differences in job attribute preferences and their subsequent influence upon job or organisational attractiveness, this field of enquiry has not extended very

far from Jurgensen's (1978) work. Evertz and Süß (2017) conducted a literature review of studies on individual differences in applicant attraction. They found that whilst there has been substantial consideration of a wide variety of individual differences (such as those discussed above), the depth of research into personality related differences is particularly lacking. Swider, Zimmerman, Charlier and Pierotti (2015) conducted a meta-analysis on the existing studies investigating individual differences in applicant attraction. They concluded that personality consistently demonstrated a meaningful relationship with organisational attractiveness, contributing more strongly than surface-level characteristics such as age and gender. Cable and Judge (1996) were one of the first authors to consider how personality may relate to this topic, demonstrating that the work values of job applicants were generally congruent with those of the organisations that they chose to join. Looking towards the antecedents of this relationship, they hypothesised that personality could contribute to work values, and in a follow-up study they found a significant relationship between applicant personality and organisational culture perceptions, which were representative of organisational values (Judge & Cable, 1997).

Judge and Cable (1997) utilised Schneider's 'Attraction-Selection-Attrition' model (ASA Model; Schneider, Goldstein & Smith, 1995) to explain this phenomenon. One of the core principles of attraction in this model is that individuals will find organisations more attractive if they believe that the organisations goals (and the manifestations of these goals, such as work values) align with their own personality. However, there has also been evidence in favour of other theories of organisational attraction, such as the complementary hypothesis. Kausel and Slaughter (2011) found that applicants were in fact attracted to organisations which they perceived as having a complementary personality to their own, compensating for their deficits – a needs-based explanation of sorts. For example, they found that in people with very suspicious personalities (i.e. less trusting people), there was a significant

relationship between perceptions of organisational trustworthiness and applicant attraction. Thus, the theory behind the relationships between personality and organisational attractiveness is also clouded, further demonstrating the need for additional research.

1.3.2 The Five Factor Model of Personality. The Five-Factor model (the 'big five', or FFM) is one of the most prominent conceptualisations of personality throughout the literature. It is now considered a gold standard of sorts for personality assessment in personnel management contexts, enabling the prediction of work performance, satisfaction, attitudes and behaviours (Barrick, Mount & Judge, 2001; Bruk-Lee et al., 2009; Judge & Cable, 1997; Judge & Zapata, 2015). This model conceptualises personality as a hierarchy, where each of the five factors is comprised of 6 more specific facets of personality. Some of the most popular measurement tools that utilise this model are the NEO Personality Inventories, developed by Costa and McCrae (1992). The five broad factors that they measure are Neuroticism, Extraversion, Openness to Experience, Agreeableness and Conscientiousness. Neuroticism essentially represents emotional stability; it includes the tendency of an individual to experience negative affects (such as fear, sadness etc) as well as impulsivity, irrationality and one's ability to cope with stress. Extraversion is largely representative of sociability; it describes an individual's tendency to enjoy the company of other people and large gatherings, as well as their assertiveness, excitability, and optimistic outlook. Openness to experience revolves around curiosity; it encompasses an individual's imagination, independence, and preference for variety, as well as their sensitivity for aesthetics and feelings. Agreeableness describes how an individual treats the people around them; agreeable individuals are helpful and highly sympathetic to others, often believing that this will be reciprocated. Finally, there is conscientiousness, which mostly revolves around self-control; it represents the tendency of an individual to be purposeful, organised and strong-willed.

1.3.3 Personality Testing in Personnel Attraction and Selection. Whilst there has been an increasing trend towards the use of personality testing in job selection procedures (Rothstein & Goffin, 2006), there is still a great deal of debate surrounding its utility in this setting. Given the rise of the service economy (Buera & Kaboski, 2012), one would expect personality testing to be increasingly relevant to personnel selection, as employees in many more jobs are having to interact with colleagues and customers. Morgeson et al (2007) describe the main issues in this debate, with the most prominent problems being the potential for faking in personality tests, as well as the low criterion (predictive) validity that they demonstrate with regard to job performance in most occupations, other than those most obviously related to personality (such as sales and extraversion). Whilst faking has continued to plague personality testing over the years, it has had little impact upon criterion validity (Morgeson et al., 2007), and there are faking defences that are relevant to the organisational attractiveness context. For example, Morgeson et al (2007) suggest that if applicants have no reason to believe that faking will aid them in acquiring the job, then they will be substantially less likely to do so. Admittedly, social desirability bias would likely still impact their decisions (in general, participants may want to appear less anxious and more conscientious, for example). However, this is to be expected, and some authors even argue that this is a good thing, given that being capable of behaving in a socially desirable manner is desirable for many organisations (Morgeson et al, 2007).

Personality does not appear to contribute much to overall variance in job performance, with a criterion validity of approximately .20 in practical settings (Morgeson et al., 2007). However, some authors argue that this is substantial enough that personality tests could be included alongside cognitive ability tests (which account for a much larger percentage of variance in job performance predictions), so long as their importance is not overstated, and they do not replace these other tests (Morgeson et al., 2007). The research

into the relationship between personality and job attractiveness is not as well researched, and thus there do not appear to be meta-analyses on the topic that consider predictive validity. As discussed above, however, the literature thus far indicates that various relationships exist between these two concepts (Swider et al., 2015), although it should be noted that only weak relationships have been found thus far between personality traits and attraction to different job attributes (Vandenberghe et al., 2008). Nonetheless, these findings suggest that there may be predictive validity for personality in personnel selection beyond predicting job performance; organisations may be able to utilise personality testing to assist with predictions of applicant attraction and person-organisation fit, which will help with reducing employee turnover.

Vandenberghe et al. (2008) identified various relationships between personality traits and job attribute preferences (or total reward components, as they called them) in a large sample of human resource professionals. They found that the personality traits of the Five-Factor model significantly predicted applicant attraction to "work content and social relationships ($\Delta R^2 = 7\%$), development and career opportunities ($\Delta R^2 = 4\%$), variable pay ($\Delta R^2 = 2\%$), indirect pay ($\Delta R^2 = 2\%$), flexibility of working conditions ($\Delta R^2 = 2\%$), and work prestige ($\Delta R^2 = 2\%$)" (Vandenberghe et al., 2008). Personality did not however account for much of the variance in job attribute preferences, and even the overall models including their controls only accounted for between 5% and 16% of the total variance in attribute preferences. Openness exerted a weak positive influence on all of these attributes other than indirect pay, and agreeableness had a similar influence upon quality of work and relationships, as well as indirect pay. Conscientiousness, extraversion and neuroticism had weak positive effects on indirect pay, quality of work and relationships and prestige, respectively.

The relatively weak influence of personality on the attractiveness of these job attributes means that the practical applicability of these findings is fairly low. However, the authors suggested that the numerous connections between openness and job attribute preferences indicates that it should be assessed in new employees. Additionally, they advise that organisations wishing to attract employees by highlighting their work content and social environment might also benefit from selecting employees based upon their personality traits, given the larger (relatively) influence of personality on the attractiveness of work content and social relationships. The present study seeks to test the external validity of these findings with regard to whether they appear in other types of samples, whilst additionally seeking to improve upon the poor predictive validity of these results by utilising a different level of analysis.

One method of improving the predictive power of personality in predicting job attribute preferences (and thus, job attraction), comes from research into the 'bandwidth-fidelity debate'. This debate essentially considers whether 'broad' personality dimensions such as the FFM are as effective as utilising more specific 'narrow' traits (facets) with regard to predictive and analytical power (Rothstein & Goffin, 2006). For quite some time only the broad factors were assessed in personnel selection contexts (Swider et al., 2015), even though the little existing research on the topic suggested that narrow personality facets were of equal or greater utility (Rothstein & Goffin, 2006). The lengthy nature of both the questionnaires and analysis involved in utilising the narrow facets was likely off-putting to many in the field of personnel selection. However more recently, Slaughter and Kausel (2011) assessed the relationship between organisational attraction and the narrow facets of personality, separate from the broad factors. They found that including the facets improved their predictive model substantially; the broad factors (agreeableness, extraversion and openness) alone did not

significantly predict attraction, whereas a model including specific organisation-related facets of these traits was significant.

Slaughter and Kausel (2011) suggest that this finding could stem from the fact that in an organisational context, some facets of a personality factor may correlate in opposite directions with attraction to certain job attributes. For example, extroverted individuals might be expected to desire control and power in their job, as indicated by the assertiveness facet. However, other extroverted individuals might be high in warmth and gregariousness and thus get along very well with others, whilst not identifying with assertive behaviours. For these individuals a negative correlation would be expected with desire for control. Consequently, to some extent these opposing effects could cancel each other out if extraversion is only assessed at the trait level, potentially obscuring higher-level relationships. Thus, the results of Slaughter and Kausel's (2011) study concurred with Rothstein and Goffin's (2006) observations, that utilising the narrow facets of personality provides both more predictive and explanatory power than the broad factors do. The present study will further test this finding, comparing the predictive power of the broad and narrow traits of personality.

1.4 The Present Study

The aim of the present study is firstly to investigate the external validity of Vandenberghe et al's (2008) findings, exploring the use of their model in a student sample. The second aim of this study is to utilise exploratory analysis to compare the predictive power of the broad and narrow traits of personality with regard to job attribute preferences. This will investigate potential improvements to the predictive validity of personality testing in this domain.

2. Method

2.1 Participants

Participants were recruited via the Research Participation program at the University of Adelaide, which awards course credit (equivalent to 5% of their overall grade) to students studying the *Psychology 1A* or *Psychology 1B* courses based upon their participation in research studies. An online advertisement was placed on the system which described the study in some detail, providing a link to the online questionnaire for those interested parties. The reading level of the questionnaires used in the study was well within the capabilities of students enrolled in Australian tertiary education. Students were made aware that their participation was voluntary, that they could withdraw from the study at any time, that their responses were confidential and that only group results would be reported. They were also given the opportunity to receive a copy of the results of the study, as required by the Research Participation program.

2.2 Materials

Participants were administered an online survey on the SurveyMonkey platform, comprising three components. The first collected various demographic information for control purposes, whilst the second measured job attribute preferences using a modified version of the Total Reward Characteristic questionnaire (Vandenberghe et al., 2008). The final component of the survey measured personality via the International Personality Item Pool NEO-120 (IPIP NEO-120; Johnson, 2014). These components are described in further detail below.

2.2.1 Demographic Characteristics. Following the precedent set by Vandenberghe et al. (2008), the following characteristics were measured for control purposes; age, gender,

experience in the workforce, organisational size, level of education, number of dependants, average annual salary and time spent with current employer.

2.2.2 Job Attribute Preferences. Job attribute preferences were measured using a modified version of the Total Rewards Scale developed by Vandenberghe et al. (2008). Google Translate was utilised to provide an initial English translation of this questionnaire, which was written in French. The translation was then edited by the Head of French Studies at the University of Adelaide to ensure accuracy, and some detail was added to questions three and four to account for the fact that students may not understand some of the concepts involved. For the third question, brief explanations were provided addressing the various types of individual variable remuneration, given that some students may be unfamiliar with different types of share-based compensation plans. A clarification was added to the fourth question, explaining that collective variable compensation involves pay increases based upon team performance. The preamble for the questionnaire was also edited - due to the student sample, the questionnaire asked 'when you imagine the job that you plan on entering in your chosen field, to what degree do the following job attributes influence your decision?'. In Vandenberghe et al.'s (2008) study, participants were instead asked to consider which attributes influenced their current choice of employer. All questions were answered on a five-point Likert scale ranging from '1 - Very Little' to '5 - Extremely Important' (without middle rankings), whereas Vandenberghe et al.'s (2008) study included the same scale without any labels.

The original questionnaire was constructed through factorial analysis of how respondents rated the attractiveness of 30 rewards components. Principle components analysis with a varimax rotation of the 30 reward components provided eight factors with eigenvalues greater than 1, accounting for 74% of the total variance. These formed the primary reward components to be measured in the study, each demonstrating a main loading

greater than .40, very small cross-loadings and an internal consistency greater than the .70 threshold (Vandenberghe et al., 2008). The factors related to quality of work and of social relationships, variable pay, indirect pay, development and career opportunities, flexibility of working conditions, work prestige, bonuses, and work load, respectively. These factors address all of the job attribute preferences that Jurgensen (1978) considered, including security, which is a derivative of indirect pay. However, Jurgensen's measure involved ranking job attribute preferences against each other, rather than rating their individual attractiveness. More information about the items comprising each of these factors can be found in Vandenberghe et al. (2008).

2.2.3 Personality. The FFM of personality has demonstrated substantial predictive power in analysis of human behaviours, including both work performance (Judge & Zapata, 2015) and job satisfaction (Bruk-Lee et al., 2009). The International Personality Item Pool NEO-120 (IPIP-NEO-120; Johnson, 2014) was utilised in this study to measure the five broad factors of the FFM, as well as the thirty narrower facets that they are comprised of, which are displayed in Table 1. This inventory was developed as an open-source, short-form substitute for the NEO Personality Inventory Revised (NEO PI-R; Costa & McCrae, 1992), providing a robust alternative measure of the FFM. It is comprised of 120 items, with four items for each of the 30 facets of the FFM, and 24 for each factor. Each item is a statement related to personality, and participants are asked to rate how well each one describes them on a five-point Likert scale ranging from 'Very Inaccurate' to 'Very Accurate', with the middle rating being 'Neither Accurate nor Inaccurate'. This yields a score for each facet, which is used to calculate overall scores for each factor, ranging from 24 to 120. The alpha reliability coefficients of all bar three of the facet scales were .69 or higher (ranging from .63 to .88) in a large-scale internet sample. Thus, the author suggests that whilst the instrument is suitable for use in research, the results should not be utilised in such a way that it would impact

important life decisions (Johnson, 2014). The validity of the instrument is determined primarily through its correlations with the NEO PI-R, with the corresponding scale correlations averaging .66 (.91 when correcting for attenuation due to unreliability). This instrument has not been utilised in many studies investigating this topic, other than in Kausel and Slaughter (2011), however it has been utilised in some other research related to personnel selection (Johnson, 2014).

Table 1.

Traits and Facets of the Five Factor Model of Personality

Personality Facets	Personality Facets	Personality Facets
Neuroticism	Openness	Conscientiousness
Anxiety	Imagination	Self-efficacy
Anger	Artistic interests	Orderliness
Depression	Emotionality	Dutifulness
Self-consciousness	Adventurousness	Achievement-striving
Immoderation	Intellect	Self-discipline
Vulnerability	Liberalism	Cautiousness
Extraversion	Agreeableness	
Friendliness	Trust	
Gregariousness	Morality	
Assertiveness	Altruism	
Activity level	Cooperation	
Excitement-seeking	Modesty	
Cheerfulness	Sympathy	

Note. List generated from Johnson (2014).

2.3 Procedure

The study was conducted through the online survey software package *SurveyMonkey*, which provided participants with each questionnaire in the order above. Participants consented to participation in the study via acceptance of the information presented on the initial screen of the questionnaire. The questionnaire was available online for a period of 14 weeks (from April 20 to June 8, and from July 23 to September 7). Questionnaires were administered in length order (beginning with the shortest; demographic characteristics, job attribute preferences, personality) in an attempt to retain participant interest, and they were

provided with an approximate completion time of 20 minutes with this in mind. The IPIP-NEO-120 was divided into 40-question segments and was accompanied by a reminder of response confidentiality and the importance of honesty to promote truthful responses.

Identification numbers were generated through the Research Participation system to ensure participant confidentiality and allow for the provision of course credit. The current study was approved by the Human Research Ethics Subcommittee of the School of Psychology at the University of Adelaide (Code Number: 18/28).

3. Results

3.1 Analysis Description and Quality Control

In Part 1 of this study, the relationships between personality and job attribute preferences were examined utilising correlation analysis (Tables 3-9) and multiple hierarchical regression analyses (Table 11). Part 2 of the study comprises exploratory analysis of the predictive power of personality facets with regard to job attribute preferences, which was conducted using a model selection procedure (see Tables 11-15). Whilst 156 individuals participated in the study, 13 were removed from the dataset, resulting in a final sample size of $N = 143$. Nine of the removed participants only completed a small proportion of the questions before withdrawing from the study, and a further four answered every job attribute preference and personality question with the middle response, indicating that they faked their participation to obtain course credit.

3.2 Summary of Sample Characteristics

Table 2 summarises the demographic characteristics of the sample. Participants ranged from 18 years of age to 40-44 years old, with the vast majority being between 18-24 years of age. The majority were female, and most had between one and five years of experience in the workforce, although a substantial proportion had less than one year's worth of experience. Participants had worked in organisations of various sizes, and most had only been with their current organisation for less than one year. Most were educated at a high-school level, but a small minority had completed further study. The vast majority of participants had no dependents and low average income (less than $30,000 per year). It is likely that the majority of these students were engaged in casual or part-time work.

Table 3 summaries the personality and job attribute preference profiles of the sample. On average, participants scored slightly higher on Neuroticism and Agreeableness than the

means generated from the initial dataset of the IPIP NEO-120 (Johnson, 2014), whilst scoring substantially lower on Extraversion and Conscientiousness, and slightly lower on Openness. Norms are unavailable for this assessment tool, and whilst student norms are available for the NEO PI-R, it is impractical to compare means generated from different measures. Overall, participants displayed higher preferences for quality of work and of relationships, development and career opportunities and flexibility of working conditions, with lower preferences for both variable and indirect pay.

Table 2.

Summary of Demographic Variables

Characteristic	Percentage	*M*	*SD*
Gender:		1.74	0.44
Female	74.13%		
Age:		2.08	0.81
Under 18 years old	7.69%		
18-24 years old	85.31%		
25-29 years old	4.20%		
30-34 years old	0.70%		
35-39 years old	0.70%		
40-44 years old	0.70%		
45-49 years old	0%		
50-54 years old	0%		
55 years or older	0.69%		
Workforce Experience:		2.28	1.2
Less than 1 year	34.27%		
1-2 years	22.38%		
3-5 years	30.07%		
6-9 years	9.79%		
10-19 years	1.40%		
More than 20 years	2.10%		
Organisational Size		2.65	1.7
0-10	9.09%		
11-49	18.88%		
50-99	25.17%		
100-999	15.38%		
1000-7499	14.69%		
7500 or more	9.79%		
N/A	6.99%		

(continued)

(continued)

Characteristic	Percentage	*M*	*SD*
Level of Education		3.42	1.65
Less than secondary	0.70%		
Secondary	53.15%		
Secondary and Technical	3.50%		
Technical	1.40%		
Incomplete Tertiary	29.37%		
Bachelor	11.19%		
Master's	0.70%		
Doctorate	0%		
N/A	0%		
Number of Dependents		1.45	1.07
None	79.02%		
One	8.39%		
Two	7.69%		
Three	1.40%		
Four	0.70%		
More than four	2.80%		
Average Salary		3.1	3.66
Less than $30,000	67.13%		
$30,000 - $39,999	8.39%		
$40,000 - $49,999	1.40%		
$50,000 - $59,999	0.70%		
$60,000 - $69,999	0.70%		
$70,000 - $79,999	0%		
$80,000 - $89,999	0%		
$90,000 - $99,999	0%		
$100,000 or more.	0.70%		
Prefer not to say.	20.98%		
Organisational Seniority:		1.59	0.82
Less than one year	58.74%		
1-2 years	25.17%		
3-5 years	14.69%		
6-9 years	0.70%		
10-14 years	0.70%		
15-19 years	0%		
20-29 years	0%		
30 years or longer	0%		

Note.

Table 3.

Summary of Personality and Job Attribute Preference Profiles

Characteristic	*M*	*SD*
Personality Traits:		
Neuroticism	69.63	13.1
Extraversion	75.57	13.12
Openness	80.71	11.25
Agreeableness	91.01	12.06
Conscientiousness	85.15	14.32
Job Attribute Preferences:		
Development and Career Opportunities	4.22	0.78
Flexibility of Working Conditions	3.83	1.01
Quality of Work and of Relationships	4.27	0.51
Variable Pay	2.89	0.93
Indirect Pay	2.90	.955

Note. Means for Job Attribute Preferences are calculated per item for comparison purposes, rather than across the entire variable.

3.2 Power Analysis

A-priori power analysis was conducted using G*Power 3.0.10 to find the sample size necessary for the reliable identification of effects as small as those found in the previous study by Vandenberghe et al. (2008). In order to achieve a power level of .80 with a significance criterion of 0.05 and a minimum R^2 value of .05, the program indicated that a sample size of $N = 330$ would be necessary for a multiple regression model with 11 predictors. Thus, the study did not have sufficient statistical power to detect the smaller effects found previously.

3.3 Part 1 - Correlation and Multiple Hierarchical Regression Analysis

Table 4 shows the correlations between the five job attribute preferences and each control variable measured in this study. There were few significant relationships present in this sample. A small positive correlation was apparent between workforce experience and quality of work and relationships. Additionally, there were small negative correlations between variable pay and both workforce experience and organisational size. Table 5

demonstrates the correlations between job attribute preferences and the big five personality traits. Only quality of work and relationships correlated significantly with the personality traits, demonstrating small positive correlations with Extraversion and Openness, and a medium positive correlation with Agreeableness.

Table 4.

Correlations Between Job Attribute Preferences and Control Variables

Variable	Age	Gender	Workforce Experience	Organisational Size	Education Level	Number of Dependents	Organisational Seniority
Development and Career Opportunities	0.13	-0.01	0.08	0.07	-0.05	-0.01	0.11
Flexibility of Working Conditions	0.02	0.08	0.06	0.13	0.03	-0.08	-0.01
Quality of Work and of Relationships	0.06	0.09	0.17*	0.11	0.02	-0.02	0.13
Variable Pay	-0.14	0.01	-0.21*	-0.18*	-0.13	0.06	-0.03
Indirect Pay	-0.05	0.04	-0.16	0.02	-0.07	-0.13	-0.02

Note.
**p<.05. **p<.01.*

Table 5.

Correlations Between Job Attribute Preferences and Personality Traits

Variable	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Development and Career Opportunities	-0.01	0.07	0.09	0.13	0.06
Flexibility of Working Conditions	0.02	0.09	0.00	0.07	0.07
Quality of Work and of Relationships	-0.02	0.27**	0.28**	0.35**	0.11
Variable Pay	0.07	-0.06	-0.14	-0.06	0.06
Indirect Pay	0.14	-0.10	-0.10	-0.04	-0.06

Note.
**p<.05. **p<.01.*

Tables 6-10 illustrate the correlations between the five job attribute preferences and the six personality facets of each trait. Quality of work and relationships was again the most prominent job attribute preference, displaying weak positive correlations with E2 - Gregariousness, E3 - Assertiveness, E6 - Cheerfulness, O2 - Artistic interests, O5 - Intellect, A2 - Morality, C3 - Dutifulness and C4 - Achievement-striving, as well as moderate positive correlations with E1 - Friendliness, O3 - Emotionality, A3 - Altruism and A6 - Sympathy. This preference also demonstrated a weak negative correlation with N4 - Self-consciousness. Both variable and indirect pay demonstrated weak negative correlations with O4 - Adventurousness, and there was a weak positive correlation between development and career opportunities and A3 - Altruism.

Table 6.

Correlations Between Job Attribute Preferences and Neuroticism Facets

Variable	N	N1	N2	N3	N4	N5	N6
Development and Career Opportunities	-0.01	0.01	0.06	-0.04	-0.04	0.08	-0.09
Flexibility of Working Conditions	0.02	0.07	0.07	-0.06	-0.01	-0.11	0.09
Quality of Work and of Relationships	-0.02	0.03	0.11	-0.10	-0.16*	0.02	-0.01
Variable Pay	0.07	0.07	0.08	-0.08	0.09	0.03	0.09
Indirect Pay	0.14	0.15	0.06	0.03	0.10	0.08	0.13

Notes: N1 = Anxiety, N2 = Anger, N3 = Depression, N4 = Self-consciousness, N5 = Immoderation, N6 = Vulnerability.
**p<.05. **p<.01.*

Table 7.

Correlations Between Job Attribute Preferences and Extraversion Facets

Variable	E	E1	E2	E3	E4	E5	E6
Development and Career Opportunities	0.07	0.08	0.11	0.08	0.05	-0.08	0.04
Flexibility of Working Conditions	0.09	0.03	0.06	0.01	0.07	0.08	0.13
Quality of Work and of Relationships	0.27**	0.31**	0.18*	0.22**	0.10	0.09	0.20*
Variable Pay	-0.06	-0.05	-0.01	-0.06	-0.02	-0.13	0.02
Indirect Pay	-0.10	-0.04	0.02	-0.07	-0.12	-0.14	-0.07

*Notes:*E1 = Friendliness, E2 = Gregariousness, E3 = Assertiveness, E4 = Activity level, E5 = Excitement-seeking, E6 = Cheerfulness.
**p<.05. **p<.01.*

Table 8.

Correlations Between Job Attribute Preferences and Openness Facets

Variable	O	O1	O2	O3	O4	O5	O6
Development and Career Opportunities	0.09	-0.05	0.12	0.11	-0.05	0.16	0.08
Flexibility of Working Conditions	0.00	-0.03	0.02	0.05	-0.06	0.02	0.00
Quality of Work and of Relationships	0.28**	0.09	0.28**	0.34**	0.04	0.17*	0.11
Variable Pay	-0.14	-0.02	-0.12	-0.03	-0.24**	-0.10	-0.02
Indirect Pay	-0.10	0.01	-0.06	0.02	-0.26**	-0.12	0.05

Notes: O1 = Imagination, O2 = Artistic interests, O3 = Emotionality, O4 = Adventurousness, O5 = Intellect, O6 = Liberalism.
**p<.05. **p<.01.*

Table 9.

Correlations Between Job Attribute Preferences and Agreeableness Facets

Variable	A	A1	A2	A3	A4	A5	A6
Development and Career Opportunities	0.13	-0.04	0.15	0.21*	0.14	-0.01	0.10
Flexibility of Working Conditions	0.07	0.02	0.05	0.10	0.04	0.07	0.00
Quality of Work and of Relationships	0.35**	0.09	0.27**	0.48**	0.15	0.12	0.32**
Variable Pay	-0.06	0.05	-0.09	-0.05	-0.09	-0.01	-0.04
Indirect Pay	-0.04	0.00	-0.13	0.00	-0.07	0.02	0.00

Notes: A1 = Trust, A2 = Morality, A3 = Altruism, A4 = Cooperation, A5 = Modesty, A6 = Sympathy.
**p<.05. **p<.01.*

Table 10.

Correlations Between Job Attribute Preferences and Conscientiousness Facets

Variable	C	C1	C2	C3	C4	C5	C6
Development and Career Opportunities	0.06	0.09	0.02	0.11	0.13	0.03	-0.05
Flexibility of Working Conditions	0.07	0.11	0.00	0.10	0.01	0.11	0.01
Quality of Work and of Relationships	0.11	0.14	0.04	0.17*	0.28**	0.03	-0.08
Variable Pay	0.06	0.01	0.10	0.08	-0.03	0.10	0.01
Indirect Pay	-0.06	-0.03	0.00	0.03	-0.10	-0.10	-0.06

Notes: C1 = Self-efficacy, C2 = Orderliness, C3 = Dutifulness, C4 = Achievement-striving, C5 = Self-discipline, C6 = Cautiousness.
**p<.05. **p<.01.*

Table 11 displays the results of multiple hierarchical regression models analysing the influence of each control variable and personality trait in predicting job attribute preferences. Age and average salary were excluded from the control variables in these models due to their lack of variance, as demonstrated in Table 2. This was to be expected, given the first-year student sample. Step 1 of the regression models included only the control variables, whilst step 2 included both the controls and all five personality traits. None of the control models significantly predicted attribute preferences. Only quality of work and of relationships was significantly predicted by the personality trait models, which accounted for 23% of the variance in the attractiveness of this job attribute ($Adjusted\ R^2 = .16$). The personality model accounted for a significantly larger portion of variance than the control model, with Neuroticism, Extraversion and Agreeableness exerting significant positive effects on the attractiveness of this job attribute.

Table 11.

Multiple Hierarchical Regression Models Predicting Job Attribute Preferences From Controls and Personality Traits

Variables	Development and Career Opportunities	Flexibility of Working Conditions	Quality of Work and of Relationships	Variable Pay	Indirect Pay
Step 1					
Gender	.00	.09	.09	.02	.07
Workforce Experience	.02	.01	.10	-.20	-.24*
Organisational Size	.05	.13	.07	-.10	.10
Education Level	-.06	.01	-.01	-.09	-.04
Number of Dependents	-.02	-.07	-.03	.05	-.13
Organisational Seniority	.9	-.03	.08	.08	.10
ΔR^2	.02	.03	.04	.07	.06
Step 2					
Gender	-.06	.04	-.04	.00	.06
Workforce Experience	.04	.02	.13	-.20	-.23*
Organisational Size	.03	.12	.01	-.10	.13
Education Level	-.07	.00	-.05	-.10	-.02
Number of Dependents	-.02	-.09	-.05	.04	-.13

(continued)

(continued)

Variables	Development and Career Opportunities	Flexibility of Working Conditions	Quality of Work and of Relationships	Variable Pay	Indirect Pay
Organisational Seniority	.08	-.05	.05	.06	.10
Neuroticism	.08	.09	.19*	.04	.08
Extraversion	.05	.14	.23*	.05	.01
Openness	.06	-.07	.13	-.09	-.09
Agreeableness	.12	.05	.32*	-.09	-.01
Conscientiousness	.03	.03	-.02	.16	-.03
ΔR^2	.03	.02	.18**	.03	.02
R^2	.04	.05	.23**	.10	.08

Note. All values in table, other than where indicated for R^2, are standardised regression coefficients (β).

**p<.05. **p<.01.*

3.4 Part 2 - Model Selection

Exploratory analysis was utilised in addressing the second aim of this study, which was to assess the predictive power of personality facets in comparison to their respective traits. The relative ability of the various personality variables to predict job attribute preferences was assessed using the model selection process described in *An R Companion to Applied Regression* (Fox & Weisberg, 2011). First, a regression model is constructed including all of the control variables and each personality facet for a given trait. Stepwise regression is conducted using backwards elimination, removing the worst performing variable one by one until removing another would increase the Akaike Information Criterion (AIC) of the model. The end result of this is a second regression model, which includes only the controls and facets that are active predictors. Finally, a third model is constructed including the given personality trait and any remaining control variables following the stepwise procedure. AIC values were calculated to identify the best performing model out of the three, ensuring that needlessly complex models are punished for including unnecessary predictors (smaller AIC values indicate better fit).

As shown in Table 12, the model selection procedure identified statistically significant predictive models for development and career opportunities using Openness and Agreeableness facets, and in neither of these cases are any control factors present. The retained openness facets account for almost as much variance as the overall facet model, whilst substantially increasing the adjusted R^2. The reduced facet model also accounts for a great deal more variance than the trait model ($\Delta R^2 = 0.07$), and produces the lowest AIC, indicating that it best fits the data. Both O4 - Adventurousness ($\beta = -0.19, p = .048$) and O5 - Intellect ($\beta = 0.25,\ p = .022$) were significant contributors to the model, and their effects were in opposite directions. O1 – Imagination ($\beta = -0.18, p = .064$) and O2 – Artistic interests ($\beta = 0.15, p = .163$) were not significant, and neither was the Openness trait model. The reduced agreeableness facet model similarly accounted for substantially less variance than the overall facet model, whilst producing a larger adjusted R^2 value. This reduced model accounts for more variance than the Agreeableness trait model ($\Delta R^2 = 0.03$) and also produces the lowest AIC, indicating that it best fits the data. The facet A3 – Altruism ($\beta = 0.21, p = .011$) was a significant contributor to the model, whilst the Agreeableness trait model was not significant.

Table 12.

Model Selection for Linear Regression of Development and Career Opportunities

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls[a] + Neuroticism Facets[b]	12, 130	0.67	.777	0.06	-0.03	666.44
2. Organisational Time + N1 + N6	3, 139	1.79	.152	0.04	0.02	651.62
3. Organisational Time + Neuroticism Trait	2, 140	0.8	.451	0.01	0.00	653.40
1. Controls + Extraversion Facets	12, 130	0.73	.724	0.06	-0.02	665.75
2. E2 + E5	2, 140	2.51	.085	0.03	0.02	649.99
3. Extraversion Trait	1, 141	0.69	.409	0.00	0.00	652.34

(continued)

(continued)

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls + Openness Facets	12, 130	1.27	.242	0.11	0.02	659.14
2. O1 + O2 + O4 + O5	4, 138	2.86	.026	0.08	0.05	647.64*
3. Openness Trait	1, 141	1.22	.270	0.01	0.00	651.79
1. Controls + Agreeableness Facets	12, 130	1.34	.203	0.11	0.03	658.34
2. A3	1, 141	6.61	.011	0.04	0.04	646.48*
3. Agreeableness Trait	1, 141	2.52	.115	0.02	0.01	650.50
1. Controls + Conscientiousness Facets	12, 130	0.57	.859	0.05	-0.04	667.64
2. C4	1, 141	2.55	.113	0.02	0.01	650.47
3. Conscientiousness Trait	1, 141	0.59	.442	0.00	0.00	652.43

Note. N1 = Anxiety; N6 = Vulnerability; E2 = Gregariousness; E5 = Excitement-seeking; O1 = Imagination; O2 = Artistic interests; O4 = Adventurousness; O5 = Intellect; A3 = Altruism; C4 = Achievement-striving.

[a]Control variables included gender, work-force experience, organisational size, educational level, number of dependents and organisational time.

[b]A list of the personality facets of the Big Five Model of Personality can be found in Table 1.

*The best performing model as per the AIC, if significant models are found.

Table 13 demonstrates that the model selection procedure was unable to identify any statistically significant predictive models for flexibility of working conditions. None of the facets of openness, agreeableness and conscientiousness were retained following the procedure; for these domains only organisational size was retained in the reduced models, which were not significant.

Table 13.

Model Selection for Linear Regression of Flexibility of Working Conditions

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls[a] + Neuroticism Facets[b]	12, 130	0.97	.477	0.08	0.00	621.37
2. Organisational Size + N3 + N6	3, 139	2.32	.078	0.05	0.03	608.70
3. Organisational Size + Neuroticism Trait	2, 140	1.324	.270	0.02	0.00	611.00
1. Controls + Extraversion Facets	12, 130	0.64	.801	0.06	-0.03	625.42
2. E6	1, 141	2.50	.116	0.02	0.01	609.17
3. Extraversion Trait	1, 141	1.22	.271	0.01	0.00	610.44

(continued)

(continued)

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls + Openness Facets	12, 130	0.47	.931	0.04	-0.05	627.64
2. Organisational Size	1, 141	2.36	.127	0.02	0.01	609.30
3. Organisational Size + Openness Trait	2, 140	1.20	.304	0.02	0.00	611.25
1. Controls + Agreeableness Facets	12, 130	0.57	.860	0.05	-0.04	626.30
2. Organisational Size	1, 141	2.36	.127	0.02	0.01	609.30
3. Organisational Size + Agreeableness Trait	2, 140	1.45	.239	0.02	0.01	610.75
1. Controls + Conscientiousness Facets	12, 130	0.95	.503	0.08	0.00	617.13
2. Organisational Size	1, 141	2.36	.127	0.02	0.01	609.30
3. Organisational Size + Conscientiousness Trait	2, 140	1.37	.258	0.02	0.01	610.91

Note. N3 = Depression; N6 = Vulnerability; E6 = Cheerfulness.

[a]Control variables included gender, work-force experience, organisational size, educational level, number of dependents and organisational time.

[b]A list of the personality facets of the Big Five Model of Personality can be found in Table 1.

[*]The best performing model as per the AIC, if significant models are found.

As shown in Table 14, the model selection procedure identified statistically significant predictive models for quality of work and relationships using all of the personality domains, although it is noteworthy in this instance that the overall facet models for openness, agreeableness and conscientiousness were already significant. Each of the reduced facet models accounted for slightly less variance than the overall facet models, whilst increasing the adjusted R^2 value in each case. The reduced facet model for each domain accounted for more variance than the trait models; Neuroticism ($\Delta R^2 = 0.04$), Extraversion ($\Delta R^2 = 0.04$), Agreeableness ($\Delta R^2 = 0.07$), Openness ($\Delta R^2 = 0.14$) and Conscientiousness ($\Delta R^2 = 0.13$). These models also produced the lowest AIC values, indicating that they best fit the data. The reduced facet model for neuroticism included workforce experience ($\beta = 0.14, p = .103$), N2 - Anger ($\beta = 0.14, p = .091$) and N4 – Self-consciousness ($\beta = -0.15, p = .086$), however none of these predictors were significant. Similarly, the trait model was not significant. In the reduced facet model for extraversion, E1 - Friendliness ($\beta = 0.26, p = .002$) was significant, whilst E3 - Assertiveness ($\beta = 0.13, p = .120$) was not. The trait

model was significant also, with Extraversion ($\beta = 0.27, p = .001$) being a significant predictor. All of the retained variables were significant in the reduced openness facet model, which included workforce experience ($\beta = 0.15, p = .049$), O2 – Artistic Interests ($\beta = 0.17, p = .036$) and O3 - Emotionality ($\beta = 0.29, p < .001$). The trait model was also significant, with workforce experience ($\beta = 0.16, p = .048$) and Openness ($\beta = 0.27, p < .001$) being significant predictors. In the reduced agreeableness facet model, only workforce experience ($\beta = 0.19, p = .010$) and A3 - Altruism ($\beta = 0.50, p < .001$) were significant predictors, whilst A2 - Morality ($\beta = 0.14, p = .127$) and A4 - Cooperation ($\beta = -0.18, p = .056$) were not. The trait model was also significant, with both workforce experience ($\beta = 0.16, p = .039$) and Agreeableness ($\beta = 0.35, p < .001$) being significant predictors. In the reduced conscientiousness facet model, only C4 – Achievement-striving ($\beta = 0.48, p < .001$) and C5 – Self-discipline ($\beta = -0.24, p = .030$) were significant, whilst organisational time ($\beta = 0.12, p = .144$) and C6 - Cautiousness ($\beta = -0.15, p = .101$) were not. The Conscientiousness trait model was not significant, and the effects of the two significant facets were in opposite directions.

Table 14.

Model Selection for Linear Regression of Quality of Work and of Relationships

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls[a] + Neuroticism Facets[b]	12, 130	1.09	.374	0.09	0.01	821.78
2. Workforce Experience + N2 + N4	3, 139	3.17	.027	0.06	0.04	808.03*
3. Workforce Experience + Neuroticism Trait	2, 140	2.057	.132	0.03	0.01	811.34
1. Controls + Extraversion Facets	12, 130	1.75	.063	0.14	0.06	814.06
2. E1 + E3	2, 140	8.77	>.001	0.11	0.10	798.60*
3. Extraversion Trait	1, 141	10.93	.001	0.07	0.07	802.81
1. Controls + Openness Facets	12, 130	2.62	.004	0.19	0.12	804.49
2. Workforce Experience + O2 + O3	3, 139	9.723	>.001	0.17	0.16	790.24*
3. Workforce Experience + Openness Trait	2, 140	8.04	>.001	0.10	0.09	799.94

(continued)

(continued)

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls + Agreeableness Facets	12, 130	4.65	>.001	0.30	0.24	784.44
2. Workforce Experience + A2 + A3 + A4	4, 138	13.77	>.001	0.29	0.26	771.45*
3. Workforce Experience + Agreeableness Trait	2, 140	12.25	>.001	0.15	0.14	792.42
1. Controls + Conscientiousness Facets	12, 130	2.25	.013	0.17	0.10	808.49
2. Organisational Time + C4 + C5 + C6	4, 138	6.381	>.001	0.16	0.13	795.21*
3. Organisational Time + Conscientiousness Trait	2, 140	2.00	.140	0.03	0.01	811.46

Note. N2 = Anger; N4 = Self-consciousness; E1 = Friendliness; E3 = Assertiveness; O2 = Artistic interests; O3 = Emotionality; A2 = Morality; A3 = Altruism; A4 = Cooperation; C4 = Achievement-striving; C5 = Self-discipline; C6 = Cautiousness.

[a]Control variables included gender, work-force experience, organisational size, educational level, number of dependents and organisational time.

[b]A list of the personality facets of the Big Five Model of Personality can be found in Table 1.

[*]The best performing model as per the AIC, if significant models are found.

Statistically significant predictive models for variable pay were identified for neuroticism, openness and conscientiousness facets, as shown in Table 15. Workforce experience appeared in all of the reduced models; it was the only variable remaining following model selection for the extraversion and agreeableness domains, where alone it outperformed all other models. It was a significant predictor in these two reduced models ($\beta =, p = .013$). The reduced facet models for neuroticism, openness and conscientiousness accounted for less variance than the overall facet models, but produced higher adjusted R^2 values in each of these cases. The reduced facet models for neuroticism ($\Delta R^2 = 0.03$), openness ($\Delta R^2 = 0.03$) and conscientiousness ($\Delta R^2 = 0.01$) all accounted for more variance than their respective trait models. They also produced the lowest AIC values, indicating that they best fit the data. In the reduced neuroticism facet model, only workforce experience ($\beta = -0.20, p = .013$) was a significant predictor, whilst N3 - Depression ($\beta = -0.18, p = .059$) and N6 - Vulnerability ($\beta = 0.16, p = .107$) were not significant. The trait model was also significant, however only workforce experience ($\beta = -0.20, p = .018$) was a significant

predictor; neuroticism ($\beta = 0.02, p = .812$) itself was not. In the reduced openness facet model, both workforce experience ($\beta = -0.18, p = .029$) and O4 - Adventurousness ($\beta = -0.22, p = .008$) were significant predictors. The openness trait model was also significant, although the trait ($\beta = -0.14, p = .093$) itself was not; only workforce experience ($\beta = -0.20, p = .014$) was a significant predictor. For the reduced conscientiousness facet model, again only workforce experience ($\beta = -0.18, p = .047$) was a significant predictor, whilst organisational size ($\beta = -0.13, p = .135$) and C5 – Self-discipine ($\beta = 0.15, p = .066$) were not significant. The trait model was also significant. However, it did not feature any significant predictors; workforce experience ($\beta = -0.17, p = .058$), organisational size ($\beta = -0.12, p = .174$) and conscientiousness ($\beta = 0.10, p = .219$) were all not significant.

Table 15.

Model Selection for Linear Regression of Variable Pay

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls[a] + Neuroticism Facets[b]	12, 130	1.19	.294	0.10	0.02	953.58
2. Workforce Experience + N3 + N6	3, 139	3.55	.016	0.07	0.05	939.97*
3. Workforce Experience + Neuroticism Trait	2, 140	3.18	.044	0.04	0.03	942.17
1. Controls + Extraversion Facets	12, 130	1.18	.307	0.10	0.01	953.78
2. Workforce Experience	1, 141	6.35	.013	0.04	0.04	940.23*
3. Workforce Experience + Extraversion Trait	2, 140	3.16	.046	0.04	0.03	942.22
1. Controls + Openness Facets	12, 130	1.48	.141	0.12	0.04	950.25
2. Workforce Experience + O4	2, 140	6.95	.001	0.09	0.08	934.98*
3. Workforce Experience + Openness Trait	2, 140	4.65	.011	0.06	0.05	939.34
1. Controls + Agreeableness Facets	12, 130	0.97	.480	0.08	0.00	956.25
2. Workforce Experience	1, 141	6.35	.013	0.04	0.04	940.23*
3. Workforce Experience + Agreeableness Trait	2, 140	3.37	.037	0.05	0.03	941.80

(continued)

(continued)

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls + Conscientiousness Facets	12, 130	1.33	.212	0.11	0.03	952.02
2. Workforce Experience + Organisational Size + C5	3, 139	3.86	.011	0.08	0.06	939.09*
3. Workforce Experience + Organisational Size + Conscientiousness Trait	3, 139	3.19	.026	0.06	0.04	941.01

Note. N3 = Depression; N6 = Vulnerability; O4 = Adventurousness; C5 = Self-discipline.

[a]Control variables included gender, work-force experience, organisational size, educational level, number of dependents and organisational time.

[b]A list of the personality facets of the Big Five Model of Personality can be found in Table 1.

[*]The best performing model as per the AIC, if significant models are found.

Table 16 shows that the model selection procedure was able to identify statistically significant predictive models of indirect pay using extraversion, openness and agreeableness facets. The reduced facet models for these domains again account for less variance than the overall models, but increase the adjusted R^2 value in each case. The reduced facet models for extraversion ($\Delta R^2 = 0.04$), openness ($\Delta R^2 = 0.07$) and agreeableness ($\Delta R^2 = 0.01$) also account for more variance than their respective trait models. These reduced models produce the lowest AIC values for each of these domains, again indicating that these are the best fit for the data. Whilst the reduced neuroticism facet model was very close to statistical significance, the only facet in this model was N6 - Vulnerability ($\beta = 0.12, p = .162$), which was not significant. The reduced extraversion facet model included two significant predictors; workforce experience ($\beta = -0.22, p = .018$) and E5 – Excitement-seeking ($\beta = -0.22, p = .019$), whilst organisational size ($\beta = 0.13, p = .153$), number of dependents ($\beta = -0.12, p = .135$) and E2 - Gregariousness ($\beta = 0.16, p = .089$) were not significant. The extraversion trait model was also not significant. In the reduced openness facet model, only O4 - Adventurousness ($\beta = -0.31, p = .162$) was a significant predictor, whilst number of dependents ($\beta = -0.13, p = .103$) and O6 - Liberalism ($\beta = 0.14, p = .107$) were not significant. The openness trait model was similarly not significant. There were no significant

predictors in the reduced agreeableness facet model; workforce experience ($\beta = -0.15, p = .068$), number of dependents ($\beta = -0.13, p = .125$) and A2 - Morality ($\beta = -0.13, p = .129$) were not significant. The agreeableness trait model was not significant either. There were no facets retained in the reduced conscientiousness facet model.

Table 16.

Model Selection for Linear Regression of Indirect Pay

Model	*df*	F	*p*	R^2	Adjusted R^2	AIC
1. Controls[a] + Neuroticism Facets[b]	12, 130	1.03	.422	0.09	0.00	802.94
2. Workforce Experience + Number of Dependents + N6	3, 139	2.65	.051	0.05	0.03	790.02
3. Workforce Experience + Number of Dependents + Neuroticism Trait	3, 139	2.49	.063	0.05	0.03	790.47
1. Controls + Extraversion Facets	12, 130	1.31	.218	0.11	0.03	799.61
2. Workforce Experience + Number of Dependents + Organisational Size + E2 + E5	5, 137	2.63	.027	0.09	0.05	788.88*
3. Workforce Experience + Number of Dependents + Organisational Size + Extraversion Trait	4, 138	1.79	.134	0.05	0.02	792.74
1. Controls + Openness Facets	12, 130	1.65	.086	0.13	0.05	795.68
2. Number of Dependents + O4 + O6	3, 139	5.31	.002	0.10	0.08	782.46*
3. Number of Dependents + Openness Trait	2, 140	2.05	.132	0.03	0.01	791.84
1. Controls + Agreeableness Facets	12, 130	1.07	.394	0.09	0.01	802.55
2. Workforce Experience + Number of Dependents + A2	3, 139	2.77	.044	0.06	0.04	789.67*
3. Workforce Experience + Number of Dependents + Agreeableness Trait	3, 139	2.04	.111	0.04	0.02	791.81
1. Controls + Conscientiousness Facets	12, 130	0.88	.570	0.08	-0.01	804.81
2. Workforce Experience + Number of Dependents	2, 140	2.96	.055	0.04	0.03	790.05
3. Workforce Experience + Number of Dependents + Conscientiousness Trait	3, 139	2.05	.110	0.04	0.02	791.79

Note. N6 = Vulnerability; E2 = Gregariousness; E5 = Excitement-seeking; O4 = Adventurousness; O6 = Liberalism; A2 = Morality.

[a]Control variables included gender, work-force experience, organisational size, educational level, number of dependents and organisational time.

[b]A list of the personality facets of the Big Five Model of Personality can be found in Table 1.

*The best performing model as per the AIC, if significant models are found.

4. Discussion

This study sought to advance the literature surrounding the influence of personality on job attribute preferences, investigating potential improvements to the predictive validity of personality in this area. The initial aim of this study was to investigate the external validity of Vandenberghe et al.'s (2008) findings; to test whether a similar pattern of relationships between personality and job attribute preferences would appear in a different type of sample. Their model, which was based on a large sample of business professionals, was not replicated in the student sample utilised in the present study; only one of the expected five job attribute preferences was significantly predicted by participant personality traits. The second aim of this study was to extend previous research by conducting exploratory analysis investigating the comparative predictive power of personality traits and facets with respect to job attribute preferences. The model selection procedure identified significant predictive facet models for all job attribute preferences other than flexibility of working conditions. Each of these models performed better than their respective trait models according to the Akaike Information Criterion (AIC), which selected the most parsimonious model of those investigated. Multiple instances of significant countervailing personality facets were also identified within personality traits that were not significant predictors of job attribute preferences. This provides further evidence for Kausel and Slaughter's (2011) suggestion that countervailing facets could obscure trait-level relationships, thus reducing the predictive power offered by analysis at this level. Although the present results need to be replicated and verified with other types of samples, they suggest that personnel selection, at least in relation to job attributes, could benefit from facet level analysis of personality.

4.1 Controls.

Very few of the control variables utilised in this study were significant in any of the regression analyses. None were significant predictors in the initial hierarchical regression models (see Table 11) other than workforce experience, which had a significant negative influence on indirect pay, although the overall model for indirect pay was not significant. Throughout the model selection process workforce experience was again the only significant control variable, with more experienced participants tending to rate quality of work and of relationships as more important than others, whilst rating both variable and indirect pay as less important. These mixed results are consistent with previous research, where evidence has been found both in favour of and against the relationships between control variables and job attribute preferences. However, the present results are limited in their implications due to the restricted range of most control variables in the sample used.

The restricted range in control variables was expected due to the youth of most participants. Their student status meant that most were likely involved in casual or part-time work. The predominantly female sample (74.30%) may have contributed to the lack of a significant gender difference in attribute preferences. There was however substantial variation in the organisational sizes participants had experienced, although it did not significantly contribute to predictions of any attribute preferences, unlike Vandenberghe et al.'s (2008) study where it significantly predicted four job attribute preferences. The lack of effect in this study may be due to the young participants being less accurate in their approximations of organisational size compared to the business sample used by the previous authors. This study does align with Jurgensen (1978) and Bretz and Judge (1994) in finding that experience in the workforce impacts attribute preferences, contrary to Vandenberghe et al.'s (2008) findings. This relationship demonstrates substantial face validity; individuals who have more experience in the workplace would likely be more knowledgeable with regard to

what job attributes they prefer. As already indicated, more experienced participants in this study tended to rate the importance of quality of work and of relationships more highly than others.

4.2 Vandenberghe Comparison.

In the present study, quality of work and of social relationships was the only job attribute preference to significantly correlate with any personality traits, displaying positive relationships with Extraversion, Openness and Agreeableness. Contrastingly, Vandenberghe et al. (2008) also found a positive correlation between this preference and conscientiousness, as well as a negative association with neuroticism. These authors also identified correlations between the other four attribute preferences and a variety of attribute preferences, none of which were significant in this study. Quality of work and of social relationships was also the only attribute preference to be significantly predicted by the multiple hierarchical regression models from Part 1 of this study; the more neurotic, extraverted or agreeable an individual was, the more highly they rated the importance of quality of work and of social relationships. Although these results suggest that the models identified by Vandenberghe et al. (2008) may not apply to students, the statistical power of this study was much smaller than that utilised in the previous study, which almost exclusively found small effect sizes. Thus, the present study may not have been powerful enough to detect these effects, particularly given that the only significant model identified had the largest effect size in the previous study by a large margin. It could be the case that personality traits do not influence student job attribute preferences in the same way they influence experienced business professionals, but further research is necessary in order to validate this finding.

4.3 Model Selection.

The exploratory model selection procedure utilised in Part 2 of this study identified significant personality facet models for all job attribute preferences other than flexibility of working conditions. Each of the significant reduced facet models performed better than their respective trait model according to the AIC, thus providing more predictive power than the trait models without needlessly overcomplicating the regression with unhelpful variables. Personality facets also had substantially more influence over attribute preferences than the control variables investigated, however they still accounted for only a small portion of the variance in most attribute preferences. This procedure provided preliminary evidence supporting some of the relationships identified by Vandenberghe et al. (2008), given that most of the reduced facet models were components of the traits that were identified as predictors by these authors. The personality traits previously identified as significant predictors of development and career opportunities, variable pay and quality of work and of relationships were supported by significant reduced facet models. However, the relationship between flexibility of working conditions and Openness was not supported, and neither were those between indirect pay preferences and both Agreeableness and Conscientiousness. Other significant personality facets were also identified which extend beyond the personality trait relationships identified by the previous authors. There were however a large number of analyses performed upon data from a relatively small sample, and thus it is possible that some of the observed effects were simply due to chance. This is also the first study to consider the effects of personality facets on attribute preferences, and thus there is little guidance from the literature with regard to predicting these relationships. Consequently, it is important at this stage to consider the face validity of significant facets, as discussed below.

Two openness facets had a significant influence on preferences for development and career opportunities; O4 – Adventurousness and O5 – Intellect. This was interesting in that

the former was a negative effect, whilst the latter was positive, which resulted in Openness itself being non-significant. The similarity principle of the Attraction-Selection-Attrition model (ASA Model; Schneider, 1995) would predict that individuals scoring highly on intellect would seek further career opportunities in order to engage in higher level work problems; however, adventurous individuals would be expected to prefer variety, and thus also be attracted to development and career opportunities. The relationship with adventurousness is not consistent with the complementary hypothesis either; individuals who dislike change don't appear likely to desire it in their work, and those who enjoy it seem unlikely to avoid opportunities to progress. Thus, this particular finding is odd, and requires further investigation. A3 – Altruism exerted a significant positive effect on this preference, which appears to be similarly at odds with regard to either explanation for personality-preference relationships. The lack of any relationships between personality and attraction to flexibility of working conditions was another strange finding in this study. It is noteworthy though that the mean for this preference was substantially higher than that in Vandenberghe et al.'s (2008) study, and thus it could be that students place a higher weight on this preference than business professionals did, reducing the impact of personality. However, older individuals are more likely to have families and other commitments that require their time, and thus would seem more inclined towards flexible working options.

The quality of work content and social relationships was one of the most attractive job attributes to participants, and many personality facets contributed a significant positive effect to predictions of this preference. From the perspective of the similarity principle, E1 – Friendliness and A3 – Altruism are arguably highest in face validity in this instance, given that they involve socialising and engaging with others. O2 – Artistic interests seems feasibly related to preferences for work variety and enjoyable work, whilst relationships between C4 – Achievement striving and preferences for feedback, autonomy and quality relationships with

superiors are all quite feasible also. The similarity principle also seems to favour the negative relationship between C5 – Self-discipline and this preference; individuals who lack discipline would be more attracted to the relationships at their workplace, given that this could be an enjoyable method of time-wasting. The positive relationship with O3 – Emotionality, however, is more obscure; whilst not immediately implausible, it does not seem to fit either the similarity or complementary perspectives. The two conscientiousness facets that were related to this preference demonstrated another instance of countervailing effects within a particular trait, which resulted in a non-significant effect for the trait itself.

Personality had a substantially smaller influence on participant preferences with regard to pay structures. O4 – Adventurousness had a significant negative effect on the attractiveness of variable pay, which was another strange finding given that individuals who are less open to change seem unlikely to prefer variable pay structures. This does not seem to fit either of the explanations for personality-preference relationships, lacking similarity to this facet whilst not appearing to compensate for any 'deficit' in it. Indirect pay was similarly devoid of significant predictors, with only E5 – Excitement-seeking and O4 – Adventurousness demonstrating significant negative effects. These effects were likely the result of individuals who are averse to excitement and adventurousness, and thus would prefer the stability offered by indirect pay measures, as predicted by the similarity principle.

4.4 Limitations.

There are limitations faced in this study which affect both the internal and external validity of the above findings. Considering the small effects sizes found for the relationships between personality traits and attribute preferences in the literature (Vandenberghe et al., 2008), the sample size used within this study was not large enough to reliably detect these effects, as demonstrated in the power analysis from section 3.2. There was potential pool of

over 1000 students from which to sample but only 156 volunteered to participate. Thus, the lack of previously identified significant effects may in some instances be due to the fact that the study was not powerful enough to identify them. The problematic lack of power is further accentuated by the instrument used to measure personality in this study. The IPIP NEO-120 has been demonstrably useful in a number of settings, but the authors do note that it is not quite as accurate as the NEO PI-R that it is based upon (Johnson, 2014). Thus, there was likely a certain degree of measurement error throughout this study, which makes small effects even more difficult to detect. The sample size also limits the validity of the model selection procedure that was used; preferably, a larger sample would be utilised such that it could be split in half and processed through the selection process separately, which would allow for cross-validation.

Although a student sample was considered useful to assess the effects of personality on job attributes for those who would soon be entering professions and for vocational guidance purposes, this meant that some of the variables had a restricted range. Whilst the sample demonstrated a respectable degree of variance in work experience, for the most part this experience would have been in short-term casual or part-time work. This likely impacts job attribute preferences in a different manner to full-time work in an individual's chosen profession, which is what was studied previously (Vandenberghe et al., 2008). Thus, future studies should also consider the type of work that participants have experience in, to control for the influence of this variable. Students' work experience may also have involved less exposure to certain job attribute such as insurance or leave benefits, reducing the likelihood that it would contribute to some preferences and thus reducing the generalisability of this finding to other samples. The ability to generalise these results is also hampered by biases that exist within the sample, such as being psychology students who were predominantly female and under 24 years of age. Thus, these results may not extend to older samples (given

that age has been previously related to various attribute preferences) or to male students or students from different subject areas. The majority of students were also in their first year of their degree which further restricts generalisability, since the personality of older students with more experience in their field might have a different impact upon their preferences. Thus, future research should endeavour to include a more gender-neutral student sample, with a wider range of participants from different faculties and year levels.

4.5 Importance and Generalisability of Findings.

Whilst there were some substantial limitations within the analyses utilised in the present study, the results nonetheless provide some important implications for future research. There are some practical implications also, although due to the limitations described above and the need for replication, these are limited at this stage. The influence of personality upon job attribute preferences appears be different in this sample to the business professionals investigated previously. This could relate to various differences between the samples, such as age and type of work experience (full time, contract or casual), which were not controlled for in this study. Work experience clearly influenced attribute preferences in a variety of ways, as would be expected; however future studies should consider how the casual or part time nature of student work experience could influence their attribute preferences, in comparison to the full-time work that older people might be engaged in. This research could help improve employer predictions of attribute preferences amongst students. Further research in this area could also contribute to student vocational guidance counselling; if the previous work experience of students has been fairly limited then guidance counsellors could consider utilising personality testing to assist with identifying job attributes that students might be attracted to.

Participants in this study also placed an interestingly low emphasis on both direct and indirect pay factors. Whilst this may be due to the nature of the sample (it is feasible that psychology students value pay to a lesser degree than business professionals) it could be that younger students do not understand the importance of some of these factors, such as insurance and job security. This further underlines the importance of this research to vocational counselling, which could also provide a method of obtaining a larger, more representative sample. The open-source personality measure utilised in this study could be implemented throughout these counselling services, potentially allowing for the accumulation of longitudinal data which could help verify the validity of these findings.

The effect sizes identified in this study were for the most part very small, however quality of work and of social relationships in particular stands out as a preference that personality can contribute to, as suggested by Vandenberghe et al. (2008). These results indicate that personality should at best be considered alongside other more valid predictors of job attribute preferences; whilst it does make contributions in some areas, they are not strong enough to be relied upon for making accurate predictions. The present study does however make important contributions to the literature on personality facet analysis. The similarity principle supported the majority of the facet-preference relationships identified in this study, and multiple instances of countervailing personality facets were identified where facets within a particular domain influenced job attribute preferences in opposite directions, thereby obscuring the relationship at the trait level. These results validate Kausel and Slaughter's (2011) suggestion that countervailing facets could obscure trait-level relationships, thus reducing the predictive power offered by trait-level analysis. It is worth noting however that whilst the conscientiousness facets had some face validity with regard to their opposite effects upon quality of work and of relationships, the negative effect of O4 – Adventurousness upon development and career opportunities was less clear in reasoning;

further demonstrating the need for replication of these effects before stronger conclusions can be drawn. Nonetheless, this provides further evidence for Kausel and Slaughter's (2011) conclusions with regard to the importance of testing personality at the facet level in investigations of work-related phenomena such as job attribute preferences.

Reference List

Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and Performance at the Beginning of the New Millennium: What Do We Know and Where Do We Go Next? *International Journal of Selection and Assessment, 9*(1-2), 9-30. doi:10.1111/1468-2389.00160

Bretz, R. D., & Judge, T. A. (1994). The Role of Human Resource Systems in Job Applicant Decision Processes. *Journal of Management, 20*(3), 531-551. doi:10.1177/014920639402000301

Bruk-Lee, V., Khoury, H. A., Nixon, A. E., Goh, A., & Spector, P. E. (2009). Replicating and Extending Past Personality/Job Satisfaction Meta-Analyses. *Human Performance, 22*(2), 156-189. doi:10.1080/08959280902743709

Buera, F. J., & Kaboski, J. P. (2012). The Rise of the Service Economy. *American Economic Review, 102*(6), 2540-2569.

Cable, D. M., & Judge, T. A. (1994). Pay Preferences and Job Search Decisions: A Person-Organization Fit Perspective. *Personnel Psychology, 47*(2), 317-348.

Cable, D. M., & Judge, T. A. (1996). Person–Organization Fit, Job Choice Decisions, and Organizational Entry. *Organizational Behavior and Human Decision Processes, 67*(3), 294-311. doi:10.1006/obhd.1996.0081

Chapman, D. S., Uggerslev, K. L., Carroll, S. A., Piasentin, K. A., & Jones, D. A. (2005). Applicant Attraction to Organizations and Job Choice: A Meta-Analytic Review of the Correlates of Recruiting Outcomes. *Journal of Applied Psychology, 90*(5), 928-944. doi:10.1037/0021-9010.90.5.928

Costa, P.T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R™) and*

NEO Five-Factor Inventory (NEO-FFI): Professional Manual. Odessa, FL: Psychological Assessment Resources.

Jurgensen, C. (1978). Job preferences (What makes a job good or bad?). *Journal of Applied Psychology, 63*(3), 267-276.

Evertz, L., & Süß, S. (2017). The importance of individual differences for applicant attraction: a literature review and avenues for future research. *Management Review Quarterly, 67*(3), 141-174. doi:10.1007/s11301-017-0126-2

Fox, J., Weisberg, S., & Fox, J. (2011). *An R companion to applied regression*. Thousand Oaks, CA: SAGE Publications, Inc.

Gautie, J., & Schmitt, J. (2010). *Low-Wage Work in the Wealthy World*. New York, UNITED STATES: Russell Sage Foundation.

Gerhart, B. & Rynes, S. L. (2003). *Foundations for Organisational Science: Compensation: Theory, Evidence and Strategic Implications*. doi: 10.4135/9781452229256

Jebb, A. T., Tay, L., Diener, E., & Oishi, S. (2018). Happiness, income satiation and turning points around the world. *Nature Human Behaviour, 2*(1), 33-38. doi:10.1038/s41562-017-0277-0

Johnson, J. A. (2014). Measuring thirty facets of the Five Factor Model with a 120-item public domain inventory: Development of the IPIP-NEO-120. *Journal of Research in Personality, 51*, 78-89. doi: 10.1016/j.jrp.2014.05.003

Judge, T. A., & Cable, D.M. (1997). Applicant Personality, Organizational Culture, and Organization Attraction. *Personnel Psychology, 50*(2), 359-394. doi:10.1111/j.1744-6570.1997.tb00912.xP

Judge, T. A., & Zapata, C. P. (2015). The Person-Situation Debate Revisited: Effect of Situation Strength and Trait Activation on the Validity of the Big Five Personality Traits in Predicting Job Performance. *Academy of Management Journal, 58*(4), 1149-1179.

doi:10.5465/amj.2010.0837

Kausel, E. E., & Slaughter, J. E. (2011). Narrow personality traits and organizational attraction: Evidence for the complementary hypothesis. *Organizational Behavior and Human Decision Processes, 114*(1), 3-14. doi: 10.1016/j.obhdp.2010.08.002

Lacy, W. B., Bokemeier, J. L., & Shepard, J. M. (1983). Job Attribute Preferences and Work Commitment of Men and Women in the United States. *Personnel Psychology, 36*(2), 315-329.

Morgeson, F. P., Campion, M. A., Dipboye, R. L., Hollenbeck, J. R., Murphy, K., & Schmitt, N. (2007). Reconsidering the Use of Personality Tests in Personnel Selection Contexts. *Personnel Psychology, 60*(3), 683-729. doi:10.1111/j.1744-6570.2007.00089.x

Osicki, M., & Kulkarni, M. (2010). Recruitment in a Global Workplace. In K. Lundby (Ed.), *Going Global* (pp. 113-142). San Francisco: Jossey-Bass.

Rothstein, M. G., & Goffin, R. D. (2006). The use of personality measures in personnel selection: What does current research support? *Human Resource Management Review, 16*(2), 155-180. doi: 10.1016/j.hrmr.2006.03.004

Schneider, B., Goldstiein, H. W. & Smith, D. B. (1995). The ASA Framework: An Update. *Personnel Psychology, 48*(4), 747-773. doi:10.1111/j.1744-6570.1995.tb01780.x

Swider, B. W., Zimmerman, R. D., Charlier, S. D., & Pierotti, A. J. (2015). Deep-level and surface-level individual differences and applicant attraction to organizations: A meta-analysis. *Journal of Vocational Behavior, 88*, 73-83. doi:10.1016/j.jvb.2015.01.005

Turban, D. B., Eyring, A. R., & Campion, J. E. (1993). Job attributes: Preferences compared with reasons given for accepting and rejecting job offers. *Journal of Occupational & Organizational Psychology, 66*(1), 71-81.

Vandenberghe, C., St-Onge, S., & Robineau, É. (2008). An Analysis of the Relation between Personality and the Attractiveness of Total Rewards Components. *Relations industrielles, 63*(3), 425-453. doi: 10.7202/019096ar

Von Bonsdorff, M. E. (2011). Age-related differences in reward preferences. *The International Journal of Human Resource Management, 22*(6), 1262-1276. doi:10.1080/09585192.2011.559098